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THE UNIVERSITY OF ALBERTA

DEVELOPMENT DISPARITIES WITHIN A PERIPHERAL REGION : PROBLEMS IN MEASURING THE QUALITY OF LIFE

by

JOSEPH R. OPPONG

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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Date.....

Dedication

This work is dedicated to my dear wife, Comfort, who endured long periods of loneliness during its preparation, and to Him who sits on the throne, and reigns in glory, honour, power and majesty, JESUS CHRIST. To Him be all glory, forever.

Abstract

Growth centre policies have been widely used as a strategy for reducing regional inequality, but there is no general agreement on their effects on backward regions. Some have led to improvements in living standards while others have exacerbated conditions. It has been pointed out that growth centre policy may have differential impacts on different groups of people in a region, and this has usually been measured by income differences, or some similar indicator. However, the question of the impact of the policy on the overall quality of life available to the people is rarely examined. Evaluations have usually been based on criteria determined by non-residents without any consideration for what the residents of such regions feel about their environments.

The primary aim of this study was to examine, therefore, the effect which the designation of High Prairie as a growth centre through the location of government offices and other public investments, has had on the quality of life available to its residents and the people living within its hinterland. The objectives of the study were:

1. To examine the spatial distribution of the quality of life of residents in the High Prairie region with specific reference to the spatial impact of High Prairie as a growth centre, and also to examine whether this policy has led to a reduction of disparities between High Prairie and rural settlements such as Grouard and Gift Lake in its hinterland.
2. To examine the distribution of growth in the study region among different groups of people.
3. To compare the High Prairie region with the City of Edmonton on selected life components and to outline the disparities existing between the region and Edmonton.
4. To examine the impact of selected government programmes on intra-regional and inter-group disparities.

A total of 166 people randomly selected using the Alberta Power Service List were personally interviewed using a common questionnaire between December, 1985 and January, 1986. They included 100 from High Prairie, 35 from Grouard, and 31 from Gift Lake.

The data suggested that the use of the growth centre policy tool has been highly beneficial to High Prairie but not as much to its hinterland. Furthermore, White Canadians and Non-Canadians as a group have a better quality of life whereas the native Canadian group - Metis and Indians have a poor quality of life. In fact low education and job skills appeared to be central to Native poverty. They reinforce and are reinforced by high unemployment, low incomes, and social discrimination. Each of these variables, in turn, reinforces the other.

In view of the fact that the use of direct and indirect income transfer mechanisms, such as unemployment insurance and welfare payments, have had a dependency-perpetuating effect, a rethinking of the welfare system is advocated. Education is presented as the key solution to the problem of Native poverty while economic development is needed in the region to provide job opportunities for its residents.

Because apathy and lack of unity among community residents were perceived by them to be the most important problems facing the communities, rural self-help is suggested as being vital. The development of community leadership that is resourceful and capable of initiating programmes is advocated as a key target. Finally, because an essential part of rural development is the transformation of people from being passive recipients of services (to which in many cases, they have contributed little in support), to taking an increasingly active role in the shaping of their destiny, through learning how to articulate their needs and setting a course designed to satisfy those needs, it is strongly recommended that help for self-help should be the motivating theme of public and community development programmes.

Acknowledgement

Dr. R.G. Ironside, my supervisor, deserves every bit of my heartfelt gratitude. He arranged the grant that financed the study, and was so involved in every stage, it would have been impossible without him. Dr. O.F.G. Sitwell, of this department, and Dr. Leslie Kennedy of the Population Research Laboratory, members of my Committee, deserve thanks for their constructive criticism and suggestions. I have to specially mention Dr Kennedy for the supportive help and guidance he gave me during the brief absence of Dr. Ironside.

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I. INTRODUCTION

In this chapter, the regional development problem is explored. Current thinking regarding the nature and sources of regional inequality is examined. Following the conclusion that regional inequality is not restricted to capitalist economies, the use of growth centre policy, as a tool for the reduction of regional inequalities is examined in a general context. The concept of quality of life is then presented as a major goal for most regional development programmes. The rest of the chapter deals with definition and criteria for measuring quality of life, and the current debate on the use of objective and subjective indicators.

A. The Development Problem - Wealth and Poverty

The problem of spatial disparities is, without doubt, one of the major problems facing the modern world. The disastrous consequences of abject poverty depicted recently in Ethiopia, contrast sharply with the affluence prevailing in the United States or Sweden. It has become customary, therefore, to divide the world into groups of nations labelled "developed" and "underdeveloped". Generally, low per capita incomes, malnutrition, mass illiteracy, unemployment and underemployment, and poor health characterize the underdeveloped countries, while affluence, long life expectancy, high energy consumption, and high per capita incomes are associated with the developed ones.

The gap between rich and poor nations is wide and apparently getting wider (Donaldson,1973), and has become a matter of great concern. Geographers, traditionally looking at areal differentiation, have focused on the problems posed by inequity in the distribution of income and access to facilities and opportunities, and pondered over the question of the spatial distribution of human welfare. This has led to a whole new dimension in the discipline - the geography of human welfare (Knox,1977; Smith,1977; Coates et al.,1977).

Spatial disparities exist at all levels - international, intra-national, inter-urban and intra-urban. In the United States where general material standards of living are higher than

anywhere else in the world, millions of Americans live in poverty and social deprivation in city slums. In parts of the rural south, living conditions comparable to the Third World can be found. Inter-state per capita incomes range from $3,000 in Mississippi to as much as $5,340 in Connecticut. Twelve percent of Americans have incomes below the officially recognized poverty level - a total of over six million families or about 26 million people in all (Smith 1977,21). Smith (1973) has observed that while the national rate for infant mortality in 1970 was 19.8 per 1000 live births (31.4 for non-whites), it rose to 28.2 in Mississippi (over 40 for blacks) and dropped to 14.1 in North Dakota. In the light of these figures Smith wrote: "...by this and other social criteria, large parts of the rural South and the inner areas of many American cities belong to the underdeveloped world and not to the sophisticated modern industrial society that their inclusion in this nation's aggregate statistics implies (Smith 1973,4).

In the less developed world, similar disparities prevail. A few large cities enjoy living standards comparable to any city in the developed world, but these cities are usually set in the midst of a large backward hinterland. Spatial inequity constitutes a threat to national unity. There is a very real spatial dimension to social problems which makes spatial inequality a pressing issue to address. Several questions arise: is spatial inequality inevitable? Is it a spatio-temporal phenomenon? What are its causes?

B. The Nature of Regional Inequality - The Inverted-U thesis

Regional inequality is probably concomitant with the process of economic growth. Two main schools of thought exist with regards to the nature of inequality - the convergence school represented by Williamson, and the divergence school represented by Myrdal(1957).

Williamson(1965) holds that all countries undergo a similar sequence of spatial evolution and that regional inequality passes through three distinct stages as an economy moves from early development to maturity. In the early stages of development, regional inequality widens, followed by a period of stable, high level inequality, and finally, inequality

diminishes and a marked trend towards equality sets in. This has been called the inverted-U thesis(Nugent,1983), the Williamson Curve (Richardson,1977) or the convergence thesis.

This is similar to the view presented by Hirschman (1958). To Hirschman, differential growth between core and periphery is attributable to the process of spatial interaction, and the accompanying trickle down and polarization effects. Polarization described the depressing effects of the strength of the prosperous region on the lagging region. Trickling down effects would spread development to the periphery, and make inequalities only temporary, as a series of counterbalancing forces (eg. public policy) would restore an equilibrium position between core and periphery.

Friedman(1966,1973)developed the formal core-periphery model. He discerned an autonomy/dependency pattern of development, the core dominating the periphery in most political, economic, social and other relationships. Initial advantages of location created a concentration of economic activity in one area, with other industry being attracted because of derived advantages and economies of scale. The gap between this core and the rest of the region was maintained by a series of backwash effects.(Gaile,1980). A flow of skilled labour, investment and locally-generated capital from the periphery to the core was counterbalanced by the movement of products from core to the periphery, which flooded the markets and inhibited business enterprise.

An eventual breakdown of core-periphery relationships was anticipated, with the self-reinforcing process ceasing to function as growing political and social tension between the core and the periphery emerged(Ilbery,1984). The spread of innovations and the attractions of medium-sized centres in the periphery would lead to an eventual state of equilibrium. Thus, to Williamson, Hirschman and Friedman, spatial inequality is a temporary but inevitable phase of development.

Critique of the Convergence Thesis

The convergence thesis has come under very sharp criticism. Ilbery has noted that "there is very little empirical evidence for the convergence between core and periphery hypothesized by Hirschman and Friedman(Ilbery 1984,289). Green(1983)has pointed out the lack of historical series for a sufficient number of countries to adequately test this hypothesis. Stohr and Todtling(1977) have pointed out that a convergence of regional disparities in living levels have hardly materialized, and that like the international scene, increasing interaction between rich and poor countries usually did not reduce but rather widened existing disparities.

Hall(1984) has criticized the assumption that all countries undergo a similar sequence of spatial evolution, noting that :

> ...If underdevelopment is interpreted to be a corollary rather than a predecessor of development, there is no a priori reason to suppose that the regional inequalities in third-world countries are replicas of the ones that characterized the advanced industrial countries during the early stages of their evolution.

Richardson(1977) has criticized Williamson's work as relying too heavily on the United States experience and on a belief in historical determinism, emphasizing that, unless the turning points can be a priori it is easy to explain away exceptions to the hypothesis in terms of it being either too soon for interregional diffusion, or as a result of imperfections in the statistics. Furthermore, it suffers a weak theoretical base, since the agglomeration economies that were responsible for the earlier development of the core regions may begin to dissipate because of "congestion costs such as rising land values, soaring labour costs, and environmental deterioration and symptoms of senescence such as obsolete plants, a decline in entrepreneurial and managerial talent, and debilitation of the profit motive" (Richardson, 1977).

Others have attributed the inverted-U curve relationship to measurement error. Kuznets (1976), for example, has suggested that the household (conventionally defined) may not be the the appropriate unit of analysis in settings in which some members of rural

households are sent to set up households in adjacent urban areas. Bergsman(1980) has called attention to the importance of the underrepresentation of income in kind, especially among those in the lower income groups responding to the surveys. In Canada, this argument is underscored by the Berger Commission Report on the MacKenzie Valley Pipeline which found the harvesting of natural resources, and country food production as constituting a significant contribution to the local economy (Berger, T.R., 1977). Similar results were observed by Bodden in his work on the Slave Lake region of Alberta, and he cautioned, consequently, that averaged household incomes may understate the importance of natural resource harvesting, because a number of families rely heavily on country food (meat and fish) to the exclusion of commercially available products (Bodden 1981,124).

Lately, Nugent has called attention to yet another methodological problem with the Williamson thesis - the systematic measurement error that is bound to arise when both the response rate varies from one census to another and there is a selectivity bias in those who choose to respond (Nugent 1983,386). He reasons that in communities with very low average incomes, poor non-respondents would seem likely to far outweigh rich non-respondents, making it likely that income per capita would be overestimated. On the other hand, at relatively high levels of income, one might expect that the bias would go the other way, that is, the reported incomes would underestimate actual incomes. Thus in a time series context in which a given population gradually attains a higher income level over time, or in going from a low-income region or country to a high-income one, the non-response rate would be expected to diminish, and with the strength and effects of the afore-mentioned, biases should decline.

At high levels of income, however, the non-response rate might well increase again, in this case underestimating both the degree of income inequality and the level of per capita income. As a result, the systematic measurement error in both income and inequality alone, could account for the inverted-U relationship observed in both time series and cross-section analysis.

Despite the criticism, however, some writers have confirmed the inverted - U thesis. Green(1983) has confirmed that the secular trend of relative regional income inequality in Canada for both average and per worker output followed closely the pattern set out in the inverted - U thesis.(See also Sant,1974)

The Divergence Thesis

Myrdal(1957) has explained regional income inequalities in terms of the cumulative process of spread and backwash effects. Initial advantages of location created a concentration of economic activity in one area, leading to the attraction of other industry because of derived advantages and economies of scale. The gap between this core and the rest of the country was maintained by a series of backwash effects (Gaile, 1980). Skilled labour, investment, and locally-generated capital from the periphery flow to the core, while manufactured products of the core flooded the markets of the periphery and inhibited business enterprise. The periphery, thus, becomes deprived of social services, public utilities and amenities, leading to lower levels of social well-being.

Myrdal also introduced spread effects such as good communication, education, and information flow, radiating from the core. However, these only occurred when an economy became relatively advanced and never led to equilibrium between core and periphery because of the overiding mechanism of cumulative causation.Thus the unavoidable persistence of certain immobilities (of power, population, natural resources, etc.) continued to produce biased spread and backwash effects, making the rich richer, and the poor, poorer.

Structuralist geographers, like Massey(1978), have explained regional underdevelopment as a normal facet of capitalism, with the uneven development resulting from an international division of labour based on the requirements of capital accumulation and circulation. Peet(1975,564) enthusiastically affirms that inequality is produced during the normal operation of capitalist economies and cannot be eradicated without fundamentally altering the mechanism of capitalism. To him and others, like Harvey(1972), exploitation between classes and regions can only be overcome with the overthrow of class structure.

Friedman wrote: "...a capitalist system involving payments in accordance with products can be, and in practice is, characterized by considerable inequality of income and wealth."(Friedman 1962,168).

Contrary to what structuralists like Peet and Massey would have us believe, spatial inequalities persist in the developed Marxist countries. An extensive review of the literature bearing on the question of spatial equality in the socialist countries such as the USSR, Hungary, Poland, and Czeckoslovakia by Fuchs and Demko (1979) concluded thus: "The evidence is overwhelming that the industrially advanced socialist societies exhibit marked spatial socioeconomic inequalities" Consequently, they argue that the imposition of a Marxist political-socialist system is in itself no panacea leading to removal of spatial inequities; decision-makers under state socialism appear to hold values of growth, productivity, efficiency, and rewards similar to those of capitalists, leading to similar problems of spatial inequity. Thus the persistence of spatial inequalities in socialist societies as in the West suggests that we are dealing with long-term problems, not amenable to quick solutions, and that the processes which create these inequities may be cumulative and self-reinforcing.

The relationship between economic growth and spatial disparities in living standards is, therefore, clearly not a simple one. While there is ample evidence to support the divergence thesis, at least in the early stages of development,(Stohr,1974;Schacter,1967;Green, 1983;Ahluwalia,1974), there is little empirical evidence for the convergence thesis, and where they occur, the evidence suggests that it is the result of a carefully planned governmental intervention (Hall,1984), or to both governmental intervention and natural growth (Stohr and Todtling,1977). Myrdal's ideas can be criticized, therefore, for the assumption of no governmental intervention, because, interestingly, the role of government has been the central theme of radical approaches to economic development. The idea of the integration of the space economy promoting concentration rather than a spread effect casts further doubt on the convergence thesis (Smith,1977 126).

Furthermore, economic growth is clearly not synonymous with improvements in human welfare. In their study of economic development in developing countries, Adelman and Morris echoed this realization in this way: "The frightening implication of the present work is that hundreds of millions of desperately poor people throughout the world have been hurt rather than helped by economic development. Unless their destinies become a major and explicit focus of development policy ... economic development may serve only to promote social injustice." (Adelman and Morris 1973,192).

There is a need, therefore, to reexamine the basis for measuring development. The use of absolute spatial geographic equality in the standard of living or personal income, for example, as a surrogate for measuring equity is simplistic and inappropriate (Fuchs and Demko,1977). The notion of *people equity* must be considered in conjunction with *place equity*. As Hoover observed, our legitimate concern is with the welfare of people and not places. Policies addressing spatial inequalities should, therefore, be linked to the removal of structural social and economic inequities. Regional development will, then, no longer be measured in terms of increases in GNP but in terms of the total overall improvement in the quality of life available to all the people concerned.

C. Growth Centres and Regional Inequalities

One approach that has been used to redress regional imbalances is the growth centre policy. It involves the concentration of investment in selected centres in the periphery to stimulate industrialization and thus assist with the reduction of regional inequality. The emphasis is thus on urban-industrial growth based essentially on extra-regional determinants.

The general aim is to stimulate (or even create) medium-sized centres in disadvantaged regions in order that they become self-sustaining centres of industrial and service growth. Trickle down or spread effects are expected to have a positive effect on the economy and reduce or remove existing disparities, through Hirschman's cumulative causation process. Growth poles have consequently been used in Appalachia (Alonso 1968), Italy (Allen

and Mc Lennan,1970; Sundqvst,1975), and Spain (Richardson, 1975). The empirical evidence suggest that instead of being a panacea to inequalities, growth centres breed and perpetuate inequality(Nagoya Centre,1975). As Todd (1980) put it, "the growth centre now finds itself in the slough of despond, rejected as a fraud by many academics and policy makers".

The use of growth poles has, therefore, come under much criticism (Gilbert and Goodman,1976; Richardson,1976; Morrill,1972). The spatial limitation of spread effects from the growth centre has been pointed out, (Ironside and Mellor,1978), with Morrill suggesting that within a distance of 50 miles(80km), almost all of the entire income generated from the growth centre is spent locally (Morrill,1972). It has also been noted that spread effects from growth centres are usually smaller than expected, or less than backwash effects and, therefore, have a negative effect on the hinterland (Ironside,1974). Furthermore, increases in income of lower order centres, or rural areas, create strong multiplier effects in higher order centres but not the other way around (Moseley,1973; Ironside and Bohlin,1976; Schacter, 1967). Similarly, Stohr and Todtling (1977) have suggested that "... it is difficult to justify growth centre policies for lagging areas due to their lack of spread effects in the urban hierarchy downward, or from the growth centre to a broader hinterland...", while Kamal Salih(1975) has advocated the burial of the growth pole idea.

While many of the criticisms levelled against the growth centre are valid, they tend to focus on technical specifics, and thus, have addressed insufficiently, the fundamental question of whether the growth centre is primarily a welfare instrument or a tool designed to promote the efficient allocation of economic and public facilities among regions. Todd (1980) has argued that much of the exasperation with the failure of growth centre strategies to remedy severe regional disparities can be attributed to the fact that the growth centre is decidedly a tool of economic efficiency pressed into use as a welfare instrument: "Acceptance of economic dominance by the growth centre carries with it the corollary that economic dominance can serve the best interests of the dominant political group in society". Effective growth centre implementation requires selection of favoured locations and their accompanying social groups

as (at least initial) beneficiaries. In other words the growth centre is grounded in dominance and inequality, and cannot be expected to ensure equity.

Richardson put it this way:

> Of course all locational policies are spatially discriminatory. But the central axiom of growth centre theory is that the greater the degree of discrimination, i.e. the more resources are spatially concentrated, the higher the overall rate of regional development. ... Since the backwash effects of growth centre promotion on its hinterland are generated much earlier than the spread effects, the enclave characteristic of the growth centre, at least in the short run, is almost impossible to avoid (Richardson 1977,178).

Translated into spatial planning terms, the efficiency-versus-equity issue emerges as a dilemma between attempting to maximize national growth through the stimulation of needed structural changes in regional economies as opposed to the welfarist approach of improving the distribution of development through an attack on interregional disparities. If the aim is to assist the poorest segment in society, the key issue becomes how to reach the poor by aid to places. As Richardson argues, regional policies typically benefit industrialists, contractors and landowners more than the unemployed, the unskilled and the impoverished. "Indeed the appeal of spatial redistribution policies in countries with a highly skewed income distribution is precisely because they do not redistribute income to the poor" (Richardson, 1977).

Income transfer strategies targetted to the poor suffer because there are poor people in rich regions and rich people in poor regions. Direct transfer to places are, therefore, largely ineffective. The biggest problem, however, is that the income transfer solution does very little to promote the development of the lagging regions so that the 'drain' becomes permanent (Richardson,1977).

Based on neoclassical efficiency considerations, as are implied by such constituent elements as "agglomeration and other economies of scale", "central place servicing", and "optimum city size", the validity of the growth centre hinges on its ability to attract new firms to its location and, in turn, that ability rests on the attainment of at least a minimum viable size for self-sustaining growth. Since the growth centre is economically vulnerable so long as it remains suboptimally sized, governmental intervention is usually deemed necessary.

The paradox of the situation, however, is that the neoclassical stance is often used as the basis for opposition to government intervention in regional development planning. It is often asserted that neoclassical mechanisms can come to fruition only in societies with a minimum institutionalized interference in the market, yet the contention of many policy-makers is that regional disparities will be ameliorated only as a result of extensive governmental intervention. This creates an anomalous situation where the growth centre is permeated with conflicting ideologies (Todd,1980).

Essentially, however, growth pole strategies have had mixed success, being more effective in the industrial environments of the richer nations than in the primary environments of developing countries, and more successful in circumstances where the strategy is not diluted by administrative and political modifications (Coates, Johnston and Knox 1977,232).

Unforeseen effects can also result. For example, Alonso(1968) has observed that where it has been possible to reduce disparities at one scale (eg. interregional), this has usually been accompanied by an increase in disparities at other scales (intra-regional or inter-personal). (Also see Ironside and Mellor,1978).

It is clear from the above that there is no simple straight-forward solution to the problem of spatial inequalities. Concentration strategies such as the growth pole have had questionable results, which need to be carefully examined. The key objective of most developmental planning effort is usually to address some perceived regional problem, such as high unemployment, or to improve accessibility to certain facilities and services, and thereby improve the overall quality of life of people in the region. The success or failure of such programmes, therefore, is gauged by the extent to which the quality of life available to the target groups, peoples and places, is improved. Thus, the goal of development is the improvement of the quality of life of people. This is the issue. But then, how does one measure the quality of life? This is examined in the next chapter.

D. The Concept of Quality of Life

The phrase "quality of life" has been used in the literature to encompass different things for different people. In fact Smith(1973,31) has noted that "... despite certain similarities in the views expressed, there is no generally accepted social theory setting out the precise conditions defining well-being" or quality of life. Campbell et al.(1970) have also noted that "... the phrase, quality of life is seldom defined, and is often replaced, or used interchangeably with 'well-being'". What then does quality of life involve? What is encompassed in human well-being?

Huber (1976), has philosophically analyzed the question of quality of life and concluded that it revolves around how good relations between human beings and the real world are. The main elements involved are the physical (natural) environment, social environment and human activity. Huber emphasizes that these elements should be seen as interrelated, and should not be isolated from one another, even though they may be differentiated for analysis. Furthermore, the quality of the physical environment depends also on social conditions, while the quality of the social and physical environments depicts how men have actively come to terms with their environment, and this in turn is subject to physical (natural) and social conditions. For Huber, therefore, improvement in the quality of life is not only dependent on biological and social mechanisms which could be manipulated, but can be achieved only by taking responsible and mutual actions within the environment. Thus, the phrase, quality of life, might be seen as a linguistic denominator of a comprehensive concern of human life. It should be noted that Huber's definition of quality of life incorporates the traditional focus of human geographical research. Unfortunately, only a few geographers have been involved in research about quality of life.

Smith(1977), one of those geographers, has noted that the satisfaction of human needs or wants is the motivation or origin of human actions, and that it is the regulation of human behaviour in the pursuit of needs and wants that constitutes the prime source of social relationships, political institutions, and modes of production. Furthermore, the individual

human being will presumably view his or her quality of life in terms of the extent to which perceived needs or wants are satisfied. Quality of life is, therefore, dependent on the extent to which human needs and wants are satisfied.

The definition of human needs presents problems. Loetscher (1980) has pointed out that the definition of human needs is highly value-loaded since it implies reference to some standards, and also involves ethical questions because decisions have to be made on which needs are to be satisfied, and for whom. Deciding on the identification of existing needs is, therefore, not just merely a technical matter, "it is to be found in the nature of a society as well as in the nature of human being" (Smith 1977, 28).

Maslow (1954) has proposed a hierarchy of human needs. The first level or most basic human needs relate to physical survival, and involves the satisfaction of physiological needs through the aquisition of food, clothing, shelter and the like. (See also Fletcher, 1965). The second level, labelled "security", involves needs for order, predictability and dependability of the environment, while the third, "belongingness and love", includes needs for affection, conformity to group norms and the like. The fourth level is esteem; that is strength and competence for recognition, prestige, status and dominance. The fifth and top level, "self-actualization" refers to the desire for self-fulfilment, the tendency to become everything that one is capable of becoming (Loetscher, 1980, 11; Maslow, 1970, 35-51; Smith, 1977, 28ff).

Maslow argued that higher "needs" would emerge sucessively as lower ones have been satisfied. Increasing need gratification is positively related to the degree of a person's physiological and psychological health resulting in his concept of "gratification of health". Thus, other things being equal, a person who is safe and belongs, and is loved will be healthier than one who is safe and belongs, but is rejected and unloved. If, in addition, a person wins respect and admiration, and consequently develops his self-respect he will be even healthier (Maslow, 1970, 67). This model has achieved a measure of popular support despite the scarcity of systematic empirical evidence (Pacione, 1982; Gratton, 1980).

Campbell et al. (1970) have suggested the notion of threshold as useful in explaining the structuring of overall well-being. According to this formulation, the overall sense of well-being is dependent on the presence of some threshold number of satisfactions. They suggest that it may not matter which domains are satisfactory as long as the minimum number is met, but it seems more likely that certain vital domains would all have to be satisfied as in Maslow's formulation. They also postulate that there may be an upper threshold of satisfaction above which any increase in the number of satisfactory domains fails to produce a corresponding gain in sense of well-being.

This formulation is similar to Drewnowski's concept of levels of well-being. She identified three levels - "rock-bottom level", "decent conditions" and "affluence". Once a hunger is satisfied, or comprehensive care provided, she reasoned, further flows of food or medicine are unlikely to improve the physical status of an individual very much. Beyond the point of affluence, however, a situation of "over-abundance" may be reached. "We can have too much food and medicine, resulting in a decrease in satisfaction". Smith (1977), commenting on this, has proposed a need satisfaction curve, which indicates decreasing marginal satisfaction. The curve is shown to turn down at the end, because "beyond this point additional flows might be interpreted as wasted: resources are being used but no needs are satisfied as a result".

Essentially, however, need is relative (Harvey,1973; Knox,1975, 7), and arises from a specific physical, social and economic situation. A physically disabled person needs a wheel chair in order to be mobile, just as people living in cold regions need warm clothing. Consequently, Harvey has suggested the definition of needs with respect to a number of different categories, which should be considered as remaining fairly constant over time and

space. These needs include:

1. Food
2. Housing
3. Medical Care
4. Education
5. Social and Environmental Services
6. Consumer Goods
7. Recreational Opportunities
8. Neighbourhood Opportunities
9. Transport Facilities

Harvey suggests that minimum quantities and qualities could be defined for each category and these will vary according to social norms at a given time and place as well as the available ways of fulfilling this need. Accordingly, Harvey has four methods of defining need:

1. by a determination through looking at market demand
2. latent demand, by an investigation of relative deprivation among individuals in a set of regions (felt needs)
3. potential demand by an analysis of factors which generate particular kinds of problems ("real" needs)
4. by determining needs through consultations with experts in the field.

The appropriate method, he reasoned, may vary throughout his nine categories mentioned above, and would, furthermore, demand "socially just decisions on these issues."

There are problems with the need satisfaction approach to the problem of quality of life. Essentially, individual needs differ not only with respect to levels, and from person to person, but also with time. What is satisfactory to one person may be entirely unsatisfactory to another. Thus Campbell et al, argue that satisfaction is a psychological experience and that the quality of this experience may not correspond very closely to the external conditions of life (Campbell et al. 1976,9). Again as Loetscher (1980) argues, the sense of satisfaction as a

personal experience will be influenced by an individual's past experience and present expectations. "Satisfactions and frustrations depend jointly on objective reality on one side and aspirations and expectations on the other" (Campbell 1972,442). It becomes necessary, therefore, to distinguish between satisfaction associated with declining expectations and that with rising expectations.

Harvey has also noted that "felt" needs are not always equivalent to real needs. In some situations, ignorance or misinterpretation can lead poorly served groups to have minimal "felt" needs. Thus, they do not feel deprived because they do not recognize the possibility of being better off. This argument is certainly valid for most impoverished people in the third world, and in the pockets of underdevelopment in developed countries. It also makes a behavioural approach to ascertaining the quality of life valid. Concern over the quality of life must include a hope for personal development beyond the individual's present limits of vision. Upgrading the quality of life implies progressive liberation from the constricting limits of modest aspiration levels and increasing fulfilment of the human potential (Campbell,1972). But unless a system generating rising expectations has the capacity to "deliver the goods", people end up worse off in a real sense. They may move from aspiration to frustration and aggression, expressed in revolution and other forms of violence (Stagner 1970, 65-66).

Other attempts to theorize about human needs include the works of Allardt (1973) and Drewnowski (1974). Allardt (1973) recognized three dimensions of overall individual need satisfaction: having, loving, and being. "Having" includes some of Maslow's more basic needs relating to survival, and corresponds largely to what is generally termed as standard of living. "Loving" refers to such conditions as companionship, affection, belonging, and solidarity realized in reciprocal personal relations, while "being" refers to a dimension having alienation at one extreme and self-actualization at the other. The problem with Allardt's formulation, however, is that apart from "having" which can be conveniently measured by data on housing and income, the remaining two require extensive, usually expensive, survey research.

Drewnowski has distinguished between the *means* of obtaining or achieving human well-being, and the *ends*, indicated by happiness, satisfaction or fulfilment. On this basis then, a distinction is made between the *state* of human well-being at any point in time, and the *level or flow* of the sources of well-being on which the state depends. The state of well-being is seen as a stock similar to product or income. The state is the result of past flows of goods and services consumed by the population in satisfaction of their needs. Increases in human well-being result from the level of flows during the time period in question. The production of goods and services is thus viewed as the generation of inputs into need satisfaction, the state of well-being is the output. This formulation has being extensively examined in Smith (1977). One fact that comes out clearly in all these formulations is that there is no one single accepted concept of what constitutes human need or want. Some researchers have resorted to defining various criteria by which the good life may be examined, and to this we now turn our attention.

E. Quality of Life Criteria

There are two obvious ways of determining criteria of human well-being or quality of life. The first is to derive them from theory in psychology or sociology, and the second is to ask people how they view their own state of well-being, and attempt to discover by direct inquiry on what a good quality of life is dependent. The work of Allardt, cited earlier on, is an example of the former while that of Atkinson (1980) is an example of the latter. The problem with the first approach is that there is little agreement on the precise conditions unambiguously referred to as a good quality of life. Apart from the expense involved in the second approach, it is still experimental and empirical evidence is required.

A third approach is to ask for expert opinion, such as the judgement of scientists, and other experts. This approach has been called the *Delphi* (consulting the oracle), and has been used by Dalkey and Rourke (1973), and Koelle (1974). The list of quality of life goals used by the Berlin Centre for Futures Research in 1974 is presented below.

"Quality of Life" Goals Used By the Berlin Centre for Futures Research

1. Improvement of the material quality of life
   a. Improvement of housing quality
   b. Better general supplies in quantity and quality
   c. Better use of natural resources
   d. Reduced destruction of useful material goods
2. Improvement of the physical quality of life
   a. Preservation and improvement of the state of health
   b. Reduced violence against people
   c. Restoration of health in case of sickness
   d. Preservation of the natural environment
3. Improvement of the mental quality of life
   a. Improvement of educational facilities and equal educational opportunities
   b. Better utilization of available knowledge
   c. Improvement of mental qualities and general knowledge
   d. Improvement of cultural environment
4. Improvement of the spiritual quality of life
   a. Better utilization of individual talents and capabilities
   b. Improvement of the harmony within family or social groups
   c. Greater involvement in large social groups and social affairs
   d. Improvement of the moral and ethical standards and state

Source: Koelle (1974)

As another example of quality of life criteria, Smith's (1973) general criteria of social well-being is presented below.

1. Income, wealth and employment
   a. Income and wealth
   b. Employment status
   c. Income Supplements
2. The living environment
   a. Housing
   b. The neighbourhood
   c. The physical environment
3. Health
   a. Physical health
   b. Mental health
4. Education
   a. Achievement
   b. Duration and quality
5. Social order (or disorganization)
   a. Personal pathologies
   b. Family breakdown
   c. Crime and delinquency
   d. Public order and safety
6. Social belonging (alienation and participation)
   a. Democratic participation
   b. Criminal justice
   c. Segregation
7. Recreation and leisure
   a. Recreation facilities
   b. Culture and the arts
   c. Leisure available

Source: Smith, 1973 P 70.

Other criteria have been suggested all with the intention that they will form a basis for the compilation of data, to be used eventually in evaluation of policy design at the national and sub-national level. Time will tell how successful these criteria are, but one thing is definite : piecing together the different elements of human need-satisfaction relationships is a major challenge to research.

F. Objective and Subjective Indicators

Quality of life may be conceptualized in two ways - conditions of life, and experience of life. Thus two main groups of indicators for measurement may be identified: objective indicators which refer to objectively observable facts and conditions of social life, without regard to people's own perception and assessment of these facts and conditions; and subjective indicators which are based on people's subjective perception and assessment of the life they live under the given circumstances. For instance, number of people per room is an objective indicator, while people's expressed satisfaction with their housing has been used as a subjective indicator.

Generally, objective indicators are easier to obtain, because data for this purpose is usually collected by various government statistics bureaux or some such organization. Subjective indicators, however, require extensive surveys. Pacione (1982), has consequently commented that "objective indicators are somewhat *harder* than most subjective measurement in the particular sense of being more replicable or *reliable*.

The use of subjective indicators has drawn criticism from some researchers who regard them as "disparagingly soft measures of indeterminate meaning" (Pacione, 1982), and also because measurement error is a far more serious problem for subjective measures than objective ones. However, it is worthy of note that objective indicators have also not escaped criticism, and as Campbell and Converse (1972) observed, their relative accuracy can be overestimated. Furthermore, the use of objective indicators as surrogates for various life

domains for which better data does not exist is fraught with problems. The resolution of the controversy over whether to use objective or subjective indicators is outside the scope of this study and has been exhaustively dealt with elsewhere (Pacione,1982; Dale,1980).

Another current controversy is whether there is any relationship between results obtained from subjective and objective indicators respectively. Wheras Kuz(1978) found no correlation between the two indicator types, Knox and MacLaran(1977) reported a positive and statistically significant correlation. The Alberta Bureau of Statistics (1979) found that "perceptual measures of satisfaction and importance exhibit a high degree of sensitivity to measured differences in corresponding objective conditions". The problem is that there is not enough empirical evidence to support either, and Dale's conclusion seems appropriate: "... different studies have given negative or positive answers on the basis of a very restricted set of domains and variables". The theoretical basis for categorization of *objective* and *subjective* has been inadequate, while the implications of operating at a certain spatial scale are most often ignored. Again it is worth remembering that well-being is very complicated and multi-dimensional. Most writers, therefore, agree that both types of indicators are necessary, since one type contributes to the interpretation of the other. This approach is adopted in this study.

II. RESEARCH PROBLEM AND OBJECTIVES

Introduction

In this section, the research hypotheses are presented, and the criteria used in some quality of life studies in Canada are reviewed and used as a basis for selecting the variables and indicators employed in the study. The research problem is then outlined after which a brief profile of each of the three centres studied is presented.

A. Hypotheses and Related Objectives

The study aims to examine the spatial distribution of quality of life in the High Prairie region with specific reference to the spatial impact of High Prairie as a growth centre. The gradation of quality of life from the core growth centre, High Prairie, will be compared to Grouard, located at an intermediate distance from it, and Gift Lake lying on the periphery of its tributary region. In the context of the literature reviewed three major hypotheses have been established.

1. Because larger settlements usually have a larger tax and economic base, they are able to support higher levels of service such as recreational and shopping facilities which smaller centres can not support. Since such services contribute positively to the quality of life, the quality of life available in the region will vary according to settlement size and distance from the growth centre. Consequently, living costs, for example, will vary directly with distance from the growth centre and inversely, with settlement size in rural areas because of distance and travel costs.
2. The pursuit of growth centre policy in the region has heightened, rather than diminished the differences in quality of life between the growth centre, High Prairie and rural settlements in its hinterland exemplified by Grouard and Gift Lake, and that instead of converging, inequality between High Prairie and its hinterland is diverging.
3. The distribution of growth in the study region has been selective, favouring the higher income and non-Native groups, and that generally, White Canadians enjoy a higher

quality of life than Native Indian and Metis residents.

In addition, regional and rural development programs and their locational and group targetting will be examined to identify their role in reducing, perpetuating, or increasing intra-regional and inter-group disparities. In effect, the trickle-down or spread effects from growth centres, the spatial incidence of benefits, and the effect of leakage on both the centre and the hinterland will be examined (Ironside and Mellor, 1978; Gauthier, 1972).

B. Quality of Life Criteria in Canada

There is no complete agreement on what constitutes a good quality of life. Thus, Helburn (1982), for instance, has argued that given time, place and society, both necessities and amenities are culturally defined. Therefore, quality of life is highly relative and valuative, and what is beneficial to one group of people may be detrimental to another. In a similar tone, Olsen and Merwin have observed that "whatever contributes to the quality of life of a population of people is ultimately determined by them, not by elites of any kind, and people's notion of life quality is thoroughly infused with normative values concerning what is good and right in life" (Olsen and Merwin, 1977).

The above reasoning makes it imperative that every study on the quality of life of any people or place *(must)* be based on their conception of the good life. The importance of this cannot be over-emphasized, as can be seen from the following illustration. In parts of Ghana, where being overweight is considered to be a "sign of good [illegible] and slim people are supposed to be poor, not having enough to be able to feed themselves properly, it will be wrong to consider being overweight as a health hazard, and, therefore, indicative of a poor quality of life. It is essential, therefore, that a good quality of life should be defined in terms of local criteria, because what constitutes a good quality of life is best determined by the people whose life quality is being examined. The obvious question then becomes, what do Canadians, generally, and Albertans specifically, consider as important components of the good life?

Two studies by Atkinson, (1979;1980), and one by the Alberta Bureau of Statistics (A.B.S.) (1979), provide important insights here. In Atkinson's work of 1979, which involved a representative sample of 3,300 Canadians, he reported that :

> There is a general consensus among Canadians that the quality of life would be enhanced by good social relationships, excellent health, interesting and well-paid work, financial security, adequate leisure time and the facilities to enjoy it, rich cultural and educational opportunities a clean and safe environment and so on.

In his second study in 1980, the values generally held by Canadians were examined. The results, presented in Table 1.1 below, indicate that most Canadians value family security as of utmost importance, followed by economic stability and love. The study argues that "it would seem that for family security to exist, these other two conditions should also exist, one facilitating the persistence of interaction among family members, the other creating a supportive economic environment for the family unit. Providing love and care for family members depends on having a steady, secure income to provide for one's basic needs and those of one's family and having the affection and romantic love of one's spouse" (Atkinson,1980).

The next three most important values for Canadians are independence, self-development, and friendship. Achievement and helping others, follow with fairly high ratings, while excitement, prosperity, and spiritual understanding are, on average, clearly less important. In general, therefore, Canadians place highest value on inter-personal goals, particularly those revolving around family and love. Standard of living appears to be important only in terms of maintaining basic levels of comfort for self and family.

Table 1.1

Important Canadian Values*

Values	Utmost Importance	Very Important	Fairly Important	Not Very Important	Mean Score
Social					
Love	45%	39%	11%	5%	3.24
Family Security	59	34	6	1	3.52
Friendship	27	49	21	4	2.98
Helping others	19	52	28	2	2.88
Material					
Economic Stability	44	44	11	1	3.31
Prosperity	10	26	45	19	2.27
Actualization / Stimulation					
Achievement	23	49	23	5	2.90
Self Development	29	46	20	5	3.00
Excitement	13	42	36	9	2.59
Other					
Independence	32	42	21	6	2.98
Spiritual Understanding	20	27	31	22	2.45

* Explanation of terms used in Table 1.1

a. Prosperity	Having plenty of money to afford the better things in life
b. Excitement	Having a stimulating and active life
c. Friendship	Having close friends and companions
d. Independence	Controlling your own life, free from interference by others
e. Spiritual understanding	Living a life based on religious principles
f. Achievement	Having a sense of accomplishments, being successful
g. Love	Having the affection and romantic love of a man or woman
h. Economic stability	Having a steady secure income to provide for your basic needs and those of your family
i. Self-development	Being able to improve your skills and abilities, to keep improving yourself
j. Helping others	Serving other people who need your help
k. Family Security	Providing love and care for family members

Source: Atkinson,1980:7

What do Albertans consider to be the essentials of the good life? We have to turn to the A.B.S. (1979) study for the answer. The study aimed at developing survey instruments to

assess:

1. The importance attached by individuals to various areas or domains of social concern, and
2. satisfaction with conditions in those domains.

The long range goal involved "the monitoring of satisfaction measures over time, and the integration of perceptual and objective indicators to assess both affective and objective changes in specific domains and among specific population groups" (A.B.S.,1979, 5). Three studies were undertaken, the first two addressing the conceptual and methodological issues regarding the quality of life domain structure and its related measurement, while the third attempted to replicate and extend the findings of the previous studies. The selection of items for inclusion in life domains examined was based on a review of work on quality of life including Andrews and Withey,1974; Dalkey et al.,1971; Hall and Ring,1974; and Liu,1974. The third study which is of greater relevance to the current work, was based on a stratified systematic sample of approximately 600 Alberta residents living in Calgary, Slave Lake, High Prairie, Vermillion, and Improvement Districts 1 and 23. The inclusion of High Prairie in the sample makes the findings very pertinent to the current study. A factor analysis of importance ratings resulted in ten factors which are presented below in Table 1.2.

In addition to providing a basis for evaluating the quality of life in Alberta, the study also found a strong and positive relationship between respondents' subjective evaluation of community services and the availability of services, and concluded that "perceptual measures of satisfaction and importance exhibit a high degree of sensitivity to measured differences in corresponding objective conditions".

Table 1.2
Principal Quality of Life Components - A.B.S., 1979

Factor 1 Standard of Living

Being able to afford the things you want
The cost of living
Having savings and investments
Your standard of living
The quality of the things you buy
Television
The taxes you pay
% of variance explained 26%

Factor 2 Personal Well-being

Your family
The things you do with your family
A challenging job
A job with a future
Your health
Good working conditions
Your house / apartment
% of variance explained 6%

Factor 3 Government Services

The things the provincial government does
The development of resources in Alberta, like oil, natural gas and coal
The things the federal government does
Science and the things science does

Current world events
The country you live in
Canada being on good terms with other countries
Service clubs in your community like Elks, Kinsmen, etc.
Consumer protection
5% variance explained

Factor 4 Leisure

Entertainment like restaurants, movies, etc.
Recreational facilities

Leisure
Service clubs in your community like Elks, Kinsmen etc.
5% of variance explained

Factor 5 Community

The community you live in

The neighbourhood you live in
4% of variance explained

Factor 6 Health and Welfare

Access to good doctors
Hospitals and health clinics
Consumer protection
Welfare, public assistance
3% variance explained

Factor 7 Religion

Spiritual well-being
Religious faith
3% variance explained

Factor 8 Community Services

Municipal services like water, sewage
Law enforcement
The standards and values in our society
Water quality
Standard of Living
The quality of the things you buy
3% variance explained

Factor 9 Education

A good education
Public libraries
Current world events
3% variance explained

Factor 10 Residential environment

Living near work
The shops and stores in your community
2% variance explained

Source: Alberta Bureau of Statistics, 1979

It has been argued earlier that subjective indicators serve as a useful and necessary supplement to the "hard" objective measures (Britt,1980; Knox,1976; Easterlin, 1974). As Abrams put it, there is the need for "... adding ... a new dimension to the definition of quality of life - a dimension of the satisfaction (happiness, contentment, psychological well-being etc.) felt by those who constitute the community and are the final consumers of society's output of goods and bads and therefore, the best judges of society's performance (Abrams 1976, 36).

In line with this reasoning, therefore, both objective and subjective indicators are used in this study. The aim is to provide subjective data that ultimately can be compared against objective data, to establish an overall view of the spatial distribution of well-being in the study region. After Rodgers and Converse (1975), and Kennedy et. al (1977), satisfaction scales are used as measures of cognition, whereby the respondent is required to evaluate one part of his life against other parts in some standardized way. A five-point scale, ranging from "1 - Very Dissatisfied" to "5 - Very satisfied" was used instead of the 7-point scale used in Kennedy et al. (1984). This was to ensure simplicity, and ease of judgement by respondents many of whom had low levels of education and were unfamiliar with this type of survey. The variables used in the study are presented in Table 1.3 and Table 1.4.

Table 1.3

Subjective Variables

1. Economic
   - a. Standard of Living
   - b. Employment
   - c. Housing
   - d. Cost of living
   - e. Cost of transportation
2. Health
   - a. Facilities provision
   - b. Medical staff
   - c. Access (distance factor)

3. Neighbourhood
   - a. As a place to live
   - b. Personal Safety
   - c. Education for children
   - d. Public Facilities - eg. electricity etc.
4. Interaction
   - a. Family Life
   - b. Friendships
5. Recreation
   - a. Available Time
   - b. Indoor and Outdoor facilities
6. Transport Facilities
   - a. Public
   - b. Private
7. Environmental Quality
   - a. Cleanliness
   - b. Water and noise Pollution

Table 1.4

Objective Indicators Used for the Study

1. Education / Literacy level
   - a. % People with no formal schooling
   - b. % People with Less than Grade 9
   - c. % People with Grade 9 - 13 (without certificate)
   - d. % People with Grade 9 - 13 (with certificate)
   - e. % People with Trade School certificate or diploma
   - f. % People with other non-university education only (without certificate)
   - g. % People with some University (without certificate)
   - h. % People with University degree
2. Economic
   - a. % of Families above official Canadian poverty line.
   - b. Unemployment Rate
   - c. Rate of Participation in Workforce - males, females
   - d. Average annual income per respondent
   - e. Public Assistance / Welfare Recipients per 1,000 population.
3. Health

a. Hospital Beds per 1,000 population
b. Physicians per 1,000 population
c. Psychiatrists per 1,000 population
d. Dentists per 1,000 population.
e. Proximity to Users

4 Housing and Amenities
a. % of houses lacking no plumbing facilities i.e. with cold and hot running water, indoor toilet, and shower or bathtub
b. % of houses with electricity
c. % of houses with refrigerators
d. % of houses with dish washer
e. Number of People per Room
f. Mean Rent of specified, renter occupied units.

5. Communications
a. % of households with television
b. % of households with telephone

6. Leisure and Recreation
a. % Households with television sets
b. % Households with Video Cassette Recorders

Justification For Selected Variables and Indicators

Education is understood here to be the process of developing intellectual abilities, and the acquisition of knowledge and skills which equip an individual to find employment. It is fundamental to the enjoyment of certain recreational pursuits by the individual, and to the fulfilment of democratic opportunities, occupational status and mobility. Education is, therefore, closely related to money income (Coates et al., 1977). Furthermore, it seems clear that the level of literacy is an important determinant of the amount of power that can be wielded by an individual (Smith, 1977).

Income, wealth and employment are important means of access to material goods as well as other essentials for living such as health and education. Average annual income per inhabitant is therefore, included. Unemployment affects a person's income, status and

self-esteem. In addition to these, the percentage of people living below the poverty line, and the ratio of people receiving social assistance are included. It is hoped that this will provide information not only about the spatial distribution of wealth, but also of poverty in the region.

Health is basic to a good quality of life. Personal happiness, and the ability to enjoy and appreciate all other aspects of life is dependent on it. It also has a strong influence on productivity and earning capacity. Infant mortality rates and life expectancy at age one, reflect all the physical social and medical influences that affect the individual but are not included because the information available is aggregated at the regional level and a breakdown for the respective centres were not available.

The quality of housing is a very important indicator of well-being, and falls among the variables Canadians perceived to contribute to a good quality of life in Atkinson's study (Atkinson,1980). Accordingly, amenities that make a house a comfortable dwelling place, such as indoor toilet and bathroom, hot and cold running water, electricity, refrigerator, and dishwasher are included. Overcrowding is measured using the number of people per room. The mean rent of specified renter-occupied units is included because it will provide information about the accessibility of housing, and also facilitate comparisons.

Leisure and recreation are an indispensable part of the good life. Not only must there be time for leisure, there should be the facilities for its enjoyment as well. The percentage of households with video cassette recorders is, therefore, included. This is because the increasing popularity of VCRs in Canada has made it possible for people to enjoy reasonably good leisure at home without going out to the cinema.

Instead of the "basket of goods" approach used in the Woods Gordon Study on Cost of Living in Northern Alberta, (1982), an Expenditure Diary was used. Sampled respondents were required to record as carefully as possible how much they spent on various components or domains of life, for a period of one month. This was to be used to examine the cost of living in the study region as perceived by the residents. The advantages of using the actual

expenditure figures are numerous. There were also questions on household expenditures on selected items in the questionnaire. These were to be compared to the actual recorded expenditures to be obtained from the expenditure dairy.

In addition to the expenditure diary, satisfaction indicators were also used. The advantage of using satisfaction indicators is that they allow each individual to evaluate his or her current situation in terms of personal standards. These standards will include expectations, aspirations, perceptions of what others have, feelings of entitlement, and recollections of one's past. These measures are responsive to the individual's needs, unlike objective indicators which simply make a count of things, and which often are based on assumptions which are sometimes questionable.

Satisfaction measures, however, have one shortcoming which affects their interpretation. They are in a sense, not direct measures of perceived quality of life, but tap responses to those perceptions. Since people apply individual criteria when determining their degree of satisfaction, it is possible for high levels of satisfaction to result from low personal standards or expectations rather than high achievement. Since satisfaction is a function of the difference between an individual's perceptions of what he has and some standard of comparison, such as what he aspires to, one could at the same time evaluate that the quality of one's life was high, and yet be less than completely satisfied because it was not high enough(Atkinson,1979). It is common to have people with sizeable incomes dissatisfied with them, while those with much lower incomes are satisfied. These shortcomings would, more than adequately be compensated for by the use of the objective indicators.

The study thus provides an adequate representation of the true quality of life available to Northern residents. The spatial distribution is examined against the background of growth centre theory, to throw some light on the relationship between High Prairie, as a growth centre, and its hinterland. Finally, the findings are compared with Kennedy et.al(1977) and other studies to see if the results are corroborated.

centre, and its hinterland. Finally, the findings are compared with Kennedy et.al(1977) and other studies to see if the results are corroborated.

What additional information or insight does this methodology provide?

1. The quality of life is examined using a much broader and realistic range of life domains.
2. Objective indicators give information about the living levels of individuals.
3. Satisfaction measures and subjective indicators provide inputs from the respondents as to how they respond to the objective conditions described, and the two together provide a complete representation of reality.

Such a comprehensive approach is what has been lacking in most studies on living conditions in Northern Alberta.

C. Statement of the Problem: Human Well-being In Northern Alberta

Northern Alberta, for the purpose of this study, is defined to include Census Divisions 12, 13, parts of 14, and all of 15, as shown in Fig II.1 This is the area of the Northern Alberta Development Council, a public authority which works to improve living conditions in the region. It consists of about sixty percent of the total land area of Alberta, but has only 16.9 percent of the population (Statistics Canada, 1981). The region is characterized by extremes of temperature, with a mean January temperature of -26 degrees celsius and a July temperature of 15 degrees.

The region is peripheral relative to developed Central Alberta, with very few urban, usually resource-based, centres. Forty-nine percent of the population live in centres with a population of one thousand or more, and the remainder either live on farms or in very small communities with no access to services normally available in larger urban centres. Apart from a few urban centres such as Grande Prairie and Fort McMurray, the region is not near to any major market. Industrial development is inhibited, especially for the development of consumer, market oriented products.

compared to the rest of the province. Whereas the enrolment ratio[1] for all of Southern Alberta in 1974 was 20.84, and that for rural Southern Alberta was 13.98, that for Northern Alberta was 9.68 (Northern Development Branch, 1974). The dropout rate among native children in 1984 was 85 percent (Alberta Report, July 1984, 28). Among other things, this has been attributed to the long distances travelled by students on school buses to get to school, (because of the small size of most northern communities), and a curriculum which is unrelated to native culture.

Health in the region is characterized by a paucity of staff and facilities. In 1978, the physician population ratio for the region was 1:1,174 while that for all Alberta was 1:724. The dentist population ratio for Alberta was 1:2,245 and 1:4,456 for Northern Alberta (Morton Warner Health Care Associates Ltd, 1980). The situation is not any different currently. According to the Statistics Department of Alberta Hospitals and Medical Care, the physician population ratio for the High Prairie Hospital District was 1:1,239 in 1984 and 1:1,259 in 1985. This compares poorly with the ratio of 1:727 for 1984 and 1:703 for 1985 for the province of Alberta as a whole. For CD 15, the ratios for the two time periods were 1:1,369 and 1:1,305 respectively. The inadequacy of medical staff and facilities makes it necessary for many communities to transport their sick and injured for long distances, resulting in higher costs which become additional burdens to the sick and their families. In addition, there is a dire lack of mental health services, health education, preventive medicine and health promotion measures (Marino, M.L. Ekistic Design Consultants Limited, 1976).

Transportation in the North is plagued with problems. Roads are not properly maintained, east-west road connections are almost non-existent, and air planes are a major, expensive form of communication and transportation. Compared to Central Alberta, therefore, Northern Alberta is a typical periphery region, and there is concern over the increasing disparities between the North and the rest of the province.

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[1] This is the total number of children enrolled in schools compared to the total number of children of school-going age.

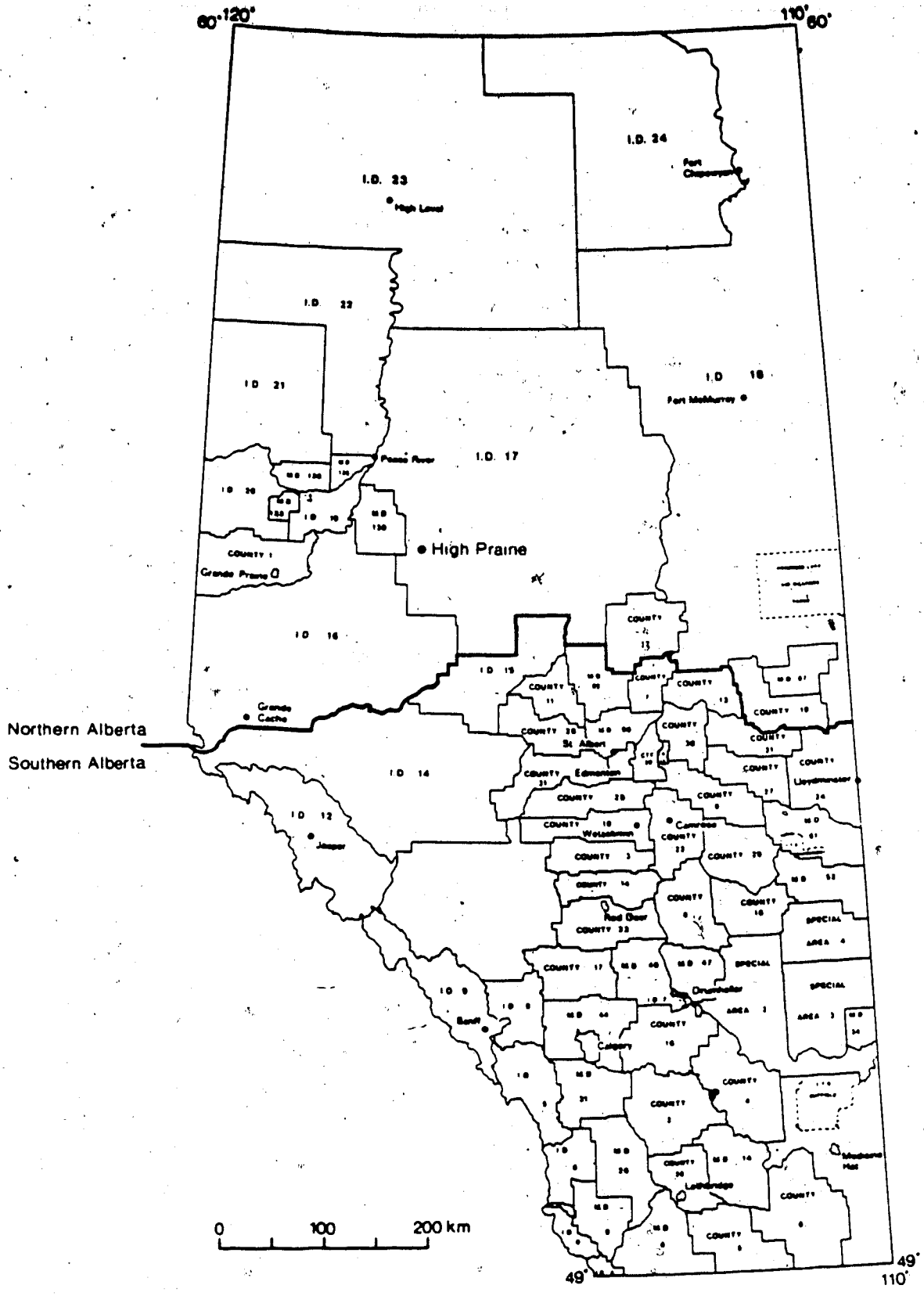


Figure II.1 Map of Alberta Showing High Prairie and its Hinterland

Both the federal and provincial governments have taken various measures to reduce the disparities. Among others, this has involved the designation of growth centres. The Lesser Slave Lake region was designated as a Special Area in April, 1970. The DREE / Alberta Joint Planning Committee established the following objectives at the initial planing stage:

4. To create long term employment for established area residents;
5. To assist local people in gaining access to employment in the central subregion;
6. To provide assistance for the development of High Prairie and Slave Lake as the major growth centres in the central subregion;
7. To diversify the economic bases of these centres in order to minimize the effects of cyclical disturbances and structural change;
8. To encourage the development of major industries in Grande Prairie and the Whitecourt area to provide additional sources of employment.

Whereas the impact of the growth centre policy on Slave Lake has been examined (Ironside and Mellor, 1978), no such study has been undertaken for High Prairie.

In addition to these two named towns, some centres, like Fort McMurray, have emerged as spontaneous growth centres because of the oil-sand resources. These centres were rapidly growing, until the recent decline in oil prices, and were drawing people from far and near. Their output seemed to be reducing the gap in per capita income between the North and the rest of Alberta. However, participation by native people in newly created jobs is low.

It seems, also, that whatever growth is taking place is heavily concentrated in these few centres (Ironside and Mellor,1978), and inequality within the region is increasing and becoming self-perpetuating as a result of limited access to land, credit, education, and modern sector employment [1]. Poverty and backwardness in the countryside is increasing, while the urban centres are booming. As Warner (1980) observed, "...there is a drainage of population, health personnel and resources towards secondary centres which is not likely to be reversed".

[1]See Chenery, 1974; and Alonso, 1968 for a general discussion of this argument.

The problem of inequality, therefore, appears to have shifted from the interregional level (between Central and Northern Alberta) to the intra-regional (between urban places and rural areas in the region). The quality of life people can enjoy seems to be directly related to their location in space - whether they are in a rural or urban area.

Furthermore, it seems that growth in the region is not equitably distributed among the various peoples in the region, and favours White Canadians to the disadvantage of the native groups - Indians and the Metis. Various obstacles generally summed up elsewhere by Chenery (1974) as "lack of physical and human capital and lack of access", prevent them from sharing in the general increase in output and growth. This is easy to conceive since native Canadians generally have low education levels, and lack the skills requisite for employment in the jobs created. A further heightening of inequalities in well-being among groups of people in the region seems inevitable, even though it may not desirable (See for example, Alonso,1968).

D. Profiles of High Prairie, Grouard and Gift Lake

High Prairie

Located 35km west of Lesser Slave Lake (see Fig II.2) and 115km from the town of Slave Lake, High Prairie has a population of 2580 (Northern Alberta Development Council 1985,98). It is 364km northwest of Edmonton, and 199km northeast of Grande Prairie. It was incorporated as a town in 1951, and acts as an agricultural and major government service centre to an area population of approximately 15,000 (Town of High Prairie, 1985). It is governed by an elected mayor, currently Fred Dumont, and 6 Councillors.

Health Care is provided by the High Prairie Regional Health Complex, which has 75 acute care beds, 52 nursing home beds, 6 doctors and a dentist, 3 public health nurses, 3 ambulances, and one air ambulance. It has 3 public schools and one separate school, offering up to Grade 12 and 9 respectively. There are two day care centres, and also the Youth Assessment Centre-In-Centre School. Adult education is provided by Alberta Vocational

Centre (AVC) through its Grouard Extension.

It also has one Senior citizen's lodge with 65 beds, and 12 Senior Citizen self-contained units. Police protection is provided by a team of 18 officers and 8 cars, and fire protection by 31 volunteer firemen and 3 firetrucks. There is a local all-weather airport, and currently, air flights are available six times a week. There is a twice a day Greyhound bus service to Edmonton and other major centres, and freight rail service is provided by Canadian National Railways. Courier service is provided by Loomis and Purolator.

Telephone service is available in most homes, and while no local radio station exists, there are two local newspapers. Water supply is from the West Prairie River, and it is fully treated and piped to almost all homes. Home heating is mainly by natural gas, and electricity is available to all households. Garbage waste is collected once a week, while sewer is piped. There are 3 banks,and 3 department stores.

For recreation, there is a hockey arena, an outdoor swimming pool, a curling rink, gymnasium, and two parks, Winagami and Hilliard's Bay Provincial Parks which are both approximately 40kms away. There are four hotels/motels with a total of 100 rooms, and also a tourist information office.

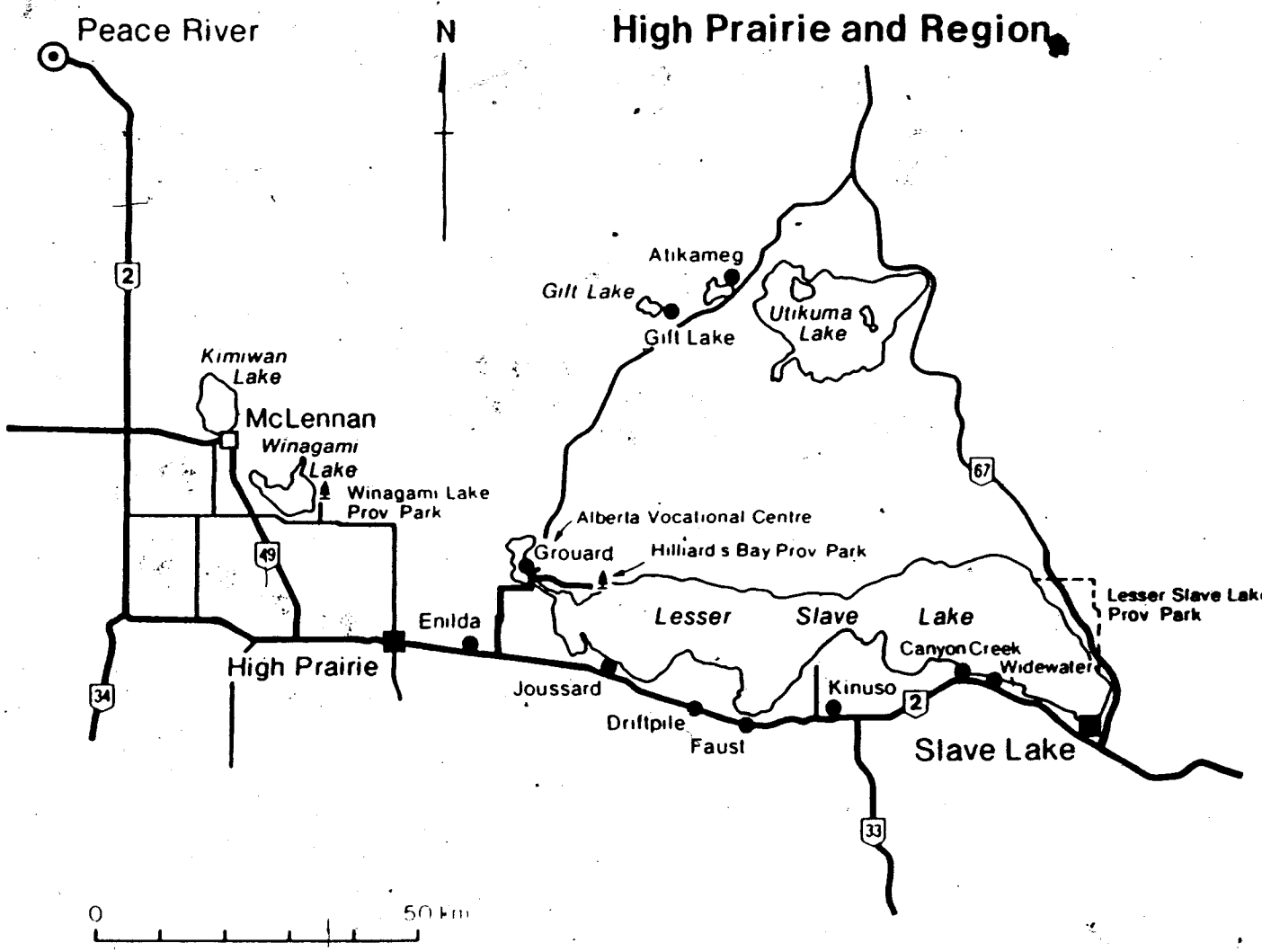
There are several provincial and federal government offices, as well as the Alberta Opportunity Corps, High Prairie Regional Economic Development Board, and also several churches.

The average annual temperature is 9 degrees celsius, with a January mean of -18.6 degrees celsius and a July mean of 15.5 degrees celsius. Annual precipitation totals 468mm, with an average of 95 frost free days, and a total of 2,100 sunshine hours.

Gift Lake

Gift Lake Metis settlement No.3 lies 90km north-east of High Prairie, (see Fig II.2) and has an estimated 1985 population of 552 (NADC,1985,83). It is linked to Grouard by Highway 750, which is gravel, and then a paved road from Grouard to Highway No.2. The

Fig II.2 High Prairie and Region



settlement was established in 1938 and is governed by the Gift Lake Settlement Council which is comprised of five elected officials.

Gift Lake has a grass airstrip, but no rail or bus connection. Health, bus and rail services are all based in High Prairie. A public health nurse, however, visits the community once a week. Police and fire protection are also based in High Prairie.

The settlement School, operating under the Northland School Division offers kindergarten to Grade 10, and students in higher grades have to attend school in High Prairie. There is a Community Vocational Centre which offers adult courses on the settlement.

Water is drawn from Gift Lake, filtered, chlorinated and stored in a reservoir. Some homes have water and sewer hookups, others use cisterns and septic tanks. Electricity and party telephone lines are available. Home heating is based on wood and propane, because there is no natural gas connection. Garbage is collected once a week.

The Post Office is the only government office in the settlement. There are no banking facilities, no local radio station, and no local newspapers, however the Settlement Council puts out a weekly newsletter. A community owned satellite dish provides good reception on CBC television.

Recreation facilities include a community hall, the school gymnasium, an outdoor skating rink which is not maintained for use, and rodeo grounds. The nearest public park is the Hilliard's Bay Provincial Park, which is 60kms away.

Grouard

Grouard is located at the north-western extremity of Lesser Slave Lake, and approximately 35km northeast of High Prairie. It is linked to Highway No.2 by a paved access road. The population in 1985 was estimated to be 545 [3]. (NADC,1985.94). Like Gift Lake, Grouard has no rail or air connection, and the internal roads are gravel. There is no scheduled bus service, but AVC buses are available three times a week to High Prairie. Unlike, Gift

[3]It is uncertain whether this figure includes the 48 people on the Grouard Reserve It is most likely that it does not.

Lake or High Prairie, there is no organized local governmental body. It is governed by Improvement District 17C, but at the time of the survey, the representative for the community was not a local resident.

Police protection is based in High Prairie, while fire protection is based on 6 volunteer firemen and one fire truck. Health services are provided at High Prairie, but AVC has a registered nurse to provide emergency care.

In addition to a public school that provides Grades 1 to 9, Grouard has the Alberta Vocational Centre, and the Kisemanito Centre, which is a Native Seminary. High School Education is available in High Prairie. There is also the Kapown centre for treating alcohol and drug addicts, on the reserve.

Water supply is provided from Lesser Slave Lake, and is fully serviced, even though at the time of the survey the water was found to have a considerable orange hue. Home heating is based on the use of wood, natural gas and propane. There is no waste disposal generally available, but AVC has some arrangement by which garbage is picked from staff and student residences.

Grouard has a food store and a gas station, but no banking facilities. No local newspapers exist, but telephone and two channels on television, CBC and CTV, are available. No community recreational facilities are available apart from those provided by the schools. These include an outdoor skating rink, gymnasium, hiking trails, two community halls, ball diamonds, and a tennis court. Hilliards Bay Provincial Park is only 10km away and provides excellent camping and fishing grounds.

III. FIELD SURVEY AND SAMPLING

Introduction

In this chapter, the preparations made for for data collection in the field, including the design of the questionnaire are described. As well, the sampling methodology, its limitations, and the data collection procedure are described, with a brief report on questionnaire administration in each of the three selected centres.

A. Field Visits

Two field visits were undertaken in October and November of 1985 to appraise the study region, and evaluate the proposed survey strategy. During the first of these, we visited Peace River for consultations with Roger Jackson, of the Northern Development Branch, and then High Prairie where we met Fred Dumont, Mayor of High Prairie and President of Alberta Vocational Centre, Grouard. This visit ended with a brief time spent in Grouard, where we met Dan Vandermuelen, Vice-President of AVC, and Frank Halcrow, Chief of the Indian Reserve in Grouard.

During the second field visit which took place in November, 1985, we went to Gift Lake, and met some members of the Gift Lake Metis Settlement Council, including the Chairman, St Germaine Courtoreille. We also had detailed and very fruitful consultations with Cynthia Buie of the Regional Economic Development Board in High Prairie regarding the sampling strategy, the content of the questionnaire and other matters related to the study. These field visits were very useful for rethinking and refining the survey methodology.

Questionnaire

On the basis of the literature reviewed and the initial field visit, a draft questionnaire was developed. This was tested during the second field visit to Gift Lake and High Prairie. Two questionnaires each were administered in each of the two settlements. It was found that it took between forty-five minutes and one hour to administer the questionnaire, and that a

few format changes would be necessary. No major change in content was found to be necessary as a result of the pre-testing of the questionnaire.

A copy of the questionnaire used for the study has been attached in Appendix 1.

B. Sampling

The population universe of the study was designated as all persons 18 years of age and older in the [redacted] centres - High Prairie, Grouard, and Gift Lake. Initial thoughts focusing on using the [redacted]ne directory for sampling, were abandoned when, during the field visits, and after consultations with individuals familiar with the region, it was realised that not every household in the study area had access to a telephone. As has been argued by Hammond and McCullagh (1982,132), "a telephone directory would provide a very good sampling frame if the true population were all a town's telephone subscribers, ... it would be overweighted with relative affluence if it were used to represent all the town's householders". Thus the sampling frame may be a source of bias, depending on how representative it is of the true population being studied. In the light of this, a more suitable sampling frame had to be obtained. The question then arose as to what constitutes a suitable sampling frame, and for that matter, what would be a good sampling frame for the survey study region?

Yates(1953,67ff) has discussed the qualities to be looked for in a good sampling frame. The essentials include

1. Adequacy - it should be *adequate* in the sense that it covers the whole population to be surveyed.
2. Completeness - It should be *complete* such that all the population members who are supposed to be on it are in fact on it.
3. A frame should not be subject to duplication, that is, certain members should not be included more than once.
4. The information should ideally not include "non-existent" units.
5. It should be as up-to-date as possible, and finally

6. It should be convenient - arranged in a suitable way for sampling.

Obviously, these are stringent requirements and no sampling frame meets them all (Moser 1969,122). However, the conditions stipulated provided a good guide for selecting a suitable sampling frame.

Since every household in the study region had access to electricity, it was decided that the most complete and adequate sampling frame from which to establish a simple random sample was the Alberta Power service list for Gift Lake, Grouard and High Prairie. This list was kindly supplied by Mr Creighton Twa, Senior Vice-President of Alberta Power, Edmonton.

The Alberta Power service listing covered every household in the study area that subscribed to electricity. If the house belonged to an institution, a church for instance, no individual would be listed, but the church would be. This created some difficulties. In Grouard for instance, where Alberta Housing owned, and was registered for the payment for electricity used in some houses, individuals living in these houses were not represented in the list. In all the list gave a total of 1139 privately registered households in the three centres. The breakdown by centre is shown in Table 2.1 below. From this list a random sample of 200 households was selected for personal interviewing. The percentage of sampled household is also presented for the three centres, as well as the percentage of households actually surveyed.

Table 2.I

Total Households and Sample Size Selected

Settlement	Households	Sample Selected	% of Households Sampled	Number Interviewed	% Total Households Interviewed
High Prairie	906	130	14.3%	100	11.04%
Grouard	129	40	31.0%	35	27.1%
Gift Lake	104	30	28.8%	30	28.8%
Total	1139	200		165	14.5%

Source: Field Work Conducted between December, 1985 and January, 1986.

The sampling was done using a program developed by the Population Research Laboratory of the University of Alberta. Support samples were then drawn from which to find replacements if anybody on the list was not available or refused an interview.

Sample Size

Sampling involves a compromise between precision and economy of effort. Ideally, every item should be measured for 100% accuracy. This degree of accuracy is however impractical most of the time. For this study, therefore, a total sample size of 200 was decided upon in view of budgetary and time constraints. A proportional[4] distribution of this would have led to a breakdown as follows: High Prairie - 159, Grouard - 23, and Gift Lake - 18. This distribution, however, does not allow Grouard and Gift Lake to have a sample size adequate for analysis. It is important to have sufficient sample sizes in each category to facilitate analysis of the category if this is deemed necessary (Moser 1969,88).

Most statisticians agree that 30 is the minimum satisfactory sample size to permit analysis (Mendenhall 1983,337; Harnett 1982,275; Hammond and McCullagh 1982,149). This, therefore, preset the minimum sample size for the smallest centre Gift Lake[5]. By similar reasoning, 40 was chosen, arbitrarily, as the sample size for Grouard. The difference, 130, was then assigned to High Prairie. Thus 28.8% of households in Gift Lake were sampled, as compared to 31% in Grouard and 14.3% in High Prairie. This sampling procedure is not unique to this study. In fact it has been described in detail by Sudman (1976, 110-112), who called it "split the difference" and Moser (1969, 84-88), acknowledges that it is widely used.

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[4]In proportional sampling, the sample selected is a function of the population size. Thus if district A has twice as large a population as district B, it is given twice the chance of being selected.(See Moser,1968 pp 87-89)

[5]The actual sample size for Gift Lake used in the analysis was 31. This was as a result of the inclusion of one questionnaire from the pretest.

Limitations of the Sampling Procedure

Even though the sample was intended to include all residents eighteen years and above, the absence of a comprehensive list of residents which included every individual, and the need to rely on a list of households with electricity obtained from Alberta Power hindered the achievement of this goal for obvious reasons:

1. The use of the Alberta Power list meant that only those who were living in houses privately registered with Alberta Power were included. Individuals living in housing registered under Alberta Housing, for instance, were not represented, and a special effort had to be made to reach these people. The implication is that if there was a large number of people living in such housing, they would be excluded from the survey. This was not generally the case, however. Where this was the case, as in Grouard, a special effort was made to include these people.
2. The list included the names of only the individuals who were registered for the payment of electricity bills. Thus if there was any significant characteristic underlying this, for instance if males tended to be registered more for the payment of electricity bills than females, many more males would be included than females. In the light of the above, it is to be expected that the sample will be biased towards the middle-age groups, 25 - 34, 35 - 44, and 45 - 54, and against the initial and last age groups, 18 - 24 and 65 and above since one expects many more middle-aged people to be paying electricity bills than those between 18 - 24, or over 65 years. Thus the presence of senior citizens homes in High Prairie is certain to affect the sample, as will the dearth of residential ownership among those in the 18 - 24 year group.
3. Residents of high turnover rental units, such as apartments, would be under-represented in the sample. To solve this problem, the current occupants of the selected unit in which the proposed interviewee was living, were solicited for an interview, and when they obliged, they were accordingly interviewed. If they declined, replacements were found for them from the support sample. Such residents were by far

the most numerous in requiring replacements from the support sample. This was, however, consistent with the survey procedure and did not constitute an extra compensatory procedure. It is also consistent with proper sampling procedure. (See Moser 1969,133; Durbin and Stuart 1954,387-428).

4. Finally, the list did not have the residential addresses in many cases, and when it did, it was often impossible to use because in the study region, mail is delivered only through post boxes and not to residences. Residential addresses, therefore, are seldom used. It was thus common to find houses without numbers, and this made it practically impossible to follow the address system in most cases. In High Prairie, for instance, it was common to find 8 - 10 houses in a row without numbers. In many cases, therefore, it was easier to identify the selected individual than the addr[redacted]. Many interviews were conducted, therefore, in workplaces and not at the residences, especially in High Prairie. The staff of the Regional Economic Development Council headed by Cynthia Buie provided much needed help in locating the workplaces of the sampled population.

Non-respondents

Only 5 out of the total of 150 people contacted for an interview refused - 3 in High Prairie, and 2 in Grouard. This gave a refusal rate of less than 3%. However, with those few individuals who could not be personally interviewed because of lack of time, and who offered to complete the questionnaire on their own, the return rate was quite poor, only 24%. This can be explained in terms of the length of the questionnaire and the detailed personal information required. Replacements were found for these people from the support sample in those few instances where this was the case.

Sample Characteristics

The completed interviews, totalled 166[4], giving a response rate of 83% of the total sample. Of those interviewed 54.4% were male, and 45.5% female. The sex breakdown of the sample by settlement is given in Table 2.2, while Table 2.3 below presents the distribution by household size of respondents in the sample.

Table 2.2

Sex of Respondents by Settlement

Sex	High Prairie	Grouard	Gift Lake
Male	58%	42.9%	64.5%
Female	42%	57.1%	35.5%
Total	100%	100%	100%

Source: Field Work Conducted between December, 1985 and January,1986.

Table 2.3

Distribution of Sample Households by Size

Size	High Prairie	Grouard	Gift Lake	Total
1	16	4	2	22
2	34	3	1	38
3	16	6	4	26
4 - 5	27	15	7	49
6 - 9	7	7	13	27
10 +	0	0	4	4
Total	100	35	31	165

Source: Field Work Conducted between December, 1985 and January,1986.

It is interesting to note that household size varies inversely with size of centre. Only 7% of households in High Prairie had 6 or more people compared to 20% in Grouard, and over 50% in Gift Lake. The sample and 1981 census distribution of size of household for High Prairie is

[4]This includes one questionnaire from the pretest in Gift Lake.

presented in Table 2.4 below.

Table 2.4

Household Size, 1981 Census and Sample for High Prairie

Size	1981 Census *	Sample
1	20.5%	16%
2	26.8%	34%
3	18.6%	16%
4 - 5	27.3%	27%
6 - 9	6.8%	7%
10 +	0%	0%
Total	100%	100%

Index of Dissimilarity 7.4 [7] * Source: Statistics Canada, 1981 Census of Canada, E-547, p1-129.

The congruence between the sample and census distributions indicates that the sample adequately represents the population for High Prairie. Similar tests have not been computed for Gift Lake and Grouard because exact figures for comparison are not available as they are not incorporated settlements. In Table 2.5 below, the age distribution of the sample is presented. Table 2.6 compares the age distribution of the High Prairie sample with the 1981 Canada census distribution for High Prairie.

As expected, a fairly high Index of Dissimilarity is obtained suggesting that the similarity between the sample and the 1981 Census in age distribution is not as close as that for household size distribution. In fact, the sample seems to be biased towards the middle age group, and against the initial and final age groups (ie. 18 - 24 and 65+). This is a direct result of the sampling frame used. As has been argued earlier, one would expect many more middle age people to be on the electricity service list, than Senior Citizens and people within the age group 18 - 24. However, this sampling deficiency should, and will, be taken into

[7] The index represents the proportion of households that would have to move to a different category to make the distributions identical. It can vary from 0 to 100; 0 indicates a perfectly similar distribution and 100 indicates a perfectly dissimilar distribution. It is similar to the coefficient of localization developed by Florence (1948), and the Location Quotient (See Isard 1960, pp 251 - 258).
Source: O. Dudley Duncan and Beverly Duncan, "Residential Distribution and Occupational Stratification", American Journal of Sociology, 60(5) :494, March 1955.

consideration in the analysis of the data.

Table 2.5

Age Distribution of Sample by Settlement

Age	High Prairie	Grouard	Gift Lake	Total
Up to 19	2	0	0	2
20 - 24	11	0	5	18
25 - 34	37	16	8	57
35 - 44	21	13	4	38
45 - 54	21	3	4	18
55 - 64	6	1	4	57
65 +	2	2	6	38
Total	100	35	31	166

• Respondents

Source: Field Work Conducted between December, 1985 and January,1986.

Table 2.6

Age Distribution of Sample, and 1981 Census Compared for High Prairie

Age	Sample	1981 Census ••
20 - 24	12%	18.6%
25 - 34	38%	25.3%
35 - 44	20%	15.7%
45 - 54	22%	13.5%
55 - 64	7%	10.6%
65 +	1%	16.3%
Total	100%	100%

Index of Dissimilarity 25.5[1] ••Source: Statistics Canada, 1981 Census of Canada, E-567, p1-129

Further comparison of the sample characteristics with the 1981 Census has not been possible because comparable statistics are not available. For instance, data on ethnicity does not include native ethnicity; level of education data is based on the population aged 15 years and over but the sample is based on 18 years and above. Household income has not been compared because the 1981 Census top category of $40,000 and above falls far below the

[1] This means that about 25% of the sample will have to move to different age groups to make the distributions identical.

$80,000 and above figure used for the study. Obviously, inflation makes the 1981 Census figure unrealistic for 1986 conditions unless adjusted for inflation.

C. Data Collection

Questionnaire Administration in High Prairie

Administration of the questionnaire began on December 1, 1985, in High Prairie. As has been previously indicated, identifying the selected addresses and people was the greatest obstacle since the address system was unreliable. Staff in the office of the Mayor provided a map which helped to locate some of the houses without addresses. Cynthia Buie, of the Regional Economic Development Council and the staff, as has been mentioned earlier, provided invaluable assistance by identifying the workplaces of many of the people in the sample. Thus if an individual could not be reached at the residence address, because the address was non-existent, for instance, an attempt was made to reach the person at his work place.

This proved to be very successful because once the individual was contacted, it was easier to obtain instructions about the location of the house and to schedule a convenient time for interviewing. If the individual had time, however, the interview was conducted there. If the respondent was literate, and willing to be interviewed, but the time was inconvenient, the questionnaire was left with them for completion to be collected at a later date.

After an interview, a respondent was usually solicited for help in locating other people in the sample, within their vicinity. This was very helpful because respondents were very co-operative in providing assistance. In all 100 interviews were completed in High Prairie over a period of three weeks - 2 weeks in December and one in January.

Questionnaire Administration in Gift Lake

The administration of the questionnaire in Gift Lake was by far the most successful. The Gift Lake Settlement Council kindly seconded one of the Settlement Office staff, Sandra Cunningham, to assist with the work. Sandra speaks Cree, as well as English, and knows every resident of Gift Lake. Thus locating the residences of respondents was easily done. In addition, where the respondent did not understand English, Sandra served as an interpreter. In fact after two days training, Sandra was administering the questionnaire, alone, to some of the non-English speaking respondents. Finally, because Sandra was known to all residents of Gift Lake, she usually introduced the survey and it made people more co-operative. In all 30 people were interviewed in the five-day period, Monday, 20th - Friday 25th January.

Questionnaire Administration in Grouard

Unlike Gift Lake, Grouard had no council of any kind. Being unincorporated, there was no local administrative body to contact and this made the work relatively, more difficult. I missed the help of a local person to introduce the work, and also had greater difficulty locating the sampled population. The heavily dented University of Alberta car, the result of two accidents caused by others during the work in Gift Lake, was my best advertisement, since people were unusually curious about what my business was and what had happened to the car.

In several respects, Grouard combined the closeness of Gift Lake and the relatively impersonal relationships of High Prairie. Respondents were contacted either at their homes or workplaces, wherever they could be found. In all 35 interviews were completed in Grouard. The absence of any official body responsible for local administration was felt to be a drawback for the field work.

It was discovered that the housing registered under Alberta Housing was mainly occupied by staff of Alberta Vocational Centre, Grouard, and teachers of the elementary school. A list of the staff was, therefore, obtained, and those not included in the sample,

were treated like a support sample. If any respondent could not be interviewed, a replacement was picked from the support list.

Expenditure Diary

After the interview, respondents were given an expenditure diary which they were asked to complete over a period of one month from the date of interview. These were to be picked up later. It involved recording daily household expenditure on various items, and the location of the expenditure made. Many respondents complained that they would not be able to find time for it, but were encouraged to do the best they could. In January, when those interviewed in December in High Prairie were contacted, only 2 out of 20 people contacted had filled it in. The rest had either forgotten about it, misplaced it, or did not do it.

This is quite consistent with Moser (1969,131) who indicated that in surveys on family expenditure which require the household to keep accounts, a generally poor response is to be expected, and a response rate of 60% is considered good. Over all, there was a very poor return on the expenditure budget, only seven people out of a total of 166 interviewed filled it out. It was therefore abandoned as a major tool for analysis. The completed questionnaires were prepared for analysis and the information coded by me. The data are stored on the University of Alberta computer.

IV. ANALYSIS - OBJECTIVE QUALITY OF LIFE INDICATORS

Introduction

Data on objective quality of life indicators used in the study are presented in this section. Personal incomes, employment status of the respondents and their spouses, and also their level of education are compared for the three centres. Reported monthly household expenditures on selected items are presented and compared. Following this, the banking and credit characteristics of the respondents are examined, and the section closes with an examination of Social Assistance recipients in the area.

A. Disparities within the High Prairie Region

Various characteristics of the respondents from the three centres are compared to bring out the disparities existing between the three centres. The items dealt with here are what may be described as objective indicators. They include the annual income of respondents, employment status of respondent and spouse, level of education, and household size. These are compared by place of residence, and explanations are adduced where feasible.

An important indicator of the quality of life available to anyone is the regular income available to them. Table 3.1 below shows the level of income of the respondents by their towns of residence.

From Table 3.1 below, clear disparities exist in the levels of income of the respondents. The mean income for High Prairie is more than twice that of Gift Lake, while that of Grouard is one-and-a-half times that of Gift Lake. Sixty three percent of the respondents from Gift Lake earned less than $10,000 annually, as compared to 12% in Grouard and 12% in High Prairie. Clearly, then, Gift Lake respondents have much lower incomes than the two other towns. About 40% of High Prairie respondents earned between $10,000 and $20,000, as compared to 65% in Grouard, and 27% in Gift Lake. Respondents from High Prairie with incomes higher than $25,000 were about 48%, while Grouard had 24% and Gift Lake only 10% in this group. Ninety percent of the respondents from Gift Lake

earned less than $20,000.

Table 3.1

Annual Personal Income by Place of Residence

Annual Income	High Prairie	Grouard	Gift Lake
Less than $5000	3.0%	5.9%	13.3%
$5,000 - $9,999	9.2%	5.9%	50.0%
$10,000 - 14,999	12.2%	17.6%	13.3%
$15,000 - 19,999	27.5%	47.0%	13.3%
$25,000 - 29,999	11.2%	11.8%	0.0
$30,000 - 44,999	25.5%	5.9%	6.7%
$45,000 - 49,999	3.1%	2.9%	0.0
$50,000 - 54,999	2.0%	0.0	0.0
$55,000 - 59,999	1.0%	0.0	0.0
$70,000 - 74,999	1.0%	0.0	0.0
$80,000 and over	4.1%	3.0%	3.3%
Total	100%	100%	100%
	N=98	N=34	N=30
Mean Income	$29,191.00	$22,299.00	$14,270.00

Source: Field work conducted between December, 1985 and January 1986.

How does one account for these differences? It is expected that this will have some relationship with the employment status of the respondents. This is presented in Table 3.2 below.

From Table 3.2, 90% of the respondents in High Prairie had full or part-time jobs, with only 3% being unemployed. In Grouard, 73.5% had full-time jobs with 5.9% having part-time jobs. About 9% of the respondents from Grouard were unemployed. In contrast, Gift Lake had 32% with full-time jobs, 3% with part-time jobs, and thus a total of 35% with

jobs. About 26% of the respondents in Gift Lake were unemployed. As well, 16% of the Gift Lake respondents were either on retirement or pension, as compared to 2% in High Prairie and 3% in Grouard. Furthermore, Gift Lake had a much higher percentage of people in seasonal employment. One can, therefore, expect a higher proportion of people drawing unemployment insurance and other forms of social assistance in Gift Lake.

Table 3.2

Employment Status of Respondents by Town

Status	High Prairie	Grouard	Gift Lake
Employed Full-time	84.0%	73.5%	32.3%
Employed Part-time	6.1%	5.9%	3.2%
Seasonal Employment	4.0%	0.0	12.9%
Unemployed	3.0%	8.8%	25.8%
Retired	2.0%	2.9%	16.1%
In School	0.0	8.8%	6.5%
Keeping House	1.0%	0.0	3.2%
Total	100%	100%	100%
	N=99	N=34	N=31

Source: Field work conducted between December, 1985 and January 1986.

There is, thus, a close relationship between employment status of respondents and annual income. High Prairie, with a higher average annual income has the lowest unemployment, while Gift Lake with the lowest annual income has the highest unemployment. Grouard fell in between on both variables.

In view of the fact that working spouses contribute to the household income, or may even, in some cases, be the sole breadwinner for the household, it was deemed necessary to examine the employment status of the spouse of the respondent as well. Table 3.3 presents the employment status of spouses for the three centres.

Table 3.3

Employment Status of Respondent's Spouse

Employment Status	High Prairie	Grouard	Gift Lake
Employed Full-time	62.7%	56.5%	28.0%
Employed Part-time	7.5%	13.0%	28.0%
Seasonal Employment	4.5%	0.0	4.0%
Unemployed	11.9%	13.0%	24.0%
Retired	1.5%	0.0	4.0%
In School	4.5%	4.3%	4.0%
Keeping House	6.0%	13.0%	20.0%
Total	100%	100%	10[illegible]
	N=64	N=24	N=25

Source: Field work conducted between December, 1985 and January 1986.

Once again the dominance of High Prairie is clearly evident. About 63% of spouses in High Prairie are employed full-time as compared to 57% in Grouard and only 28% in Gift Lake. The high employment figure in Grouard may be attributable to the presence of Alberta Vocational Centre (AVC), and confirms the fact that Grouard is more favoured than Gift Lake in job opportunities.

It was suspected that the employment status of respondents will relate closely to their level of education. Accordingly, level of education of respondents is presented next in Table 3.4.

Table 3.4 shows that 64.5% of the respondents from Gift Lake had less than Grade 9 education while High Prairie had 5% and Grouard had 11.4% in the same category. Forty-one percent of the respondents from High Prairie had a maximum of Grade 12 with certificate, that is, if all those with up to Grade 12 maximum are totalled, compared to 40% for Grouard, and 83% for Gift Lake. Twenty-five percent of respondents in Grouard had some college or university education without a degree, compared to 16% in High Prairie and 3.2% for Gift

Lake. The number of university degree holders seemed to vary directly with size of town, being highest in High Prairie with 27%, then Grouard with 11.4%, and then Gift Lake with 3.2%. The evidence suggests that the larger the centre, the higher the level of education of its residents will be.

Table 3.4

Level of Education of Respondent

Level of Education	High Prairie	Grouard	Gift Lake
No formal schooling	0.0%	0.0%	12.9%
Less than Grade 9	5.0%	11.4%	51.6%
Grade 9 - 12 (without certificate)	14.0%	25.7%	12.9%
Grade 9 - 12 (with certificate)	22.0%	2.9%	6.5%
Trades certificate or diploma	7.0%	5.7%	9.7%
Other non-university education (without certificate)	1.0%	5.7%	0.0%
Other non-university education (with certificate)	8.0%	11.4%	0.0%
College or University (without degree)	16.0%	25.7%	3.2%
University degree	27.0%	11.4%	3.2%
Total	100%	100%	100%
	N=100	N=35	N=31

Source: Field work conducted between December, 1985 and January 1986.

The relatively high educational level of Grouard respondents can probably be explained in terms of the influence of AVC, the high educational level of the lecturers, and the educational up-grading programmes that are offered. The impact of AVC, however, does not appear to extend to Gift Lake because the figures are so low there.

The high educational [illegible] High Prairie are to be expected because as a growth centre, it has many government employees with high educational qualifications. High Prairie, therefore, has clear advantages over Grouard and Gift Lake in terms of growth potential since it not only has a higher employment rate, it has higher incomes and on the average the residents are better educated. Grouard has a higher potential than Gift Lake as it performs better than Gift Lake on all the variables compared.

A close relationship has been shown to exist between education level of respondent, their employment status, and their annual income. Spouses in High Prairie tend to hold full-time jobs more than the other two centres. Total household incomes are, therefore, expected to be highest in High Prairie and lowest in Gift Lake. The study confirms this, and the results are shown in Table 3.5 below.

Table 3.5

Total Household Income of Respondent by Town in $

Income	High Prairie	Grouard	Gift Lake
Less than $5000	1.1%	3.0%	3.2%
$5,000 - 9,999	4.3%	6.1%	35.5%
$10,000 - 14,999	7.5%	6.1%	16.1%
$15,000 - 19,999	6.5%	6.1%	3.2%
$20,000 - 24,999	7.5%	18.2%	9.7%
$25,000 - 29,999	4.3%	12.1%	9.7%
$30,000 - 44,999	29.0%	30.3%	19.4%
$45,000 - 49,999	11.8%	3.0%	0.0%
$50,000 - 54,999	5.4%	9.1%	0.0%
$55,000 - 59,999	2.2%	3.0%	0.0%
$60,000 - 64,999	3.2%	0.0%	0.0%
$65,000 - 69,999	2.2%	0.0%	0.0%
$70,000 - 74,999	3.3%	3.0%	0.0%
$75,000 - 79,999	4.3%	0.0%	0.0%
$80,000 and over	7.5%	0.0%	3.2%
Total	100%(N=99)	100%(N=35)	100%(N=31)

Source: Field work conducted between December, 1985 and January 1986.

The general picture presented by Table 3.5 above is consistent with the analysis so far. Total household incomes are highest in High Prairie, followed by Grouard, and then Gift Lake. Fifty-five percent of the surveyed households in Gift Lake earned a total annual income of less than $15,000. Surprisingly, however, only 15% were found in this category in Grouard, while High Prairie, as expected, had 12.9%. Thirty-one percent of the households surveyed in High Prairie earned less than $30,000. In Grouard the figure for this same category was 52%, while Gift Lake had a high 77%. Furthermore, only one household in the Gift Lake sample, 3.2%, earned more than $50,000, while 14.3% were found in Grouard, and 26% in High Prairie. The evidence is thus conclusive.

In table 1.6 below, household size by towns is presented to facilitate a comparison of household size and total household incomes.

Table 3.6

Household Size by Town

Household Size	High Prairie	Grouard	Gift Lake
1	16.3%	11.4%	6.5%
2	37.7%	8.6%	3.2%
3	16.3%	17.1%	12.9%
4 - 5	27.6%	42.9%	22.6%
6 - 9	5.1%	20.0%	41.9%
10 and over	0.0%	0.0%	12.9%
Mean Size	2.88	4.14	5.8
	N=98	N=35	N=31

Source: Field work conducted between December, 1985 and January, 1986.

As can be clearly seen in Table 3.6, the smaller centres, Grouard and Gift Lake tend to have larger household sizes. The average of 5.8 for Gift Lake is extremely high compared to the low of 2.88 for High Prairie. Thus, a high incidence of relatively low household incomes occurs with large household sizes in Gift Lake, while relatively high household incomes occur with smaller household sizes in High Prairie. With the average household size in Gift Lake being twice that of High Prairie, the difficulties in maintaining an adequate

standard of living are much greater.

B. Amenities Available to Households

The quality of life a person enjoys can be gauged fairly accurately by the amenities available for the private use of a household. The well-to-do can afford the luxuries of life, while the poor will be seen to be merely surviving. Cold and hot running water, in a household for instance, contribute to a good quality of life and having access to them, or otherwise, provides an indication of relative well-being. The same can be said for electricity and bathroom facilities. Table 3.7 presents the result of the amenities surveyed in the households by town.

Almost every household surveyed in High Prairie had cold running water, and 97% had hot running water. In Grouard, 80% had cold running water, and the same number had hot running water, while in Gift Lake only 32% had cold running water and 26% had hot running water. It must be emphasized that many of the houses in Gift Lake lack complete indoor plumbing, and the water supply system does not cover the entire town. In fact many residents haul their own water.

More than 70% of households in Gift Lake lack indoor toilets and still use outhouses but almost every household in High Prairie had both a shower or bath tub and indoor toilet. In contrast, 80% in Grouard had these facilities. This distribution is consistent with the picture so far - High Prairie had better facilities, followed by Grouard and Gift Lake lags behind with very poor facilities.

Electricity in the study region is very well distributed and in fact available to all, except one respondent in Gift Lake [9]. Ninety-two percent of the respondents in High Prairie had access to a telephone compared to 74% each in Gift Lake and Grouard. This must, however, be seen in the light of the fact that whereas High Prairie had public phone booths

[9] Apparently he had sold his house recently, and was living in a shack without electricity. His name was on the list because of his old house, and he was readily identified.

Grouard and Gift Lake do not have this facility. The relative lack of telephones in Grouard and Gift Lake, therefore, has a larger impact than first appears because public facilities do not exist.

Table 3.7

Household Amenities by Town of Residence

Item	High Prairie	Grouard	Gift Lake
Cold Running Water	99.0%	80.0%	32.0%
Hot Running Water	97.0%	80.0%	26.0%
Shower / Bathtub	99.0%	80.0%	29.0%
Indoor Toilet	99.0%	80.0%	29.0%
Electricity	100.0%	100.0%	96.0%
Telephone	92.0%	74.0%	74.0%
Television	97.0%	100.0%	93.0%
Refrigerator	98.0%	100.0%	90.0%
Video Cassette Recorder	41.0%	49.0%	36.0%
Dishwasher	38.0%	17.0%	7.0%
Car / Truck	80.0%	88.0%	68.0%
Snowmobile	23.0%	20.0%	42.0%
Motorbike	11.0%	17.0%	10.0%
3-wheeler all terrain	13.0%	23.0%	26.0%
Personal Computer	12.0%	5.7%	0.0%
Canoe / Boat	22.0%	20.0%	32.0%
	N=100	N=35	N=31

Source: Field work conducted between December, 1985 and January 1986.

Every household surveyed in Grouard had a television set and a refrigerator, but in High Prairie 97% had television sets while 98% had refrigerators. In Gift Lake, 93% of the surveyed households had television sets, while 90% had refrigerators. In effect then, a larger proportion of people in Gift Lake, than the other centres, did not have the convenience of a refrigerator or television.

Video cassette recorders are booming as a source of home entertainment. A household that has a VCR can have adequate entertainment without going into a cinema theatre for instance. Besides, High Prairie had more than three video rental outlets. It was, therefore, a matter of interest and curiosity to find out what percentage of people owned VCRs. It was found that 41% of the respondents in High Prairie owned a VCR, but only 17% in Grouard and 11% in Gift Lake. Thus, almost four times as many people in High Prairie as in Gift Lake own VCRs.

An item that falls into the same category as the VCR is the dishwasher. Strictly speaking, dishwashers can be classified as a luxury, because they free people from the time that would have been spent on washing dishes, and enable them to have more time for other things. Being relatively expensive, it might be assumed that not too many low income households would own a dishwasher. The evidence supports this reasoning - 38% in High Prairie had dishwashers, compared to 17% in Grouard and 6.5% in Gift Lake.

Seventy-nine percent of households in High Prairie owned a car or truck, and this compares well with 88% in Grouard and 68% in Gift Lake. The relatively high percentages in the smaller centres Grouard and Gift Lake are understandable because residents of these towns need a means of transport to be able to conduct the most basic everyday transactions. It is necessary to travel to High Prairie for grocery shopping to avoid the relatively high prices charged in the smaller centres. Besides, health services and most other government services are mainly available in High Prairie. Thus whereas it is crucial for residents in these communities to own cars, even though they are less able to afford them, residents of High Prairie can do without a car because they can walk to obtain most things.

Motor bikes seem to be not too popular in the study region. In High Prairie only 11% of the households surveyed owned one. In Grouard it was 17%, and in Gift Lake 10%. Probably this low popularity of m[illegible]n be explained in terms of the extremes of temperature that exist in the region and the poor condition of most highways. The winter is extremely cold and unusually long. No climatic statistics are available for Gift Lake, but

Grouard, the nearest place for which figures are available, has an average winter temperature of -11.1 degrees celsius and an average spring and growing season temperature of 10.6 degrees celsius. The yearly average temperature is 1.2 degrees celsius. [10]

Snowmobiles are most popular in Gift Lake, 42% of the households surveyed having one, but only 23% in High Prairie and 20% in Grouard had them. It can be said that in a large centre, not too many people need a snowmobile, whereas in a smaller one, most people do, or have a use for it. Likewise, three-wheelers (all weather terrain vehicles) are quite popular in Gift Lake and Grouard. Twenty-six percent of the surveyed households in Gift Lake had them as compared to 23% in Grouard, and 13% in High Prairie. Three-wheelers seem to have greater utility in the rural areas, being used to visit trap lines and to hunt along with snowmobiles. It is unsurprising, therefore, that people in the smaller communities tend to own them more than do those in High Prairie. It is also probably true to say that in small centres, three-wheelers and snowmobiles may constitute local status symbols. The affluent will probably have two or three for the use of their family.

Personal computers are now being purchased widely by individuals for education and business use in North America. It was, therefore, desired to find out how many of the households surveyed had personal computers. The results indicate that residents of High Prairie are more abreast with the computer age, than are people of Grouard and Gift Lake. Twelve percent of the High Prairie households surveyed had personal computers, 2% had one in Grouard and there were none at all in Gift Lake. The results again are not surprising. Even though computers are being sold at relatively low prices a person has to not only to be able to afford, [illegible] but to also program it, and have a use for it before it is purchased. Thus, it is to be expected that more highly educated people will have a tende[illegible]onal computers as compared to not so well-educated people. In this context, [illegible] of computer ownership in High Prairie should be seen as an offshoot of [illegible] level of education and relative affluence.

[10] Odynsky, et.al, Reconnaisance Soil Survey of the High Prairie and McLennan Sheets. Alberta Research Council, Report # 63, 1952.

Canoes and boats can be seen either as recreation items or as work materials, for serious fishing, or for both. Thus their incidence can be expected to be flexible. Twenty percent of the surveyed households in Grouard owned canoes or boats while in High Prairie the figure was 22%. Gift Lake had a relatively high 32% which is probably explained by the fishing and hunting occupation of the Metis settlers. One would have expected Grouard lying on the shore of Lesser Slave Lake, to have many more canoes or boats. This was not the case. What this suggests is a reliance on fishing and hunting in Gift Lake and less reliance on these for sustenance in Grouard. The figure for High Prairie may result from the dual usage of the canoe or boat for the recreational pursuit of the affluent as well as for business by those who depend upon it for their livelihood.

From this analysis, once again, the predominance of High Prairie is clearly evident, followed by Grouard, and, Gift Lake at increasing distances from High Prairie.

C. Household Expenditure Patterns

Household expenditure patterns on selected items were examined as a part of this study. The goal was to analyze expenditure patterns within the region with a view to identifying similarities and differences, and finding explanations for them. The result presented in Table 3.10 below, shows the mean monthly household expenditure reported, on selected items by town.

Rent

The mean monthly expenditure on mortgage or rent for High Prairie was $476.00. This figure, of course, excluded those who have completed payments for their houses; or those who are living in free housing. In contrast, the mean for Grouard was $333.00 for 24 respondents, thus giving 31% non-rent paying households. In Gift Lake the mean rent was $245.00. This was based on 25% (8) of respondents who paid rent and excluded the 75% (23) non-rent paying people. Many of the latter group lived in settlement housing and did not have

to pay rent, or had finished paying for their housing.

A comparison of the figures reveals high rental payments for High Prairie, moderate for Grouard, and low rates for Gift Lake. The high demand for housing in High Prairie resulting from the relatively large population and the large number of Alberta government employees there probably accounts for this feature. Another factor might be the property taxes in High Prairie, which many respondents claimed were rather high.

Table 3.8

Mean Monthly Reported Household Expenditures in $

	High Prairie		Grouard		Gift Lake	
	$	N	$	N	$	N
Rent	476	80	333	26	245	8
Food	319	100	349	35	474	31
Clothing	103	100	113	34	146	29
Child Care	275	30	180	8	220	12
Health Care	43	72	20	21	47	17
Utilities	130	90	166	34	194	30
Transportation	168	93	159	35	299	30
Social and Recreation	86	92	94	27	120	17
Household Goods	82	89	73	31	86	30
Home Upkeep	75	58	43	19	65	20
Debts and Repayments	376	52	392	21	276	23
Other Expenditure	405	42	145	10	167	10
Totals	2,263		1,887		2,119	

Source: Field work conducted between December, 1985 and January 1986.

In Grouard, a large proportion of those who paid no rents were Treaty Indians who live in reserve housing. Apart from these, most housing is owned by Alberta Housing and

Mortgage Corporation. The government thus effectively sets the prices for housing in the region. The flat rate of $200 or 25% of monthly income charged by the government housing programmes in the region effectively checks the soaring of rent charges.

Gift Lake has low rents because the settlement provides free housing for the members. Very few people pay rent in Gift Lake.

Food

Monthly mean household expenditures on food were generally higher in the smaller centres than High Prairie. Gift Lake had a mean of $474.00, Grouard had $349.00 and High Prairie had $319.00. Since incomes in Gift Lake and Grouard are lower than in High Prairie, it is paradoxical that those who are least able to pay have to pay more for such a basic item as food. In the regional development literature of First World and Third World countries, such findings are the norm. How does one account for the differences? Why does the Gift Lake household pay on average $155 more than High Prairie?

Several factors may account for this. One important consideration may be the household size. Having larger household sizes it would be expected that Gift Lake respondents spend more on food since they have many more mouths to feed. [11] Since the smaller centres, Gift Lake and Grouard have few, if any shopping facilities, it is to be expected that most of these households may have to shop in High Prairie. Thus, whatever they spend would be affected by the distance factor. The high cost of transportation[12] in these areas is sure to indirectly affect the total food expenditure. Besides, most of these households are not rich enough to be able to take advantage of bulk purchases as do some households in High Prairie who purchase in bulk from Edmonton. They, inevitably, have to supplement whatever is bought from High Prairie with some purchases from the local grocery or corner store.

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[11] Dividing the reported household expenditure on food by the total number of people in the household confirmed that household size was the major factor. Per capita food expenditure for the sample was $125 for High Prairie, $100 for Grouard, and $98 for Gift Lake.

[12] Some respondents reported that it cost them $50 or more to hire a taxi, or somebody to take them from Gift Lake to High Prairie, one way.

A third and very important factor is the retail price of groceries in Grouard and Gift Lake. Many of the respondents complained about high prices, poor selection and variety and often unsatisfactory shopping conditions.There is only one grocery store in Grouard, just as in Gift Lake. In the absence of competition, because the market threshold is not sufficient to support additional shopping facilities, consumers are usually left at the mercy of profit maximizing entrepreneurs.

A further possible explanation may be the speculation that many natives, especially the poorly educated, have different shopping habits and usually purchase more processed foods, potato chips was specifically mentioned, which are less nutritious instead of the basics[1]. If this speculation is founded, then one would logically expect them to pay more than those who purchase less processed foods. There has also been the suggestion that most low educated people fail to budget, and are therefore more vulnerable to impulsive buying. This can be an important source of extra expenditure. Whatever the reasons, one point is significant - the people who are least able to pay are paying more for less quantity and quality food. While increased money flows to boost the incomes of people in small centres is a laudable idea, perhaps a neglected but important consideration should be the distribution and flow of goods at reasonable prices in these centres. Is it possible to ensure some fairness in quality and pricing in smaller centres? Co-operatives could be explored as a solution, but the leadership and organization required may currently be lacking.

Clothing

Monthly expenditure for clothing followed the same pattern as food. The mean household expenditure for Gift Lake was $146.00, that for Grouard was $113.00 and for High Prairie it was $103.00. Respondents prefixed their response with the statement "I don't buy clothing monthly, but this is an estimate of how much I spend on the average".

[1] This speculation was confirmed by several people with whom I discussed the high food expenditure bill of Gift Lake.

The observations made about food expenditure above apply also for expenditure on clothing. Unlike people in High Prairie who can afford to shop for clothing in Edmonton, those in Gift Lake and Grouard mostly shop for clothing in High Prairie and, probably, pay more. Furthermore, the large household size is also an important factor - especially the relatively large population of children. On average, High Prairie had one child per household, Grouard had 2.2 while Gift Lake had 3.2 children. It is obvious that much more will be spent generally on clothing for children, as they outgrow them easily, than adults. Gift Lake and Grouard with higher populations of children are expected, therefore, to spend more, although they can less afford to do so. High Prairie households, most likely because of the smaller population of children, spend less on clothing.

Generally, low income people can not afford to spend much on clothing, and, therefore, since one pays for the quality of the item, low income people would not be able to afford the best quality clothing available, and may purchase cheap, poor quality items. These will not last long enough. In the end, the poor will spend more on clothing than the rich. There is also a suspected lack of good clothing maintenance - mending, dry cleaning, washing - which would prolong the life of the clothing. The overall result would be higher expenditure on clothing because of the inferior quality purchased, and the general lack of proper clothing maintenance. Clothing would last a shorter time and need to be replaced more quickly. This seems to be the case with Natives generally.

Child Care

Child care expenditure was highest in High Prairie, with a mean of $275.00. This figure is based on the 24 households who used child care services. In Grouard the mean expenditure was $180, while in Gift Lake it was $220. Whereas the high figure for High Prairie is easy to explain, that for Gift Lake is not. There are two day care centres in High Prairie which provide care for the children of working families. The fee charged is $250 per child per month. Besides, the recreation facilities available probably facilitate frequent family

outings which may necessitate some expenditure on baby-sitting. The same reasons may apply to Grouard. The figure for Gift Lake is explained by the very fact of the absence of day care. Those mothers who are taking various upgrading courses at the Community Vocational Centre have to use private baby sitting, which is more expensive [14].

Health Care

Health care was the item on which the least amount of money was spent. The mean household amount for High Prairie was $43.00, based on 63 observations (63%), that for Grouard was $20.00 based on 18 observations (51%), and for Gift Lake it was $47.00, based on 11 observations(35%). Many of the non-respondents in Grouard and High Prairie were Treaty Indians who did not have to pay for health care. In Gift Lake some respondents indicated that social services paid for their health care. The question that remains unanswered is why Gift Lake respondents spend more than Grouard and High Prairie on health services. It is suspected that fewer people in Gift Lake than the other centres would have Blue Cross coverage because of their low income. Without this coverage people will have to pay for prescriptions, dental care, and other services not covered by the Alberta Health Care programme. This would result in higher medical care expenditures.

Utilities

Mean monthly expenditure on utilities was higher in the smaller towns than they were in High Prairie. Gift Lake had the highest mean household expenditure with $194.00. Grouard followed with $166.00 and High Prairie trailed with $130.00. The reason is that many of the homes in Grouard and Gift Lake which are privately owned, are heated with propane, which is relatively more expensive than natural gas or oil. Many respondents in the two smaller towns complained of poorly built housing that was usually too cold and required much more heating [15]. Consultation with field staff of Alberta Housing and Mortgage Corporation

[14] It is [illegible] that most people pay $10 a day per child or more sometimes.

[15] In one case in Grouard, the respondent complained of a faulty meter that gave

confirmed that most houses constructed in the region around 1970 are less energy efficient, and are also known to have vapourization problems because of poor construction and supervision because they were built too hurriedly. This would account for larger heating bills.

A third reason may be the absence of recreational facilities that makes staying indoors longer hours, and watching television for entertainment, a necessity. Clearly, this consumes more electricity or gas energy for heating.

For Gift Lake specifically, long distance phone bills may be an important factor. Phone calls to High Prairie and Grouard carry long distance charges, hence to keep in contact with friends in nearby centres entails higher phone bills.

Transportation

Mean household expenditure on transportation was again highest in Gift Lake and lowest in Grouard. In fact the Gift Lake respondents on average paid almost twice as much as did those in Grouard and 1.8 times as those in High Prairie. Geographical location or remoteness, is the main cause. Since almost every transaction is undertaken at High Prairie, (even welfare recipients have to pay high fares to High Prairie to receive their cheques[16]), it follows that the farther a person lives from High Prairie the greater will be the monthly transportation expenditure. It is useful to note that there is practically no public transportation for Gift Lake, and residents must either own a vehicle, hitch-hike, or telephone for a taxi from High Prairie, 90 kilometres away.

Since telephone calls to High Prairie do not attract any long distance charges, it is easy to see why Grouard respondents do not spend as much on transportation. Many things can be effectively handled by telephone, while grocery shopping may be relegated to twice a month or

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[15](cont'd) unreasonably high bills even when no gas and/or electricity were used for a period of one month. Furthermore, the poorly educated are less likely to question the bills they receive even if meters are faulty.

[16] In theory, they do not have to go to High Prairie to collect these cheques, because they are usually mailed. However, many of them do, since they have to buy groceries anyway, and there are no banks to cash the cheques except in High Prairie, but they are not reimbursed for the transportation expenditure.

less. Besides, Grouard is not as remote as Gift Lake, being only 35 kilometers distant.

The figure for High Prairie may be explained by trips that respondents make to Edmonton regularly for shopping, business or recreation[17]. Besides, in its tributary relationship with Edmonton, High Prairie does not have the same advantage that Grouard has with High Prairie. In fact, humorous though it might be, one respondent from High Prairie summed it up in her remark: "Long distance bills are killing my romance". It is to be expected, therefore, that the average household will make the four-hour trip to Edmonton at least once a month. Furthermore, the presence of a daily bus service to Edmonton probably increases the propensity to travel. The presence of a taxi service in High Prairie, however meagre it might be, may be an additional factor.

In sum, therefore, Gift Lake pays more for transportation because it is dependent on High Prairie for everything, and no bus service, for instance, exists, except for senior citizens. This necessitates high transport charges. What is pathetic is the fact that these people, the least able to pay, are required by a complex mixture of geographical and economic factors to pay more than those who can really afford to pay.

Social and Recreation

On average, High Prairie respondents spent least, on social and recreation activities, $86.00. They were followed by Grouard with $94.00 and then Gift Lake with $120.00. This should be seen against the background of recreational facilities available in the respective towns. Gift Lake had a gymnasium in the school, and it was available only three nights a week. There was a skating rink which was not maintained, hence the local hockey team has to go elsewhere for practice [18]. For bowling, the nearest place was Enilda which is over 60km away. An alternate accessible but expensive entertainment was bingo, and a large number of

[17] There were some people who shopped for groceries in Edmonton at the 'Real Canadian Superstore because they wanted a better variety and lower prices - that is, better value for their money.

[18] One respondent indicated that at one point they had to go to Donhelly, estimated to be over 80km away for practice.

households indicated they were involved in it.

Grouard had better facilities because of the Alberta Vocational Centre. The community also had access to the Northlands School gymnasium, but a large number of people still used the recreational facilities in High Prairie. Thus, whereas Gift Lake and Grouard residents had to add travel costs to their entertainment budget, those of High Prairie did not.

An alternative to all these is to have the weekend "good-time - party". This usually involved high expenditure on alcohol, and other things, and swells the entertainment expenditure. The results of some of these "good times" can often be catastrophic - leading to drunk driving, accidents, brawls and often, unwarranted vandalism.

In comparison, High Prairie was relatively well equipped with recreational facilities. There was an outdoor swimming pool, a skating rink and gymnasium, pool arcades, golf courses, drinking bars etc. These were all within walking distance and accessible to every resident, unlike the smaller centres.

The differential recreational expenditure, therefore, can be basically explained in terms of the absence of basic facilities. "Bingo and booze" take a large portion of the recreation dollar, or residents have to spend more to have access to facilities outside of their communities. Gift Lake and Grouard are not large enough in terms of population to financially support adequate recreational facilities. However, it is suggested that Gift Lake could greatly reduce recreation expenditure if the residents would team together to maintain the skating rink and more effectively co-ordinate and supervise the use of the other facilities.

Household Goods

Household goods were defined to include items for the household such as furniture, lamps, appliances and other household supplies. Residents of High Prairie on average spent $82.00 per month, Grouard $73.00 and Gift Lake $86.00

Two possible explanations for the differences may be the differential prices available to High Prairie residents who can afford to shop in Edmonton and obtain relatively better deals, compared to Gift Lake residents who shop in High Prairie, thereby paying higher prices as well as exhorbitant rates for transportation. It is possible that the larger household sizes in Gift Lake may be a contributing factor, especially for supplies.

It is suggested that poor maintenance and care for household goods can shorten their life span. As has been argued earlier for clothing, it may be that poor care for household goods is a major contributory factor to the high expenditure on this item. Bearing in mind that low incomes prevent the purchasing of high quality items, this could lead to higher overall expenditures among the poor as in Gift Lake.

Home Upkeep

As used in this study, home upkeep involves repairs and maintenance of household amenities such as roofing and plumbing. It also includes renovations and additions to the property. On average respondents in High Prairie spent $75.00 per month, those in Grouard spent $43.00 and in Gift Lake $65.00 was spent. Fifty people responded to this question in High Prairie (50%), 15 people responded in Grouard, (43%) and 9 people (29%) responded in Gift Lake. Many of the non-respondents indicated that they were renters and maintenance and upkeep of the property was the responsibility of the landlord. This was especially relevant in Grouard, where Alberta Housing owned a very high percentage of the housing.

Why does Gift Lake have a higher expenditure on home upkeep than Grouard? How does one explain the high figure for High Prairie? It is suggested that High Prairie residents need to maintain their properties to keep up with standards, and also to attract potential customers to rent accommodation. The high figure for Gift Lake may be explained by the predominance of old, poorly built houses which cost much more to maintain. The figure for Grouard may indicate a neglect of maintenance because of the lack of a town council to supervise or relatively new or well-maintained housing, such as those rented by Alberta

Housing, which do not require much maintenance. There seems to be, among the less well-educated community, a lack of good care and maintenance for housing. This would be especially crucial in instances where the individual did not have to put anything into the construction of the house. It is also possible that these people may not undertake maintenance of their houses basically because they are unable to afford it. The result of the operation of these factors is low expenditures on house maintenance, but poorly maintained or substandard housing.

Monthly Debts and Repayments

variable included loan repayments of all kinds and the repayment of personal debts. Grouard had the highest monthly mean repayment, $392.00. High Prairie followed with $376.00 and Gift Lake trailed with $276.00.

What this suggests is that respondents of Grouard and High Prairie have secure incomes, and can thus afford to plan ahead unlike Gift Lake where unemployment and low incomes force most people to live from hand to month. In Grouard, A-VC offers relative job security, while in High Prairie, the same can be said of the many government departments. The high percentage of people employed full-time in these two places lends support to this reasoning (See Table 3.2) Thus the economies of Grouard and High Prairie are stronger and more vibrant than Gift Lake.

Besides, many more people in High Prairie than the other places have had secure incomes for a longer time, and therefore, probably own many of what may be classified as basic home needs. In contrast, many residents in Grouard have not had secure incomes for long and are, therefore, just beginning to aquire these essentials.

Furthermore, most banks and credit institutions would not give credit to residents of a Metis Settlement. This is because the Metis Settlement Act prevents them from repossessing on a Settlement. Credit-worthiness is, therefore, lower in the Settlement than outside of it.

Other expenditure

This covered every item that had not been included previously. Top of the list of items were vacation and holiday expenditure, charity donations, gifts to friends and relatives, and other miscellaneous expenditure. High Prairie had the highest - $405, followed by Gift Lake with $167.00 and Grouard with $145.00. Grouard and Gift Lake had only 4 and 3 respondents respectively for this variable, representing 11% and 10% respectively. High Prairie had 24 respondents, or 24%. While the absolute number of respondents was small, these figures seem to confirm the relative affluence of High Prairie in that they can afford to spend a considerably high amount on what may not be regarded as essentials.

On very basic items - rent, food, clothing, utilities, transportation, and recreation, Gift Lake households reported they spent on average $1,478, compared to $1,214 for Grouard, and $1,282 for High Prairie. Since household incomes in Gift Lake are lower than in High Prairie, it implies that an exceedingly high percentage of household incomes would be spent on these basic necessities. Similarly, even though the average expenditures of Grouard on these items is lower than for High Prairie, the relatively low average incomes there, makes the argument presented above true in Grouard as well. If we accept Atkinson's definition of poverty as "a situation in which individuals are required to devote all or most of their earnings to the acquisition of basic subsistence needs", it becomes obvious who the poor are in our sample - those on the periphery - Gift Lake, and to a lesser extent, Grouard.

D. Banking and Credit Characteristics

Having banking accounts is definitely one of the essentials of life in the twentieth century. Most financial transactions are undertaken through the banks. A lack of a bank account can be adequately taken, therefore, to mean that a person does not undertake any viable financial ventures. In a sense, such a person can be seen as living from hand to mouth, scraping just enough to make ends meet month after month, and not having any money left-over to spare. It also suggests a lack of future orientation and planning. Table 3.9

presents some money-related characteristics of the respondents. The question asked was whether respondents had the listed items.

Table 3.9

Banking and Credit Characteristics by Town

	High Prairie	Grouard	Gift Lake
Savings Account	84.0%	69.0%	32.0%
Chequing Account	85.0%	65.7%	35.5%
Bank Deposit	33.0%	5.7%	0.0%
American Express	14.0%	6%	0.0%
Visa Card	58.0%	29.0%	3.2%
Master Card	5.0%	0.0%	0.0%
Department Store Card	35.0%	37.0%	12.9%
	N=100	N=35	N=31

Source: Field work conducted between December, 1985 and January 1986.

The results show that 84% of respondents surveyed in High Prairie had savings accounts and 85% had chequing accounts. In contrast 69% of Grouard respondents had saving accounts with 65.7% having chequing accounts. In Gift Lake, 32% had saving accounts, while about 36% had chequing accounts. For those who had both chequing and savings accounts, the large majority were found in High Prairie, and the least in Gift Lake. Seventy-two percent of the respondents had them both as compared to 46% in Grouard and 10% in Gift Lake.

Credit cards are also more popular in High Prairie than in Grouard or Gift Lake. Fifty-eight percent of the respondents in High Prairie had a Visa card, 14% had an American Express card and 5% had a Mastercard. In Grouard, 29% had Visa, 6% had American Express and none had Mastercard. In Gift Lake, no one had an American Express or Mastercard, and one person had Visa while 12.9%, or 4 people, had a department store card. Bank deposits,

that is, long term deposits with higher interest rates, were not common in Grouard or Gift Lake.

What this data suggest is that whereas the High Prairie sample has reasonably secure incomes and maintained bank accounts, many in Gift Lake do not have most probably because they lack a secure income. It does not mean that respondents from Gift Lake are averse to banking. Rather, it means that they do not have enough to be able to save anything in the banks, and maintain a regular account. It may also be the result of a lack of future planning, or a lack of the basic skills necessary to create and operate a bank account.

If credit cards are indicative of credit-worthiness, which is quite a reasonable supposition, then the results indicate that respondents of the smaller centres are less creditworthy, and this is reasonable in the light of their low, and unreliable incomes. Respondents of Gift Lake are, therefore, not only limited in access to jobs, they are limited in access to credit as well.

E. Welfare and Income Subsidies

It was deemed a matter of interest to examine the proportion of households from the three centres that received various forms of income supplements. Three of these payments were examined - Unemployment Insurance, Income Subsidies (rent, child care, and health care) and Social Welfare. These are mainly payments without which most recipients cannot survive. The proportion of people in a place who are welfare recipients can be, therefore an indication of the relative affluence or poverty of its people. The findings are presented in Table 3.10 below.

In High Prairie less than 10% indicated that they, or a member of their household had received Unemployment Insurance during the past year. In Grouard, the figure was 12%, and in Gift Lake it was 23%. The seasonal nature of most jobs in Gift Lake probably accounts for this fact [19].

[19] See Al McCully and Hugh Seaton 1981: *Gift Lake Metis Settlement Land Use Planning Inventory*, Alberta Municipal Affairs, pp 61-62.

Table 3.10

Social Assistance Recipients by Town

	High Prairie	Grouard	Gift Lake
Unemployment Insurance	9.1%	11.4%	23.0%
Social Welfare Benefits	1.0%	3.0%	19.0%
Income Subsidy	5.0%	14.0%	3.2%
	N=99	N=35	N=31

Source: Field work conducted between December, 1985 and January 1986.

Only 1% of respondents in High Prairie received Social Welfare. In Grouard, it was about 3%, while in Gift Lake it was 19%. The absence of jobs in Gift Lake as previously shown, is a plausible reason.

Income subsidy recipients constituted 5% of the respondents from High Prairie, 15% of those from Grouard, and 3% of those from Gift Lake. The relatively large size of Grouard families may probably help to explain this. From the fore-going, therefore, the incidence of poverty is highest in Gift Lake, moderate in Grouard and lowest in High Prairie.

Conclusion

The evidence presented in this section partially confirms the first hypothesis - Households in Gift Lake spend more on average per month than those in High Prairie or Grouard. However, the other part is not confirmed - Grouard respondents, reportedly, spent less per month on average than those of High Prairie. These findings, however, remain tentative, since it has not been possible to corroborate the reported expenditures with actual household expenditures. [20]

The findings also suggest that High Prairie has pre-eminence over Gift Lake and Grouard. Large disparities exist in the region with respect to access to jobs, income, and as

[20] This could have been effectively done using the expenditure dairy. Unfortunately, a statistically adequate sample size could not be obtained for analysis as has been explained earlier.

displayed by the monetary characteristics and banking habits of the respondents. Differences also exist in terms of the distribution of poverty. It has been shown that low incomes coincide with large household sizes, and consequently higher expenditures. These relationships have been shown to have a gradation of a high positive value from the centre, High Prairie, towards the periphery - Gift Lake.

V. PERCEIVED QUALITY OF LIFE

Introduction

In this section, subjective indicators are presented. Respondent's subjctive evaluation of the objective life conditions in their places of residence are examined and compared for the three centres. This gives a picture of the perceived relative quality of life available in each place. Explanations are also adduced for the differences in satisfaction levels where this is possible.

A. Subjective Evaluation of Life Components

Perhaps the one fact on which most writers on quality of life agree is that neither objective nor subjective indicators alone, are enough to adequately describe or quantify the quality of life of a place. As Cutter (1985, 2) wrote, "One must not only consider the objective conditions of the social environment (crime, housing, income) in evaluating places .... some measure of individual satisfaction with, or subjective assessment of, these conditions is needed." (See also Pacione, M. 1982; Andrews and Withey, 1976; Smith D. M., 1973)

Following this reasoning, therefore, respondents' evaluation of various components of life in their communities is presented in the current chapter. A brief description of the approach used is in order. A 5-point scale, ranging from 1 (Very Dissatisfied) to 5 (Very Satisfied) was used, and respondents were asked to evaluate specified components of their lives, to express how much satisfaction they derived from these. They were then asked to assign a reason for their level of satisfaction. For instance if a respondent indicated that they were dissatisfied, (ie. chose a 2 on the 5-point scale), they were required to explain why they were dissatisfied. These responses provide additional insights into the responses obtained. More importantly, they provided an opportunity for the respondent to indicate the cause of the dissatisfaction, or throw some light on the degree of satisfaction. Generally, it was observed that those who were satisfied with a specific life component were not as eager to provide an explanation for their expressed level of satisfaction as were those who expressed

dissatisfaction.

One serious drawback to the use of satisfaction indicators has been the fact that too much emphasis has been placed on the satisfaction measures or scales alone, to the neglect of the underlying factors. Different people may rate a given item in a similar way, but for different reasons. The utility of the measure of satisfaction for policy-making or development planning is, therefore, severely limited. For instance, improving the quality of the drinking water when the real cause of dissatisfaction in a place is the lack of recreational facilities, does little to change respondents view of the quality of life offered by the community. The need for this approach was indirectly [redacted] Dorothy Walters when she wrote: " Part of our current dilemma arises out of th[redacted]dox that measured developments in objective conditions have not been associated with similar improvements in satisfactions" (Walters Dorothy, 1972). Since this study on the High Prairie region had quality of life development and programming in view, it was deemed necessary to identify the sources of discontent.

Another departure of this study from other quality of life studies was the emphasis on *place* . As Helburn has noted, quality of life as a policy goal is attached to place, it is a goal of which geographers must be cognizant, and to which geographers can make important contributions (Helburn, 1982). In the light of this, the respondents were not asked to evaluate their quality of life in isolation, but in relation to their town of residence - how life was hindered or enhanced by the place of residence. They were not asked how satisfied they were with "life as a whole these days", but were rather asked to indicate how, all things considered, they were satisfied with the quality of life provided by their town of residence. They were then asked to explain why they were, or were not, satisfied. Thus in the truest sense, this was a geographical evaluation of the quality of life. As Storrs McCall has cogently argued, quality of life applies to life in a certain society, or life in a certain region of the earth's surface. Thus it is not the aggregated happiness, but rather the degree to which the necessary conditions for happiness in a given society or region have been obtained (McCall 1975, p235).

The results are presented in Table 4.1 and 4.4. The variables are split into public and personal life components and the explanation for this is presented in the second half of this section. On the whole, High Prairie residents were more satisfied with their town than were those of Grouard, who were in turn more satisfied than those of Gift Lake. Satisfaction was generally higher on the personal variables - physical health, family life, job, standard of living, etc. - with Mean Satisfaction Index[21] (hereafter, MSI) scores of 4.02, 3.8, and 3.6 respectively for High Prairie, Grouard, and Gift Lake, than for the public variables - cost of living, housing, job opportunities - with MSI scores of 3.4, 2.5 and 2.3 respectively. This finding is consistent with those of Campbell, Converse and Rogers (1976), Andrews and Withey (1976), and Kennedy et. al (1977).

The greatest satisfaction was derived from family life, where the MSI score for Gift Lake and High Prairie was 4.3 and that for Grouard was 4.2. There was no common variable or component that was the least satisfactory for residents from all three communities. The least satisfactory in High Prairie was housing available, (2.4), followed by transportation facilities available, (2.7). In Grouard four variables tied for being the least satisfactory - health facilities, medical staff, indoor recreation, and the quality of the water, all at 1.5. In Gift Lake the least satisfactory item was daycare, 1.2, followed by facilities for Senior Citizens at 1.3, and indoor recreation facilities with 1.4.

Satisfaction with Town as a Place to Live

High Prairie respondents were generally more satisfied [illegible] MSI of than Grouard and Gift Lake with 3.2 and 3.1 respectively. The difference in MSI, compared to High Prairie, was statistically significant for both centres. Sixty-eight percent of the

[21]This is computed by averaging the satisfaction scores. For instance, if 3 respondents in answer to the question, "How satisfied are you with your house?", select 1, 4, and 5, on the 5-point scale, signifying "very dissatisfied", "satisfied", and "very satisfied" respectively, the MSI would be given by (1 + 4 + 5)/3 = 3.3. The MSI will, therefore, range between 1 and 5 when a 5-point scale is used. High scores indicate high levels of satisfaction, while low scores indicate dissatisfaction. This approach has been used by Kennedy et al, 1977 (p 23).

respondents in High Prairie were satisfied while 11% were dis[illegible]. Among the varied reasons given were the following: small friendly community, [illegible] housing shortage, 7%; inadequate recreational facilities, 6.8%; lack of shopping facili[illegible].5%; good health facilities, 5.1%; people lacked a "progressive attitude", 5%; it is nice and quiet, 3.4%; "born and raised here", 5%; "enjoy living here", 6.8%.

Grouard residents were less satisfied with their town, 31% were dissatisfied, 49% were satisfied, and 17% were neither satisfied nor dissatisfied. Among the reasons given were the following: "lack of community feeling and unity", 12%; inadequate recreational and entertainment facilities, 21%; small friendly community, 6%; inadequate shopping facilities, 6%; poor water quality, 17%; too much vandalism and crime, 9%; rampant juvenile delinquency, 6%; too many uncontrolled dogs 6%.

Gift Lake respondents were the least satisfied, MSI of 3.1. The reasons given for the dissatisfaction included a lack of housing 19%, inadequate recreational and entertainment facilities 19%, unfair and discriminatory practices by Settlement Council 9.4%, a lack of jobs 6%, a general lack of opportunities and facilities 6%, a lack of community feeling and unity 6%, nice and quiet community 6%.

Generally the explanations given seem to support the overall evaluation of satisfaction with town. High Prairie has better recreational and other facilities, Grouard is known to have poor water quality, whereas Gift Lake, being more remote and more rural, has a shortage of almost all facilities including housing and recreational activities. The disparities existing between the three centres with respect to facilities and services will be examined later.

Satisfaction with Health Facilities and Medical Staff

Respondents from High Prairie were by far the most satisfied with the health facilities available in the community, with MSI of 3.7. Respondents from Gift Lake and Grouard were dissatisfied with MSI of 1.5 each. Wheras 72% of the High Prairie respondents were satisfied and 12% dissatisfied, in Grouard 91% were dissatisfied and 3% satisfied, while in Gift Lake

90% were dissatisfied and and only 3% satisfied.

Table 4.1

Satisfaction with Public Life Components - MSI

Life Component	High Prairie	Grouard	Gift Lake
Town as place to live	3.7	3.2•	3.1••
Health Facilities	3.7	1.5••	1.5••
Medical Staff	3.5	1.5••	1.4••
Transportation Facilities	2.7	2.0••	1.6••
Housing	2.4	2.4	2.4
Public Services	3.6	2.3••	2.7••
Educational Opportunities	3.8	3.5	3.7
Indoor Recreational Facilities	3.1	1.5••	1.4••
Outdoor Recreational Facilities	3.5	3.0•	1.8••
Environmental Quality	2.9	3.3	3.0
Job Opportunities	2.9	2.3••	1.9••
Communications System	3.2	3.5	4.0••
Daycare Facilities	4.0	2.9••	1.2••
Senior Citizen's Facilities	4.0	2.6••	1.3••
Religious Facilities	4.0	3.8	3.8
Water Quality	3.7	1.5••	3.1••
Local Government	3.4	1.6••	2.0••
Safety of the Environment	3.5	2.6••	3.0•
Cost of Living	2.4	2.7	3.0••
	N=99	N=35	N=31

These were compared with the MSI for High Prairie using the test for difference between means. • indicates the difference is significant at .05 •• Significant at .01

The generally high dissatisfaction in Gift Lake and Grouard is understandable in view of the fact that there are no health facilities available in those communities and those in need of medical care have to travel to High Prairie before they can have access to facilities[21]. This emerged clearly in the reasons given for explanation.

Asked to explain the level of satisfaction, 58% of the respondents from High Prairie had no comments. Thirty-eight percent said the facilities were good, while the remainder complained about various things such as "too crowded", 8%, "poor quality doctors", 18%, and poor service, explaining that "doctors appear to be in a rush", 38%.

The reasons given are self-explanatory. Since the High Prairie Regional Health Complex serves the entire region, overcrowdedness can easily result. When few doctors have to attend to too many people, most likely, in order to be able to serve them all, they will have to work fast, appear to be in a rush, in order to be able to handle the heavy load. This will invariably, depending upon the weight of the load, result in delayed appointments, long waiting times, "assembly line"[22] type treatment and an inevitable inefficient performance of medical staff. Figure V.1 below shows the service area of the High Prairie Regional Health Complex.

In Grouard, the most frequent reason for dissatisfaction with health facilities was that there was none available locally, 65%, or facilities were too far away, 24%. Nine percent indicated that there was one nurse available in the community, referring to the nurse at AVC, Grouard, but that this was not enough. About 3% indicated that the facility was too crowded.

The high dissatisfaction with health facilities in Grouard is basically explained in terms of the absence of any facility there. Residents have to travel 35 kilometers to High Prairie to obtain health care. In an emergency, they have to telephone, and wait for an ambulance from High Prairie before any treatment can be given.

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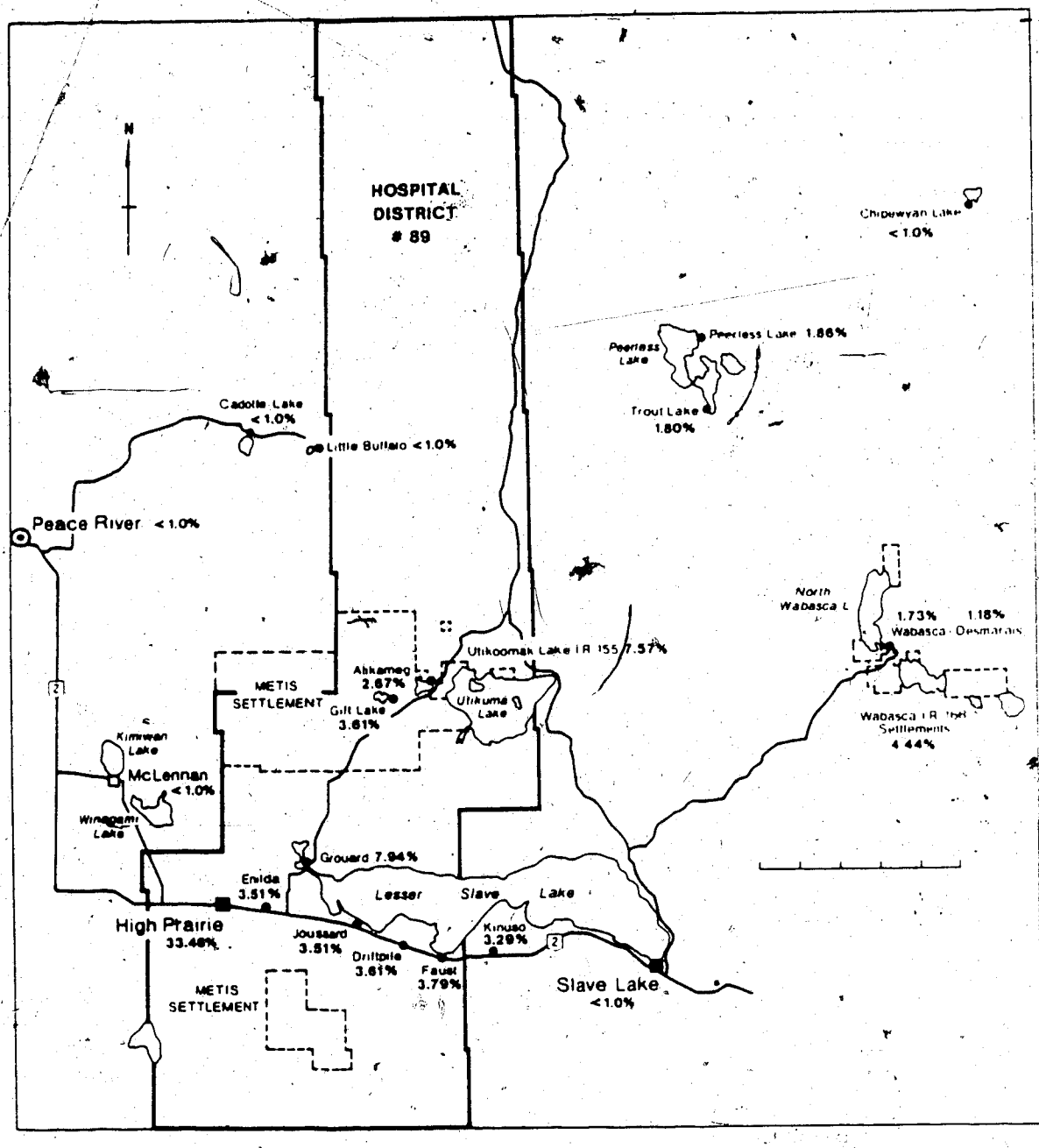
[21] A nurse visits these communities once a week but apart from that no other service is available.

[22] Two respondents used the term to describe the service given there. Others said: "In - out", "Before you finish describing what is wrong with you they have already written your prescription".

Fig V.1 Patient Origins of the High Prairie Regional Health Complex 1975-1977 [1]



[1]The % figures indicate the proportion of patients seen at the Health Complex originating from each centre

Gift Lake respondents gave only two reasons for their level of satisfaction with health facilities - no facilities were available locally, 78%, and the available facilities were too far away 19%. The situation here is very much like that in Grouard. There are no facilities available and residents have to travel 85 kilometers to High Prairie, or go to McLennan for health care. In emergencies, the same procedure is followed in Gift Lake as Grouard, except that telephoning High Prairie incurs long distance charges.

A doctor visits nearby Atikameg once a week, but surprisingly, not one of the respondents indicated they used the services offered there. Table 4.2 below shows the location of medicare facilities used by respondents.

Table 4.2

Location of Health Facilities Used

Facility Used	Town of Respondent		
	High Prairie	Grouard	Gift Lake
High Prairie	90.0%	97.0%	77.0%
McLennan	1.0%	3.0%	23.0%
Edmonton	7.0%	0.0%	0.0%
Grande Prairie	2.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%
	N=98	N=35	N=31

Source: Field work conducted between December, 1985 and January, 1986.

The heavy load of the High Prairie Regional Health Complex is evident just from a scanning of Table 4.2 above. The exact volume of traffic which the centre has to handle can not be accurately estimated on the basis of the above information alone.

Medical Staff

High Prairie respondents again had the highest satisfaction with the medical staff, with MSI of 3.5. Compared to the level of satisfaction with health facilities, (MSI of 3.7), this means that they were less satisfied with medical staff than they were with health facilities. Grouard respondents were dissatisfied with medical staff with MSI of 1.5, while Gift Lake was the most dissatisfied with 1.4.

Respondents from High Prairie were not too satisfied because the available staff was of poor quality, 34%; incompetent, giving wrong prescriptions, 18%; not enough, lacking specialists, 18%; the doctors were rushed and took no time with the patients, 11%; or they were too "prescription happy", "runnning people through like assembly line", 4.5%. About 14%, however, felt the staff was excellent, while 55% had no comments.

In Grouard, the main source of discontent was the absence of medical staff. This reason was given by 76.5% of the people. About 12% indicated that there was only one nurse in the community and 6% indicated that what was available was not enough. The remaining 6% said that the staff was of poor quality, and the doctors were rushed, and so did not take time with the patients. Overall, 94% of the repondents were dissatisfied with medical staff.

Gift Lake respondents had the highest degree of dissatisfaction with medical staff, with MSI of 1.4. Nine out of every ten respondents were dissatisfied. The fact that no medical staff was available locally was cited as the reason by 90% of the respondents, while the rest indicated that the once a week visit by a nurse to the community was just not adequate.

The results clearly indicate an inequity in geographical access to medical care. This is particularly a serious problem in view of the dual problems of communication of low personal mobility, as seen in the previous chapter, and high transportation charges. In the light of work done on this kind of problem by Jolly and King (1966), one will expect a decrease in the utilization of health facilities in Gift Lake, resulting from a severe distance decay essentially because of the costs of transportation to health care. How severe this is, and how Grouard is affected by distance decay in access to health facilities requires further research.

Transportation Facilities

In the entire study region transportation facilities were perceived to be unsatisfactory. MSIs were 2.7, 2.0 and 1.6 for High Prairie Grouard and Gift Lake respectively. The difference in MSI, compared to High Prairie, was significant at 1% for both towns. Dissatisfaction levels were however different for each town. Forty-seven percent were dissatisfied in High Prairie with 30% satisfied, 68% were dissatisfied in Grouard with 14% satisfied, while 84% were dissatisfied in Gift Lake with 16% satisfied.

In spite of the generally low level of satisfaction, the reasons given varied from town to town. Eighty-four percent of the respondents from Gift Lake were dissatisfied because there was absolutely no public transportation available. In Grouard 80% gave the same reason but 6% felt that Grouard could not support a better service. The comments from High Prairie were, however, more varied. Thirty-seven percent complained about the absence of air service, 27% indicated that the available facilities were poor, 12% noted a poor bus service - with unreasonable bus schedules, a lack of shelter for passengers waiting for the bus, 15% complained about a poor taxi service - "not available when you need them", but 5% indicated that the town of High Prairie could not support a better service, hence whatever was available was enough. Two percent felt that the facilities could be improved.

High Prairie has, therefore, a more varied transportation need than does Grouard and Gift Lake. The business community in High Prairie wish to have better links with Edmonton and, therefore, require air service, while Gift Lake and Grouard need basic transportation - probably a public bus system in order to have access to essentially basic facilities such as shopping, health care, and recreation which are located in High Prairie.

Housing

Housing was equally unsatisfactory in all three places studied, with MSI of 2.4 each. This was based on the criteria of availability, quality, and the prices charged. Sixty-four percent of the respondents in High Prairie were dissatisfied and 24% were satisfied as

compared to 66% and 26% respectively in Grouard, and 52% and 22% respectively in Gift Lake. High Prairie respondents were dissatisfied because the quality of housing available was poor, (10%), too expensive (40.5%), not enough, (37%), or there was none at all available, (9%).

Grouard respondents felt there were not enough houses, (32%), and whatever was available was of poor quality, (25%), and too expensive, (14.3%), or none at all was available, (11%). However, 14% thought that the housing situation was reasonably satisfactory.

In Gift Lake, 21% complained of poor quality housing reporting that most houses were poorly built, and consequently too cold, while 68% felt there was not enough housing to go around and this had led to overcrowding. Ten percent, however, were satisfied with the general housing situation.

Not one person in Gift Lake mentioned expensive housing or high rents as a reason for dissatisfaction, but availability was the major concern. Meanwhile, in Grouard and High Prairie cost of housing was the major concern. The reason for this difference is that in Gift Lake, many people live in Settlement housing for which they do not pay any rent. This is not the situation in Grouard (except on the Indian Reserve), or in High Prairie. Respondents in the latter want better quality for the value of their money, but Gift Lake requires an improvement of the quality and availability of housing to lessen the already high overcrowding.

In Table 4.3, the number of people per room for the three centres is presented. It shows that Gift Lake has poorer housing conditions, that is, more overcrowding, than either Grouard or High Prairie.

Table 4.3

Mean Household Size and Mean Number of Persons per Room

Town	Household Size	Persons per Room	N
High Prairie	2.869	1.122	98
Grouard	4.143	1.338	35
Gift Lake	5.839	2.118	31

Source: Field work conducted between December, 1985 and January, 1986.

The relatively high satisfaction with housing in Gift Lake can probably be explained in terms of low expectations of the people resulting from low standards of reference. This is evident in the light of the information presented in Table 4.3 above. Campbell, Converse and Rodgers observed a similar phenomenon in their study, and described it as "the astonishingly high levels of satisfaction with most facets of life reported by people of very limited education", and explained it as a problem of "... constricted horizons that lead to a kind of blind and unquestioning satisfaction with the status quo, not far from what Marx called 'false consciousness'" (Campbell et. al., 1976,145-156).

Public Services

Public services were defined to comprise street maintenance, garbage disposal, and snow removal. It was rated least satisfactory in Grouard, MSI of 2.3, and highest in High Prairie, 3.6 while Gift Lake was in between with 2.7. Seventy percent were satisfied in High Prairie with 18% dissatisfied, 26% were satisfied in Grouard with 62% dissatisfied, and in Gift Lake, 39% were satisfied with 45% dissatisfied.

That Gift Lake should be less dissatisfied than Grouard with the public services available is strange. An examination of the reasons given for the responses may help to provide an explanation. Gift Lake respondents were dissatisfied because garbage disposal was poor or not available, (65%), street maintenance and snow removal were poorly done, (15%), while 5% felt the services were good as they were and 10% indicated that the services could be

better. In Grouard 30% explained that there were no public services available, 19% said whatever services exi[redacted]ble only to staff and students of AVC, 37% said there was no garbage disposal, and 7% s[redacted]here was poor s[redacted]and snow removal. About 4% were, however, satisfied with the service.

It seems then, that, respondents of Grouard are more dissatisfied because of the apparent visible discrimination in the disposal of garbage. Residents who daily see garbage removed from some residences other than theirs are likely to feel bitter, and this will be reflected in the satisfaction score. This is not the case in Gift Lake where some garbage disposal is available to all the people. This explains the difference in the level of satisfaction expressed in the two communities.

In High Prairie, 56% had no comments about the quality of public services available. Of those who responded, 43% thought that snow removal and street maintenance were poor, 9% felt garbage disposal was poor, 9% felt the services could be improved, while 30% said the services were good as they were. About 7% said that the streets were either muddy, dusty, or dirty, while 2% felt the services were excellent.

Educational Opportunities

Surprisingly, Grouard, having the AVC, was the least satisfied with the educational opportunities available; it had an MSI of 3.5. High Prairie had 3.8 while Gift Lake had 3.7. Generally therefore, educational opportunities in the study area were perceived to be quite satisfactory, and no clear disparities existed in satisfaction levels as the difference in MSI was not significant. In High Prairie 71% were satisfied and 14% were dissatisfied, while 12 % were neither satisfied nor dissatisfied. This should not be surprising because with the two day cares, two elementary schools, two junior and senior high schools as well as the AVC extension and the Youth Assesment Centre in Centre School, the opportunites are available for those who want to use them. In Grouard, 66% were satisfied, 20% were dissatisfied, and 14% were neither satisfied nor dissatisfied.

In Gift Lake, 25% were dissatisfied because schools and facilities were too far away[24], and 19% were dissatisfied because the content was poor and inadequate, leading to relatively poor performance of students when compared with other kids from outside the community, such as High Prairie. Nineteen percent thought that there was poor quality teaching and about 13% thought that teachers were not dedicated. Six percent indicated that there were problems of juvenile delinquency, while 19% thought that generally things were reasonably satisfactory but could be improved.

In Grouard, 54% had no comments. Of those who responded, 31% thought the facilities were reasonably satisfactory but could do with some improvement, 25% were especially concerned about the lack of adult education for university courses, 13% noted that there was some juvenile delinquency, but 19% felt that the facilities were excellent. In High Prairie, apart from the 67% who had no comments, 12% of those who responded complained that some facilities were too far away, (Grouard?), that the content of instruction was poor, (21%); and the facilities for adult education were limited, (18%). Twelve percent felt that there was poor quality teaching in some schools, while another 12% felt that generally, the available facilities are reasonable even though they could do with some improvements. However, 24% saw the facilities as excellent.

In summary, then, for High Prairie, even though the educational opportunities are reasonably satisfactory, what appears to be lacking is access to university education. As one respondent observed, "an intensification of the Extension programs of the University of Alberta and Athabasca University would be very much appreciated" by some repondents in High Prairie.

That Gift Lake has a higher MSI than Grouard is difficult to explain. It might be because the respondents, having low levels of educational qualifications largely, do not appreciate the utility of educational opportunities and facilities, and as such, have low expectations.

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[24]Students were taken to Atikameg for vocational courses, and some in upgrading programs had to go to AVC at Grouard.

Indoor Recreation

Whereas High Prairie respondents were fairly satisfied with the indoor recreational facilities available, MSI of 3.1, those in Grouard and Gift Lake were very dissatisfied, 1.5 and 1.4 respectively. Thirty-three percent in High Prairie were dissatisfied, with 45% satisfied, while in Grouard 89% were dissatisfied and 6% satisfied. In Gift Lake, 84% were dissatisfied, and 3% were satisfied.

In High Prairie, people were dissatisfied because there was a limited variety of facilities. The absence of an indoor swimming pool was cited by 77% of the respondents, while others explained that the existing facilities were not enough, (5%), and needed improving, (6%). However, 3% felt that the facilities were good enough for the town, and yet another 3% felt they were just excellent. Four percent were not concerned because they did not use existing facilities.

Grouard residents were dissatisfied because there were no facilities at all available, (53%), variety was very limited, (34%), and were not enough, (6%), especially for kids, (3%). Only 3% felt there were enough facilities.

In Gift Lake, respondents explained that there were no facilities at all available, (43%), and that what was available was very limited in variety, (37%), and poorly maintained[23], (7%), and that the general situation needed improvement, 6%. As well, 3% felt that the facilities were too crowded, and another 3% were of the opinion that the facilities were enough for a place of that size.

Outdoor Recreation

High Prairie residents were the most satisfied, with MSI of 3.5, Grouard had 3.0, and Gift Lake, 1.8. In Gift Lake, 68% were dissatisfied, while 10% were satisfied with the facilities. In Grouard, 40% were dissatisfied, 20% were neither satisfied nor dissatisfied, and 37% were satisfied. In High Prairie, 18% were dissatisfied, 21% neither satisfied nor

[23] There is an ice rink which is not flooded nor maintained for effective use.

dissatisfied, and 52% dissatisfied.

Among the reasons given for High Prairie were a limited variety of facilities and programs, 15%; lack of facilities or none at all available, 10.4%; a lack of year round facilities, 6%; or facilities were too far away, 10%; facilities were poor and needed improving, 17%; they were enough for a town of that size, 8%; or actually excellent, 12.5%.

In Grouard, 17% of respondents felt there was nothing at all available, 13% said there was limited variety, 7% complained of poor maintenance of existing facilities, and another 7% said the available facilities were too far away. Others said there were not enough facilities, (13%), but 30% felt the facilities were adequate for the size of the town, and 10% felt they were just excellent.

In Gift Lake, 54% indicated that there were no facilities at all. As one respondent remarked, "they used the ski hill to make the road", implying that what used to be a ski hill had been used up in the construction of the Gift Lake highway. Nineteen percent believed the facilities were not enough and needed improving , another 12% felt that the existing facility was not being properly maintained, while about 4% felt the facilities were adequate.

Environmental Quality

Grouard was the most satisfied with the quality of environment as defined in terms of noise pollution, air pollution, and general cleanliness, with MSI of 3.3, and High Prairie was the least satisfied, with 2.9, while Gift Lake was in between with 3.0.

In High Prairie, 42% were dissatisfied, but 34% were satisfied. The major cause of dissatisfaction, cited by 66% of the respondents, was pollution by saw dust from Buchanan's lumber mill. Ten percent said there was too much garbage around, 6% felt it was too noisy, 9% complained of general untidiness of the community, but 7% felt it was a clean, quiet environment without pollution. Interestingly, the majority of those who complained about the level of pollution were those who lived or worked in the western part of town. This was because Buchanan's mill was located in the south-western part of the town. Those living in

the eastern and northern parts of town did not complain as much. See Fig V.2.

In Grouard, 26% were dissatisfied with the quality of the environment, while 57% were satisfied. Thirty-three percent complained of a general untidiness of the community, 20% said it was too noisy, 7% said the water was of poor quality, and 7% felt that a drastic improvement in the quality of the environment was necessary. However, 20% felt the quality of the environment was good, 7% felt that it was clean and quiet, and about 7% noted that there was no pollution. Some of the respondents attributed the noise level to the large number of freely running uncontrolled dogs and cats in the community, and drunken brawls, especially during the weekend. Fifty seven percent of the Grouard sample had no comments.

Gift Lake residents were more satisfied with their environment than those of Grouard 32% were dissatisfied, 19% neither satisfied nor dissatisfied, and 45% satisfied. By far the problem cited most often was that it was too noisy, (47%), had too much smoke and dust during the summer, (35%), and was too muddy during wet weather, (6%). In addition, 6% of the respondents indicated that there was too much garbage strewn around, making the town dirty, while 6% were happy because it was clean, quiet, and had no pollution.

The differences in perception exhibited here is most likely attributable to the previous experiences of the respondents. It was observed that respondents who were relatively "new in town" were more likely to complain about how dirty or untidy the town was compared to those who had lived there longer.

Job Opportunities

Respondents in all three centres studied were dissatisfied with the job opportunities, but Gift Lake residents were the most dissatisfied. The MSI of 2.9 for High Prairie, 2.3 for Grouard, and 1.9 for Gift Lake indicated that High Prairie was much better off in terms of the perceived availability of job opportunities.

Beginning with Gift Lake, 74% were dissatisfied with the job opportunities available, 22% were neither satisfied nor dissatisfied, suggesting that they accepted a lack of job

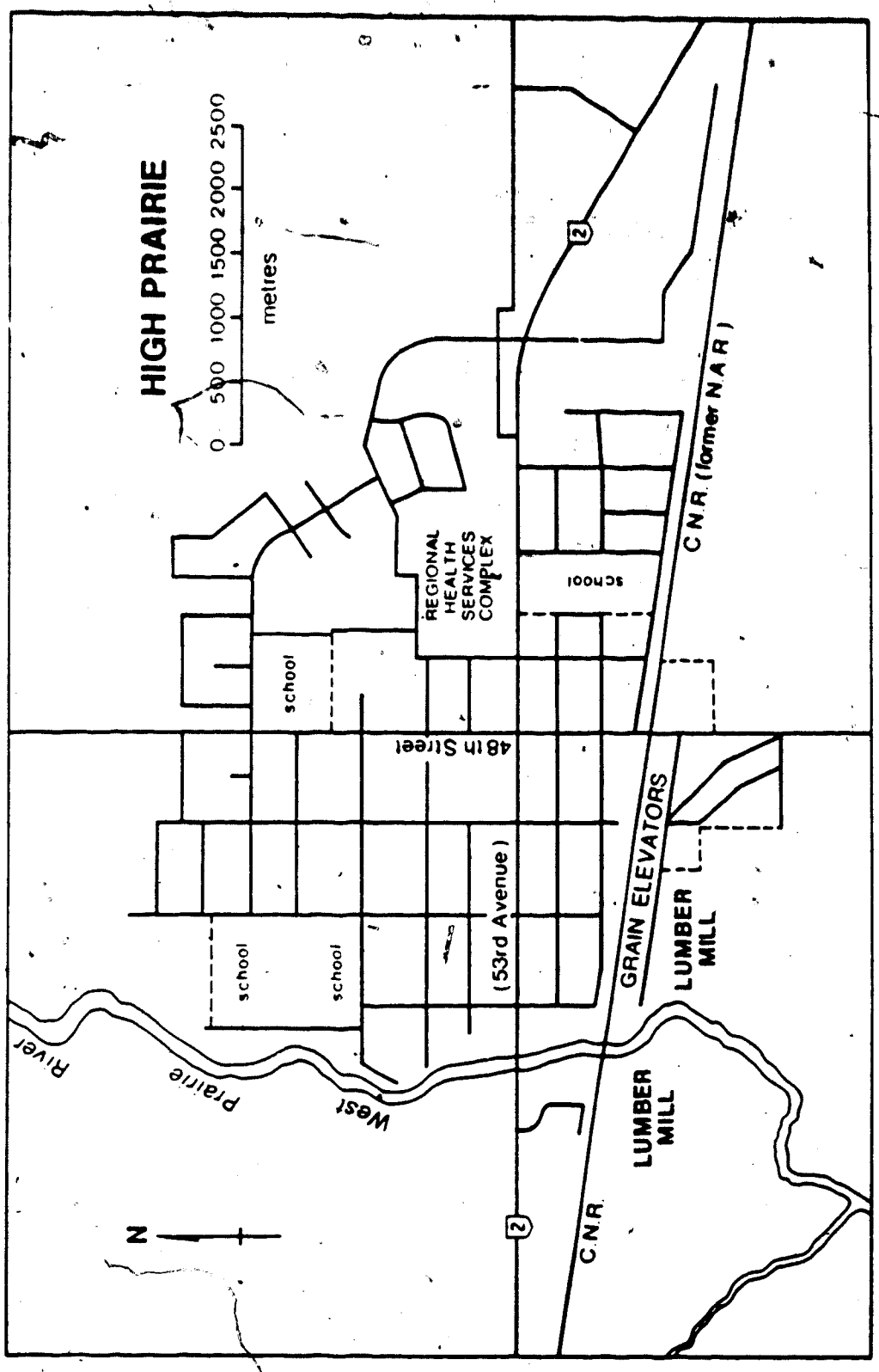

Fig V.2 Town of High Prairie

opportunities as a trade-off for life in the small community. Three percent were satisfied with the job opportunities available. The respondents felt that generally there were very few job opportunities, (43%), or no jobs at all, (32%), while 7% indicated that the few jobs available were not fairly distributed, and alleged discrimination based essentially on whether or not one had a relative on the Settlement Council. Other comments included the following: "not enough jobs"; "none for the unskilled"; "only poorly paying jobs"; "only seasonal jobs"; and "there is none for women".

In Grouard, 71% were dissatisfied, 9% were neither satisfied nor dissatisfied, and 20% were satisfied. The relatively large number of people who are satisfied with the job opportunities can be explained essentially in terms of the number of people with full-time jobs as compared to Gift Lake. Of those who responded when asked to explain, some thought there were no jobs at all, (25%), or the opportunities were few and limited, especially in terms of career opportunities, (50%). Some thought that there was discrimination against natives and Grouard residents in the selection of people for the few opportunities available, (14%), that there was little or nothing for the unskilled, (7%), or there were only poorly paying jobs, (4%).

In High Prairie 41% were dissatisfied with the job opportunities, 19% were neither satisfied nor dissatisfied, and 34% were satisfied. On the one hand, out of those who responded, 19% felt there were no jobs, 39% felt there were limited career opportunities, 10% felt there was nothing for the unskilled, such as high school graduates with no further training, but 3% felt that there was also discrimination against natives. On the other hand, 22% felt that there were reasonably adequate opportunities, and those who seriously wanted jobs could find some. Twenty-eight percent had no comments. It can be seen that the level of satisfaction indicated reflects the spatial distribution of full-time employment in High Prairie, 84% compared with 74% in Grouard, and 32% in Gift Lake.

Communications System

As used here, communications system refers to all the facilities in use at a place for transmitting information, comprising mainly telephone, television, radio, and newspapers. Interestingly, Gift Lake residents were the most satisfied, MSI of 4.0, followed by Grouard with 3.5 and High Prairie with 3.2. What is intriguing is the discernible relationship, that is the lower the income, and the level of education of the community, the greater their satisfaction on the communication variable. This suggests that the low income, poorly educated, are satisfied with less information. This is to be expected on the basis of Campbell et. al. quoted earlier. Besides, Gift Lake residents do not have to pay for cable television as do residents of High Prairie and Grouard. There is a community owned satellite dish. However, this has to be seen in the context of the absence of most major newspapers available in High Prairie, such as the Globe and Mail, the Edmonton Journal, and the Edmonton Sun.

In High Prairie, 30% were dissatisfied, 17% were neither satisfied nor dissatisfied, and 52% were satisfied. Of those who responded when asked to explain, 42% complained of poor TV reception, citing limited channel access (a person had only 2 - 3 channels), and 20% complained of having to pay exhorbitant fees to have cable installed and rented. Ten percent indicated that there was no local radio station, and 16% felt radio reception was limited. Four percent felt the telephone service was poor and there were not enough pay phones. About half of all respondents made no comments.

Grouard residents were more satisfied than those of High Prairie. Twenty-two percent were dissatisfied, but 63% of them were satisfied. When asked to explain, fifty-three percent complained about poor TV reception, and a limited number of channels, 20% were dissatisfied because of high cable fees, 13% were unhappy about the telephones because of the lack of pay phones, but 13% were fully satisfied with the conditions.

What emerges from the responses is the fact that Grouard is in close proximity to High Prairie and has access to some of the facilities available there. Thus people can have

access to cable TV in Grouard, but having lower incomes, they should be expected to be more concerned about the cable fees than those in High Prairie. Furthermore, they will feel the absence of pay phones more than will those in Gift Lake.

Gift Lake residents, as previously mentioned, were the most satisfied with the communications system. Ninety percent were satisfied, 7% were dissatisfied, and 3% were neither satisfied nor dissatisfied. In addition, 87% had no complaints about the system. Fifty percent of those who explained their satisfaction level complained about a limited number of channels, 2-3 only (probably people used to many more channels than 2-3)[26] and 25% gave as the reason for the high level of satisfaction, a community owned satellite dish which enabled them to have good television reception, while 25% indicated poor telephone service.

It is very likely that the low level of education and the lack of a preference for reading did not make the absence of national newspapers an issue. A local newsletter put out by the Settlement Office handled local information and apparently, that was all they required.

Daycare

Facilites for daycare were most satisfying to respondents from High Prairie, with MSI of 3.9, less so for Grouard, with 2.9, and Gift Lake was the least satisfied with 1.9. Of the Gift Lake respondents, 97% were dissatisfied, 10% failed to respond, and 3% were neither satisfied nor dissatisfied. The reasons given were that there was no daycare available, 89%, and that a building was in place but not being used, 11%.

In Grouard, where a relatively larger number of mothers are working, 35% were dissatisfied, 26% were neither satisfied nor dissatisfied, and 39% were satisfied. Sixty percent of those who explained their level of satisfaction were dissatisfied because daycare was not available to all, but only to staff and students of AVC, and others had a place for their kids only after AVC had catered to its people. In addition, 10% thought that the quality of the staff was below standard, 10% thought there was poor housing for the Centre, 5% felt the

[26]The work of Campbell et. al gives credence to this argument.

service was rather expensive, while 5% said there was nothing available. It is understandable that AVC needs to run a daycare to free mothers and enable them to concentrate on their studies or work, but is it not possible to expand whatever facilities are available to include the rest of the townspeople?

High Prairie was the most satisfied with daycare. This is not surprising in view of the fact that there are two daycare centres. Eighty percent of those who responded were satisfied, 16% were neither satisfied nor dissatisfied, and only 4% were dissatisfied. Explaining why, 55% felt that the service offered was very good, or at least good enough, 17% felt the quality of staff was below standard, another 17% felt the service was very expensive, and many could not afford it, while 6% did not know. Seventy-six percent of the respondents had no comment. A little more probing revealed that one of the two Daycares was perceived to be inferior to the other, which was regarded as excellent.

Facilities for Senior Citizens

High Prairie was the most satisfied with facilities for senior citizens with an MSI of 4.0. Grouard and Gift Lake followed in that order with 2.6 and 1.3 respectively. This is not surprising, High Prairie has two apartments and a drop-in centre for Senior Citizens, while Grouard has a drop-in facility that is hardly ever used. Gift Lake has no facilities whatsoever.

In High Prairie, only 3% were dissatisfied with the available facilities, 9% were neither satisfied nor dissatisfied, and 69% were satisfied while 19% either did not know or failed to respond. Asked why, 81% had no comment. Of those who responded, 70% indicated the facilities were excellent, and 30% felt the facilities could do with some improvement.

In Grouard, 46% were dissatisfied with the available facilities, 17% were neither satisfied nor dissatisfied, and 26% were satisfied. Seventy-six percent of those who responded explained that there was a facility that was not used, 14% thought nothing was available, and 5% thought that whatever facilities existed could do with some improvement. Only 5%

expressed complete satisfaction with existing facilities.

In Gift Lake, 87% were dissatisfied, 3% were neither satisfied nor dissatisfied, and 10% either did not know or failed to respond to the question. The major cause of this dissatisfaction was that there were no facilities whatsoever available for senior citizens and this was confirmed by all of the respondents.

The relatively high proportion of elderly people in Gift Lake as reflected in the sample makes some sort of facility for senior citizens necessary.

Religious Facilities

Of all the public variables, religious facilities was the most satisfactory to respondents from all three centres. High Prairie was the most satisfied with MSI of 4.0, while Grouard and Gift Lake had 3.8 each. The high satisfaction with religious facilities probably reflects the fact that not too many used these faciltities, and particularly because many did not regard it as an essential to life which they needed to have. Unlike the quality of water, or housing, a person does not have to be confronted with religion everyday. Apparently, those who did have use for religion found facilities that were satisfying.

In Gift Lake, 71% were satisfied, 13% were neither satisfied nor dissatisfied, and 7% were dissatisfied. Asked to explain, 84% had no comment. Of those who explained, about 40% felt that the service was good enough and satisfactory, and another 40% thought the services could be improved, while 20% said there was limited variety.

In Grouard, 82% were satisfied, 15% were neither satisfied nor dissatisfied, and 3% were dissatisfied. Asked why, 80% had no comment. Of those who responded, 57% thought that the existing facilities were good enough, while 43% thought the facilities could be improved.

In High Prairie, 79% were satisfied, 10% were neither satisfied nor dissatisfied, and 3% were dissatisfied. In answer to why they were satisfied, 82% had no response, and of those who did, 62.5% said the available facilities were good enough, 19% felt the variety was limited

and 12.5% felt that there could be some improvement.

Water Quality

The quality of the water was fairly satisfactory in Gift Lake and High Prairie with MSI of 3.1 and 3.7 respectively, but unsatisfactory in Grouard, with 1.5.

In High Prairie, 13% were dissatisfied with the water quality, 10% were neither satisfied nor dissatisfied, while 73% were satisfied. The reasons given as explanations for dissatisfaction included "the water is too hard", (10%), "its not good enough, needs improving", (9%), while 13% thought that the water was excellent, and 62% offered no explanation.

In Grouard, 86% were dissatisfied with the water while 14% were satisfied. Forty-two percent explained that the water was "dirty, coloured and sometimes yellow, like orange juice." Some felt it tasted terrible, (15%), and "it stinks", (12%); others felt it was not good enough and needed improving, (18%), and some others felt it was "not bad, not great", (6%). Six percent felt that the water was rather hard. As judged by the respondents, therefore, the quality of the water in Grouard, leaves a lot to be desired.

Gift Lake residents were satisfied with the quality of water, generally, but dissatisfied with its distribution. Forty-five percent of the people were satisfied, 19% were dissatisfied, and 35% were neither satisfied nor dissatisfied. The reason given most often by those who explained, (70%), was the lack of running water, even though 18% complained about the smell, and 6% felt that it was hard. On the whole, 45% offered no explanation for the indicated level of satisfaction.

Local Government

This refers to the local administrative machinery that handled town planning, maintenance and development. In High Prairie, it was the Town Council, while in Gift Lake the equivalent was the Metis Settlement Council. The closest equivalent to local government in

Grouard would be the Improvement District No. 17, with its headquarters in High Prairie, but respondents would not accept that definition since they indicated there was no resident of Grouard on the I.D. Council. Thus, most Grouard residents indicated that there was really no local government.

The general responses to local government indicate that High Prairie residents were more satisfied with local government, MSI of 3.4, than Gift Lake, with 2.0, and Grouard, with 1.6. In High Prairie, 47% were satisfied, 27% were neither satisfied nor dissatisfied, and 15% were dissatisfied. The reasons given were varied: some felt the Town Council was not doing enough to promote the town, (25%); that some general improvements were needed in the council, (19%); that council was insensitive and ineffective regarding problems of residents and businesses, (11%). Six percent felt that Council members were unskilled and lacked the expertise necessary to serve, 8% felt Council was dictatorial and undemocratic, but 14% indicated that the Town Council was doing well. In fact, 8% felt people were apathetic to the council, while 3% suggested that there was a need for people to understand and be involved in local government. About 64% of all respondents either had no comment, or did not know enough to be able to assess the Town Council.

In Grouard, 88% were dissatisfied with the local government, 9% were satisfied, and 3% were neither satisfied nor dissatisfied. Eighty-seven percent of the respondents were dissatisfied because there was no local government available. In fact, there was no local administrative body responsible for the development of the hamlet. As I was informed by a respondent, the Grouard representative on the Improvement District Council was not from, or resident in Grouard, but from outside the community. Thus, the state of the hamlet was perceived to be deteriorating progressively. The recent proposal to locate new AVC student housing in High Prairie brought many respondents to the awareness of a need to get together and form a Community Development Council to improve the Hamlet. Three percent of the people indicated that people needed to be involved in local government because people were generally apathetic, while 3% indicated that some improvement was needed, and 6% felt there

was adequate, good local government.

In Gift Lake, 68% were dissatisfied with the Settlement Council 18% were neither satisfied nor dissatisfied, while 14% were satisfied. Reasons cited were as follows: twenty-nine percent of the respondents cited favouritism and other unfair practices by Council as the reason for their dissatisfaction, 13% felt Council needed improvement, another 13% felt Council was insensitive and indifferent to people's needs and problems, and 8% felt Council was incompetent and inefficient. Eight percent thought Council comprised of unskilled and poorly educated members, 8% thought Council was unreliable and not trustworthy, while 4% indicated that Council was dictatorial and undemocratic. Others said it had disunity among its members, some felt it needed improvement, while some indicated that people who had relatives on the Council had no problems.

It can be observed that there exists a general dissatisfaction with the Settlement Council in Gift Lake, based on perceived unfairness in the distribution of jobs and housing on the settlement. There seems to be a great need for improvement.

Safety of the Environment

High Prairie residents were the most satisfied with the safety of their environment, with MSI of 3.5, and Grouard was the least satisfied, 2.6, while Gift Lake was in between with 3.0. This should be interpreted against the background of police protection being available only in High Prairie. Grouard and Gift Lake have to rely on High Prairie for this service.

Fifty-eight percent of the High Prairie respondents were satisfied with the safety of the environment from crime, rape, assault and the like, 22% were neither satisfied nor dissatisfied, and 19% were dissatisfied. About 21% of those who explained their level of satisfaction complained of too much vandalism and lawlessness, 19% felt that it was never safe, and 17% felt that it was safe, and that "the crime impression is historic", (implying that the high crime rate that existed in the area some years back is no longer present). About 19%

had never personally been bothered, 8% had experienced or witnessed petty break-ins and 11% indicated that safety in the environment could be improved. About 4% complained of too much alcoholism and drug abuse.

In Grouard, 53% were dissatisfied with the safety of the environment, 21% were neither satisfied nor dissatisfied, and 26% were satisfied. In terms of reasons, about 38% of the respondents complained of an over-abundance of petty break-ins, 19% complained of too much alcoholism and drugs, 14% felt that it was never safe, 10% indicated that there was too much vandalism and lawlessness, while another 10% felt that there was too much juvenile delinquency. About 5% indicated that things were satisfactory, while a further 5% felt that improvements were required.

In Gift Lake, 17% were dissatisfied with the safety of the environment, 37% were neither satisfied nor dissatisfied, and 46% were satisfied. Fifty percent, of the 18 respondents who explained their level of satisfaction, cited too much vandalism and lawlessness as the reason, 5% cited petty break-ins, 12% felt the police were too far away, 18% felt that there was too much alcoholism and drug abuse, while about 6% felt that improvements were required.

Why Gift Lake should be more satisfied than Grouard with the safety of the environment is a puzzle. Does Gift Lake have less vandalism, break-ins, and lawlessness than Grouard? Geographically, Gift Lake is further from High Prairie, the source of police protection, and one would expect, therefore, a distance decay function relationship resulting in Gift Lake being less satisfied than Grouard. Being closer to High Prairie, it would be expected that police protection is higher, and more satisfactory in Grouard than in Gift Lake. Suprisingly however, residents of Grouard are less satisfied with the safety of the environment. The evidence confirms the finding of Kelling, et. al., ((1974), reported in Smith, 1977, 326-327), that routine preventative patrol has no significant impact either on the level of crime or on the public's feeling of security.

Cost of Living

Cost of living was perceived to be generally unsatisfactory in the region. The highest MSI, 3.0, was recorded in Gift Lake, and the lowest, 2.4, in High Prairie. Grouard had 2.7. The generally low satisfaction observed confirms the finding of the Woods Gordon Report (1982), that cost of living in Northern Alberta was generally higher than in the central parts of the province.

Conclusion

Quality of life, as perceived by the respondents, is highest in High Prairie, and lowest in Gift Lake. Generally, repondents' evaluation of satisfaction closely reflects the objective conditions prevailing in their place of residence. The data therefore supported the argument that perceptual measures of satisfaction exhibits a large degree of sensitivity to measured differences in corresponding objective conditions (A.B.S.,1979; Knox and MacLaran,1977). In a few instances such as medical staff, however, for the same facility the extreme differences in the subjective evaluations suggest that some other factors may be operating. The level of satisfaction expressed for Gift Lake does not reflect the objective conditions in view of the high level of overcrowding there. This may be attributed to cultural and other differences. Satisfaction with educational facilities and also with communication facilities also reflect a similar result in Gift Lake - high levels of satisfaction occur with low levels of service. These observations are not true for Grouard and High Prairie. This result suggests that due to the complexity of human cognition, a close relationship between objective and subjective indicators may not always be assumed (Kennedy et al, 1978; Pacione,1982). It has not been possible within the constraints to examine such aberrant cases further. They constitute areas of further research using principal component analysis and other techniques as used in Kennedy et. al, 1977.

VI. EVALUATION OF PERSONAL LIFE COMPONENTS

Introduction

Items relating to the personal lives of the respondents, such as their health and physical condition, and family life are presented in this section. These are distinguished from the life components of place examined in the previous section. They are again compared to give a picture of the relative well-being prevailing in the three centres.

A. Personal Life Components

Cutter (1985) defined quality of life broadly as an individual's happiness or satisfaction with life and environment including needs, desires, aspirations, lifestyle preferences, and other tangible and intangible factors which determine overall well-being. While the last section dealt with various components of life related to the places of residence of respondents, what has been called public life components, the current one deals with various aspects of the personal well-being of the respondents. How respondents perceived various components of their lives, their health and physical condition, places of residence, job satisfaction, family life, friendships, and the amount of time they had for leisure and hobbies are examined.

Strictly speaking, these variables, even though classified *personal* can not be divorced from *place* - the town of residence. The house lived in is as much a function of what a person is capable of obtaining, as a result of the financial situation of the household, as it is of the place of residence, and the prevailing housing market. If people are dissatisfied with their jobs, they could easily leave if it was easy to find another job. Evaluation of job satisfaction is therefore, as much a function of a person's present job situation as it is of the general job situation.

Similarly, family life is affected by a complex range of variables in the community such as the job situation of both parents, educational opportunities for the children, family income, market prices, and the like. When a Gift Lake respondent, asked about how

satisfactory their family life was, indicated very great dissatisfaction and explained that "We are too crowded in one house", the relationship between place of residence and personal life quality was being characterized. The lack of housing and jobs, and the consequent inevitable poverty had led to such an overcrowding that affected family life. Thus even though family life may be seen as a very personal thing, it is as much a place affected variable as any other. The presence of adequate recreational facilities for families may go a long way to enhance the quality of family life.

Health and physical condition, even though very individualistic and personal can also be enhanced by the environment of residence[17]. People can be healthy, but physically poor because of a lack of exercise arising from the lack of recreational and sporting facilities in a community.

The amount of time available for leisure activities and hobbies is again affected by the environment. An extreme example here may be useful to illustrate. In a large city without a reliable transit system, much of the time after work may be spent in merely waiting for the bus to get home. The ordeal of travelling to and from work can effectively eliminate anything in the form of leisure or recreation time. The amount of time available may also be affected when in an environment of low wages and high market prices, a person has to work extra hours in order to make enough to sustain the family.

Thus as can clearly be seen from this example, no part of human existence can be effectively separated from, and be independent of, *place*. These variables, therefore, provide some indication of the extent to which life in the community is enhanced or inhibited. The extent to which one's needs, desires and aspirations are fulfilled, lifestyle shaped and values molded can largely be explained with reference to the effect of the environment of residence. Thus the study of disparities in quality of life is essentially amenable to the scope of enquiry of the geographer. Helburn wrote:

Geographers, as they deal with quality of life issues, can speak up for place - not

[17] The recent Chernobyl disaster is a case in point.

for its own sake, but because the characteristics of the place contribute to quality of life (Helburn, 1982,450).

The purpose of the above discussion is to emphasize the fact that it is unrealistic to expect the personal variables to behave the same way as the public variables. These responses are relatively more value-loaded, based on aggregate subjective evaluations of individuals with different backgrounds and experiences, and hence, are more difficult to interpret than the public variables. It is a highly subjective area, and statements need to be carefully qualified. When a respondent whose household lacks basic amenities such as furniture, refrigerator, and telephone, claims that their standard of living is very satisfactory, a researcher can only report the response without passing any value judgements. In matters of aesthetics, one man's meat is another man's poison. The explanation of the response is however, an entirely different matter. The underlying values for these reported levels of satisfaction may not be the same. It is hoped that the aggregated satisfaction score, MSI, captures enough of the commonalities to facilitate comparison and analysis. The results are presented in Table 4.4 below.

Table 4.4

Satisfaction on Personal Life Components

Life Component	High Prairie	Grouard	Gift Lake
Your health and Physical Condition	4.0	4.1	3.5*
The House You Live In	4.1	3.5**	3.1**
Your Job	4.2	3.8*	3.0**
Your Family Life	4.3	4.2	4.3
Your Friendships	4.2	3.9	4.0
Time for Leisure and Hobbies	3.4	3.4	3.6
Standard of Living	4.1	3.8*	3.0**
	N=100	N=35	N=31

Source: Field work conducted between December, 1985 and January, 1986.

Using the test for difference between two means, the MSI, compared to that for High Prairie was found to be: * Significant at .01 ** Significant at .05.

Health and Physical Condition

Grouard residents were the most satisfied with their health and physical conditions with MSI of 4.1. High Prairie had 3.9 while Gift Lake had 3.5. There is, thus, a general satisfaction which is lower in Gift Lake than in the other two centres. Probably this may be explained by the relatively high percentage of the elderly in the Gift Lake sample. Nineteen percent of the respondents in Gift Lake were 65 years or older, compared to about 6% in Grouard and 2% in High Prairie. Besides, the general absence or inadequacy of the recreational facilities in Gift Lake may also be noted.

In High Prairie, 9% of the respondents were dissatisfied, 79% were satisfied, and 12% were neither satisfied nor dissatisfied. Seventy- two percent of the respondents had no comments when asked to explain their level of satisfaction. Seven percent indicated that they were dissatisfied because of weight problems, 4% indicated a lack of physical activities and training, 5% were actually sick or recovering from some illness, while 4% felt they had excellent health.

Grouard respondents were 3% dissatisfied, 9% neither satisfied nor dissatisfied, and 86% satisfied. Asked why, 86% had no comments, 6% explained they had excellent health, while 6% indicated that their current health situation could be better.

In Gift Lake, 19% were dissatisfied, 13% were neither satisfied nor dissatisfied, and 68% were satisfied. Sixteen percent indicated they were actually sick or recovering from some illness, 13% felt their present health could improve, 3% indicated weight problems, 3% indicated a lack of activities and facilities for physical training and exercise, while 3% felt they had excellent health.

From the above a strong case can be made for the provision of some form of health services in Gift Lake. A relatively less healthy group of people are living farthest from the available health facilities. The people who are least able to pay are required to pay high fares for transportation to access health care. This is crucial because even though a medical clinic is held weekly in Atikameg nearby by a medical officer from High Prairie, not one of the

respondents used the facility. The evidence provides further confirmation for Humphreys's observation that there exists a marked pattern of *inverse care* with respect to provision of service services - that is, a pattern in which the variation in the availability of services is inversely related to the variation in need for such services (Humphreys, 1985,223)[11]. On the basis of the distance decay theory alone, the residents of Gift Lake can be expected to utilize health care less frequently (Jolly and King, 1966), and only go during emergencies, or perhaps self-medicate when they can not afford the fare for the trip to High Prairie.

What are the hidden costs that residents of Gift Lake pay for accessing health care? With Alberta Health Care and Medical Insurance coverage, even if no premiums were paid, what is paid in transportation charges for one visit to the health facility far surpasses what others elsewhere in relatively better locations in the province pay for premiums.

Perhaps this also helps to explain the relatively high expenditure of Gift Lake respondents on transportation. The question that remains unanswered is whether it is socially just for Gift Lake residents, through being located at a certain point in space, to pay more for the same facility or service [12].

The House You Live In

Gift Lake residents were least satisfied with their housing with MSI of 3.1, followed by Grouard with 3.5, and High Prairie was most satisfied with 4.1. The difference in MSI was significant at 1% for both Grouard and Gift Lake. This again fits the existing pattern, but fails to provide evidence for Campbell et.al.'s finding that "the poorly educated are more satisfied with their housing than the well-educated (Campbell et. al, 1976,133). Generally, however, people were more dissatisfied with the general housing situation in their communities (MSI of 2.4) than with their own housing as reflected in the MSI values presented above.

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[11]See also Hart, 1971; Morris and Donald, 1980; Stimson, 1981

[12]For a discussion of the social justice of spatial distributions, see Smith, 1977,141 - 157; Harvey, 1972.

Two possible explanations can be given. As has been noted by Campbell, Rogers and Converse (1976), and also Kennedy et al. (1977) , people tend to rate their personal life components more positively than public or community variables. Thus these responses may just fit into the expected pattern, with people being very dissatisfied with the general housing situation and satisfied with their own housing.

A second explanation could be that people are so dissatisfied and disappointed with the general housing situation that they count themselves lucky to have what they have. In such a situation, it is easy to see how they will down-play the not-too-pleasant aspects of their housing, and be satisfied with it. In either case we see how difficult it is to interpret and evaluate reported satisfaction with various life components.

In High Prairie, 6% were dissatisfied because their housing was too cold, and poorly built or serviced, 5% because the rent was too high, 3% had housing that was too old and needed renovation, 4% wanted a house (not an apartment), while 6% were very satisfied because they had comfortable dwellings.

In Grouard, 14% were dissatisfied because their housing lacked indoor plumbing, 9% because the houses were too cold and had been poorly built, 6% because of too high rents, and a further 6% because their houses were too old and needed renovation. 9% were satisfied because their housing was comfortable, 3% wanted houses, not mobile homes, and 3% complained the space available to them was too small. Fifty-one had no comments.

In Gift Lake, 23% complained that their housing was too cold because they had been poorly built, 20% were dissatisfied because there was no indoor plumbing, 7% felt the houses were too old and needed renovation, while 3% indicated that there was nothing at all available to them. Three percent were satisfied because they had comfortable housing.

Your Job

Satisfaction with job was highest in High Prairie and lowest in Gift Lake, with an MSI of 4.2, 3.0 respectively, while Grouard had 3.8. The MSI difference was significant at 1%

and 5% for Gift Lake and Grouard respectively.

In High Prairie, the reason given most often for dissatisfaction , 11% of the respondents, was that the jobs were not challenging enough. 12% explained that their jobs had a bright future or were very good. Sixty-eight percent had no comments, while 2% were dissatisfied with poor salaries, and 2% had no jobs.

The reason given most often in Grouard was the absence of jobs. Eleven percent indicated that they had no jobs. 6% felt their jobs were not challenging enough, 6% were dissatisfied because of poor remuneration, while another 6% were very happy with their jobs. Sixty-three percent had no comments.

Gift Lake respondents cited a lack of jobs as the major reason for dissatisfaction, with 29% of respondents being found in this category. Sixteen percent indicated that their jobs were not challenging enough and varied from day to day, while 7% had poor remuneration. Three percent felt there was no opportunity for professional development, 7% were in school, and thus not working, while 29% had no comments.

Family Life

Family life was the variable that was considered most satisfactory by all respondents, MSI of 4.26. This finding is consistent with Campbell et. al., 1976.(p337). Satisfaction with family life was highest in Gift Lake and High Prairie, with MSI of 4.3 each, while Grouard had 4.2. In fact the responses to this variable were rather unexpected. Only 7% were dissatisfied in Gift Lake, but a total of 87% were satisfied. Similarly, only 4% were dissatisfied in High Prairie, while a total of 86% were satisfied. Grouard was not any different, 3% were dissatisfied, while 83% were satisfied.

When probed for further clarification, very few people offered an explanation for their level of satisfaction with family life; 21% in Gift Lake, 23% in Grouard, and 23% in High Prairie. Seventeen percent of those who answered from High Prairie thought that their family life was just excellent. Twenty-two percent had no family or were single, 4% wanted a

baby but could not have one, while 35% felt their family life could improve. However, 4% felt there was too much fighting and disagreement, while 17% were separated from their families for various reasons, most important of which was job opportunity., Of those who responded from Grouard, 25% cited singleness, 12.5% were separated from their family, 50% felt there could be some improvement in their family life, while 12.5% had excellent conditions. Of the Gift Lake respondents, 33% cited excellent conditions, 17% cited overcrowdedness, 33% cited too much fighting, and 17% had a need for general improvements. A general satisfaction with family life appears to be present in all three towns.

Your Friendships

High Prairie respondents were the most satisfied with their friendships, with MSI of 4.2. Gift Lake followed with 3.96, and Grouard had 3.9. Once again very few respondents gave reasons for the level of satisfaction. There was 16% in Gift Lake, 11% in Grouard, and 17% in High Prairie. Forty percent of those who responded from Gift Lake did not have many friends, 20% complained of a lack of people with their lifestyle, 20% felt the situation could improve, while the remaining 20% were very pleased with their friendships.

Of the respondents from Grouard, 50% did not have many friends, and the remaining 50% complained of a lack of people with their lifestyle.

Thirty-five percent of those who responded from High Prairie were very pleased with their friendships, 24% indicated they could do with some improvements, another 24% complained of a lack of people with their lifestyle, while the remaining 17% did not have many friends.

Generally, therefore, it appears that personal friendships are reasonably satisfactory in the study region. Why High Prairie has a higher level of satisfaction than Gift Lake and Grouard, which are rather smaller communities is difficult to explain. Probably, it might be the result of petty jealousies sometimes characteristic of small communities. The fact that satisfaction with family life is higher than friendships suggests that people probably invest

much more time in developing family relationships than friendships. This may be a good sign for the survival of the nuclear family.

Amount of Time for Leisure and Hobbies

Gift Lake respondents were the most satisfied with the amount of time they had for doing what they wanted to do, MSI of 3.6, while Grouard and High Prairie had 3.4 each.In each of the three communities, relatively high percentages of people indicated a need for improvement in the amount of time available for leisure - 56% in High Prairie, 54% in Grouard, and 55% in Gift Lake.

In both Grouard and High Prairie [redacted]% had time but the facilities for enjoying leisure time was lacking. The figure in Gift Lake in this category was 10%. The summary picture then is one of a more relaxed pace of life in Gift Lake, and a faster pace in High Prairie. This is consistent with the job situation as portrayed earlier on. Many in Gift Lake lack jobs, and have large amounts of time on their hands and very little to do. Campbell et al. have noted that having much time on one's hand may well be as unsatisfying as always feeling harassed to keep up with time demands. Certainly, lack of knowledge of what to do with discretionary time in segments of the population that have an abundance of it seems fully as much a problem as severe time pressure in other segments (1976,356).

Standard of Living

Respondents from High Prairie were the most satisfied with their standard of living, with MSI of 4.1. Gift Lake had 3.7, while Grouard had 3.8.

Fourteen percent of the respondents from High Prairie explained that their standard of living needed improvement, 4% were satisfied with the level as it was, and 3% thought it was excellent. Seventy-eight percent had no comment.

About 6% of the Grouard respondents explained that their standard of living was unsatisfactory because they needed a car or truck, 9% explained that some improvement was

needed, 9% considered it reasonably satisfactory, while 3% felt their standard was just excellent. Seventy-four percent had no comment.

In Gift Lake 23% explained that an improvement was needed in their standard of living, 3% needed a car or truck, 3% had no furniture, 3% were satisfied while 68% had no comments.

Conclusion

While satisfaction with public facilities and conditions associated with place, is relatively low and fairly predictable, that for personal life components is relatively high and not so easily predictable. In fact in some cases it is difficult to explain. The objective life conditions of most respondents, in most instances, especially among the poorly educated (in Gift Lake), do not exactly reflect the subjective evaluation given. As Pacione (1982) has argued, many factors, including personal characteristics such as age, income and educational achievement, intervene between the objective world and an individual's evaluation of it, and these may act as filters to distort the ojective conditions. Individual experience is also a key factor which affects the perception of a specific domain. The experience of one respondent whose next door neighbour was murdered in the night, is sure to remain with him for a long time, and will definitely affect his perception of the safety of the environment despite what the official crime statistics say.

While all these oservations are generally true for all subjective indicators, they are more so for those components of life that border on the personal lives of respondents. As has been seen different people may use different criteria to evaluate various components of their lives. The problem is exacerbated when the psychological process of accommodation (Campbell et al. 1976) is introduced. Furthermore, for various reasons, a person may report high levels of satisfaction just to register a good impression before the researcher. Subjective indicators alone, especially for personal life components, are therefore, not very reliable for the purpose of evaluating the life conditions in a place. They need to be supplemented with

objective indicators.

The point of the issue, however, is that it is not what the researcher thinks people ought to feel about their circumstances, but what *they really feel* about it that is important. It is the quality of life provided by a place as perceived by the residents of the community under consideration themselves, *and not outsiders* that is important.

The subjective evaluation of the quality of life in the three communities is accordingly used as a variable in Smith's standard score additive model for the computation of overall quality of life. However, the results seem to confirm in some measure the assertion that "ignorance is bliss (and) spatial variations that are unjust, harmful and inefficient are accepted not only by those who govern both nationally and locally, but also by those who, did they know it, suffer badly because they happen to live and work in particular areas" (Coates and Rawstron, 1971).

VII. ETHNIC GROUPS AND QUALITY OF LIFE

Introduction

Growth centre policy is known to affect different groups of people in the target area differently (Todd,1980). This proposition is examined with respect to the different ethnic groups in the study region. Both objective conditions and perceptual evaluations of various components of life are used to bring out existing inter-ethnic disparities in access to goods and services, and in the overall quality of life.

A. Disparities Between Ethnic Groups

Three major ethnic groups were identified in the study area: Treaty Indians, Metis and White Canadians. All others who did not fit into these categories were classified as *Non-Canadian*. These were mainly landed immigrants from the Phillipines, and the Carribean countries. Among the respondents, there were 28 Treaty Indians, 56 Metis, 73 White Canadians and 8 Non-Canadians. One respondent in Grouard refused to answer this question. Table 5.1 shows the breakdown of ethnic groups by town of respondent. Next, annual personal incomes are compared in Table 5.2.

Table 5.1

Ethnic Breakdown of Sample

Ethnic Group	High Prairie	[illegible]	[illegible]ake	Total
Treaty Indian	16 (16.0%)	11 (3[illegible].4%	3.2%)	28
Metis	10 (10.0%)	17 (50.0%)	29 (94.0%)	56
White Canadian	66 (66.0%)	6 (17.6%)	1 (3.2%)	73
Non-Canadian	8 (8.0%)	0 (0.0%)	0 (0.0%)	8
Total	100 (100%)	34 (100%)	31 (100%)	165

Source: Field Work conducted between December, 1985 and January, 1986

Table 5.2

Mean Annual Personal Income by Ethnic Groups in %

Income	Treaty Indian	Metis	White Canadian	Non-Canadian
Under $6,000	0.0	10.9	4.2	0.0
$6,000 - 9,999	23.1	32.7	1.4	0.0
$10,000 - 15,999	23.1	16.4	13.9	12.5
$16,000 - 19,999	11.5	18.2	6.9	0.0
$20,000 - 25,999	23.1	12.7	20.8	12.5
$26,000 - 29,999	3.8	1.8	12.5	0.0
$30,000 - 35,999	7.7	1.8	16.7	12.5
$36,000 - 39,999	0.0	1.8	8.3	25.0
$40,000 - 44,999	0.0	0.0	4.2	12.5
$45,000 - 49,999	3.8	1.8	1.4	12.5
$50,000 - 54,999	0.0	0.0	2.8	0.0
$55,000 - 59,999	0.0	0.0	1.4	0.0
$70,000 - 74,999	0.0	0.0	1.4	0.0
$75,000 and over	3.8	1.8	4.2	12.5
Total	100.0	100.0	100.0	100.0
	N=26	N=53	N=70	N=8
Mean Income	$21,060	$15,748	$30,542	$42,962

Source: Field work conducted between December, 1985 and January, 1986

From Table 5.1 above, broad ethnic groups can be identified within the three places. All the people in the Non-Canadian ethnic classification were found in High Prairie, while 94% of the Gift Lake sample were Metis. This is to be expected since Gift Lake is a Metis settlement, and one would expect immigrants to live in relatively larger towns. Sixty-six percent of the High Prairie sample was made up of White Canadians, 16% were Treaty Indians, and 10% were Metis. In Grouard, 32% were Treaty Indians, 50% were Metis, and 17.6% were White Canadians. High Prairie and Grouard are, therefore, multicultural unlike Gift Lake.

Of the three identifiable ethnic groups, White Canadians had the highest personal income, followed by Treaty Indians with $21,060 and then Metis with $15,748. In fact, the

average personal income of White Canadians is about one-and-a-half times that of the Treaty Indian, and twice that of the Metis. While about 11% of Metis earned less than $6,000 annually, not one Treaty Indian or Non-Canadian was found in this category, compared to 4% for White Canadians. Ninety-one percent of Metis earned less than $26,000 as compared to 80.4% for Treaty Indians, 47.2% for White Canadians and 25% for Non-Canadian. Whereas the distributions for Treaty Indians and Metis are skewed towards the low income groups, that for White Canadians is more evenly distributed, suggesting that incomes among the former groups converge around low income categories while among the latter group they are more widely distributed. To explain the income distribution, it is necessary to look at the employment status by ethnic groups. This is presented in Table 5.3 below.

Table 5.3

Employment Status by Ethnic Group in %

Employment Status	Treaty Indian	Metis	White Canadian	Non-Canadian
Employed full-time	63.0	46.4	94.4	87.5
Employed part-time	7.4	5.4	4.2	12.5
Seasonal employment	11.1	8.9	0.0	0.0
Unemployed	11.1	19.6	0.0	0.0
Retired	7.4	10.7	0.0	0.0
In School	0.0	7.1	0.0	0.0
Keeping House	0.0	1.8	1.4	0.0
Total	100.0	100.0	100.0	100.0
	N=27	N=56	N=72	N=8

Source: Field work conducted between December,1985 and January, 1986.

From Table 5.3 above, whereas 94% White Canadians have full-time employment, as do 87.5% Non-Canadian, only 63% and 46% Treaty Indians and Metis respectively fall into this category. About 20% of the Metis group is unemployed, compared to none for White Canadians and Non-Canadian, and 11.1% for Treaty Indians. A higher percentage of natives

are retired, about 11% for Metis and 7.4% for Indians, as compared to none for the White Canadian and Non-Canadian groups. In addition 11% Indians are in seasonal employment compared to 8.9% Metis and none for White Canadian and Non-Canadian.

It can be seen from Table 5.3 that disparities clearly exist between ethnic groups in terms of access to jobs. White Canadians and Non-Canadian seem to have a greater tendency to hold full-time jobs, while Metis and Treaty Indians do not. To examine this disparity further, employment status of the respondent's spouse is presented in Table 5.4 below, while Table 5.5 presents the level of education of respondents.

Table 5.4

Employment Status of Spouse by Ethnic Group in %

Employment Status	Treaty Indians	Metis	White Canadian	Non-Canadian
Employed full-time	47.1	36.6	65.4	100.0
Employed part-time	11.8	9.8	7.7	0.0
Seasonal employment	23.5	22.0	7.7	0.0
Unemployed	0.0	7.3	1.9	0.0
Retired	5.9	4.9	3.8	0.0
In school	11.8	12.2	7.7	0.0
Keeping house	0.0	6.4	5.7	0.0
Total	100.0	100.0	100.0	100.0
	N=17	N=41	N=52	N=5

Source: Field work conducted between December,1985 and January, 1986.

Table 5.5

Level of Education by Ethnic Group in %

Education level	Treaty Indian	Metis	White Canadian	Non-Canadian
No formal schooling	0.0	7.1	0.0	0.0
Less than grade 9	14.3	35.7%	1.4	0.0
Grade 9 - 12 (no certificate)	28.6	21.4	8.2	0.0
Grade 9 - 12 (with certificate)	14.3	7.1	21.9	12.5
Trades certificate	7.1	10.7	5.5	0.0
Other non-university (no certificate)	0.0	3.6	1.4	0.0
Other non-university (with certificate)	3.6	5.4	9.9	12.5
College or university (without degree)	32.1	7.1	17.8	0.0
University degree	0.0	1.8	34.2	75.0
Total	100.0	100.0	100.0	100.0
	N=28	N=56	N=73	N=8

Source: Field work conducted between December,1985 and January, 1986.

From Table 5.4 above, 100% Non-Canadian spouses have full-time employment, compared to 65% for White Canadians and 47.1% and 36.6% for Indians and Metis respectively. Unemployment is highest among Metis spouses, 7.3%, while Indians lead in seasonal employment with 23.5%, followed by Metis with 22% and White Canadians with 7.7%. This basically reflects the trapping, fishing and hunting lifestyle of many Natives in Canada, and the seasonal nature of most jobs on settlements and reserves. Treaty Indians led in the category of retired spouses with 5.9%, followed by Metis with 4.9%, and then White Canadians with 3.8%, while Metis had the highest percentage on spouses who were in school, 12.2%. The employment status of spouses in the Non-Canadian category confirms that most immigrants in the study region are well-qualified people who come to sell their skills. As will be seen in Table 5.5 below people in the Non-Canadian category tend to be more highly

educated than the other groups.

Seventy-five percent of the Non-Canadians in the sample had a university degree, compared to 34% for White Canadians, and only 1.8% for Metis. Not one Indian in the sample had a university degree, but they had the highest percentage of those who had attended college or university but failed to obtain a degree, 32%. White Canadians followed with 34.2%. The Metis seem to have considerably lower education, having the highest score of the category of people with no formal schooling, 7.1%, and apart from them, no other ethnic group in the sample had any people in that category. Again Metis had the highest percentage on the category of people with less than Grade 9, 35.7%. This figure was about two-and-a-half times the size of the Indian population in this category. Thus while 42.8% Metis had less than Grade 9 education, only 14.3% Indians, and 1.4 White Canadians were in this category.

B. Subjective Evaluation - Public Life Components

The results of the subjective evaluations of respondents are compared in this section. For the sake of convenience, they are broken into two categories - public and personal. Table 5.6 presents the MSI on the public life components.

White Canadians were the most satisfied with the town of residence, with an MSI of 3.75. They were closely followed by Non-Canadian with 3.71, then Metis with 3.31 and Treaty Indians with 3.11. It seems that the relatively affluent ethnic groups, White Canadians and Non-Canadian, are more satisfied with their towns than the relatively poor Metis and Indians. If the town of residence provides a job, and a secure income, it is expected that people will count themselves well-off, and down-play the negative aspects, if any. On the other hand, those with low incomes, low education and, therefore, a poorer access to jobs, can be expected to be less satisfied since the place of residence does not meet some of the most vital needs.

Table 5.6

MSI on Public life Variables by Ethnic Group

Life Component	Treaty Indian	Metis	White Canadian	Non-Canadian
Satisfaction with Town	3.11	3.31	3.75	3.71
Health facilities	2.25	1.89	3.78	3.50
Medical staff	2.29	1.80	3.50	3.63
Transportation	2.40	2.00	2.65	2.00
Housing	1.96	2.16	2.75	2.63
Public services	2.86	2.75	3.53	3.75
Educational opportunities	3.61	3.69	3.86	3.63
Indoor recreation	2.18	1.86	3.00	2.57
Outdoor recreation	2.77	2.37	3.59	3.88
Quality of environment	3.07	3.07	3.05	2.50
Job opportunities	2.46	2.03	3.03	3.00
Communication systems	3.50	3.65	3.23	2.75
Daycare facilities	2.45	2.26	3.71	4.2
Facilities for senior citizens	3.26	1.96	3.95	4.14
Religious facilities	3.82	3.86	4.04	4.14
Quality of the water	2.81	2.68	3.69	3.25
Local government	2.71	1.94	3.37	2.86
Cost of living	2.00	2.82	2.68	2.13
Safety of environment	2.89	2.77	3.53	4.25
	N=28	N=56	N=73	N=8

Source: Field work conducted between December,1985 and January, 1986.

White Canadians were again more satisfied with health facilities than any other group, followed closely by Non-Canadian, and then Indians and Metis in that order. This may suggest that the less educated and poorer natives have unpleasant experiences with the health facilities available. The geographical concentrations of the various ethnic groups may be an important explanatory factor, since the Metis are predominantly concentrated in Gift Lake which has the lowest accessibility to the facilities, and over 90% of White Canadians are concentrated in High Prairie where the facility is located. However, this alone can not fully explain the significantly high level of dissatisfaction.

Discussions with some medical officers at the High Prairie Regional Health Complex revealed that Natives in the region generally failed to be on time for their appointments, and were usually late. However, most of the time, some of them would insist on being seen immediately. This would, of course, create problems. To solve the first problem, double, triple and even quadruple booking were now practised to cut down on the number of people who fail to show up.

The high level of dissatisfaction may, therefore, be explained in terms of unpleasant experiences at the facility probably arising out of misunderstanding or misconceptions about the role and use of health facilities. This would then mean that the relatively better educated White Canadian and Non-Canadian groups have more realistic expectations of the health facilities, or have more pleasant experiences with the facility. It is suggested that this may be attributable to better personal health care, and preventive health practices among White Canadians and Non-Canadian groups. It may also suggest some form of discrimination in the quality of services received by the different groups of people, as suggested by the wide discrepancy between Metis and White Canadians. The frequency of alcohol related cases among Natives that are treated at the Complex can have a stereotype effect on the perceptions of the medical staff.

Medical Staff was most satisfactory to Non-Canadians, with an MSI of 3.63, followed by White Canadians with 3.50 and then Indians with 2.29 and Metis with 1.89. This is not any

different from satisfaction with health facilities. Two clear groups can be identified with regard to medical care - the satisfied, White Canadian and Non-Canadian group, and the dissatisfied Native group - Metis and Indians. When it is realized that the Native groups live farther away from the health facilities, it is easier to understand the discrepancy. However, this may not be the whole of the story[10]. Once again what seems to be clearly revealed is the law of inverse care. The poorer people, have poor health, low education levels, and consequently low, if any, health education, but they receive the least in health care.

Transportation facilities were most satisfactory to the White Canadian group, followed by Indians with 2.40 and then Metis and Non-Canadian with 2.0 each. The generally low satisfaction scores on these variables shows the people's evaluation of the generally poor, or absent public transportation in the study area. Some attention needs to be definitely paid to this social provision.

It is easy to understand why the Metis mostly living farther away from High Prairie than other groups will be dissatisfied, but perhaps the dissatisfaction of the Non-Canadian group reflects higher expectations as a result of previous experiences, which are not being met. A. McCall argues, the same objective conditions may elicit different evaluative responses, while Seashore also suggests that the same evaluative responses may be elicited by different conditions. Kennedy et. al, have suggested that both these processes may simultaneously be on-going in a social system. (Andrews and Withey, McCall, 1975; Seashore, 1974; Kennedy et. al, 1977.)

Housing was generally unsatisfactory in the region, but Indians were the most dissatisfied with 1.96, followed by Metis with 2.16, and then Non-Canadian and White

[10]During the time of the field work, I would frequently hear announcements over the car radio naming some mothers and asking them to go and get their children who had been discharged from hospital. When I asked the medical staff the reason, I was told that some mothers use the hospital as a baby sitting service. Especially, during the Stampede days in High Prairie, there would usually be a great influx of mothers insisting that their children be admitted.

There was also the story of someone who phoned up the hospital asking to be admitted so that he might have free accommodation for the two weeks he needed to do a job which he had found in town.

Canadian in that order with 2.63 and 2.75 respectively. It seems that the groups that are better able to afford housing are less dissatisfied than those who are less able to do so. It is surprising that Indians are less satisfied than Metis with the housing situation, even though they earn slightly higher incomes. It is suggested that Metis have access to housing programmes while urbanized Indians do not, and consequently, they may be dissatisfied. Most provincial housing programmes are geared to low income people with a maximum adjusted[31] family income limit of $18,000 per annum. Families which have an income in excess of this amount are largely excluded from receiving government assistance. (Alberta Housing, 1985). Since the average annual personal income of Indians in the sample was $21,060, they are more likely to be disqualified for provincial housing programmes than the Metis.

White Canadians and Non-Canadian were more satisfied with public services than Metis or Indians, MSIs were 3.53 and 3.75 for the former group, and 2.75 and 2.86 for the latter group in that order. Since the majority of the Non-Canadian and White Canadian groups live in High Prairie, which has relatively better public services, this is not difficult to explain. The rural communities, Gift Lake and Grouard where the Natives predominate do not have the tax base, and therefore, cannot support the services which High Prairie provides.

Educational opportunities were generally evaluated to be satisfactory, however Indians were less satisfied, with an MSI of 3.61 than the other groups. White Canadians were the most satisfied with 3.86, followed by Metis with 3.69 and then Non-Canadian with 3.63. Again the relatively high level of satisfaction among the Non-Canadian group may be attributable to their previous experiences, or disinterest because they have attained their pre-set educational goals and therefore, do not need any facilities for themselves, except for their children.

Indoor recreation was generally evaluated unsatisfactory, with Metis being the most dissatisfied with 1.86, and White Canadians least dissatisfied with 3.0. Non-Canadian had 2.57, while Indians had 2.18. The arguments presented for this variable in the previous

[31]The combined income of all family members, less $2,500 for a spouse, and less $500 for each dependent child is the adjusted family income.

chapter are also relevant here. White Canadians and Non-Canadian live in closer proximity to indoor recreational facilities than Metis and Indians. This being the case, the former will spend less on recreational facilities than the latter who will have to add transportation costs. Thus, even though the absence of an indoor swimming pool is bemoaned in High Prairie, and the general lack of variety is noted, White Canadians and Non-Canadian have better access to the limited facilities available. Again, the lower satisfaction among Non-Canadian may be attributable to previous experiences and hence higher expectations.

Outdoor recreation was most satisfactory to Non-Canadian, 3.88, followed by White Canadians, 3.59, then Indians, 2.77, and finally Metis with 2.37. It is important to note that accessibility to outdoor recreational facilities is very much dependent on personal mobility. Hilliard's Bay Provincial Park is sixty kilometres from Gift Lake, ten from Grouard and forty from High Prairie. In addition, High Prairie also has the Winagami Provincial Park which is about the same distance away. Thus residents of Gift Lake may have to travel sixty kilometres to Hilliards Bay, or not have anything at all. The low personal mobility of Metis and Indians, as reflected in the ownership of motor vehicles, reflects the relative access to outdoor recreational facilities. The correlation between total household income and satisfaction with outdoor recreation was only 0.19, but it was significant at 1%. This implies that households with higher incomes are better able to access outdoor recreation facilities.

The quality of the environment was perceived to be fairly satisfactory among Indians, Metis and White Canadians, but unsatisfactory among Non-Canadian. The most plausible explanation seems to be issue of expectations and previous experience as noted earlier. The close satisfaction scores, 3.07 for Indians, and Metis and 3.05 for White Canadians, suggests that there is no difference with respect to the evaluation of the environment, between these three groups.

Metis were the least satisfied with job opportunities available, MSI of 2.03. They were followed by Indians with 2.46, Non-Canadian with 3.00 and White Canadians with 3.03. As has been shown earlier, Metis and Indians have a generally low education level and are thus

poorly prepared for the job market. In fact, while 75% Non-Canadian and 34.2% White Canadians had a university degree, only 1.8% Metis and no Indians in the sample had achieved one. If access to a job is enhanced by a university degree, then definitely, the Metis and Indians have very poor access to jobs. Thus the, seemingly, poor job market in the High Prairie region has differential effects on the ethnic groups within the region, and favours White Canadians and Non-Canadian, to the disadvantage of Metis and Indians.

The communication system was rated most highly by Metis, 3.65, followed by Indians, 3.50, then White Canadian 3.23 and then Non-Canadian with 2.75. The differential educational levels probably has something to do with this fact. The highly educated have a higher need for information, and demand a greater flow of information than the less well-educated, who seem to be satisfied with less information. Particularly, it is understandable to expect migrants to have a greater need for international newspapers and magazines, as well as a wider variety of radio channels to provide regular information about their home countries. If this is lacking, they will tend to be dissatisfied. It is also more likely that this group will have lived elsewhere, and will have had a larger experience of information flow than the remaining groups. This will explain their relatively high level of dissatisfaction.

As expected, daycare was most satisfactory to Non-Canadian, 4.2, followed by White Canadians with 3.71 and Indians with 3.45, but Metis were quite dissatisfied with 2.26. Sixty-three percent Non-Canadian were double income families, with the spouse working full-time. Since the remaining 37% had no spouses, it implies that spouses in Non-Canadian category were 100% employed full-time. These families would require daycare for their children, and since High Prairie offers two daycare facilities, their needs would be fully satisfied. An additional point is that because they have higher incomes, they are able to afford the daycare facilities unlike people in the Metis or Indian groups. Again, the concentration of White Canadians in High Prairie, which has facilities, helps to account for the relatively high satisfaction among that group, while a similar concentration of Metis in Gift Lake, and Grouard, with no, or poor facilities accounts for the low satisfaction among the Native

Groups.

Facilities for Senior Citizens were evaluated most highly, by Non-Canadian, 4.14, followed by White Canadian with 4.04, then Indian with 3.82, and then Metis with 1.96. The greater disparity in level of satisfaction is again dependent on location of the person. Whereas most of the Non-Canadians live in High Prairie, where there are good facilities, and are not likely to need these facilities themselves nor have relatives needing them, the Metis concentration in Gift Lake and Grouard, with a higher percentage of older people, and a dearth of such facilities, makes the disparity understandable. There seems to be again another resemblance to the inverse case law - the elderly populations concentrated in Gift Lake and Grouard, have the least access to facilities for Senior Citizens. It is sad that a Senior Citizen in either Grouard or Gift Lake would have to relocate if access to such facilities is a priority when they do not want to do so.

Religious facilities were most satisfactory to Non-Canadian, 4.14, followed by White Canadian, 4.04, then Metis, 3.86 and finally Indians with 3.82. As has been argued earlier, it seems that not too many people use these facilities, and therefore, have no effective way of judging them. The presence of a facility is enough to merit a "very satisfied" response, whereas those who use it would use relevant criteria - such as time schedules, variety, level of participation, and programmes offered. The relatively higher satisfaction among the White Canadian and Non-Canadian groups probably reflects the larger variety of programmes available in High Prairie as opposed to Grouard and Gift Lake.

The quality of the water was evaluated more highly by the White Canadian group, with 3.69, followed by Non-Canadian with 3.25, then Indian with 2.81 and Metis with 2.68. The relative location of the concentration of these ethnic groups is most likely to be a major determinant and explanatory factor. Grouard, known to have poor water at the time of the study, had 49% of its population Metis. The high dissatisfaction among the Metis with the quality of the water can, therefore, be explained by their geographic location. The relatively good water quality in High Prairie underscores this argument, and is reflected in the high

satisfaction scores among White Canadians and Non-Canadian.

Like the quality of the water, local government again reflects local variations, rather than inter-ethnic disparities. Metis were the least satisfied with 1.94, followed by Indians with 2.71, and Non-Canadian with 2.86, with White Canadian being relatively satisfied, MSI of 3.37. It will be recalled that Gift Lake and Grouard respondents were very dissatisfied with the local government available (See Table 5.6). Since 94% of the Gift Lake respondents are Metis, as was 49% of the Grouard sample, the low dissatisfaction is not directly attributable to ethnic differences, but should be explained by community factors. Grouard, lacking a local government, and Gift Lake with a Council perceived by many respondents as needing improvement, just happen to have a relatively higher concentration of Metis people. The high satisfaction among White Canadians may be attributable to the presence of the office of the Town of High Prairie, and the fact that they can make contributions to the administration of the Council. The relatively low score among Non-Canadian may be due to a low participation.

Cost of living was generally perceived to be not so satisfactory, the MSI ranging from 2.0 for Treaty Indians through 2.13 for Non-Canadian, and 2.68 for White Canadians to 2.82 for Metis. Contrary to expectations, the Metis concentrated in Gift Lake and Grouard do not seem as dissatisfied as do the Indian community, even though they are the poorest group. This might be due to lower expectations in the light of transportation costs paid by proprietors for goods shipped to the area. It might also be due to a lack of relevant criteria for comparison, because generally they may not be as widely travelled as the Non-Canadian group, or it may be due to the constricted horizons factor, referred to in earlier chapters which make the poor rate their conditions more highly. It is also interesting to note that the most affluent group, the Non-Canadians, were more dissatisfied with the cost of living than the poorest group, the Metis. The low satisfaction among Indians, however, is not so easy to explain, while the relatively low dissatisfaction among White Canadians may be due to accommodation - the operation of psychological mechanisms such that beyond a certain initial point of familiarity, satisfaction with a situation increases as one becomes increasingly accommodated to it, even

though at least the gross features of the situation remain constant" (Campbell et. al, 1976; Andrews and Withey, 1976).

Two clear and strikingly different groups emerge on the question of the safety of the environment - the Metis and Indians who evaluated it as unsatisfactory, and White Canadian and Non-Canadian who evaluated it as satisfactory. Geographical concentrations play an important role in explaining this, because it is the RCMP unit located in High Prairie that services Gift Lake and Grouard. It seems, however, that Native groups perceive themselves as more likely targets of crime. Many more respondents complained of petty break-ins and vanadalism in Gift Lake and Grouard than they did in High Prairie. The poor are more likely to feel threatened by crime than the affluent who can afford to, and may pay for protection when necessary. There was no evidence to suggest differential police protection in the study area, for different ethnic groups. Thus, the presence of the RCMP in High Prairie, coinciding with the concentration of White Canadian and Non-Canadian, accounts for the disparity in satisfaction with the safety of the environment.

The evidence presented so far shows that White Canadians and people in the Non-Canadian category rate various components of their places of residence more highly than the Metis and Indians. There seems to be differences in the way the two groups experience and, therefore, perceive their environment. This is important in view of the finding reported by the Alberta Bureau of Statistics study that "... perceptual measures of satisfaction ... exhibit a high degree of sensitivity to measured differences in corresponding objective conditions", and that " respondents' perception of the environment parallel a number of objective conditions in their environment". Such a close relationship was noted in the previous chapter where the perceptive responses were compared for place of residence. Similar parallels seem to prevail except for the conflicting evaluation of health facilities. The rather high discrepancy in the evaluation of health services is a cause for concern. Why do the two groups experience and rate the same facility and service so differently? Does it suggest differences in the services received, or differences in the expectations of these two groups of people? The

geographical location appears to be an important explanatory factor here, but there may be other reasons which lie outside the scope of this work.

C. Personal Life Components by Ethnic Groups

Personal health and physical condition was most satisfactory to respondents in the Non-Canadian category, with MSI of 4.25, followed by White Canadians with 4.03, then Treaty Indians with 3.89 and Metis with 3.75, as can be seen in Table 5.65 below. Many more Natives in the sample than the other two groups were in the 65 and above age category. This implies that a higher incidence of failing health among them is likely, and a low satisfaction with personal health can be expected. As the evidence shows, the relatively poor, Metis and Indians perceive themselves to be less healthy than the other groups. Interestingly, the former were more dissatisfied with the health facilities and medical staff than the latter. It is suggested that this also constitutes evidence for the inverse care law.

Personal housing was rated very highly, unlike the general housing conditions, with MSIs ranging between 3.18 and 4.38. People in the Non-Canadian group were the most satisfied with 4.38, followed by White Canadian with 4.15, then Treaty Indians with 3.78, while Metis trailed with 3.18. In fact 88% Non-Canadian, and 85% White Canadian were satisfied compared to 74% for Indians and 51% for Metis. The average housing satisfaction expressed by homeowners is considerably higher than that expressed by renters; 80% homeowners were satisfied compared to 64% for renters. This parallels the work of Campbell et.al. (1976, 255), and probably explains the higher satisfaction among the Non-Canadian and White Canadian groups.

Table 5.65

Subjective Evaluation of Personal Life Components

Life component	Treaty Indians	Metis	White Canadians	Non-Canadian
Health and physical condition	3.89	3.75	4.03	4.25
Your House	3.78	3.18	4.15	4.38
Your job	4.16	3.39	4.22	4.13
Your family life	4.15	4.16	4.33	4.25
Your friendships	4.11	4.02	4.18	4.00
Time for leisure	3.48	3.54	3.40	3.50
Your standard of living	3.74	3.75	4.21	4.38
	N=28	N=56	N=73	N=8

Source: Field work conducted between December,1985 and January, 1986.

In Table 5.7 below, ethnic identity is presented together with type of tenure.

Table 5.7

Type of Tenure by Ethnic Group in %

Tenure type	Treaty Indians	Metis	White Canadian	Non-Canadian
Own	35.7	55.4	66.9	75.0
Rent	46.4	25.0	34.7	25.0
Rent to own	7.1	17.9	1.4	0.0
Others (eg. live with others)	10.7	1.8	0.0	0.0
Total	100.0	100.0	100.0	100.0
	N=28	N=56	N=73	N=8

Source: Field work conducted between December,1985 and January, 1986.

Home ownership is higher among Non-Canadian and White Canadian than Metis and Indians. A low correlation of 0.18 was found between household income and a person's satisfaction with housing, but this was significant at 1%, suggesting that the rich evaluate their housing more highly than the relatively poor, probably because of their different access to good housing.

Job satisfaction was highest among White Canadians, with an MSI of 4.22, followed by Indians with 4.16, then Non-Canadian with 4.13, and again Metis trailed with 3.39. That White Canadians were more satisfied with their jobs than any other group is not surprising because 94% of them had full-time jobs, as compared to 63% for Indians, 87.5% for Non-Canadian and 46% for Metis. This breakdown of full-time employment status is what makes the higher satisfaction score of Indians than people in the Non-Canadian group difficult to explain. It may be due to the fact that not being so well-educated, Indians count themselves lucky to be holding full-time jobs. People in the Non-Canadian category being highly educated, however, may consider their present jobs below their qualifications, or they may be paid less than what others with similar qualifications are receiving elsewhere. The low score of the Metis is easy to explain, because they have the highest unemployment rate, and the lowest rate for people with full-time employment.

Family life was generally very satisfactory. White Canadians were the most satisfied, with 4.33, followed by Non-Canadian with 4.25 and then Metis with 4.16 and finally Indians with 4.15. It seems that the groups with relatively higher household incomes rate their family lives more highly, probably because they can afford to do things together such as utilize the outdoor facilities, activities the poor cannot afford to do. In a sense, therefore, the family life is enhanced or inhibited by the income of the household. As Atkinson has argued, economic stability is essential to providing love and care for family members. It facilitates providing for a person's basic needs and those of their family, and having the affection and romantic love of a spouse (Atkinson, 1979).

Personal friendships were most satisfactory among White Canadians with MSI of 4.8, followed by Indians with 4.0. Since the Non-Canadian group is made up of people from different nationalities, it is easy to see why the score is lower than other groups. Probably new to the community and constituting a minority group, these people may have few friends.

The amount of time for recreation and leisure was more satisfying to the Metis with MSI of 3.54, followed by Non-Canadian with 3.50, then Indian with 3.48 and finally White Canadian with 3.40. As has been argued earlier, people without jobs usually find themselves with more time than they really need, and this was suggested to be particularly true of Gift Lake respondents who constitute the bulk of the Metis group. This same reasoning may, therefore, account for the high level of satisfaction expressed by the Metis group. The level of satisfaction expressed by people in the Non-Canadian group is not easy to explain. It may suggest a well-adjusted group that effectively handles a full-time job and has time for other activities. The score among White Canadians is not at all surprising. In the Alberta Bureau of Statistics Quality of Life in Alberta Survey, 1979, leisure was the second most important factor in explaining global life satisfaction (pp. 71-72). This was especially found to be true with urban dwellers (p. 86), unlike rural dwellers where the most predictive of expressed life satisfaction were housing and spiritual well-being. Thus White Canadians, in the sample, being relatively more urban than Metis or Indians, would probably prefer much more leisure time than what a full-time job can allow them.

As was expected, standard of living was most satisfactory to people in the Non-Canadian group, with 4.38, followed by White Canadian with 4.31, then Metis and Indian with 3.75 and then 3.74 respectively. While the higher satisfaction score among White Canadians and Non-Canadian is obvious as a result of higher incomes, and also the relatively larger community within which they live, one would have expected Metis to be less satisfied with their standard of living than Indians, in view of the differences in income, for instance, yet this is not the case. This again seems to be a situation where people's evaluations of their life conditions do not reflect the objective conditions, but is it? The ABS study suggested that

housing and spiritual well-being were the important predictors of expresed life satisfaction in rural areas. If this is true, then with a larger percentage of the Metis owning their housing, 55.4%, compared to 35.7% for Indians, the former will be expected to express a higher satisfaction with their standard of living regardless of what their other circumstances might be. It is even possible that both of these factors are operating jointly and simultaneously to account for the higher satisfaction on standard of living expressed by the Metis.

The survey data amply demonstrates that native groups in the study area, Metis and Indians, evaluate their lives less highly than White Canadians and Non-Canadians. This is true for the personal life components, where the overall MSI was 3.90, 3.68, 4.07 and 4.13 for Indians, Metis, White Canadian and Non-Canadian respectively, as well as public life components with MSI of 2.81, 2.57, 3.40 and 3.29 respectively. However, White Canadians were more satisfied with the public life components than non-Canadians, and this has been explained in terms of the differences in the experiences of the two groups, and consequently in expectations. On the whole, however, not much variation exists between these two groups in terms of access to jobs and opportunities, educational level and income, even though people in the Non-Canadian category appear to be slightly better off on many of these variables.

However, great disparities exist between these groups on the one hand, and the Native groups on the other. It is suggested that the low levels of satisfaction registered by the latter indicates some level of discrimination against these groups facilitated essentially by social characteristics - low income, low educational status, low employment and employability, poorer access to facilities, and hence a poorer overall quality of life. These characteristics, constitute an inherent handicap, or disadvantage, which make it very difficult for Natives, at least in the study area to participate more effectively in the general Canadian society. If this reasoning is plausible, then it means area targeting for programmes should be carefully re-evaluated and perhaps modified to include programmes targeted to meet the needs of specific groups of people. This will be explored further, following examination of the

household amenities available.

D. Household Amenities by Ethnic Group

As was done with the three centres, the household amenities available to the different ethnic groups by households are presented in Table 5.8 below. The objective is to provide a comparison of the relative well-being of the ethnic groups.

From Table 5.8 below, whereas 89% Indians had cold running water, only 55% Metis had, as compared to 100% for White Canadian and Non-Canadian. About 86% Indians had hot running water, compared to 51.8% Metis and 98.6% White Canadian and 100% for Non-Canadian. Thus whereas all Non-Canadians had both cold and hot running water, barely half the Metis had one or the other. For shower or bathtub, while every Non-Canadian and White Canadian had them, 85.7% Indians and 55.4% Metis did. Indoor toilets were available to all White Canadians and Non-Canadian, and 89.3% Indians and 55.4% Metis. Thus, about one in every two Metis and one in every ten Indians lack what may be considered basic plumbing facilities, unlike Non-Canadians and White Canadians who mostly have them.

Electricity was available to all members of all Ethnic groups except Metis. Telephone was available to almost all White Canadians, 87.5% Non-Canadian, 78.6% Indians and 69.6% Metis. Television sets were the most popular item, and were available to 96.4% Indians and Metis, 97.3% White Candians and all Non-Canadian, while refrigerators were available to all other, 98.6% Metis and 96.4% Indians. Surprisingly, however, fewer White Canadians than Indians had Video Cassette Recorders, 41% and 50% respectively, wheras as expected only 37.5% Metis had them compared to 62.5% Non-Canadian. Thus again, except in the case of VCRs, the Native groups have fewer household entertainment and other vital amenities than the White Canadian and Non-Canadian groups.

Table 5.8

Available Household Amenities by Ethnic Group in %

Household amenity	Treaty Indians	Metis	White Canadians	Non-Canadian
Cold running water	89.3	55.4	100.0	100.0
Hot running water	85.7	51.8	98.6	100.0
Shower or bathtub	85.7	51.8	100.0	100.0
Indoor toilet	89.3	55.4	98.6	100.0
Electricity	100.0	98.2	100.0	100.0
Telephone	78.6	69.6	98.6	87.5
Television	96.4	96.4	97.3	100.0
Refrigerator	96.4	94.6	97.3	100.0
Video eassette recorder	50.0	37.5	41.1	62.5
Dishwasher	25.0	5.4	46.6	25.0
Car or truck	71.4	67.9	89.0	87.5
Snowmobile	25.0	32.1	21.9	25.0
Motor bike	21.4	7.1	12.3	12.5
Three-wheeler	17.9	26.8	10.9	12.5
Personal computer	10.7	5.4	8.2	25.0
Canoe	25.0	21.4	24.7	25.0
	N=28	N=56	N=73	N=8

Source: Field work conducted between December,1985 and January, 1986.

While one in every four Indians and Non-Canadians had diswashers, only one in twenty Metis had them, compared to almost one in two for White Canadians. The discrepancy between White Canadians and Non-Canadian on this item probably reflects different lifestyles or expenditure patterns, and the same can be said for the Indian group. The low rate among

the Metis definitely reflects their relative poverty. Even though one would expect the Metis to need a means of transportation more than any other group because they live farthest away from High Prairie, they had the least number of people with a car or truck, 67.9%. In comparison, 89% White Canadians, 87.5% Non-Canadian, and 71.4% Indians had a car or truck. However, the Metis had more snowmobiles and three-wheelers than any other group, and they were followed closely by the Indians on these two items. White Canadians had fewer of these two items than any other group. This probably stems from lifestyle differences, with the hunting and trapping Metis and Indians requiring the use of these vehicles, more than Non-Canadians or White Canadians.

Motor bikes are more popular among Indians, 21.4%, and less among the other groups, 12.3 and 12.5 for White Canadian and Non-Canadian, but with only 7.1% for Metis. The generally low popularity of this item may reflect the generally poor nature of the roads in the specific local areas. As expected, Non-Canadian had the highest percentage on ownership of a personal computer, one in every four people having one. In contrast, 10.7% Indians, 8.2% White Canadians and 5.4 Metis had these items. It is surprising that fewer White Canadians than Indians have computers, because of the lower educational qualifications of Indians. One in every four Indians and Non-Canadians had canoes, compared to 24.7% for White Canadians and 21.4% for Metis. Again one would have expected a higher figure for the Metis and Indians because many of them depend on seasonal fishing and trapping. However, this is is not supported by the evidence. Perhaps the problem may be one of inability to afford such items.

From the data on household amenities, the relative poverty of the Metis and Indians and the relative affluence of the White Canadian and Non-Canadian groups are clear. It seems that in the sample, the Metis, particularly, are much more worse off than the Indians, as will be shown by Poverty Line figures and also by the survey data on welfare recipients. People in the Non-Canadian category seem better off than White Canadians, but clearly, a wide gap exists in the living standards available to the native groups as compared to the White

and Non-Canadian groups.

E. Poverty in the High Prairie Region

Poverty, as defined by the Canadian National Council of Welfare is based on two considerations - size of the household and the town or place of residence. Seven categories of family size are used, ranging from a single person to seven or more persons while communities are divided into five groups according to population: metropolitan areas with half a million or more residents (eg. Edmonton and Calgary), large cities (100,000 to 499,999), medium sized cities (30,000) to 99,999), smaller centres (cities of 15,000), and rural areas (both farm and non-farm). Income is defined as money income received by all family members 15 years and older from the following sources: wages and salaries (before deductions for taxes, pensions, etc.) net income from self-employment, investment income (interest, dividends, rental income, etc.), government transfer payments (eg. family allowances, child tax credit, old age security, provincial tax credits), pensions (eg. retirement pensions, annuities and superannuation) and miscellaneous income (eg. scholarships, alimony) (National Council on Welfare, 1984, 1-2) Poverty lines are thus based on gross rather than net (after tax) income.

Using this definition, it is found that all three centres studied - High Prairie, Grouard and Gift Lake fit into the last category - rural, on the basis of population size. The poverty lines for rural areas as set by the National Council of Welfare for 1985 and 1986 are presented in Table 5.9 below.

Using the Table as a guide, the total household income of respondents before tax, as reported by them during the survey, was compared with the household size. Since the reported household incomes were in categories, the mid-point of each category was used to represent that category. For instance, while the total household income of a respondent may lie anywhere within the range of $5,000 to $9,999, the mid-point, $7,500 is used to represent this category. This is statistically sound, even though it means that some incomes can be

under-reported while others may be over-reported.

Using these guidelines the incidence of poverty among the various ethnic groups was [illegible]% for Non-Canadian, 1.4% for White Canadians, 17.8% for Indians, and 41.1% for Metis, when the 1985 cut off lines are used. The same proportions were obtained when the 1986 cut-off lines were used.

Table 5.9

Poverty Lines for 1985 and 1986

Household size	Total Household Income	
	1985	1986
1	$7,571	$7,870
2	$9,895	$10,316
3	$13,250	$13,813
4	$15,360	$15,967
5	$17,810	$18,567
6	$19,444	$20,270
7	$21,423	$22,334

Source: National Council of Welfare 1985 Poverty Lines, pp 6-7.

The high rate of poverty among the Metis is alarming, but understandable in view of the fact they tend to have larger household sizes and lower incomes. This finding is, however, contingent on the reported incomes for the various groups being reflective of the exact income earned by the total household. Even, if the incomes are under-reported, the relative distribution among the different ethnic groups will not be affected, since one has no factual basis to assume that one ethnic group will tend to under-report their incomes more than

another. The fact that only 1% of White Canadians in the sample were in poverty as compared to 17.8% for Indians and 41.1% for Metis underscores the point previously made about inter-ethnic disparities. The Native groups, clearly have a poorer quality of life than the White Canadian and Non-Canadian group. However, this disparity may not be too extreme when Bodden's observation that averaged household incomes among Natives may be underestimated without including the value of harvested natural resources, (Bodden,1981) is considered.

In Table 5.10 below, data are presented on social assistance recipients in the sample. The data is broken down by ethnic groups to show the proportion of each group that reported that they, or a member of their household, received any of the three forms of assistance examined. The objective is to compare the relative poverty among the groups.

Table 5.10

Social Assistance Recipients by Ethnic Groups in %

Assistance type	Treaty Indians	Metis	White Canadians	Non-Canadian
Unemployment Insurance	10.7	19.6	8.2	0.0
Income subsidies	17.9	7.14	2.74	0.0
Social Assistance	0.0	10.7	1.4	0.0
	N=28	N=56	N=73	N=8

Source: Field work conducted between December,1985 and January, 1986.

The above confirms what has been clear all along. Native groups rely much more on government assistance for survival, than does the White Canadian group, or the Non-Canadian group which does not. The high rates for unemployment insurance among the native groups probably reflects the seasonal nature of most jobs for which they are qualified, such as fire fighting and fishing, while the high percentages on income subsidy among Indians

shows a relatively better position compared to the high percentages on welfare or social assistance among the Metis. The Metis seem to be the poor of the poor.

In Table 5.11, the credit and banking characteristics of the ethnic groups are compared. Once again, the native groups have poor access to facilities. Every person in the Non-Canadian group had a savings account, 87.7% had among White Canadians, but only three in every four Indians had, compared to about two in every five Metis. Even though, the Metis had more chequing accounts than savings, 48.2%, they still had less than Indians with 53.6%. Every person in the Non-Canadian group had it, compared to 94.5% for White Canadians. Only two people in a hundred had a bank deposit among the Metis, compared to 7 among the Indians, and 38 among White Canadians, while every other person in the Non-Canadian group had a bank deposit. From this alone, it is evident that the Non-Canadian group constitutes a great resource to the economy because they provide money for investments. White Canadians are also very important in this regard, but the same can not be said of the Metis and Indians.

Table 5.11

Banking and Credit Characteristics by Ethnic Groups in %

Item	Treaty Indians	Metis	White Canadians	Non-Canadian
Savings account	75.0	42.9	87.7	100.0
Chequing account	53.6	48.2	94.5	100.0
Bank deposit	7.1	1.8	38.4	50.0
American Express card	7.1	3.5	13.7	25.0
Visa card	21.4	7.1	72.6	75.0
Mastercard	0.0	0.0	5.4	12.5
Department store card	25.0	25.0	34.3	75.0
	N=28	N=56	N=73	N=8

Source: Field work conducted between December,1985 and January, 1986.

On the credit characteristics, while it seems that the American Express Card is not very popular, or that many individuals do not qualify for one, ownership of that card again reflected the trend that has been observed so far among the ethnic groups - 25% for Non-Canadian, 13.7% for White Canadian, 7.1% for Indians and 3.5% for Metis. While 75% and 72.6% respectively of Non-Canadian and White Canadian had a Visa Card, only 21.4% Indians and 7.1% Metis had it. It is difficult to believe that the White Canadian is ten times as likely as the Metis to own a Visa Card, but this is the reality; the poor have a poorer credit rating and are, therefore, less likely to be given credit. Not one Metis or Indian had a Master Card, perhaps reflecting a lack of popularity for this particular Card, but 5.4% White Canadians, and 12.5% Non-Canadian had it. Department store cards were more common, with 25% Metis and Indians having them, compared to 34.3% White Canadian and 75% Non-Canadian.

The evidence is once again conclusive. The Native groups have low credit ratings, since fewer of them have banking accounts, and consequently, or in addition, have low access to credit cards, bank loans, and other banking facilities. White Canadians and Non-Canadians, have higher credit ratings and, therefore, better access to banking facilities.

F. Mean Monthly Household Expenditure on Selected Items

The monthly expenditure on selected household items or activities, as reported by respondents, is presented in Table 1.12 below. The table is broken down by ethnic groups to facilitate comparison. The findings of this study closely parallel those reported in the Family Expenditure Survey conducted by Statistics Canada (1984). Total expenditure per person decreased as household size increased. For instance, household expenditure on food was highest for the Metis, but they had the lowest per capita food expenditure. Per capita expenditure on shelter in the Non-Canadian group was more than three times that of the Metis. The per capita expenditure on the selected items by ethnic group and also by place of residence is presented in Appendix 1.6. The analysis has been confined to the household unit,

however, because the use of per capita figures make no sense when many of the people are dependent and not income earners.

Monthly expenditure on rent or mortgage payments followed the same distribution as the income pattern we have seen - it was highest for Non-Canadians, followed by White Canadians, then Indians and finally Metis. The high amounts for Non-Canadian and White Canadians are expected since many of them own their housing and make regular mortgage payments. The relatively low rates for Metis and Indians definitely reflects the pricing policies of the provincial government housing programmes to give assistance to these groups. Since the government is the largest landlord, especially in Gift Lake and Grouard, it effectively sets local market rates for rents, and because this figure is usually low qualified families either pay 25% of their income or between $100 and $200 for rent (Alberta Housing, 1985).

Table 5.12

Mean Monthly Expenditure on Selected Items in $

Item	Treaty Indian	Metis	White Canadian	Non-Canadian
Rent	360.0	320.0	490.0	580.0
Food	323.0	441.0	305.0	308.0
Clothing	88.0	126.0	105.0	163.0
Child care	199.0	190.0	310.0	420.0
Health care	79.0	33.0	36.0	57.0
Utilities	163.0	181.0	122.0	157.0
Transportation	185.0	231.0	158.0	200.0
Social & recreation	98.0	100.0	85.0	93.0
Household goods	70.0	83.0	80.0	116.0
Home upkeep	38.0	70.0	67.0	109.0
Debts and repayments	364.0	312.0	380.0	457.0
Other expenditure	170.0	99.0	502.0	166.0

Source: Field work conducted between December,1985 and January, 1986.

Food expenditures followed an inverse of the previous pattern with Metis spending the highest, $441, followed by Indians with $323, then Non-Canadian with $308 and White Canadian with $305. The high figures for Metis and Indians are explained by the relatively larger household sizes, as can be seen in Table 5.13 below and perhaps extra costs they pay as a result of higher prices.

Table 5.13

Distribution of Household Sizes by Ethnic Group in %

Household size	Treaty Indian	Metis	White Canadian	Non-Canadian
1	10.7	5.4	19.7	25.0
2	32.1	1.8	36.6	25.0
3	10.7	19.6	14.1	25.0
4-5	35.7	35.7	24.0	25.0
6-9	10.7	30.4	5.6	0.0
10+	0.0	7.4	0.0	0.0
Total	100.0	100.0	100.0	100.0
Mean size	3.54	5.10	2.74	2.63
	N=28	N=56	N=73	N=8

Source: Field work conducted between December,1985 and January, 1986.

As can be seen, household size almost perfectly explains the differences in food expenditure, except for the discrepancy between the Non-Canadian and White Canadian groups. It is suggested that this might probably be due to specialty foods demanded by the Non-Canadian group, which may be relatively more expensive. This can explain why a smaller household size among the Non-Canadian group has slightly higher expenditure on food than the White Canadian group with a larger mean household size.

People in the Non-Canadian group spent the highest on clothing, $163 followed by Metis with $126, then White Canadian with $105 then Indians with $88. While the figure for Non-Canadian may be attributable to taste and preference, that for Metis will have to be explained again by household size, and perhaps a lack of good clothing care, arising out of poor education, compounded by the fact that low incomes would not allow them to buy the best quality clothing in the first place. It is particularly sad that the Metis spend, on average, $96 more on food and clothing per household, than the highest income earning group, Non-Canadian, especially because they are least able to afford it.

Child care expenditure was highest among the Non-Canadian and White Canadian groups, with a mean of $420 and $310 respectively, reflecting the high rate among them of double income earners. Indians spent $199 compared to $190 for Metis.

Health Care expenditure was highest for Indians, almost $80, followed by Non-Canadian with $57 then White Canadians with $36 and Metis with $33. The high figure for Indians reflects the large proportion of that group in High Prairie, who, because they live off the reserve have very little or no health coverage from the Department of Indian Affairs and Northern Development. If these people have no Blue Cross Insurance Coverage, because of inability to afford the premium payments, it is understandable they will pay more for prescriptions, and consequently for health care as a whole.

The group which spent the highest on utilities was Metis, with a mean of $181. They were followed by the Indians with a mean of $163, then Non-Canadian $157, and White Canadians with $122. The high figures among the Native groups can be attributed to poor and less energy-efficient housing and also the fact that a telephone call to High Prairie from Gift Lake incurs long distance phone charges.The high figure for Non-Canadian probably reflects long distance telephone bills resulting from telephone calls made to relatives and friends overseas.

Transportation expenditure was highest for the Metis with a mean of $231, followed by Non-Canadian with $200, then Indian with $185 and White Canadian with $158. The high

mean for Metis reflects their relative location and in the absence of efficient public transportation, the high costs they incur maintaining old vehicles, or hiring some one to take them. As was seen in the previous secion, the Metis had the least percentage of people who owned a means of transport - car or truck, and it can be expected that those who do not have transportation either hitch-hike or pay exhorbitant fares for transportation as was seen in Gift Lake.

Social and Recreation expenditure was highest among the Metis, $100, followed by Indians with $98, then Non-Canadian with $93, and finally White Canadian with $85. The higher mean expenditure for Metis probably reflects the extra transportation charges they incur travelling to recreational facilities, in the absence of any local facilities, while the figure for Indians may be linked to the high percentage of Video Cassette ownership among them.

Expenditure on household goods was highest among Non-Canadian, with a mean of $116, followed by Metis with $83, then White Canadian with $80, and Indians with $70. The higher figure among Non-Canadian probably reflects their taste, while the figure for Metis may be explained by reasons similar to those adduced for clothing.

Upkeep of home expenditure was highest among Non-Canadian, a mean of $109, followed by Metis with $70, then White Canadian with $67 and then Indian with $38. The high figure among Metis is disturbing and probably reflects older housing requiring expensive maintenance and repairs.

Debts and repayments reflected credit card ownership. The Non-Canadian group, with the highest rate of credit card ownership paid the highest, on average $457, followed by White Canadians with $380, then Indians with $364, and Metis with $312. The less creditworthy people are, it seems the less debts they may have to repay. Probably, it also suggests that the native groups, lacking a secure income, can not afford to take things on credit, whereas those relatively more secure or higher incomes can.

Other expenditure, including any other monthly expenditure not included in those listed here, was highest among White Canadians with a mean of $502, followed by Indians

with $170, then Non-Canadian with $166, and Metis with $99. While no real conclusions can be drawn because the list of items on which money was spent was so varied, we can at least surmise that the poor have little else to spend money on, apart from the basics, probably because they have little left after meeting basic needs, while the rich - White Canadian and Non-Canadian have a greater variety of extra expenditure. The high figure for Indians is difficult to explain, and may refer to a culture-specific need that has not been covered by the previous breakdown.

Conclusion

The evidence presented in this section demonstrates that the White Canadians and Non-Canadians enjoy a higher quality of life than Metis and Indians in the sample. Not only are incomes higher in the former, unemployment is lower, level of education is higher, and they have more in household amenities than the latter.

This examination of monthly household expenditures has further confirmed the relative well-being of the four groups in the study area. The less well-to-do Metis and Indians have been seen to spend more on basics - food, clothing, utilities, transportation, and recreation, while the well-to-do spend less. This has been explained by, among other things, differential demographic characteristics - larger houshold and family sizes among the poor, and poorer care for goods because of poor education and lack of skills, further compounded by poor quality goods because of the inability to afford quality items. Exactly the opposite is true for White Canadians and Non-Canadian. What is most disturbing is that those, least able to afford it, spend the highest on utilities because of poorer housing. In a sense, their poverty reinforces itself, and is almost self-sustaining. Low education makes them unemployable, or fit only for seasonal and unskilled jobs, and therefore leaves them with lower incomes, which in turn works against higher education for themselves and their children. Since the home environment is not conducive to academic work, and inability to meet the population threshold requirements results in bussing of students to other communities, a high dropout

rate is inevitable, and this culminates in a poorly educated group, conscious of its inadequacies, and unable to escape the jaws of poverty. How has government policy compounded, ameliorated or led to this drama of disparity?

VIII. THE IMPACT OF HIGH PRAIRIE AND SELECTED PROGRAMMES

Introduction: In this section the spatial impact of High Prairie as a growth centre is examined using income, level of education and unemployment rates for 1971, 1976, and 1981. This is done by comparing High Prairie with ID 17, the hinterland of High Prairie, over this time frame to test the convergence-divergence thesis. Data on previous place of residence is then presented to show who the real beneficiaries of investment in High Prairie have been.

Following this, selected on-going projects in the region are reviewed to examine their potential benefits and beneficiary groups.

A. The Spatial Impact of High Prairie

The spatial impact of High Prairie as a growth centre is examined, and contrasted with its hinterland, ID 17. Using statistical data on level of education, income, and unemployment, for 1971, the year in which the growth centre was designated; 1976, (5 years after the policy), and 1981, it becomes obvious that the spatial incidence of benefits have largely been concentrated in High Prairie.

An examination of the Table reveals that while there has been a drastic improvement in the lower levels of education for ID 17, leading to a drop in the proportion of people with less than Grade 9 education from a high of 52% in 1971 to less than 36% in 1981, a similar improvement is not seen at the higher levels of education. An average percentage change of 4.4 for High Prairie contrasts with 8.3 for ID 17 in this category. However, at any one time ID 17 has about one-and-a-half times the percentage of people with less than Grade 9 education that High Prairie has.

On the other hand, High Prairie has a higher percentage increase in university degree holders, averaging 3.9% every five years, compared to 1.3% for ID 17. By 1981, High Prairie had three times as many university degree holders as as did ID 17. While the change could be accounted for by the differential rate of influx of people into the region, if the holding of a university degree is a criterion for securing a high-paying job, then definitely High Prairie had

superior advantages over ID 17.

Table 6.1

Level of Education 1971, 1976 and 1981

Level of Education	High Prairie			ID 17		
	1971	1976	1981	1971	1976	1981
Less than Grade 9	33%	30.4%	24.3%	52.3%	42%	35.8%
Grade 9 - 12 (no cert)	20.6%	17.8%	40.5%	20.4%	21.6%	33.7%
Grade 9 - 12 (with cert)	19.9%	23.7%	14.3%	13.9%	16.9%	6.6%
Trades cert or diploma	14.7%	13.5%	0.7%	8.9%	12.2%	1.8%
University (no degree)	7.2%	5.5%	5.6%	3.1%	4.4%	5.1%
University degree	4.2%	8.9%	11.9%	1.4%	% 2.9%	4.0%
Unemployment Rate						
Males	6.2%	1.7%	4.3%	6.7%	4.4%	8.1%
Females	6.8%	3.4%	1.9%	7.2%	3.4%	7.7%
Total Personal Income						
Males	$5,382	**	$16,561	$3,440	**	$12,320
Females	$2676	**	$11,715	$2,793	**	$6,603

** Not available Source: Statistics Canada, 1971 1976, and 1981 Census Reports.

While unemployment in High Prairie is generally low throughout, it is not so in ID 17. In fact the impact of the growth centre is seen to be greatest in High Prairie in 1976, with a record low male unemployment of under 2%, but in that same year unemployment in ID 17 is 2.5 times that in High Prairie. In 1981, it was not any better, male unemployment in ID 17 was 8%, about twice that of High Prairie.

Female unemployment shows even more dramatic differences. Whereas unemployment in ID 17 in 1971 was just under 1.1 times that existing in High Prairie, it was four times as much in 1981. The implication is that whatever jobs have been created as a result of growth centre policy in the region have favoured High Prairie to the disadvantage of ID 17. In fact this is to be expected. The availability of jobs in the region attracts well-qualified people from outside the region who displace the less well-educated predominantly native population of ID 17.

An examination of the total personal incomes for both male and female residents for the same time period shows that whereas the difference between the average total income for males in 1971 for High Prairie and ID 17 was only $1,942, in 1981 it was $4,846, about two and a half times the difference in 1971. Inequality among males is not converging, it is diverging. Similarly, whereas in 1971, average total incomes for females in ID 17 was actually about $100 higher than their colleagues in High Prairie, in 1981 the latter were receiving a total income over $5,000 higher than the former. In relative terms, however, a weak convergence may be observed in male income differences, while for females a divergence is observed. In 1971, the average personal income for males in ID 17 was 63.9% that of those in High Prairie, but in 1981 it had risen to 74.4%. The opposite is true for female incomes. While average personal income for females in 1971 in ID 17 was actually 1.04 times that of High Prairie, in 1981 it was only 56.4%.

How do respondents perceive the quality of their lives over the years in the light of these facts? To answer this, respondents were asked the following question: "Compared to 5 (10) years ago, how would you describe the present quality of your life?" The responses are presented in Table 6.2 below. On the whole, most respondents perceived the quality of their lives to have improved compared to 10 years ago, as well as when compared to 5 years ago. To obtain an idea of the net quality of life improvement, the percentage of people who said their lives had actually become worse than formerly was subtracted from those whose lives were better. The value for High Prairie for both 10 years ago and 5 years ago was 54.

However for Grouard, while it was 62.5 for ten years ago, it dropped to 27.3 when compared to 5 years ago. In Gift Lake, it was 61.2 for ten years ago, but 41.9 for 5 years ago. This suggests that while people perceive things to be better now than they were in 1975, things are not as good as they were in 1980.

Table 6.2

Quality of Life Compared to 10 years ago

Response	High Prairie	Grouard	Gift Lake
Better	70%	75%	67.7%
No change	14.5%	12.5%	25.8%
Worse	15.5%	12.5%	6.5%

Quality of Life compared to 5 years ago

Better	67%	45.5%	54.8%
No change	20%	36.3%	32.3%
Worse	13%	18.2%	12.9%

Source: Field work conducted between December, 1985 and January, 1986.

Of those who previously lived outside of High Prairie (90) 77 out of the 90, (ie. 86%) had full-time jobs, and 4% had part-time jobs. Of the number who had permanent jobs (77), 25% were from some Canadian province other than Alberta, 23% were from Edmonton or Calgary, 4% were from outside of Canada, 26% were from some other town or city in Alberta, and only 8.5% (6) were from the High Prairie region - Gift Lake, Grouard Wabasca, Falher, Driftpile, and Slave Lake. The implication of the above analysis is that the incidence of benefits from the jobs created in High Prairie using the growth centre policy, do not coincide with the region. In fact, taking into consideration the fact that 83 people in the sample had full time employment in High Prairie, it means that less than 12% of the residents of the

region are benefitting by way of full-time employment[31]. The beneficiaries of public investment in High Prairie are, therefore, not the poor, native people within the hinterland or High Prairie itself, but the more mobile, better educated non-natives. This confirms what Ironside and Mellor noted concerning Slave Lake. "A programme in a depressed region which induces heavy in-migration may raise per capita income of the region concerned but leave the welfare of the original inhabitants unchanged", (and we may add) or even worse.

The welfare of the original inhabitants becomes worse because there is increased demand for housing and other scarce resources; jobs become more difficult to find as the influx of more qualified people raises the minimum qualifications required for them; increasing frustration with lack of jobs becomes a great disincentive for further education, which then leads to further poverty, unemployment, social alienation (stigmatization) and on it goes.

In contrast, 15 out of the 25 people in the sample who held full-time jobs in Grouard, 60%, were people who had moved into the hamlet from the High Prairie region, while the rest were held by people from outside of the region. Thus in terms of benefits to native people, investment in Grouard seems to be more effective than in High Prairie. This argument becomes all the more convincing when it is realised that aside from geographical and occupational accessibility problems hindering residents from the hinterland from filling employment positions created in growth centres, migration from the hinterland to the growth centre may be limited further where place preference and kinship ties rank high in the social values of the hinterland population. This seems to be very much the case with Natives in the region.

Only 2% of High Prairie workers lived outside of High Prairie - in Grouard. However 7% of the Grouard workers in the sample lived in High Prairie. These are most likely to be lecturers at AVC. Not one of the residents of Gift Lake worked in High Prairie, but 7% worked in Grouard and another 7% in Wabasca. The remainder worked in Gift Lake. Thus, in

[31] This includes the difference between 83 and 77 (6), and the number of people with full-time jobs from the vicinity (6).

terms of jobs in High Prairie for non-residents chances are very slim indeed.

When asked the question, "have you always lived here?", 88% in High Prairie replied in the negative, compared to 63% in Grouard and 64.4% in Gift Lake. The given reasons for moving are presented in Table 6.3

Table 6.3

Reason for Moving from previous place of Residence

Reason	High Prairie	Grouard	Gift lake
Job transfer	6.5%	0.0%	0.0%
Job Opportunities	51.6%	50.0%	17.4%
Family move	13.2%	21.0%	26.7%
Business opportunities	7.7%	4.2%	4.3%
Educational opportunities	3.3%	8.3%	4.3%
Closer to family	3.3%	0.0%	0.0%
Unspecified family related	3.3%	0.0%	0.0%
Enjoy reserve rights (No taxes, fishing & hunting etc.)	0.0%	4.2%	13.0%
Closer to work	0.0%	4.2%	0.0%
Marriage	1.0%	0.0%	21.7%
Cost of housing	0.0%	0.0%	4.3%
Unspecified opportunities	0.0%	0.0%	4.3%
Others	20.06%	3.8%	8.3%
	N=91	N=24	N=23

Source: Field work conducted between December, 1985 and January, 1986

It is worthy of note that about 52% moved to High Prairie because of job opportunities, 6.5% because of job transfer while about 8% moved because of business opportunities, totalling 64.8% in this category. In Grouard, 50% had moved because of job related reasons, while 4.2

moved because of business opportunities. In contrast, the major reasons underlying movement to Gift Lake were family related ("family moved"), 26%, marriage 21.7%, and job opportunity only 17%. It is remarkable also to note that 13% moved in order to enjoy the rights on the settlement - free fishing and hunting.

The analysis and statistical facts examined above graphically demonstrate the inappropriateness of area-targetting strategies for the development of backward regions. The rich in the backward community get richer, while the poor get poorer. In a sense, therefore, this type of development approach creates many more problems than it solves, this being evident in the high incidence of such social problems as alcohol, drug abuse and poverty among natives. The growth centre strategy is, therefore, ill-suited to the problem of solving spatial disparities, because of its inherent structural inequality in the distribution of benefits.

B. Selected Government Programmes In the High Prairie Region

Opportunity Corps

The Alberta Opportunity Corps was begun by Alberta Social Services and Community Health at Slave Lake in 1970. Since then, the project has been extended and is now under Alberta Manpower and Advanced Education. There are five regional centres - Slave Lake, High Prairie, Fort Vermillion, Fort Chipewyan, and Janvier. In addition, there are eight satellite offices at Cadotte Lake, Calling Lake, Peerless Lake, Little Buffalo Lake, Trout Lake, Loon Lake, Wabasca / Sandy lake and Chipewyan Lakes (Cowest Associates, 1980, 48-50). The objective is to provide basic life and work skills orientation through counselling and short-term employment to training programmes or jobs available within an immediate area (Northern Development Branch, 1984,12). The overall goal is to reduce the dependency of persons who are in receipt of services from the Department of Social Services and Community Health by providing practical training programmes or existing employment (Cowest Associates, 1980, 48-49). The project also attempts to encourage community

improvement by providing labour to complete community identified work projects which improve the quality of life and which has been indicated by the community as a high priority need.

In this regard, the activities of the Corps have included construction and erection of fencing for High Prairie recreational grounds, construction of the High Prairie recreational ball diamond, construction of frame houses in the Peerless Lake area, sewing of linen for High Prairie Day Care Centre, renovation of the Lutheran Church in Fort McMurray, clearing of right-of-way for Alberta Power in the Wabasca area and the painting of the Slave Lake ambulance garage. In Table 6.4 below, a summary of the Corps programme from 1978 to 1983 is presented.

Table 6.4

Opportunity Corps - Total Annual Rates 1978-83

Item	Number	%
Trainees admitted to Corps	2771	100
Trainees terminated*	770	27.8
Trainees dropped out	1,140	41.2
Trainess to school	145	5.2
Trainees to employment	716	25.8

Programme Expenditure: $12,800,000

*Trainees terminated : includes trainees released fro[illegible] to completion of year programme, lack of interest and work habits, and re[illegible]

Source: Northern Development Branch, 1984

While the Corps continues to make some contribution to the communities through the provision of labour for community self-help projects, the benefit to the target group appears to be limited. In fact, judging by the high drop-out and termination rates among trainees a conclusion that the Corps programme has not been successful is justified. Several reasons account for this result. Most important are:

1. The training is too limited, and confined primarily to the building trades, particularly carpentry, and is often not much related to the needs of the trainees.
2. There is a high tendency to treat the Corps as the employment rather than the training for employment, especially in isolated communities where it becomes the economic base or the sole employer (Cowest Associates,1980:62).

This then results in a higher recycling of employees. These problems are now examined with reference to the High Prairie Opportunity Corps.

After fifteen years, there has been a transition from a stable population with average age of 30 years to a lower average of 18 years. As Table 6.5 shows, about half of the trainees are from High Prairie and the rest from the surrounding area.

The programme is basically pre-employment, and aims at equipping participants with the requisite skills to obtain and retain employment. Most of the trainees lack self-confidence and basic life skills, such as budgetting, and a regular work routine. Trainees receive hands-on training and exposure to various trades, to help them identify their areas of interest. This has included exposure to electrical welding, sheet metal welding, and cabinet making. Since November, 1985, a specific skill training programme has begun, and graduates receive a certificate which has province-wide recognition.

Table 6.5

Origin of Trainees of High Prairie Opportunity Corps, 1984-1985*

Place	Number	%	Place	Number	%
High Prairie	34	44%	Enilda	1	1.3%
Gift Lake	4	5.2%	Trail, BC	1	1.3%
Grouard	11	14.3%	Lac la Biche	2	2.3%
McLennan	3	3.9%	Loon Lake	1	1.3%
Driftpile	2	2.6%	Bon Accord	1	1.3%
Peerless lake	1	1.3%	Peace River	1	1.3%
Wabasca	5	6.5%	La Crete	1	1.3%
Atikameg	4	5.2%	Port Prince	1	1.3%
Meander River	1	1.3%	Paddle Prairie	1	1.3%
Faust	2	2.3%			

*There is not much variation in this distribution over the years. Source:High Prairie Opportunity Corps during field survey, June,1986.

The High Prairie Opportunity Corps tries to be sensitive and responsive to the needs of the community. An excellent example of this was the recent "Rough Neck Programme", which provided much needed general handymen on oil rigs in the region. All the participants in that specific programme were employed by the oil companies. The Corps also tries to be sensitive to the needs of trainees. For instance, general upgrading programmes are offered twice weekly for those needing it. This equips students to be able to access the more specialized programmes available at AVC in Grouard. However it seems that much more could be done in this specific area. For instance, even though the majority of the trainees are female, because males usually find high paying jobs on rigs, and fire-fighting, no special effort is made to provide programmes specifically geared to the needs of the unemployed single mother. A course in effective parenting has been offered before, but it is not one of the

regular courses. A sewing course is organized once a year "when the girls request it", but it is doubtful if the trainees know that is available to them, or that they can, and have to, request it. Nevertheless, it has not been offered in the past two years. While these essential courses were not being offered, almost all the students were involved in cabinet making. Is it any wonder that there is a 42% dropout rate in the Corps programme as a whole?

It also seems that most of the time, the programme is not geared to the job opportunities available. It was surprising to find that cabinet makers were being trained even though no demonstrated or proven market for cabinet makers existed in the High Prairie region at the time. But even if, for the sake of argument, we assume that such a market exists, the question is, are graduates expected to set up cabinet-making companies, and if yes, with what capital? Do these graduates have the skills necessary for obtaining a bank loan, and establishing, and running a company?

It is this problem that leads to the professional student syndrome illustrated by Cowest Associates thus:

> ... a large number of former trainees are returning to Opportunity Corps. Thirteen out of the seventeen (76%) of the trainees in the period beginning in 1979 (for Calling Lake), had been trainees in the Corps previously.

Thus in the absence of jobs after training, trainees return to the Corps and try to make it the employment.

There is a definite need for expanding the horizons of the Corps project if it is to have any meaningful impact on the communities. The Corps should be more resourceful and creative in identifying suitable programmes to be offered. The needs of the single mothers who predominate in the enrolment records should be taken into consideration.

Alberta Vocational Centre, Grouard

Administered by Advanced Education and Manpower through the Province, AVC, Grouard, is one of two institutions[33] in Northern Alberta that caters to the needs of the

[33] The other one is in Lac La Biche.

native adult community. It provides programmes in vocational preparation, business education, trades and para-professional areas, as well as skills directly useful in gaining and holding employment in a wage economy. It also offers courses in life skills, personal development and Native Culture which are important in fostering personal confidence, and serve as a bridge between Natives and the White Community (MTB Consultants Ltd,1980,6).

As Table 6.6 shows, AVC, Grouard has a large catchment area, and in fact enrolled students from all over the Province including 118 (34%) from High Prairie, 18 (5.1%) from Gift Lake and 27 (7.7%) from Grouard. Through the extension and satellite programmes AVC is able to offer an extensive range of programmes to a very large audience. The total enrolment stood at 351 as at May, 1986 (AVC President's Office, June 1986).

A great variety of courses are offered which may be broken down into four main categories - academic upgrading, vocational training, para-professional training, and post secondary. Academic upgrading courses provide adult students with the opportunity to upgrade their educational standing (ie. basic education in arithmetic, reading and writing, at the 0-4 grade level, basic content and acquisition of new academic skills and concepts in the 5-9 level, or equipping for higher education, vocational training or employment at the 10-12 level). Vocational training provides a first year apprenticeship programme, or a more practical short-term programme emphasizing the aquisition of skills in automotive, trapping, small engine repair and welding. Para-professional courses train individuals to assist professionals in a variety of fields such as teacher aide, community resource workers, or counsellor aide. Post-Secondary education covers a wide range of offerings including basic management and administration, clerk-typist and the native heritage programme.

Table 6.6*

Origin of AVC Students: May 1986**

Donnely	2	Fort McLeod	2
Giroùxville	2	Nampa	2
Rocky Mountain House	2	Wabasca	2
Faust	3	Winterburn	3
Atikameg	4	Sturgeon Lake	4
White Court	4	Falher	5
Kinuso	5	Edmonton	6
Calais	7	Joussard	8
Hythe	10	Enilda	13
Gift Lake	18	Driftpile	19
Grouard	27	McLennan	27
Valleyview	28	High Prairie	118

Total 351

*In addition, there was a student each from the following places Barrhead, Beaverlodge, Caslan, Dixonville, Eaglesham, Fairview, Goodfare, Grande Centre, Guy, Hinton, Lacombe, Lethbridge, Paddle Prairie, Peace River, Peerless Lake, Red Deer, Revelstoke, Rycroft, Trochu, Whitehorse - Yukon

** Source: AVC President's Office, June 1986.

Native participation in AVC seems to be restricted to basic academic upgrading, job skills training programmes, and generally seem to be leading to low skill jobs as can be seen from Table 6.7 below.

In addition to the educational oppotunities offered, AVC also provides some services and facilities to the residents of Grouard. These include meeting rooms, free recreational facilities - gymnasium, skating rink, and ski equipment, free transportation to High Prairie three times a week, restaurant facilities, a community nurse, and occasionally, "meals on wheels" for Senior Citizens in the community. In addition, AVC cleans the driveways after snowstorms, and provides some limited daycare for the community. Let me explain. Because daycare is required by students and staff, AVC provides the entire food requirements and housing for such a place, and pays the salaries of the director and assistant director. This

Table 6.7

Student Registrations in Grouard AVC - September 1978 to August 1979

Name of Course	Total Enrollment	Treaty		Metis		Other	
		No.	%	No.	%	No.	%
Academic Upgrading 0-4	36	17	47	12	33	7	20
Academic Upgrading 5-9	154	62	40	78	50	14	9
Academic Upgrading 10-12	131	33	25	72	54	26	19
Carpentry	38	11	28	26	68	1	2
Welding	28	5	17	12	42	11	39
Business Education	44	6	13	16	36	22	50
Native Cultural Heritage	18	7	38	9	50	2	11
Native Arts and Crafts	3	2	66	0	0	1	33
Fur Trapper's Upgrading	20	6	30	8	40	6	30
BJRT - Pipeline Worker (1)	16	11	68	5	31	0	0
BJRT - Pipeline Worker (2)	21	10	47	11	52	0	0
Counseller Aide	16	5	31	10	62	1	3
Teacher Aide	31	11	35	17	54	3	9
Early Childhood Services	18	6	33	4	22	8	44
Upgrading - Summer	23	9	39	14	60	0	0
Library Aide	3	2	66	1	33	0	0
Homemaker Health Aide	13	2	15	9	69	2	15
University Cree	2	2	100	0	0	0	0
Issues in Youth	13	2	15	1	7	10	76
McLennan 0-9	34	0	0	24	70	10	29
McLennan 10-12	43	0	0	21	48	22	51
McLennan - Bus. Rd.	16	0	0	6	37	10	62
Valleyview 0-12	53	26	49	14	26	13	24
Totals	774	235	30.4	370	47.8	169	21.8

Source: Enrollment data prepared by Julie Chalifoux, Registrar, AVC Grouard.

gives AVC top priority, staff and students being served first before any other community members.

The need to render certain specific services to staff and students specifically has brought AVC under sharp criticism recently. For instance the unequal access to daycare was a major source of dissatisfaction among Grouard residents during the field survey, and so was the issue of garbage disposal. Because the Improvement District does not provide garbage disposal services, AVC has an arrangement whereby garbage is picked up for staff and students. This selectivity in service delivery was another important source of dissatisfaction during the survey.

The potential utility of AVC to the native community is not fully realized because of a complex set of problems which have been documented elsewhere (MTB Consultants,op cit., pp43-53). These may be summarized as cultural barriers, including cultural differences between the Native and Non-Native groups, with the former being "silent" and group-oriented and the latter being more "talkative" and individual-oriented (Gue,1966), unfavourable economic conditions such as the deleterious effects of poverty including poor housing and nutrition, which have "...proven to be a deterrent to the completion of education"; and problems with support payments owing to the multiplicity and often uncoordinated, and therefore conflicting, nature of most funding programmes.

While it has the potential of being an institution meeting the specific needs of the less well-educated native people, certain set prerequisites for enrolment hinder the achievement of this objective. Most programmes require as prerequisites, a minimum of 18-years of age, good physical health, and grade ten academic standing. While the health factor may not be a big issue, the age and academic stipulations are. Prospective students are unable to access most programmes if they are less than 18 years, or have less than grade ten education. Besides, since most schools on reserves and settlements go only up to grade eight or nine, those who can have access are the few who have survived bussing to the nearest town, which could mean anything within the range of 50 to 80km (eg. Gift Lake to High Prairie or

Grouard). Thus, those who either dropped out of school early, and have not been able to upgrade, or those under age [14], cannot make use of the programmes.

Some flexibility in the admission requirements may be necessary, if the target population is to be reached. Meanwhile, every effort should be made to ensure that the future generations do not come to face the same problems. The question of native education is further examined in the conclusion chapter.

High Prairie Regional Health Complex

The High Prairie Regional Health complex dates back to 1919 when a private doctor practised out of a small cottage hospital operated by the United Church and the Red Cross. The High Prairie General Hospital District was formed by Ministerial Order in 1969, and this led to the purchase of the then Providence Hospital. In 1973, the current J. B. Wood Memorial Nursing Home was acquired and added. It was then realised that growth in the area and the geographical isolation of many service communities were generating demands for care that could be better met by a single co-ordinated health care complex. The Providence Hospital was renamed the High Prairie Regional Health Complex in 1974, and in 1978 new construction on the facility, designed to house a wide range of health and social services, was completed (Alberta Hospitals Association,1979,2).

Essentially, the Complex leases space to various agencies and groups involved in health and medical-care delivery. These include, a retail pharmacy, two private medical clinics, and a private optometrist. In addition the Complex has 75 active treatment beds, 16 bassinettes, 52 nursing home beds, a 20-bed medical hostel, where an accompanying adult to a patient can stay without charge, laboratory and radiology facilities, (not including

[14] In a typical case I encountered during the field survey, a 15-year old single mother dropped out of school to have her first baby. After delivery, she could not get admission into AVC because she was under age. She would therefore, have to move outside of Grouard, where she was living with her parents, to be able to continue where she left off - Grade 10. Unfortunately, this would mean losing the baby-sitting services of her mother, the secure and supportive environment of the home, and having to put the baby in daycare. She preferred to keep her baby, and keep out of school until she turned 18, or got married, whichever came first.

ultrasound), physiotherapy facilities, day surgery and ambulatory care facilities, and outpatient facilities. It also provides office space for Mental Health, Social Services, Preventive Social Services, Community Health and Federal Health Programmes. There is also a staff day care facility with a capacity of 20.

Outlying communities are hindered from accessing facilities because of distance and travel costs, and crowdedness, as was shown by the subjective evaluations. Using the population of the Hospital District alone and excluding communities such as Kinuso, Peerless Lake, Trout Lake and Wabasca-Desmarais gives a physician to population ratio of 1:1067. Since there is only one dentist, the ratio for dentists is 1:6402. Obviously, access is not evenly distributed, and to those who live in remote communities, like Gift Lake, without personal transportation, there is very little access.

Other problems include high turnover of staff and the difficulty of finding and retaining qualified staff. Most notable was the high turnover of female nurses because of the lack of opportunities for social relationships, and lack of accommodation. Since the last psychiatrist left, no replacement has been found, and additional physicians were considered necessary at the time of the study.

Mental health care is particularly a problem. The nearest facilities are those in Grande Prairie and Peace River, but direct transportation to Grande Prairie, for instance, is not available. Again, despite the high frequency of alcohol and drug abuse in the region, the 'Detox' centre in High Prairie and the Kapown Centre in Grouard provide only short term treatment, while the centre in Edmonton which is supposed to cater for the region usually has long waiting lists (ie. even when the patient has consented to go for treatment). The paradox is that an individual is not recognized as an alcoholic or drug addict until they get into trouble, such as drunk driving and its resultant injuries and damage to property, and often life. Preventive counselling is still very much underdeveloped.

The evidence generally suggests a dearth of preventive health care in the region, probably resulting from a lack of staff and capital constraints. This is especially crucial in

the communities with poor housing conditions, overcrowdedness, low education, and income and poor or severely limited personal mobility. A team comprising a dietician, a pharmacist and a public health nurse providing health counselling and seminars in such disadvantaged communities will certainly go a long way towards improving health standards in the region.

Housing Programmes in the High Prairie Region

Through several housing programmes in the study region, the Provincial government is easily the largest landlord in the region, especially on the Metis settlements and in other remote centres. The existing programmes include Rural Home Assistance Programme (RHAP), Rural Emergency Home Programme (REHP), Rural and Native Housing Programme (RNHP), and the Modest Apartment Programme (MAP).

The presence of the Provincial government in the housing industry in the area, combined with other factors, effectively limit the activities of private developers in the area. Provincial housing programmes, with low rental rate structures, and low cost home ownership options have established market rental rates which private developers are unable to match for several reasons.

1. Since materials have to be transported over long distances, costs for serviced land and building materials are generally high in Northern Alberta compared to the rest of the province.
2. The harsh climatic environment of the North results in high operating costs for rental units, particularly for heating, inevitable, resulting in higher development and maintenance costs.
3. In some cases, especially on settlements, where clear land title cannot be established, finance companies refuse to provide credit. Private developers are kept, therefore, from establishing rental housing.
4. Where credit is granted, developers are required to provide large down payments, and their projects are expected to generate immediate positive cash flows. This makes rental

rates for new rental projects inevitably high. Since the proportion of the population which can afford these rates is rather low, it is unlikely that a developer will undertake a project until the required market is assured. Besides, most people compare the private rates with the government rates and then opt for government programmes because the rates are lower.

Eligibility for most government housing programmes in the study area is based on the family income. The maximum adjusted family income for most of these programmes is $18,000 per annum, and families receiving incomes in excess of these amounts are mostly excluded. This can be an incentive for keeping the income of a family low. For instance, whereas a family with an adjusted income of $17,500 may occupy an REHP mobile home unit (usually three bedrooms) for $200 a month, or 14% of their monthly income, a family with $18,500 will have to pay $424 per month (or 28% of their income) for a two-bedroom unit in High Prairie[35]. This implies that a family not qualifying for government housing programmes, because of a higher income, is compelled to pay more for less value; and a $1,000 raise could cost them $2,688 in additional rental costs annually[36]. Often times, such families are unable to qualify for mortgages because of a poor credit rating as has been seen.

Furthermore, singles who are less than 65 years of age and couples with no dependents are ineligible for most government programmes. Thus, the housing programmes in practice, constitute an incentive for raising a family. When such people who are ineligible for government assisted housing programmes happen to be receiving social assistance, the problem is compounded, because the ceiling set by Social Services for shelter makes renting from the private sector not feasible. Finally, some programmes, especially the Community Housing Programme, which involve local self-help in the construction and management of housing are not available in unincorporated centres such as Grouard, as there is no recognized body to

[35]This is based on the average rents published by Alberta Housing for 1986.
[36] During the field work, I encountered a family who were moving back to the Reserve because they did not qualify for government housing programmes off the reserve in High Prairie. Interestingly, they found housing immediately they moved back to the reserve.

establish a housing authority or to contribute towards the operating deficits incurred by some projects.

Thus, in the study area, generally, housing is in high demand. In Table 6.8 below, a breakdown of housing units supplied under various housing programmes in the study area is presented. The general distribution of government assisted, or provided housing, seems to be generally reflective of the level of need. Gift Lake, the location with the highest number of persons per room, has 68% of the total housing stock supplied or assisted by the government. Grouard has 57.7%, while High Prairie has 20.2%. If this can be used as a criteria for evaluating the success of housing programmes in the study region, then they have been successful, since the supply appears to be greatest where the need is greatest.

However, there is room for improvement. If participation in the general economy is seen as a desirable goal worthy of pursuit, then the existing policies, which make it more favourable for Natives to continue living on reserves and settlements, where there is very high unemployment or marginal employment, need to be carefully re-evaluated. There is a need for a programme such as is currently provided by the Employment Counselling and Relocation Services, that provides for the housing needs of natives living off the reserves, without neglecting those on the settlements or reserves. Furthermore, while it is essential to assist the low income population, it seems that an enquiry is necessary to examine the extent to which housing programmes have an income lowering incentive. Is the provision of housing keeping, or rather motivating, people to remain poor?

There is also a need for some evaluation of the delivery aspect of the programme. Handing out housing must be avoided. Recipients need to be well-prepared for home ownership before they assume ownership of housing. Unquestionably, there is much truth in the saying "easy come easy go". When houses get run down quickly because of lack of proper maintenance and care probably arising out of low education, and poverty (and more than likely, overcrowdedness) of the occupants which characterize the native poor as we have seen, the cost of providing housing still remains a public responsibility. A pre-home ownership

Table 6.8

Supply of Government Housing in High Prairie Region

Programme Type	High Prairie	Grouard	Gift Lake
Rural & Native Housing	16	1	0
P[illegible]ned)			
P[illegible]ve Housing	0	11	0
Pr[illegible]Rented)			
Rural Home Assistance Program	0	0	41
Rural Emergency Home Program	54	34	22
Community Housing Program	26	0	0
Senior Citizens Self [illegible]ontained	12	0	0
Modest Apartment Programme	106	0	0
Total Gov't Housing	214	56	63
Total Housing Stock	1053	80	92
Government housing as % of Total Housing Stock	20.2%	57.5%	68.5%

Source: Alberta Housing

programme that will help beneficiaries to appreciate, value and maintain property is definitely required, and should be given priority. On a small scale, such a programme is being implemented by some field workers of Alberta Housing, who recognize the need for it, on a voluntary basis. Beneficiaries are not obliged to participate. As one official put it, "we counsel them about maintenance while seeing them about arrears". This is crucial, especially in situations where payment defaults make repossession necessary. The neglect of such preventive assistance may result in huge bills for the repair of prematurely run down housing. The cost of neglected "preventive care" is, inevitably, a costly "cure". Providing counselling services on proper home maintenance practices for beneficiaries under a mandatory programme, in certain cases, may help to avoid such expenditures.

In a similar vein, it is suggested that government assistance with maintenance is definitely neccessary if the overall housing problem is to ease. Currently, home maintenace is the responsibility of the occupants, except in the case of rental units. Noting the fact that many of the beneficiaries in the study area lack the requisite income, skills and other resources to effectively maintain their homes, a government assisted home maintenance programme of some sort is necessary.

IX. COMPOSITE QUALITY OF LIFE INDEX

Introduction

Using the standard score additive model (Smith,1973), the composite quality of life index is computed for High Prairie, Grouard and Gift Lake, and also for the different ethnic groups. The results are then compared. In the second part of the chapter, the City of Edmonton, is compared with the High Prairie region, as well as with each of the three centres in the study, on selected objective and subjective indicators.

A. The Use of Standard Scores in the Measurement of Quality of Life

The multi-dimensional nature of quality of life makes a multi-variable approach to its measurement inevitable. Individual life components, despite their importance, are unwieldy measures of what is essentially a unitary concept (Knox,1975:37). As Smith noted:

> Identifying broad spatial variations in social well-being requires the derivation of a single general indicator or a restricted set of indicators measuring major dimensions of the concept. This necessitates the combination of data on different conditions. In other words, a SWF(Social Welfare Function) must be made specific, with respect to the contribution of each variable to the general welfare (Smith 1977,271).

Problems, however, arise as to how the multitude of variables denoting quality of life may be combined to arrive at a reliable composite index. In fact there are some who believe that a single index of quality of life is impossible. Helburn, for instance, wrote:

> There is good reason to believe that quality of life will never lend itself to a quantifiable index. ... Parts of it may be indexed: air quality, or duration of journey to work, or total user days in National Forest campgrounds. Attempts at a composite index of the quality of the environment have not been especially productive. A composite QOL index seems impossible. It is not just that we are trying to compare apples and avocados, we are including nourishment for the mind and spirit too (Helburn,1982,448).

Admittedly, developing a single index for anything as multi-dimensional as quality of life is difficult, even without including the problems of cultural and geographic differences, and the time-dependent nature of many human values and attributes. But that is not enough reason to stop us from trying, or to be overwhelmed at the magnitude of the task. If air

quality has been indexed, why do we assume that the same cannot be done for other components of life, and ultimately for the whole of quality of life. Instead of despair at the size and difficulty of the task, the efforts of the few who have conducted exploratory studies in this field of the discipline should be applauded. If we are unable to measure how good a place is, how do we determine that it has become better, or worse? If we are unable to evaluate the quality of life in a place, how do we "areally differentiate"? We need to be able to measure the quality of life in order to effectively identify regional disparities, and geographical inequalities resulting from the implementation of public and social programmes.

In the effort to develop a composite quality of life indicator the most common methodologies used have been standard score addition (Smith 1973, Park 1985), principal component analysis (Ebert,1979; Liu,1976; Knox,1974), or a combination of both(Ebert,1979).

Concerning the use component scores from principal component analysis, Knox has cautioned that this depends upon the components being unambiguous in character. This may not be possible when several of the primary variables are not entirely normative. Besides, using only normative variables can easily produce components with an ambiguous character (Knox,1974). In addition, he cautioned that the number of diagnostic variables used is necessarily arbitrary, and their selection subjective.

The use of the technique for a time series analysis of quality of life in a place is also limited. Park (1985) applied principal component analysis to examine the quality of life in Illinois counties for the two time periods, 1970 and 1980. In 1970, the variables that loaded highly on factor I were mostly wealth and income related variables: property tax, employment, school tax, housing values, rents, and college graduates. In 1980 factor I loadings were still wealth and income related: property tax, housing values, rents, school tax, and college graduates. However, factor II loadings for 1970 and 1980 were very different. In 1970, the ratio of physicians to population, housing values, rents, juvenile delinquency, teacher and pupil ratio loaded highly on factor II, which accounted for 11% of the total

variance of the variables. In 1980, variables which loaded highly on factor II were mostly negative quality of life variables: ratio of dependent children, crime rate, crowded rooms, and public aid, and they accounted for 17% of the variance. Because of this great variation between the variables that loaded on factor II, even though the same variables were used in both years, it becomes meaningless to note the changes in factor II overtime. Accordingly, the conclusion was that: "principal component analysis is, ... not a very useful methodology to indicate overall quality of life".

The standard score additive model was developed by Smith, who compared the quality of life in the 48 contiguous states using an additive model in which the standardized scores for 47 equally weighted variables were combined, and grouped into six components. These components were then used to obtain an overall composite quality of life index, which was subsequently used to rank the states according to general social well-being. Smith's methodology has been replicated with successful results.(See Park,1985).

In the light of the above, Smith's standard score additive model is used for this study (Smith,1978,85 - 90). Scores on each variable are standardized to zero mean and unit standard deviation, and these are then summed for each category and subsequently for each town. The model can therefore be represented thus:

$$Sj = \sum_{i=1}^{m} Zij$$

where j(1,2,3) are the three towns studied and i(m=8) the set of variables used in the computation of the index. For any sub-category, a sub-indicator can be derived in the same way:

$$Ij = \sum_{i=1}^{k} Zij$$

where k is the appropriate subset of m.

The utility of the standard score additive model is illustrated below with two examples. For policy purposes we may be interested in how one place performs in relation to the overall national geographic space. Taking the national average for the percentage of people living below the poverty line, for example, the rate for the place in question can be

standardized and will reflect the degree by which that place varies from the national average. This may be positive or negative implying that the rate is above or below the national average and will give an indication of the difference. Thus, as many places as are required can be comparatively examined using the national average statistics. On the other hand, when the focus is the relative performance of three places, say Edmonton, Calgary and Vancouver, the mean rating of the places for each variable, together with the standard deviation for all three cities is used, instead of the national average. If it is annual personal incomes that are being compared, the model helps to determine the relative city ranking.

Due to the fact that life is multi-dimensional, a person's level of satisfaction with life is an aggregate sum of the different *goods* and *bads*. Thus the quality of life in a place is usually the result of a multiplicity of trade-offs. Life in the city with its high levels of service, and greater variety of shopping and recreational facilities, contribute positively to the quality of a person's life, but this has to be traded off against the high crime levels, traffic congestion, and pollution that contribute negatively to it. A person's satisfaction with a place is, therefore, an aggregate of the different components of life, and any realistic attempt at measuring the quality of life has to be able to combine and aggregate these components. In effect apples and oranges have to be added. This is effectively done using the standard score model. In addition, for policy purposes, the model shows what variables or life components constitute the strengths and weaknesses of the various spatial units being examined. Specific policy can then be developed to address these variables. The impact of such policy could be easily assessed by comparing the previous index with the index after the policy period.

The obvious limitation of this approach is the inherent application of equal weighting to all the variables, and the implied substitutability of variables. The percentage of the population having access to cold running water per household, for instance, is going to be equated with percentage of car or television set ownership. While this difficulty is acknowledged, the absence of any theoretical guidance for weighting the different components of life differently, makes this approach not only justifiable, but also inevitable. As Park

noted, "deciding appropriate weighting is often biased and subjective ..... weighting often reveals the individual scholar's value preferences." On the contrary, Liu (1983) has commended the method not only because of its "simplicity, commonality, adaptability, neutrality and utility, but also because it is clearly defined, and can be readily identified, varied, and validated for policy implication studies and project impact assessments." (Liu 1983,117).

Eight major components of life were used in the computation of the overall quality of life index. The first seven were made up of various objective indicators and the eighth was the result of the respondents subjective evaluations of various life components in their places of residence. While many recognize the need for including both objective and subjective variables in any quality of life study, as has been seen earlier in the discussion, this is one of the few works that have actually implemented this thought. In Table 7.1 the major categories used in the computation of the Index are presented with the results for Gift Lake, Grouard and High Prairie, while Appendix 1.2 presents the individual variables used in the computation.

Table 7.1

Composite Quality of Life Index by Centre

Categories	High Prairie	Grouard	Gift Lake
Banking and Credit	1.54		
Household Amenities	2.20		-7.11
Employment and Income	.82	.16	-.85
Education	1.21	.12	-4.04
Poverty and Welfare	.34	-.22	-.86
Household Expenditure	-.02	1.86	-1.39
Overcrowdedness	.60	-.18	-1.70
Subjective Evaluations	6.44	-8.04	-10.69
Quality of Life Index	13.13	-7.30	-32.48

The quality of life is seen to be highest in High Prairie, and lowest in Gift Lake. The subjective evaluations weighed heavily in favour of High Prairie and against Gift Lake. Household expenditure was highest in Grouard followed by High Prairie and then, Gift Lake. In fact this was the only variable on which High Prairie scored second to Grouard or Gift Lake. The dominance of High Prairie, therefore, as a growth centre, is apparent. Gift Lake is worse off than Grouard in all the categories, and this suggests the relative advantages that it has because of location. As was hypothesized, quality of life is highest in the growth centre, moderately high in the intermediary centre, and lowest at the periphery. This is consistent with growth centre literature that have pointed out the the limited spatial incidence of benefits (Ironside and Mellor; Todd 1980).

Inter-ethnic Disparities in Quality of Life

The highest composite z-scores among the ethnic groups were found among Non-Canadians and White Canadians, and the lowest among the native groups, Metis and Indians. While there is little inequality between White Canadians and Non-Canadians, it is quite large between Metis and Indians. This is to be expected since Indians in the sample were mainly concentrated in High Prairie and Grouard which offer a higher quality of life, as a direct result of the consequences of growth centre policy. An obvious avenue for further research would be to compare the relative quality of life on an Indian reserve, a White Canadian hamlet, and a Metis colony located at approximately the same distance from High Prairie, or some other growth centre. This will throw further light on the differential impact of growth centre policy on different groups of people.

In terms of the various components of life, this study has revealed that Gift Lake residents are most disadvantaged in terms of access to household amenities. The Metis in our sample, characterized by Gift Lake, live farthest away from High Prairie, nevertheless, they are the least likely to own an automobile. In addition, the z-score on education was particularly low, as it also was for employment and income, and banking and credit. These

culminated in a very low score on subjective evaluations. Using these indications, a hypothetical model of poverty has been proposed. The details of the computation of the composite quality of life index for ethnic groups is presented in Appendix 1.2.

Table 7.2

Quality of Life Index by Ethnic Groups

Categories	Indians	Metis	White Canadians	Non-Canadians
Banking & Credit	-1.46	-2.82	2.26	4.66
Household Amenities	.75	-4.33	2.81	-3.44
Employment & Income	-.39	-1.75	1.26	2.31
Education	-.09	-2.60	1.74	2.71
Poverty & Welfare	-.22	-.52	.44	.86
Household Expenditure	.46	-.08	.22	-3.55
Overcrowdedness	.10	-1.07	.73	.98
Subjective Evaluations	-3.34	-8.03	7.24	5.72
Quality of Life Index	-4.20	-21.22	16.69	17.14

Having identified these *bads* of life in the region, the obvious next step is how do we deal with them? The policy implication is not to supply every home in Gift Lake, for instance, with an automobile, a dishwasher, video cassette recorder, or even an indoor toilet. No, it can not be another handout. Evidence from history suggests that such policies only lead to greater dependency, and very little pride in personal ownership. It only reinforces and "... confirms underdeveloped men in their passive attitude to awaiting favours from government, industrialists, landowners, or employers...." (Goulet, 1971).

B. Centre Periphery Relations - Edmonton and High Prairie Region Compared

The relationship between a metropolitan core city, such as Edmonton, and small towns in its periphery, such as High Prairie, has always been a subject of great interest. In the Third World context, the story has always been one of a booming central city and a backward and impoverished periphery. To what extent is this characterization true of Canada, a First World country, as exemplified in Alberta? How does High Prairie, a small town in rural Alberta with a population of 2,560 compare with sprawling Edmonton with 600,000 people? Are residents of Edmonton better off in terms of income, level of education, access to jobs, and for that matter, do they enjoy a higher overall quality of life than people in the rural towns? More importantly how do residents of rural Alberta perceive their life, as better off or worse off than residents of Edmonton? On the other hand, are residents of Emonton more satisfied with various components of life in the city than those of High Prairie, for instance?

Such a comparison is attempted in this section. Needless to say, the questions raised above deserve a separate thesis and the amount of space or time available is not enough to adequately or effectively answer them. Nevertheless, a beginning can be made here which will provide some foundation for future work. Of direct relevance to this is the ongoing work of the Population Research Laboratory of the University of Alberta. Since 1977, it has been conducting annual longitudinal studies, Edmonton Area Studies, with a stated general aim of obtaining baseline demographic data, among other things, to provide the opportunity for researchers to do replication of work to further validate previous findings. The overall theme of the project has been the measurement of quality of life. Some variables in the current High Prairie study, hereafter HPS, are compared with similar variables in the Edmonton Area Studies (hereafter EAS) for 1984 and 1985.

Before a comparison is undertaken, however, a few differences between the two surveys should be noted. The sampling frames were different. Whereas the current study used the electricity list and therefore, only those registered for paying electricity bills were interviewed, EAS, was based on a computerized list of addresses compiled by the City of

Edmonton from their most recent population enumeration - 1983 (Kinzel, 1985,3). The sample size for EAS 1984 was 452 and that for 1985 was 421, while the current study has 166. However, if 600,000 is taken as the population for Edmonton, only 7 out of every 10,000 people were interviewed, compared to 4.5 out of every 100 people in the HPS. Variables used in the two studies may not be exactly similar since the goals of the surveys were not exactly identical. Even where variables are identical, for instance with total household income, the use of different categorization groups make a comparison impossible or very difficult. In other cases, a scale factor has to be used to convert the data to a comparable standard before a comparison can be effected[11]. With these clarifications, we begin our comparison of the two areas by examining the employment status of respondents of EAS 85 and HPS. This is presented in Table 8.1.

Table 8.1 shows that a higher percentage of people have full-time employment in the High Prairie region than in Edmonton. Within the region, however, while Grouard and High Prairie have higher full-time employment than Edmonton, Gift Lake has a very low figure, 32%. Unemployment in the HPS is slightly lower than in Edmonton, but the disparity within the region is high indeed, with Gift Lake having 25.8% and High Prairie only 8.4%. Also many more people have part-time employment in Edmonton than in the High Prairie region. As expected, a higher percentage in Edmonton are in school, as compared to 3.0% in the High Prairie region, while a still higher percentage in Edmonton keep house. Within the region, however, Grouard has the highest figure for those in school, while High Prairie has the highest figure for those who keep house. Twice as many are retired in the Edmonton sample as in the High Prairie study. In terms of employment status, therefore, residents of High Prairie seem to have an advantage over their Edmonton counterparts, there being not so much competition for the available places. The story within the region is, however, an entirely different matter.

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[11]For instance EAS used a 7-point scale in the satisfaction indicators, while the HPS used a 5-point scale. The low level of education of some people in the HPS sample made this necessary as has been clarified in the discussion.

Table 8.1

Employment Status of Respondents - EAS 85 and HPS (in %)

Employment Status	EAS	HPS	High Prairie	Grouard	Gift Lake
Employed full-time	50.8	71.1	84.0	73.5	32.3
Employed part-time	12.1	5.4	6.1	5.9	3.2
Seasonal employment	••	4.8	3.0	0.0	12.9
Unemployed	8.6	8.4	2.0	8.8	25.8
Retired	9.7	4.8	0.0	2.9	16.1
In school	6.2	3.0	1.0	8.8	6.5
Keeping house	12.4	1.2	4.0	0.0	3.2
Total	100.0	100.0	100.0	100.0	100.0

Source: Col 2, EAS 85; Col 3 - 5, Field work conducted between December, 1985 and January, 1986. •• Not used in EAS

Table 8.2

Employment Status of Spouse - EAS and HPS Compared

Employment Status	EAS*	HPS	High Prairie	Grouard	Gift Lake
Employed full-time	60.7	53.4	62.7	54.2	28.0
Employed part-time	8.5	8.6	7.5	12.5	8.0
Seasonal employment	••	3.4	4.5	0.0	4.0
Unemployed	7.7	14.7	11.9	12.5	24.0
Retired	6.5	3.4	1.5	0.0	12.0
In school	1.6	4.3	4.5	4.3	4.0
Keeping House	15.0	10.3	6.0	12.5	20.0
Other	(Not used)	1.7	1.5	4.2	0.0
Total	100.0	100.0	100.0	100	100.0

Source: * Edmonton Area Studies, 1985. All others: Field work conducted between December, 1985 and January, 1986. •• Not used in EAS

In Table 8.2 employment status of the spouses of the respondents is also compared. Unlike Table 8.1, a higher percentage of spouses in Edmonton have full-time jobs than in the High Prairie region, 60.7% as compared to 53.4%. There is also a smaller unemployment in Edmonton (7.7%), than in the High Prairie region even though the rate for Gift Lake is almost two times the regional average of 14.6%, and more than three times that of Edmonton. Fewer spouses in Edmonton than in the High Prairie region are in school (1.6%, compared to 4.3%), but many more keep house in Edmonton than in the High Prairie region, but not as many as in Gift Lake.

In terms of the employment status of spouses, therefore, it is obvious that Edmonton spouses are better off than the High Prairie region as a whole, but not as well-off as their counterparts in High Prairie. Again, compared to Edmonton, spouses in Gift Lake are least well-off as far as employment is concerned. In Table 8.3 below, household sizes are compared.

Table 8.3

Household Sizes - EAS 85 and HPS compared

Household Size	EAS	HPS	High Prairie	Grouard	Gift Lake
1	18.8	13.4	16.3	11.4	6.5
2	31.8	23.2	37.7	8.6	3.2
3	17.6	15.8	16.3	17.1	12.9
4 - 5	27.8	29.9	27.6	42.9	22.6
6 - 9	4.1	15.2	5.1	20.0	41.9
10+	Not used	2.4	0.0	0.0	12.9
Total	100.0	100.0	100.0	100.0	100.0

Source: Col 2 - EAS, 1985; Col 3 - 6 - Field Work Conducted Between December, 1985 and January, 1986. 1985 and January, 1986.

Edmonton residents have smaller household sizes compared to those in the High Prairie region, as can be seen from cursory examination of Table 8.3 above. The Table shows

Edmonton as having relatively higher percentages in the one and two member household categories whereas the High Prairie sample has larger percentages in the 4-5 and 6-9 categories. In fact the HPS had almost four times as much in the 6-9 people per household category as did the EAS sample. It confirms the fact that household sizes are larger in rural areas than in urban areas. The fact that Gift Lake has ten times as much as Edmonton in this particular category underscores this point even further.

Next we examine the level of education of the respondents in Table 8.4 below.

Table 8.4

Level of Education Compared EAS and HPS

Level Attained	EAS	HPS	High Prairie	Grouard	Gift Lake
No formal schooling	1.0	2.4	0.0	0.0	12.9
Less than Grade 9	12.8	15.2	5.0	11.4	51.6
Grade 9-12 (without certificate)	15.2	16.5	14.0	25.7	12.9
Grade 9-12 (with certificate)	23.0	15.2	22.0	2.9	6.5
Non-university (without certificate)	6.9	1.8	1.0	5.7	9.7
Non-university (with certificate)	15.7	12.6	15.0	17.1	0.0
University (incomplete)	8.1	15.8	16.0	25.7	3.2
University degree	17.0	19.5	27.0	11.4	3.2
Total	100.0	100.0	100.0	100.0	100.0

Source: Col 2 - EAS 1985;Col 3-6 - Field Work Conducted Between December, 1985 and January, 1986.

The High Prairie sample has a higher percentage of people with lower education than the EAS one. It has two times the percentage of people without any formal schooling in Edmonton, and about 3% more people with less than Grade 9 education. It is interesting however, to note that while Grouard has about the same or slightly less percentage figure in

this category, Gift Lake has more than 50% or four times as much as the Edmonton sample. The Edmonton sample has one and a half times as many people in the Grade 9-12 with certificate category, as does the High Prairie study sample. This suggests a higher dropout rate in the High Prairie Region than in Edmonton. This is further borne out by the relatively higher percentage of people in the non-university with certificate category in the Edmonton sample.

It is, however, surprising that the High Prairie sample has a higher percentage in the University incomplete and University degree categories. The presence of AVC in Grouard, as well as other schools in the region, and the large number of well-educated teachers needed to run them, the large number of well-educated government employees in High Prairie and the relatively small population size of the region account for the difference. The same explanation applies to the personal income of respondents presented in Table 8.5 below. The concentration of highly educated and high income earning people in the region swells the mean income, and masks the extremely low incomes in Gift Lake. Thus, while the mean for Edmonton was $19,037, that for the High Prairie area was $24,611, and for High Prairie town, Grouard and Gift Lake, respectively, it was $28,505, $22,299 and $14,270.

The evidence suggests that High Prairie residents are not as badly off as we would expect, and in fact as far as incomes, job opportunities, and level of education are concerned they are even better off. However, while the average regional figures put the region ahead of Edmonton, the separate communities do not equally perform so high. For instance, while High Prairie compares favourably with Edmonton on most of the variables examined, the wide disparity between High Prairie and Gift Lake is all the more emphasized.

Table 8.5

Annual Personal Incomes Compared - EAS and HPS in %

Income	EAS	HPS	High Prairie	Grouard	Gift Lake
Under $6,000	22.5	6.2	3.1	8.8	13.3
$6,000 - 9,999	12.2	15.4	9.2	2.9	50.0
$10,000 - 15,999	14.7	16.0	15.3	20.6	13.3
$16,000 - 19,999	9.9	11.1	9.2	20.6	6.7
$20,000 - 25,999	13.9	17.9	18.4	26.5	6.7
$26,000 - 29,999	3.9	6.8	8.2	8.8	0.0
$30,000 - 35,999	8.9	9.9	13.3	2.9	6.7
$36,000 - 39,999	4.4	5.6	8.2	2.9	0.0
$40,000 - 44,999	3.7	2.5	4.1	0.0	0.0
$45,000 - 49,999	1.7	2.5	3.1	2.9	0.0
$50,000 - 54,999	0.7	1.3	2.0	0.0	0.0
$55,000 - 59,999	0.5	0.6	1.0	0.0	0.0
$60,000 - 69,999	0.7	0.0	0.0	0.0	0.0
$70,000 - 74,999	0.2	0.6	1.0	0.0	0.0
$75,000 +	1.5	3.7	4.1	2.9	3.3
Total	100.0	100.0	100.0	100.0	100.0
Mean Income	$19,037.5	$24,611	$28,505	$22,299	$14,270

Source: Col 2 - EAS 85; Col 3 - 6 Field Work Conducted Between December, 1985 and January, 1986.

In the light of these objective differences presented above, or rather in spite of them, how do residents evaluate various components of their lives? The variables common to the two studies are examined in Table 8.6 [31] below.

[31]Kennedy et al. used a 7-point scale, while a 5-point one was used in the HPS. The mean satisfaction for each EAS variable was multiplied by 5/7 to give the equivalent MSI for HPS.

Table 8.6

Subjective Evaluations Compared EAS and HPS

Life Component	EAS	HPS	[illegible]	Grouard	Gift Lake
Satisfaction with house	3.86	3.76	4.1	3.5	
Family Life	4.21	4.24	4.3	4.2	
Health and physical condition	3.80	3.92	3.97	4.1	3.5
Amount of time for leisure and hobbies	3.22	3.46	3.4	3.9	3.96
Friendships	4.05	4.09	4.2	3.9	3.96
Standard of living	3.89	3.98	4.1	3.8	3.7
Job satisfaction	3.77	3.92	4.2	3.8	3.0

Source: Col 2 - EAS, 1984 Col 3-5; Field Work Conducted Between December, 1985 and January, 1986.

From Table 8.6 above, family life and friendships are the more satisfactory in both studies. Why do people rate these two variables so highly? Campbell et al. (1976) have suggested that people rate family life highly because there is no external standard against which a person can compare and evaluate their own experience, unlike standard of living, education or housing, for example, where it is easy to compare one's status with what other people have. They argue that "...the outside criteria is an objective one, and it is not hard for the individual to see how he departs from it. It is less clear, however, what standard he uses in evaluating his marriage or his family life, since there is no general norm in these domains to which he can compare himself" (Campbell et al, 1976, 346). Andrews and Withey also found family and friends to be a source of very high satisfaction (Andrews and Withey, 1976,274) and explained this partly in terms of bias, people not liking to appear miserable or unhappy.

It is interesting to observe that satisfaction with friendship is slightly lower in Edmonton than in the High Prairie study, but actually higher in High Prairie than Grouard, Gift Lake and Edmonton. It has already been suggested that the relatively low figure in Grouard and Gift Lake may be attributed to the petty jealousies of small town living, where

everybody knows almost everything about everybody else. It seems, however, that the other extreme occurs as the size of a place increases - relationships become less and less satisfying. High Prairie may then be within a size range where relationships are neither too impersonal nor too personal for comfort. This thesis requires further examination but this is beyond the scope of this study.

Edmonton residents were more satisfied with their housing than the sample from the High Prairie region. It is generally true to say that better quality housing can be found in Edmonton than in the rural communities, and especially when the problem is compounded by harsher weather conditions and poorly insulated houses, a person's satisfaction can be very low indeed as is shown by the Grouard and Gift Lake scores of 3.5 and 3.1. Since it has been suggested that home ownership increases satisfaction with housing, the tenancy types are presented in Table 8.7 below.

Table 8.7

Type of Tenancy Compared EAS and HPS

Type	EAS	HPS	High Prairie	Grouard	Gift Lake
Own	51.2	58.2	60.6	40.0	71.0
Rent	48.7	32.7	33.3	45.7	16.1
Rent to own	Not used	7.8	5.1	14.3	9.7
Other	Not used	1.3	1.0	0.0	3.2
Total	100.0	100.0	100.0	100.0	100.0

Source:Col 2 - EAS 85; Col 3 - 6 Field Work Conducted Between December, 1985 and January, 1986.

Contrary to expectation, many more people own their housing in the High Prairie area than in Edmonton. While this can, to some extent, be attributed to differences in the sample, it may be largely explained in terms of the differences in the real estate market in these two places. Housing is more expensive in the city than in the rural area, and therefore fewer people in the city can afford to own their housing. Another factor may be the effect of the

multiplicity of government housing programmes in rural Alberta, especially in the High Prairie region.

Whatever the cause may be, the evidence here does not seem to support the supposition that home ownership increases satisfaction with housing. Satisfaction with housing, therefore, appears to be more complex than a simple relationship with ownership.

Family life was perceived to be slightly more satisfying in the High Prairie area than in Edmonton. Perhaps one major explanation may be the fact that there is a higher proportion of single member households in Edmonton, about 19%, than in the High Prairie area with 13%. It has been documented in Campbell et. al. (1976)that single member households express low satisfaction on this variable.

Both Gift Lake and High Prairie had the same level of satisfaction for family life, even though household sizes for the two places differ quite markedly as was seen in Table 8.3. Probably, it is rural life that gives people a greater satisfaction with family life. People have fewer distractions and alternatives to spending time with the family. They thus either come to enjoy the family, or adjust themselves through the process of accommodation to being satisfied with it.

Health and physical condition was perceived to be less satisfactory in Edmonton, (MSI of 3.80), than in the High Prairie study, (MSI of 3.92). for the latter. Grouard and High Prairie had a higher satisfaction than Edmonton, with MSI of 3.97 and 4.10 respectively. Gift Lake lagged behind with 3.5. This figure for Gift Lake can be explained by the high percentage of the elderly in the sample, as a glance at Table 8.8 below will show.

Table 8.8

Age Distribution Compared

Age	EAS	HPS	High Prairie	Grouard	Gift Lake
Up to 19	2.6	1.2	2.0	0.0	0.0
20-24	16.0	9.6	11.0	0.0	16.1
25-34	31.8	36.7	37.0	45.7	25.8
35-44	19.0	22.9	21.0	37.1	12.9
45-54	13.9	16.0	21.0	8.6	12.9
55-64	8.3	6.6	6.0	2.8	12.9
65 and older	9.0	6.0	2.0	5.7	19.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Col 2 - EAS 85; Col 3-6 - Field work conducted between Dec. 1985 and January, 1986.

Andrews and Withey found that satisfaction with health decreases with age, especially from the mid-forties. The high proportions of Gift Lake and Edmonton in the higher age groups should be noted in connection with this point.

Amount of time for leisure and hobbies was, as expected, less satisfying in Edmonton, 3.22, than in the High Prairie study, 3.46. This suggests that in larger urban centres, there are so many things to do people hardly have time to do them, whereas in the rural communities where there is hardly anything to do, in terms of receational facilities, people do not feel pressured for time. This becomes even more so, when the point is made that fewer people in the rural areas have full-time jobs.

Residents of Gift Lake were the most satisfied, and this can be attributed to the prevalence of seasonal employment lack of recreational facilities, the size of the community, thus not necessitating any travelling within town, as compared to the urban environment where people have to adjust to rigid bus schedules if they do not own transportation. Similarly, the high satisfaction in High Prairie and Grouard can be explained by the fact that most things are within walking distance, and life in the rural community is more slow-paced.

The standard of living was perceived to be slighty less satisfactory in Edmonton than in the High Prairie sample, with MSI scores of 3.89 and 3.98 respectively. It was highest in High Prairie, 4.1 and lowest in Gift Lake3.7, but not so low in Grouard,with 3.8. This is to be expected because Gift Lake residents have significantly lower incomes than all the other places, and being a variable on which people can find standards of comparison beyond their families, the relatvely poor conditions there can be apparent. The disparity between High Prairie and Edmonton is not so easy to explain. It is suggested that the relatively high education of the High Prairie town sample, will, all other factors held constant, lead to similar or relatively higher incomes, because government is the largest employer in High Prairie. Since cost of living in High Prairie can be reasonably expected to be lower or comparable to Edmonton, a person working in High Prairie can be expected to enjoy a higher standard of living than their counterpart in the city. However, this may be only in the dollar component, because while the city resident will also have access to many more things , the rural dweller would not.

Probably another explanation might be the standard of comparison or reference used. Whereas in a place like High Prairie, among university graduates, large disparities in affluence and lifestyles may not be expected and, therefore, people may not feel that they compare unfavourably with others, the same can not be said for the city. Incomes are more widely distributed, wealth or affluence is more likely to be displayed, and therefore, people can find themselves comparing unfavourably to their next door neighbour. Shopping facilities in High Prairie are limited, as is the level of variety that can be offered in local shops because of a limited threshold size. Thus while the standard of living can be expected to be converging in the small town, one would expect it to be diverging in the city. Residents of Gift Lake, comparing their standard of living with the better educated people with full time employment in High Prairie, would rate their standard of living low.

Job satisfaction was also lower in Edmonton than in the High Prairie area as a whole, 3.77 as compared to 3.92, but it was highest in High Prairie and lowest in Gift Lake. As has

been argued earlier, the lack of jobs and predominance of seasonal employment in Gift Lake is the major explanation for the low satisfaction score there. One can also expect a higher level of job security in High Prairie than in Edmonton, since there are many more equally qualified contestants for one vacant position in the latter than in the former. Thus, whereas people in Edmonton would be under pressure to perform, those in High Prairie would be working at a more relaxed pace. Furthermore, it is reasonable to expect that the university degree holder in High Prairie would be near to or at the top position in their jobs, while in Edmonton they would be lower down the ladder. Differences in job satisfaction would definitely be expected between these two different categories of people. This would then explain the differences observed between High Prairie and Edmonton.

Conclusion

In closing, some differences have been seen to exist in the subjective evaluation of various life components between residents of Edmonton, as shown in the Edmonton Area Study, and those of the High Prairie region as shown in the current study. Disparities have also been seen to be present within the region. On two variables, family life and friendships, satisfaction has been fairly high throughout all the centres, but whereas family life appears to be more satisfactory, the smaller the community, friendship satisfaction increases with reducing town size, then falls again. This suggests that people do not enjoy too impersonal nor too personal relationships. Standard of living, and housing have been seen to increase with town size, again up to a point beyond which it drops. For standard of living it has been suggested that a wider variety of horizons for comparison in the city, as compared to a smaller variety in the rural town centre accounts for the difference. Within the rural area, Gift Lake on the "periphery of the periphery" scores low because it compares with the better favoured centre of the periphery, High Prairie, where higher education levels and incomes because of more steady employment prevail. Housing satisfaction was seen to be tied with people's expectations depending on the size of place of residence. Job satisfaction was seen to

be lower in the city than in the rural town where there is less competition, relationships are friendlier, and the pace of life slower.

It seems, therefore, that an appropriate centre to enhance the quality of a person's life is neither the sprawling metropolis, nor the small rural community. Rather, it is the small town, not too distant from an urban centre, where access to many things is readily obtained, jobs are secure, variety of shopping is guaranteed or close by, parking is not a hassle, congestion is no problem, life is not rushed, and, where friendships and family life can really blossom.

Also, incomes, job opportunities and level of education are generally higher in the High Prairie region than in Edmonton. However, while the averaged statistics place the region above Edmonton on the indicators compared, the wide disparities within the region can not, and should not, be ignored. Within the region, extreme disparities exist. Gift Lake is not as well off, and neither is Grouard, even though the latter is better off than the former. The evidence seems to confirm what has been pointed out as one of the shortcomings of growth centre policy, and was hypothesized for this study, that the spatial incidence of benefits from a growth centre are limited indeed. Furthermore, while growth centre policy reduces inter-regional disparities, it increases intra-regional, inter-group and interpersonal disparities. Thus, the location of growth in High Prairie has not benefited the people in the periphery of the region as much as those residents of High Prairie.

Average personal incomes are higher in High Prairie than in Edmonton, as are level of education, and the ratio of people employed full-time. However, the regional averages, while putting the High Prairie region above Edmonton, mask the the extreme disparities existing between centres and peoples within the sub-region. The inequities in the distribution of growth from growth centre are thus clearly portrayed - inter-regional disparities decrease, but intra-regional disparities increase.

X. CONCLUSION AND RECOMMENDATIONS

Introduction

In this concluding chapter, a hypothetical model is presented to explain Native poverty. The effect of growth centre policy on the spatial distribution of quality of life is briefly reviewed, and recommendations are made for policy making in the region in light of the results of this work.

A. Modelling Spatial Disparities Within Northern Alberta

Spatial disparities in overall quality of life have been seen to exist in the study area, with the quality of life being high in predominantly White Canadian areas and low in Native areas, and also being high among White Canadians and Non-Canadians, on the one hand, and low among Natives - Metis and Indians, on the other. This has been seen to be true for income, level of education, housing conditions, poverty, employment, and the composite quality of life index. Even though information on all the variables used in this study is not available to facilitate a time series analysis of the trend, it seems that the gap between the Native groups and the non-native groups does not seem to be decreasing, instead it seems to be increasing. An examination of Table 8.9 below which compares income statistics of High Prairie and Improvement District No. 17 with its predominantly native population confirms this assertion.

If the average for ID No.17 is taken to be representative of the hinterland of High Prairie, then the income disparity is seen to be increasing, between High Prairie and the surrounding communities. The situation is not improving, rather it appears to be becoming worse. In this section an attempt is made to model the Native-Poverty problem.

Table 8,9

Personal Income Differences Between High Prairie and ID No. 17

Year	High Prairie	ID No.17	Difference
1979	$10,047	$8,273	$1,774
1980	11,214	9,214	2,000
1981	13,080	11,509	1,571
1982	14,841	12,508	2,333
1983	15,045	12,558	2487
HPS*	29,191	22,299	6,892

Source: Alberta Bureau of Statistics, Income Tax Returns, 1981

* Current study, from Table 3.1

There is a definite link between unemployment and poverty. Gonick (1970) wrote that " ... the elimination of unemployment is a neccessary condition to the elimination of poverty." He cautions, however, that "... the achievement of permanent employment will not be possible without enormous efforts in education, vocational training and continuous re-training - especially aimed at the poor - to equip them to move into expanding branches of the labour market." Thus, it may be suggested that low education among natives is basic to the high unemployment found among them, and in fact also explains the observed poor rates on most of the quality of life indicators used in this study. Natives are less likely to be employed because they lack the requisite skills and education for the jobs. They are less likely to apply for a job, anyway, because of their low self-esteem arising out of inability to communicate effectively in English, and understand the complex world of the White society (MTB Consultants, 1980). The data indicate that the Metis or Indian is more than twenty times as likely to be unemployed, or in seasonal employment, as the White Canadian. Even though it was a little better for spouses, the Metis spouse was three times as likely as the White Canadian spouse to be found in this category.

Lack of employment keeps natives poor, and perpetually reliant on social assistance programmes. The ill effects of poverty on the general health, and welfare of those affected are well-known. Substandard housing reduces the chances of good health, better education, a stable family life and being self-sufficient. In this context, their children will be expected to be poorly motivated towards participating in existing educational programmes, or even when they do, to perform poorly, as is shown in the following report by Parnell(1973).

> Among the children of several Native Communities in Northern Alberta in 1971, it was discovered that the physical and language skills of the children were least developed in extreme poverty communities but better developed in communities where poverty was not quite so severe.

The Economic Council of Canada has noted that "the association between low income and lack of education beyond the elementary level is particulary strong ... The education levels of family heads were very likely influenced by the income and related circumstances of their parents; and their circumstances in turn are likely to influence the education levels achieved by their children (Economic Council of Canada, 1970). Thus there is a very great probability for the poor to have poorly educated children. In addition, students from poor homes are more likely to drop out to find a job to support the family than others from affluent homes.

For the dropout, there are further problems. Since the academic programme requires some basic education to move on, it becomes a deterrent in itself. Most programmes in AVC require a Grade 10 level, and this effectively leaves out those unfortunate to have dropped out before that grade. The problem is compounded by the traditional conflicts between Native and modern educational processes, values, attitudes, and goals. Lack of employment goals, combined with poverty within the community largely lead to dropout.

When training facilities, for efficiency reasons, are located far away from the community of the potential student, additional problems like cost of living, including rent, transportation, and adapting to the urban system become a major stumbling-block. When combined with the thought of 'loneliness in the crowd', and the pressure of academic work, the tendency to fail or drop out can be very high indeed.

Thus, various factors lead to poor native participation in educational programmes. The consistent lack of education and skills for employment reinforces their poverty and makes them still less employable. The resulting picture is one of a withdrawal from the larger society and sticking closely to one's own kind: natives huddle closely together among natives and discriminate against non-natives, who are seen not to "understand our way of life". In turn, this reinforces the stigma that has always accompanied the image of Natives - poor, illiterate and drunk. This stigmatization creates a situation in which the prospective non-native employer has biases and handicaps which become a barrier usually too formidable for the native employee to surmount successfully and excel. So they remain unemployed, less employable, poor, overdependent on Social Assistance, and poorly educated. The above reasoning may be schematically represented as in Fig X.1.

There is hardly any future for the children in such homes in the absence of a deliberate policy targetted towards their educational needs. Like begets like. If the typical role model is one of a Grade 4 holder with seasonal employment in fishing, receiving Social Assistance, driving an old car, and living in substandard housing, it is difficult to see how the youth can be motivated to be different and live differently. In this respect, it has been argued that to eliminate case poverty, we should invest more proportionally in the children of the poor. "It is there that high quality schools, strong health services, special provision for nutrition and recreation are most needed to compensate for the very low investment which families are able to make in their offspring" (Galbraith,1952). The Economic Council of Canada (1970) put it slightly differently:

> It seems that provision of adequate education generally, plus deliberate special efforts to help those whose family circumstances tend to discourage persistence in education, must form a highly important part of policy against poverty .... the performance of the educational system has very long range effects. To the extent that it fails to perform well in helping the children of low-income parents to break out of the poverty cycle, there are likely to be distressing social and economic costs for one and perhaps more generations.

The combined effects of poverty, low employment, and low levels of education among natives results in a very low quality of life which is self-perpetuating. The problem is further

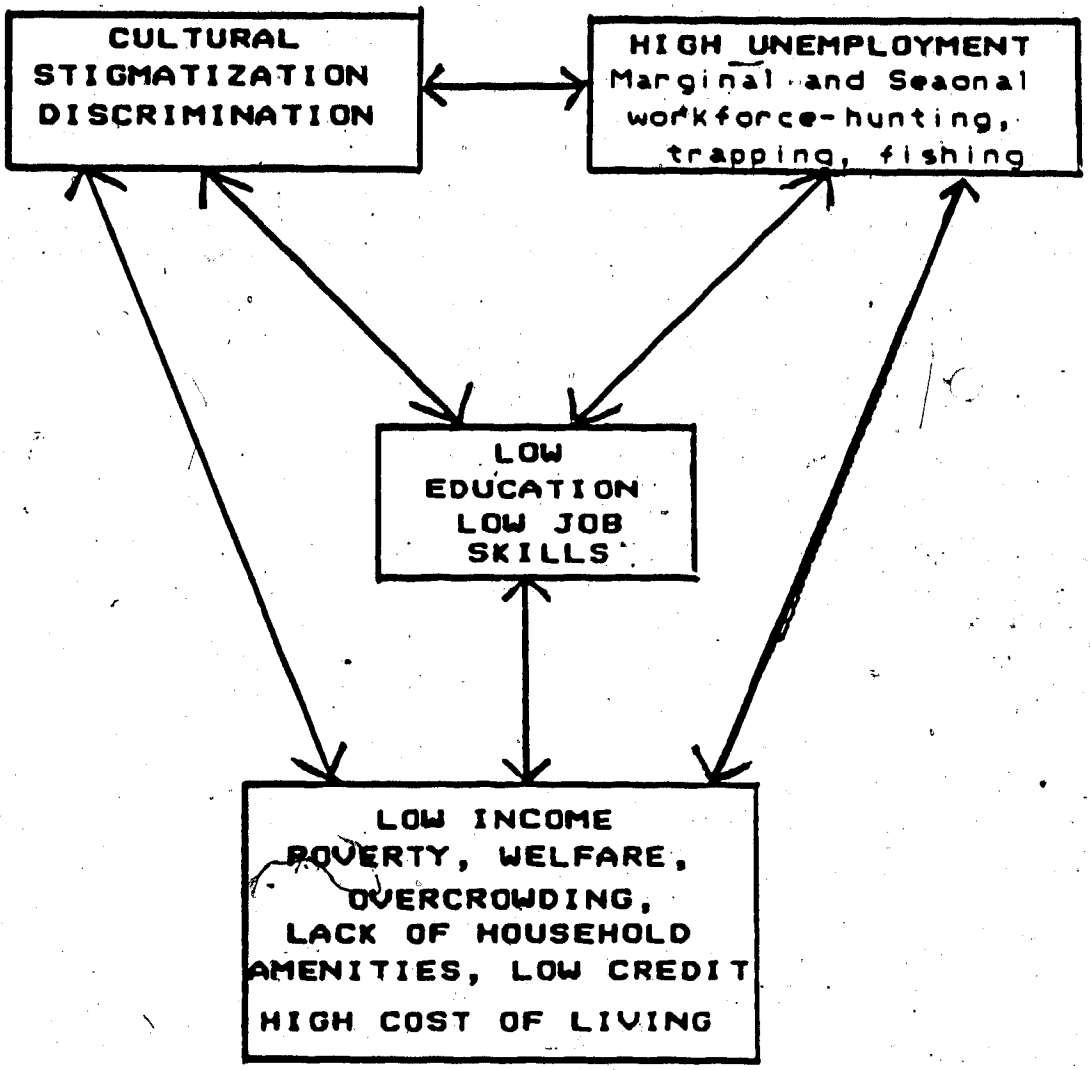

Figure X.1 Hypothetical Model of Native Poverty

compounded by the factor of rural residence and little access to facilities and services, and also a large family size. Thus, poverty produces more poverty. As Galbraith noted, modern poverty is not remedied by a general and tolerably well-distributed advance in the economy; the poor of today are immune to general economic progress; the best way to eliminate poverty is to see to it that it is no longer self-perpetuating.

What happens to the individual who tries to break free? First, a person will have to break free of the internal problems, a good education may be a good start, then there are the external problems to face. The discrimination of the wider community arising out of cultural stigmatization, lack of job skills, and general unemployment in the larger society create problems in finding and retaining a job.

These individuals have to learn to live in the larger society with its individual orientation instead of the group orientation with which they are familiar and get used to bus schedules, job routine, work ethics, and learn to compete with others. They are also confronted with the basic rights they lose once they leave the Reserves or Communities, such as free housing, little or no taxes, and free medical care. They have to be able to earn enough to sustain themselves and their family in the market economy where they pay for eveything. More than likely, they will find themselves earning less than on the Reserves but spending more because of the new demands and challenges.

The experience of these people can be traumatic in an environment of little job security. In fact, the current state of the economy and the generally high unemployment makes it especially difficult for these groups since the areas most hit are their predominant sources of employment: construction and oil. Gonick's description of Canada's poor perfectly fits them:

> "They are ... people working in highly seasonal industries: farm workers, fishermen, loggers .... They are unorganized, and unorganizable. Increases in their money incomes barely keep up with prices. They are employed, most often, in marginal enterprises and marginal industries. On the job training is almost nil. Job security is minimal. During recessions they are the first to be fired .... Most of them were born poor...", and we may add, they will continue to be poor, and their children will most likely be poor. (Gonick, 1970).

Higher housing costs and higher utility bills provide an additional scare. The obvious response is to return to the former life fraught with poverty, but promising fewer risks and less vulnerability. At least they can hunt and fish on the reserve freely.

What has been suggested as solutions to the problem in previous works? Ironside and Mellor(1978) advocated the use of direct and indirect income transfer mechanisms such as "negative income tax, or a guaranteed income, unemployment insurance payments, welfare payments, and education or skill training grants differentiated spatially so that people in disadvantaged regions would receive substantially higher benefits than those elsewhere", but a point worthy of note is that area targetted programmes have little impact on improving the quality of life of the poor in the backward regions. While not disputing the potential impact of such an approach, the pragmatic reality needs to be recognised and dealt with.

It is my contention that indiscriminate throwing of money at a problem does not solve it. Native leaders have long recognised that "indiscriminate use of welfare is making native people dependent on the system, generation after generation". At the Alberta North in the 80s conference, Mr Allan Jacob, a native businessman from Cold Lake, expressed concern with the loss of self-esteem that comes from being unemployed or unemployable for long periods. This inevitably leads to family breakdown, alcoholism, and other social problems He concluded with a call for a re-thinking of the welfare system, and the use of the funds in more constructive, (we may may add, more creative) ways - such as job training and the creation of viable employment opportunities in Northern communities (Alberta North in the 80s Conference Report pp. 20-21).

Perhaps direct transfers per se may not be a panacea to the Native problem. Poverty is much more than low income. Statistics such as the following presented by the Department of Indian and Northern Affairs in 1980, even though mind-boggling, should warn us of the dependency-perpetuating nature of such direct transfer programmes.

In 1964, an estimated 36% of the Indian population received social assistance; by 1977-78, between 50-70% received social assistance. (DINA, 1980, pp.3) Use of social

assistance by Indians "on a per-capita basis was 22 times greater than for non-Indians". Furthermore "over 70% of Indian recipients were able-bodied and employable".

A study initiated by the NADC in response to the above, has suggested creative and ingenious alternatives to the current welfare system, and is worth careful scrutiny. The suggestions on how to use social assistance dollars in a different way, to turn welfare dollars into wages for work, to take the bite of low self-esteem out of welfare are worth serious consideration[39].

Two suggested approaches, the Work Opportunity Programme (WEP) under which social assistance funds and funds from other sources are used to provide employment opportunities for those people who would otherwise be unemployed, and the Work Fare(WF), where social assistance recipients capable of working do so in exchange for their benefits, are suggested to be especially relevant for the study region. Guidelines for these have been outlined in Kupfer and Fern-Kupfer, 1983. If the work fare programme can be implemented so that it improves the future employability of the participants, that would be excellent. The community self-help programme tried in the Lethbridge region also merits serious consideration.

A final point to note is that it is necessary to recognise that long-term policy needs to be derived to tackle the problems of deprived people. These are problems which cannot be solved by short-term five-year programmes.

How then can, and must the Native problem be tackled? The answer does not lie in more money, welfare grants[40], nor in more housing programmes, rather it lies in education. There is a need for a comprehensive educational programme that will make Natives see the need for education, first and foremost, and then train and equip them to be able to see themselves as equal to, and capable of competing with any other groups in the society. As Gonick has observed,

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[39] See Employment Alternatives and Social Assistance in Smaller Northern Alberta Communities by Kupfer and Fearn-Kupfer, 1983.

[40] The work disincentive effect of social assistance has been documented in Kodras, (1986). Also see Pigou, A. (1952).

> "if the children of the poor families have first-rate schools and school attendance is properly enforced; if the children though badly nourished at home, are well nourished at school; if the community has sound health services and the physical well-being of the children is vigilantly watched; if there is opportunity for advanced education of those who qualify regardless of means; if the environment of the children of the poor is thus transformed and if recreational facilities are greatly expanded, then considerable in-roads will have been made in breaking the vicious cycle of poverty that everybody condemns."

Of course, jobs are needed after training, which may not be easy to obtain, but the point is that, the well-educated stand a better chance of finding a well-paid job than the poorly-educated.

Good education, while it may not, in the short run, remove the cultural stigmatization or discrimination, will definitely make the beneficiaries aware of their potentials, recognize their self-worth, be better able to understand and be understood by the non-native society. Educated Natives, in educational roles may be able to do a better job educating other Natives, since they are more likely to be better understood, and accepted, Better role models will be provided so that the Native woman may not be seen as only good for child-bearing. People will begin to more positively motivate their children with regard to education and this will lead to a reduction in the drop out rate. The result will be a reversal of the previous model.

Better jobs arising out of higher education will lead to higher incomes, probably lower birth rates, and therefore, smaller household sizes, less poverty and a higher quality of life. The problem of poverty among Natives is a difficult, even complex one, but not insoluble. However, it demands a definite determination on behalf of government and Native leaders, and a commitment to change, to be able to effect any changes. The seeming current hostility between government departments and some Native communities can, and must, give way to co-operation.

Natives will have to stop withdrawing into their culture and move out boldly into the general Canadian society. The larger society has a lot to learn from Native culture and Natives need to come out and show the wealth that is their cultural endowment. On the other hand, there are undoubtedly many useful aspects of the non-native culture which Natives will well want to absorb. What is required then is a symbiosis - a living in interdependence.

Natives need to cease living in the past, and stop looking back with nostalgia at "the land that was taken from us", and to live in the present, with thoughts for the future. This may be a beginning, only a beginning, but a very important beginning to a lasting journey fraught with exciting and surprising challenges and opportunities.

B. Growth Centre Policy and the Quality of Life

The use of growth centre policy in the study area has favoured High Prairie as a centre to the detriment of Grouard and especially, Gift Lake on the periphery. Quality of life, measured using both subjective and objective indicators in the standard score additive model, has been seen to be highest in High Prairie, then Grouard and Gift Lake. As was seen in the case of income statistics, the disparity between High Prairie and the rest of the communities in the region is increasing, not decreasing. The evidence reflects and confirms the objections that have been raised against the growth centre strategy as a tool for the development of backward regions. The inherent efficiency goal is usually in conflict, and incompatible, with the welfare goals. This study reminds us once again of the fact that the growth centre is decidedly a tool of economic efficiency pressed into use as a welfare instrument. The underlying operating mechanisms of the concept are rooted in inequity, and this becomes a stumbling block whenever and wherever it has been used (Todd, 1980). Is this another nail in the coffin of the growth centre concept as a tool for the development of backward regions? Not exactly.

Like any other tool, the growth centre has to be used for the purpose for which it was designed. An axe cannot be used for shaving, and when a pair of scissors is used for trimming the beard, a trim is what should be expected, and not a smooth shave. "If survival of the growth centre is predicated on its ability to marshal economic efficiencies in productive activities or to deliver public services, then the instrument may never contibute to the mitigation of hard-core regional poverty - the implicit, if not explicit objective of most growth centre programs" (Todd,1980).

In the light of these deficiencies, Todd has advocated the recognition of the limitations of the growth centre instrument and suggested a modification that reconciles the goals of efficiency and welfare - the welfarist growth centre. He described it thus:

> The new growth centre tool can be couched not as one, all-embracing concept but as a spectrum wherein the two extremities represent a welfare-oriented device and an efficiency-oriented device respectively. Growth centres designed to fulfill welfarist ends would be shorne of the classical paraphernalia, whereas growth centres aimed at bolstering regional contributions to national growth would emphasize factors promoting economic efficiency. Combinations of welfarist and efficiency criteria would occupy the middle zones of the spectrum and would provide planners with the scope to adjust growth centre strategies to cases of not so obvious regional deprivation.

Thus a composite growth centre programme would be the result. As he has further argued, the very fact that growth centres foster efficiencies in organization and administration is almost tautological. However, there is a need for a recognition of the conflict between efficiency and equity, and making a choice between fostering activities in growth centres that indirectly foster welfare in adjacent deprived areas, or direct public investment in the provision of social and economic facilities for tempering depressed communities. The growth centre is sufficiently flexible to accomodate both approaches. In our context, a welfarist growth centre is what High Prairie has turned out to be through the provincial and federal government's investment in regional services and jobs. However, the limited spatial impact results directly from the limited number of jobs that can be created, the inability of the native population to qualify for these jobs because of low education, the lack of substantial private investment to accompany the public investment, and other general factors including the overall state of the economy.

Since the trickle down effects of growth centres are usually small and their impact limited, it seems that more direct measures to reach the poor with services in the region are justified. For instance, medical care delivery needs to be based on this fact so that mobile services can be delivered in the remote communities where transportion to High Prairie is a major problem. The growth centre policy can be used, therefore, to improve the quality of life of the rural poor albeit with deficiencies in its impact both spatial and in benefits

delivered to different groups of people.

C. Rural Self-help

It is evident that nothing can be a substitute for a people who are resolved and determined to improve themselves and their community. Such a people may be held back by temporary obstacles or difficulties but not defeated. This appears to be crucial for improving the quality of life in the study area. Rural self-help is necessary in itself, and also as a catalyst to government efforts at development. Most government programmes are available to communities that can get organized, and stay organized, and not to unstable groups.

Apathy and lack of unity among community residents emerged as one of the most important obstacles to community development during the study. Asked what respondents thought were the most important problems facing life in their communities[41], about 9% in High Prairie and 10% in Grouard as well as 6% in Gift Lake indicated that there was a lack of community feeling and co-operation and people were apathetic and critical of one another. Asked what they thought had to be done if the quality of life in the community had to improve, even higher percentages stressed the importance and need for community unity and working together. (The results are presented in Appendix 1.4). It appears then that a lack of unity among residents of small communities should be a matter of great concern. This is especially relevant in Grouard, where the absence of properly organized and effective local committees have led to the loss of government funding meant for recreation, for instance.

Consequently, Grouard needs to get a responsible, viable and lasting Community Development Committee to oversee and supervise various activities in the community. For example, the lack of accountability exhibited by previous Recreation Boards should cease, and proper planning for recreation in the community, which will definitely be beneficial to all, should be pursued. Instead of blaming, or looking to AVC for everything, Grouard needs to become organized and stay organized so they can have access to the numerous government

[41]The results of this question are presented in Appendix 1.3

programmes for rural development available. The multi-ethnicity of Gouard should not be allowed to be a hindrance to development, rather it should be set aside, and Indians, Metis, and Whites need to come together and stay together to plan and work for development. It could be turned into an advantage instead.

A well-organized Community Development Committee would lead to better relationships with AVC and the Improvement District Council, which will ultimately be in the interest of the community. For instance, whereas at present, the suggestion of an individual to AVC can be treated lightly, the same cannot be said of presentations from duly recognized community representatives. Such a body can seriously examine the the numerous problems facing the community and come up with proposals for their resolution. In addition, it can effectively negotiate with the Improvement District regarding various projects in the community. It is incredible to think that a large community like Grouard could not find one person to represent them on the Improvement District Council. The current representative lives outside of the community, unknown to most residents. Apathy does not help anybody. The community needs to get together, stay together, and work together. That is the only way to proceed to development. The newly formed Community Development Committee is a laudable step in the right direction, and should get to work to produce creative and constructive solutions to local problems. Contact with the Improvement District management in High Prairie indicates that such a body would be given maximum co-operation.

Gift Lake needs a Day Care Committee to examine the current vacant facility for day care, and organize community effort to ensure it meets provincial standards, and receives official approval. This will be helpful to the many mothers in the CVC who are currently paying $10 a day per child for private day care, and provide better care for the children. Of course, that will mean an end to baby sitting for the few "professional baby sitters". It is even possible that these people could be trained and employed in the facility. The government cannot, and should not be expected to, legislate a local Day Care Committee.

Gift Lake needs to take responsibility for the organization of recreation in the Community and especially maintain the skating rink, instead of children having to travel to Donhelly for hockey practice, or complaining about the absence of a paid Recreational Organizer. In the absence of such a person, perhaps it should not be too difficult for the Community to come together and do this for their children.

High Prairie should seriously examine the proposal of an indoor swimming pool. The evidence from this survey suggests that there is a market for such a facility that will provide an indoor alternative to the outdoor sports during the harsh winter.

The High Prairie Regional Health Complex could provide better services if a way could be found to remove the current impression that Natives have of the facility. Better relationships are required between the Community and the Complex to transcend the current stereotype of high "alcohol-related cases" from native communities. If the long waiting times are to be avoided, in the event of no extra doctors, it is necessary for individuals, especially Natives, who book appointments to show up for them so that it will not be necessary for doctors to triple and quadruple book to ensure effective time utilization. The provision of a weekly consultancy would be an important development in Gift Lake since it will curb the operation of the 'inverse care law' in the delivery of health services.

The question of social assistance must be carefully and critically reviewed to curtail or limit its adverse disincentive effect. Programmes need to be developed that make people able to fend for themselves and provide for their families instead of living on handouts. People should be, wherever possible, encouraged to work for what they receive. The handout policy fosters dependency and hinders the development of a sense of responsibility, while restricting and hindering the development of individual initiative and achievement. It also diminishes an individual's sense of self-worth.

It is recommended that in rural communities, like Grouard and Gift Lake, the employable but unemployed, and other active welfare recipients be organized to provide some services to their communities. These may include such services as snow removal, garbage

disposal, or even maintaining various community facilities. The skating rink in Gift Lake could be effectively maintained this way, without any extra expenditure. The advantages of such a programme are obvious. It would give the recipients something to do for their communities, a sense of worth, and a feeling of accomplishment, but more importantly, it would enable residents of these communities to better appreciate, value and care for public and community property. All these hinge on effective and resourceful community leadership. This may not, currently, be available. However, if lasting changes have to be made, it seems that the development of community leadership should be a key target of rural development programmes.

The evidence adduced reflects the general objections that have been raised against the growth center strategy as a tool for the development of backward regions. The efficiency goal very often conflicts with the welfare goal. For instance, welfare considerations make it important that some form of medical facility be provided in Gift Lake, as well as a recreational complex. These can be justified by the low personal mobility, which obstructs or hinders access to facilities in High Prairie. Efficiency considerations however, make such a proposal untenable since neither the population size nor the economic base reaches the market threshold size required.

Objective and Subjective Indicators

The use of subjective indicators has provided useful inputs and additional insights into the quality of life in the study region, however some general observations about their nature have to be made as a result of the findings in this study. The use of satisfaction indicators for evaluating the facilities and services in a place provides fairly reliable results. However, when applied to various components of the personal life of an individual, the results are, at best, difficult to interprete, unreliable, or at worst, even meaningless. Different people use different criteria to evaluate their standard of living, for instance. It is possible for the poor to be satisfied while the affluent is dissatisfied essentially because they use different yardsticks

for measurement. When yardsticks of varying length are used by ten people, it does not make sense to call the result ten yards. Researchers, therefore, need to take this into consideration in the use of subjective indicators.

The one thing that subjective indicators fail to tell us is what the feelings of "those who are not there" are. People who are dissatisfied with the quality of life in their community, in one way or the other, may simply move to another community perceived by them to be better. The views expressed in such studies may, therefore, tend to be favourable because they reflect the views of those remaining who are satisfied and fail to echo the dissatisfaction of those who have left. This reasoning may be useful in explaining the high level of satisfaction expressed with family life by the married. In this context, the divorced or single, empirically documented to be usually less satisfied with family life (see Campbell et al., 1976), may, in this context, represent those who have "voted with their feet". The *stayers*, it can be reasoned, have a high propensity to accommodate their aspirations with their environment; the *movers* refused to do so and thus left.

Again, when satisfaction indicators are used in an area with non-homogenous cultural groups, differences in cultural preferences, as well as aspirations and expectations may make the resulting conclusions questionable and difficult to interpret. Furthermore, even in a homogenous cultural group, differences in the needs and satisfaction requirements of those who are working and those who are not, the dependent and the self-sufficient, complicates matters even further. The most important issue, however, is that all these factors are usually present and may be operating at the same time. Researchers can never, therefore, be too cautious in the interpretation of subjective evaluation data.

However, this does not mean that subjective indicators cannot be used. In fact, they constitute a necessary and indispensable supplement to objective indicators in evaluating various facilities and services in a place. The input of the users of the facilities is a valid and necessary component of the overall measuring process. Thus, the objective conditions in a place and the subjective evaluation of the respondents need to be taken together to provide a

more accurate and reliable picture of the state of affairs (Dale,1980; Kennedy et al.,1978; [illegible]ne,1982).

Hypotheses

As was hypothesized, the quality of life in High Prairie is higher than in Grouard, which, in turn, is higher than in Gift Lake. It has been suggested that the location of investment in High Prairie as a growth centre is the major factor. The quality of life is highest in the growth centre and lowest in the periphery because of the inherent characteristics of growth centres. Cost of living as reported by the respondents, however, did not fit this general pattern. In fact Grouard respondents reported lower monthly expenditures than those in Gift Lake or High Prairie. Further research, using actual recorded expenditures, is required to unravel the real factors underlying this.

It has not been possible to comprehensively examine whether the relationship between High Prairie and its hinterland is divergent or convergent because previous work has not been on such a comprehensive scale. No information has previously been published on household amenities, banking characteristics and subjective evaluation of specific life components in the study region. However, for personal income where some information is available, the evidence does not support a convergence, but rather a weak divergence. The current study, however, has demonstrated that disparities exist between High Prairie, as a growth center and its periphery regions, and that Gift Lake, located farther away than Grouard has a poorer quality of life.

Again, lack of previous data makes a time series analysis of inter-ethnic disparities impossible, but the evidence presented in this study has shown that white Canadians and Non-Canadians in the study sample, enjoy a higher quality of life than their native counterparts. Furthermore, because the former groups have higher educational qualifications and incomes, they are better able to utilize growth inputs in the region to their advantage. Competition with non-Natives for employment, particularly for high-paying jobs is known to

be a continual source of discouragement for many Native people (MTB Consultants,1980,52). Consequently, inequities exist in the distribution of growth in the sense that Natives are generally, less likely to obtain a high-paying job than the non-Native.

Access to vital facilities, such as health, police protection and recreation have been seen to diminish the farther away a person lives from High Prairie. Residents of High Prairie, on the other hand, have easy access to these facilities, and in addition enjoy the benefits of better public services. Regular easy access to Edmonton gives them a further advantage.

Except for housing, various government programmes in the area seem to favour the dominant groups to the disadvantage of Natives, and it has been suggested that at the least such programmes perpetuate, not ameliorate, the existing disparities. For instance, the Grade 10 requirement for most courses at AVC makes it difficult for many Natives to avail themselves of the opportunity. Thus, unless steps are taken to arrest the situation, it seems that Native reliance on Social Assistance as a predominant source of income will be with us for a long time.

It is necessary to recognize that an essential part of rural development is the transformation of groups of people from being the passive recipients of services (to which in many cases, they have contributed little in support) to increasingly taking an active role in the shaping of their destiny through learning how to articulate their needs and setting courses designed to satisfy those needs (Bruce Morrison,1978,6). Help for self-help should be the motivating theme of public and community development programmes. Without this approach, programmes designed by others to alleviate the circumstances of the disadvantaged are doomed to being either off-target or not appropriate to their circumstances, and will fail to elicit their support.

In conclusion we can agree with Goulet that:

> Development is not a cluster of benefits given to people in need, but rather a process by which a populace acquires greater mastery over its own destiny. Certain modes of investment confirm under-developed men in their passive attitude to

> awaiting favours from government, industrialists, landowners, or employers. Investment made in paternalistic fashion can perhaps generate economic progress in material terms, but they do not make the economy progressive.... A progressive economy likewise signifies that economic progress ceases to depend primarily on the goodwill of government, the charity of the wealthy, or the favours of heaven. Progress becomes the fruit of man's own will and work. The "beneficiaries" of development are also its agents. (Goulet, 1971, 155-156)

The antiquated notion that posits human welfare as being synonymous with economic growth must give way to a recognition of the complexity of human motivation, needs, and behaviour. Efficiency needs to be carefully balanced with welfare. There is no other alternative.

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XII. APPENDIX

A. Appendix 1.1 - Questionnaire

QUALITY OF LIFE IN NORTHERN ALBERTA
QUESTIONNAIRE
1985

1. Interviewer's Name _____
2. Address Label

3. *Visits to Address* — *Date* — *Time*
   1. Initial Visit _____ | _____
   2. 1st Call Back _____ | _____
   3. 2nd Call Back _____ | _____
   4. 3rd Call Back _____ | _____
   5. 4th Call Back _____ | _____

4. Start Time _____ Length of Interview _____ minutes

5. Appointment Time
   1. _____
   2. _____

6. Reason For No Interview
   _____
   _____
   _____
   _____

PERCEIVED QUALITY OF LIFE IN SOME SELECTED CENTRES IN NORTHERN ALBERTA

The purpose of this questionnaire is to examine what residents of selected centres in Northern Alberta perceive to be the quality of life available to them. You will probably agree that the phrase, "good quality of life", means different things to different people. To maintain some uniformity in interpretation, for the purpose of this study, a good quality of life is taken to include good social relationships, excellent health, interesting and well-paid work, financial security, adequate leisure time and the facilities to enjoy it, rich cultural and educational opportunities, a clean and safe environment, and so on.

Please be assured that your answers will be treated in the strictest confidence, and the results of the survey will be reported in such a manner that individuals cannot be identified.

I would also like to emphasize that you are under no obligation to participate in this interview, and that you have the right to withdraw anytime you feel uncomfortable.

I'd like to begin by asking your opinions about various aspects of the life of this community. Of course how satisfactory the quality of life in any community is eg. the quality of health services available is best judged by the members of the community themselves, and not outsiders. This is why YOUR input is so important. Remember there are no right or wrong answers, we are interested only in opinion.

We have specified certain aspects of the life of this community. Please indicate how much satisfaction you get from each area, by circling which number comes closest to how you feel. Here is what the numbers mean:

1 indicates you are **VERY DISSATISFIED**
2 indicates you are **DISSATISFIED**
3 indicates you are **NEITHER SATISFIED NOR DISSATISFIED**
4 indicates you are **SATISFIED**
5 indicates you are **VERY SATISFIED**

a. All things considered, how satisfied are you with:
b. This town/village as a place to live?

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

c. Why? Explain _____

_____

NOW SOME QUESTIONS ABOUT THE FACILITIES AND SERVICES IN THIS COMMUNITY

How satisfied are you with:

a. The health facilities available

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain. _____

_____

a. The medical staff available

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain. _____

_____

a. The transportation facilities available

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain. _____

_____

a. The housing available

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

a. The public services available (such as garbage disposal services, street maintenance, etc.)

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain. _____

_____

a. The educational opportunities available (quality of staff, facilities, instruction and content)

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain. _____

_____

a. H. The indoor recreational facilities available(eg. swimming pool, hockey arena, community centre, etc.)

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain. _____

_____

a. The outdoor recreational facilities available (eg. parks, ski slopes, etc.)

b. Why? Explain. _____

_____

a. The quality of the environment (cleanliness, noise pollution, etc.)

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain. _____

_____

a. The job opportunities available

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

a. The telephone, television, radio and other communication systems available

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain. _____

_____

a. The daycare facilities available

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

a. The facilities for Senior Citizens available

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

). The facilities for religious expression available

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

a. Why? Explain _____

_____

a. The quality of the water

Very Dissatisfied						Very Satisfied	DK
1	2	3	4		6	7	8

b. Why? Explain _____

_____

a. The local government available

Very Dissatisfied					Very Satisfied	DK
1	2	4	5	6	7	8

b. Why? Explain _____

_____

10. What would you say are the two most important problems of life in this village/town? _____

_____

_____

_____

11. Thinking about our definition of a good quality of life, what do you think must be done if the quality of life in this community is to improve? _____

_____

_____

_____

NOW SOME QUESTIONS ABOUT YOUR PERSONAL SATISFACTION WITH VARIOUS COMPONENTS OF YOUR LIFE

12. For each of the following areas of life, please indicate how much satisfaction you receive:

a. Your health and physical condition

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

a. The house you live in

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

Your job

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

a. Why? Explain _____

_____

a. Your family life

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

a. Your friendships

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

a. The amount of time you have for doing things you want to do (eg. games, hobbies, etc.)

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

a. Your standard of living, the things you have (eg. car, furniture, housing, etc.)

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

a. The safety of your environment - safety from crime (eg. rape, theft, assault, etc.)

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

a. The cost of living in this area

Very Dissatisfied						Very Satisfied	DK
1	2	3	4	5	6	7	8

b. Why? Explain _____

_____

13. Compared to five years ago, how would you describe your present quality of life?

Better.....1 No Change.....2 Worse.....3

Please explain _____

_____

14. Compared to ten years ago, how would you describe your present quality of life?

Better.....1 No Change.....2 Worse.....3

Please explain. _____

_____

_____

NOW SOME QUESTIONS ABOUT THE HEALTH FACILITIES AVAILABLE TO YOU

15. Where do you go for medical care when you need it?

_____

16. What problems do you have in seeing a doctor or obtaining health care when you need treatment? (Circle at most 2)

Uwilling/reluctant to visit - owing to cost..... 1
Unwilling/reluctant to visit - owing to distance and travel costs..... 2
Unwilling/reluctant to visit - quality of treatment..... 3
Unwilling/reluctant to visit - quantity of treatment..... 4
Unwilling/reluctant to visit - to undergo hassle..... 5
Insignificant effect of treatment given..... 7
Other, specify _____ 8
No difficulties .....

NOW I'D LIKE TO ASK SOME QUESTIONS ABOUT YOUR LIVING ARRANGEMENTS

17. What type of place do you live in?_____

(Use the list below, and simply indicate by the number)

1. Single Family Dwelling
2. Duplex, Triplex, Fourplex
3. Mobile Dwelling Unit
4. Boarding House
5. None
6. Basement Suite.
7. Townhouse, Row Housing
8. Apartment (4 floors or less)
7. Shelter
9. Other (Specify)

18. How many bedrooms are there in your place? _____

19. Do you own or rent your place? _____

20. How much do you pay monthly for your place including utilities? (Mortgage payments include principal, interest, taxes, and utilities). _____

21. Could you please give some information about the people living with you? I'm interested in their age, sex, relationship to you, employment status and approximate annual income:

Person No.	Age	Sex	Relationship to you	Employment Status	Annual Income
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

22. Do you have the following items in your house for the private use of your household?

a. Cold running water	Yes.....1	No.....2
b. Hot running water	Yes.....1	No.....2
c. Shower / Bathtub	Yes.....1	No.....2
d. Toilet	Yes.....1	No.....2
e. Electricity	Yes.....1	No.....2
f. Telephone	Yes.....1	No.....2
g. Television	Yes.....1	No.....2
h. Refrigerator	Yes.....1	No.....2
i. Video cassete recorder	Yes.....1	No.....2
j. Dishwasher	Yes.....1	No.....2
k. Car	Yes.....1	No.....2
l. Snowmobile	Yes.....1	No.....2
m. Motor-bike	Yes.....1	No.....2
n. 3-wheeler	Yes.....1	No.....2
o. Personal Computer	Yes.....1	No.....2
p. Boat	Yes.....1	No.....2

23. What is your marital status?

Single	1
Married	2
Common-law	3
Divorced	4
Separated	5
Widowed	6

I'D LIKE TO KNOW SOMETHING ABOUT YOUR EDUCATIONAL BACKGROUND

24. What is the highest level of education that you / your spouse have completed?

	You	Your Spouse
No formal schooling	1	1
Less than Grade 9	2	2
Grade 9 - 12 (without certificate)	3	3
Grade 9 - 12 (with certificate)	4	4
Trades certificate or diploma	5	5
Other non-university education only (without certificate)	6	6
Other non-university education only (with certificate)	7	7
College or university (without degree)	8	8
University degree	9	9

25. Why did you stop at that level? (Indicate at most 3 reasons)

1. Lack of money
2. Family Work (eg. Trapping, farming)
3. Parents Wishes
4. To look after family
5. Health problems
7. Drug / Alcohol problems
8. Could not meet necessary requirements
9. To work
10. School was too far to go
11. Other (specify) _____

_____

I'D LIKE TO KNOW ABOUT YOUR CHILDREN'S EDUCATION

26. Where do your children go to school?
ii. How far away is it from here?
iii. By what means of transport do they get there?
iv. Approximately how much per month per child do you spend on transportation to school?

Child No.	School Location	Distance (one way)	Monthly Expenditure
1			
2			
3			
4			
5			
6			
7			
8			
9			

NOW A FEW QUESTIONS ABOUT THE MEANS OF TRANSPORTATION AVAILABLE TO YOU

27. What means of transport do you use most often to get around to do the following things? (Use the Table below, and indicate in the blank under "MEANS OF TRANSPORT", the letter corresponding to the option used)

1.ACTIVITY	MEANS OF TRANSPORT	OPTIONS
1. Work		a. Walk
2. Shopping		b. Bus and/or train
3. Banking		c. Bicycle
4. Run errands		d. Own car/Truck
5. Medical/Dental care		e. Car Pool
6. Recreation		f. Taxi
7. Visiting		g. Hitch a ride
8. Others		h. Others

NOW SOME QUESTIONS ABOUT YOUR EMPLOYMENT SITUATION

28. Are you / your spouse presently working full time, part-time, going to school, keeping house, or what?

	You	Your Spouse
Employed full time	1	1
Employed part time	2	2
Unemployed	3	3
Retired	4	4
In School	5	5
Keeping House	6	6
Other(Specify)	7	7

(ASK IF EMPLOYED FULL/PART TIME, OTHERWISE GO TO 10a)

29. If you are employed, what is the location of your work place? _____

30. How far away is it from here? _____

31. Approximately how much per month do you spend on transportation to and from your work place?_

(ASK IF UNEMPLOYED, OTHERWISE GO TO 23.)

32. If unemployed, why are you not working? (Circle at most 3)

1. Cannot find work
2. Laid off
3. Inadequate education
4. Retired
5. Seasonal worker
6. Child care responsibilities
7. Health problems
8. Lack of job skills
9. Returning to school
10. Other (specify) _____

NOW SOME QUESTIONS ABOUT YOUR INCOME

33. Where do you get your income from? (Include other household income) Circle all applicable sources of income.

1. Wages, salaries
2. Income from business (self employment)
3. Royalties
4. Unemployment insurance benefits
5. Income subsidies (rent, child care, health care)
6. Alimony, child support
13. Other, specify _____
7. Tips, Commissions
8. Investment income
9. Family Allowance
10. Social welfare benefits
11. Government income (veteran's allowance, workmans compensation)
12. From friends/family

34. Did any member of your household receive any of the following payments last year? If yes, how much did they receive monthly? For how long?

Family Allowance	Yes...1	No...2	_____	_____
Unemployment Insurance Benefits	Yes...1	No...2	_____	_____
Social Welfare Benefits	Yes...1	No...2	_____	_____
Income subsidies (rent, child care, health care)	Yes...1	No...2	_____	_____

35. Which of the following accounts and Credit Cards do you have? (*Circle* Yes *for everyone which applies.*

1. Savings account	Yes.....1	No.....2
2. Chequing account	Yes.....1	No.....2
3. Bank deposit	Yes.....1	No.....2
4. American express card	Yes.....1	No.....2
5. Visa card	Yes.....1	No.....2
6. Mastercard	Yes.....1	No.....2
7. Department Store card	Yes.....1	No.....2

36. In the following categories, please indicate which number comes closest to the total income of all the members of this household for this past year before tax deductions?

Under $5,000	1	50,000-54,999	9
5,000-9,999	2	55,000-59,999	10
10,000-14,999	3	60,000-64,999	11
15,000-19,999	4	65,000-69,999	12
20,000-24,999	5	70,000-74,999	13
25,000-29,999	6	75,000-79,999	14
30,000-44,999	7	80,000 and over	15
45,000-49,999	8	Dont Know	00

37. Which number on the card indicates your total personal income for the past year? _____

NOW SOME QUESTIONS ABOUT YOUR EXPENDITURE PATTERNS

38. Approximately how much per month do you spend on the following items?

Mortgage or rent _____ 1
Food _____ 2
Clothing _____ 3
Child care _____ 4
Health care (*medical and dental*) _____ 5
Utilities _____ 6
Transportation _____ 7
Social/recreational activities _____ 8
Household goods _____ 9
Upkeep of home _____ 10
Debts _____ 11
Other (specify) _____ 12

39. What would you spend more money on if you had it? _____

_____

FINALLY, SOME QUESTIONS ABOUT YOUR MOBILITY

40. Where were you born? (Indicate town and province) _____

41. How long have you lived here? _____

42. Where were you living before you came here? *(Indicate town/city and province)* _____

43. Why did you move ? _____

_____

_____

44. If you were to move from here, where would you move to? (Indicate town/city and province) _____

_____

45. Why would you move there? _____

_____

46. How would you define your ethnic identity?

_____

THIS SECTION DEALS WITH THE COSTS AND LOCATIONS OF GOODS AND SERVICES IN THIS COMMUNITY, AND HOW THEY AFFECT THE QUALITY OF LIFE.

THIS PART OF THE QUESTIONNAIRE WILL BE LEFT WITH YOU TO COMPLETE LATER ON, OVER A PERIOD OF ONE MONTH. TO HELP YOU, THE MONTH HAS BEEN DIVIDED INTO 4 WEEKS, AND EACH WEEK IS FURTHER DIVIDED INTO 7 DAYS. YOUR STARTING DAY IS DAY ONE. PLEASE RECORD, AS CAREFULLY AS YOU CAN, HOW MUCH EXPENDITURE YOU MADE ON EACH SPECIFIED CATEGORY ON ON THE DAY IT IS MADE, AND AS WELL, WHERE THE EXPENDITURE WAS MADE. IT WILL BE MOST HELPFUL IF YOU CAN KEEP ALL RECEIPTS FOR CROSS CHECKING.

ONCE AGAIN, THANK YOU VERY MUCH FOR YOUR CO-OPERATION AND THE TIME YOU TOOK TO ASSIST WITH THIS QUESTIONNAIRE.

B. Appendix 1.2 - Z-score Values for Computation of Quality of Life Index by Town

Variable	High Prairie	Grouard	Gift Lake
Banking and Credit			
% Having Savings Accounts	.28	-.06	-.85
% Having Chequing Accounts	.29	-.13	-.80
% Having Bank Deposits	.29	-.38	-.52
% With American Express card	.15	-.13	-.33
% With Visa Card	.33	-.26	-.78
% With Master Card	.12	-.18	-.18
% With Department Store Card	.08	.13	-.40
Total Banking & Credit	1.54	-1.01	-3.84
Household Amenities			
% Households with Cold Running Water	.43	-.07	-1.32
% Households with Hot Running Water	.42	0.	-1.36
% Households with Shower or Bathtub	.44	-.05	-1.37
% Households with Indoor Toilet	.44	-.05	-1.37
% Households with Electricity	.08	.08	-.34
% Households with Telephone	.20	-.30	-.30
% Households with Television	0.	.18	-.20
% Households with Refrigerator	.06	.18	-.39
% Households with V C R	0.	.13	-.13
% Households with Dishwasher	.23	-.24	-.47
% Households with Car or Truck	.03	.17	-.27
% Households with Personal Computer	-.07	-.13	.36
% Households with Three-wheeler	-.03	.16	-.07
% Households with Motor Bike	-.12	.14	.22

% Households with Snowmobile	.13	-.10	-.30
% Households with Canoe	-.04	-.08	.21
Total Household Amenities	2.20	.01	-7.11
Employment and Income			
% Employed Full-time	.26	.01	-.85
% Employed Part-time	.03	.01	-.10
% Unemployed (-)	-.19	0.	.62
% Spouses Employed Full-time	.10	0.	-.30
% Spouses Employed part-time	-.04	.11	.02
% Spouses Unemployed (-)	-.09	-.16	.47
Personal Income of Respondent	.19	-.12	-.51
Total Employment and Income	.82	.16	-2.85
Level of Education			
% With No Formal Schooling (-)	-.16	-.16	.68
% With Less than Grade 9 (-)	-.28	-.10	1.02
% Univerity (without cert.)	.01	.28	-.34
% With University Degree	.20	-.20	-.41
% Spouses with no Schooling (-)	-.11	-.11	.48
% Spouses with Less than G.9 (-)	-.23	-.09	.85
% Spouses University (no cert.)	.07	-.17	-.03
% Spouses with University Degree	.16	-.24	-.23
Total Level of Education	1.21	.12	-4.04
Poverty and Welfare			
% Received Unemp. Insurance (-)	-.10	-.01	.32
% Received Income Subsidy (-)	-.07	.32	-.14
% Received Social Welfare (-)	-.18	-.09	.67
% Below Poverty Line (-)			
Total Poverty and Welfare (-)	.34	-.22	-.86
Household Expenditure			

Rent	.20	-.39	-.75
Food	-.22	-.04	.73
Clothing	-.11	.01	.38
Child Care	.16	-.21	-.05
Health Care	.12	-.56	.22
Utilities	-.23	.17	.49
Transportation	-.12	-.16	.58
Social and Recreation	-.07	.03	.33
Household Goods	.01	-.09	.07
Home Upkeep	.14	-.43	-.05
Debts and Repayments	.06	.12	-.28
Other Expenditure	.09	-.31	-.28
Total Cost of Living	-.02	1.86	-1.39
Overcrowdedness			
Household Size (-)	-.36	.19	.93
No. of persons per room (-)	-.23	-.02	.77
Total Overcrowdedness	.60	-.18	-1.70
Subjective Indicators			
Satisfaction with Town	.21	-.29	-.34
Health facilities	.65	-.96	-.98
Medical Staff	.64	-.86	-.98
Transportation	.30	-.27	-.61
Housing Available	0.	-.03	.03
Public Services	.35	-.65	-.38
Educational Opportunities	.09	-.24	-.02
Indoor Recreation	.51	-.73	-.81
Outdoor Recreation	.34	-.06	-1.06
Quality of Environment	-.08	.24	0.
Job Opportunities	.27	-.26	-.53

Communication System	-.21	.06	.63
Daycare Facilities	.63	-.17	-1.40
Senior Citizens Facilities	.63	-.38	-1.40
Religious Facilities	.11	-.14	-.18
Water Quality	.45	-1.22	-.03
Local Government	.53	-.93	-.59
Your Health and Physical Condition	.05	.21	-.41
Your House	.27	-.23	-.61
Your Job	.27	-.09	-.78
Your Family Life	.03	-.12	.02
Your Friendships	.13	-.21	-.18
Amount of Time for Leisure	-.02	-.05	.13
Your Standard of Living	.17	-.19	-.36
Safety of the Environment	.26	-.57	-.23
Cost of Living	-.14	.08	.37
Total Subjective Indicators	6.44	-8.04	-10.69

C. Appendix 1.3 - Z-score Values for Computation of Quality of Life Index by Ethnic Groups

Categories	Indians	Metis	White Canadians	Non-Canadians
Banking and Credit				
% Having Savings Accounts	.09	-.62	.36	.64
% Having Chequing Accounts	-.40	-.52	.51	.63
% Having Bank Deposits	-.34	-.47	.42	.71
% With American Express card	-.08	-.20	.14	.52
% With Visa Card	-.41	-.70	.63	.68
% With Master Card	-.18	-.18	.14	.55
% With Dept. Store Card	-.14	-.14	.06	.94
Total Banking & Credit	-1.46	-2.82	2.26	4.66
Household Amenities				
Cold Running Water	.18	-.71	.46	.46
Hot Running Water	.14	-.71	.46	.50
Shower or Bathtub	.10	-.69	.47	.47
Indoor Toilet	.19	-.69	.43	.47
Electricity	.08	-.15	.08	.08
Telephone	-.18	-.43	.38	.07
Television	-.03	-.03	.02	.18
Refrigerator	-.03	-.14	.10	.18
V C R	.16	-.09	-.02	.41
Dishwasher	-.06	-.50	.42	-.06
Car or Truck	-.18	-.27	.25	.21
Personal Computer	-.02	.14	-.09	-.02
Three-wheeler	.29	-.15	.01	.01
Motor Bike	.01	.24	-.17	-.13
Snowmobile	.08	-.11	-.01	.59
Canoe	.04	-.05	.03	.04
Total Household Amenities	.75	-4.33	2.81	3.44
Employment and Income				
% Employed Full-time	-.23	-.54	.49	.36
% Employed Part-time	.08	0.	-.06	.31
% Unemployed (-)	.08	.40	-.30	-.30
% Spouses Employed Full-time	-.18	-.44	.30	.91
% Spouses Employed part-time	-.18	-.22	.19	.52
% Spouses Unemployed (-)	.05	.05	-.02	-.25
Personal Income of Respondent	-.16	.19	-.07	-.16
Total Employment and Income	-.39	-1.75	1.26	2.31
Level of Education				
No Formal Schooling (-)	-.16	.31	-.16	-.16
Less than Grade 9 (-)	-.02	.58	-.38	-.42
% Univerity (without cert.)	.45	-.23	.06	-.43
University Degree	-.49	-.44	.38	1.41

% Spouses with no Schooling (-)	-.11	.22	-.11	-.11
% Spouses with Less than G.9 (-)	-.13	.54	-.32	-.36
% Spouses University (no cert.)	-.14	-.07	.09	.20
% Spouses with University Degree	-.34	-.22	.25	.49
Total Level of Education	-.09	-2.60	1.74	2.71
Poverty and Welfare				
% Received Unemp. Insurance (-)	-.03	.23	-.12	-.37
% Received Income Subsidy (-)	.47	.02	-.16	-.27
% Received Social Welfare (-)	-.23	.27	-.16	-.23
Total Poverty and Welfare (-)	-.22	-.52	.44	.86
Household Expenditure				
Rent	-.28	-.44	.25	.62
Food	-.20	.53	-.31	-.28
Clothing	-.28	.16	-.08	.58
Child Care	-.14	-.17	.29	.72
Health Care	1.14	-.18	-.10	.50
Utilities	.14	.33	-.33	.07
Transportation	-.02	.22	-.17	.06
Social and Recreation	.07	.10	-.08	.02
Household Goods	-.13	.02	-.01	.45
Home Upkeep	-.52	.05	0..	.75
Debts and Repayments	.02	-.16	.08	.34
Other Expenditure	-.27	-.38	.23	-.28
Total Cost of Living	.46	-.08	.22	-3.55
Overcrowdedness				
Household Size (-)	-.07	.61	-.42	-.47
No. of persons per room (-)	-.03	.46	-.31	-.51
Total Overcrowdedness	.10	-1.07	.73	.98
Subjective Indicators				
Satisfaction with Town	-.36	-.16	.27	.24
Health facilities	-.44	-.70	.69	.48
Medical Staff	-.30	-.67	.61	.70
Transportation	.04	-.29	.25	-.29
Housing Available	-.37	-.20	.29	.19
Public Services	-.24	-.32	.31	.48
Educational Opportunities	-.12	-.03	.12	.10
Indoor Recreation	-.21	-.46	.42	.09
Outdoor Recreation	-.26	-.60	.44	.68
Quality of Environment	.03	.03	.02	-.47
Job Opportunities	-.09	-.45	.39	.36
Communication System	.10	.24	-.15	-.60
Daycare Facilities	.26	-.62	.45	.81
Senior Citizens Facilities	.07	-.88	.57	.71
Religious Facilities	-.18	-.13	.16	.31

Water Quality	-.27	-.37	.39	.06
Local Government	-.03	-.64	.49	.09
Your Health & Physical Condition	-.04	-.19	.12	.36
Your House	.01	-.51	.34	.53
Your Job	.22	-.48	.27	.19
Your Family Life	-.11	-.11	.11	.01
Your Friendships	.02	-.11	.11	-.13
Amount of Time for Leisure	.01	.07	-.07	.03
Your Standard of Living	-.28	-.27	.26	.46
Safety of the Environment	-.30	-.40	.29	.93
Cost of Living	-.51	.21	.08	-.40
Total Subjective Indicators	-3.34	-8.03	7.24	5.72

D. Appendix 1.4 - Perceived Problems of Life

Perceived Problems of Life in High Prairie

Problem	*% of Responses*
Alcoholism and drugs	15%
Unemployment	12%
Apathy, discrimination and prejudice	11%
Inadequate good housing	7%
Limited shopping facilities	7%
Lack of recreational facilities	7%
Too many people on welfare	4%
Too distant from major centres	4%
Lack of community feeling and co-operation	3%
Inadequate entertainment facilities	3%
Stagnant - no economic growth, no development	3%
Cost of living too high	3%
Air pollution	2%
Inadequate health facilities	2%
Lack of pride in town	2%
Limited career/business opportunities	2%
Unfavourable attitude of Town Council to development	2%
Total	89%

Other problems cited include: inadequate educational opportunities; Too high taxation; No consolidated downtown; Child delinquency; Lack of co-operation between government and local government agencies; Welfare - a disincentive to work; Poor hotel, visitor accommodation.
Source: Field work conducted between December, 1985 and January, 1986.

Problems of Life in Grouard

Problem	*% of Responses*
Lack of recreational facilities	16%
Unemployment	15%
Poor water quality	13%
Lack of community feeling and co-operation	12%
Inadequate good housing	10%
Child delinquency	7%
Uncontrolled vandalism and crime	3%
Too many uncontrolled dogs and cats	3%
No law enforcement	3%
Poor care for Senior Citizens	3%
Too many people shop out of town	2%

Spiritual chaos	2%
Inadequate transportation	2%
Dependency on High Prairie for everything	2%
No economic growth	2%
Total	95%

Source: Field work conducted between December, 1985 and January, 1986.

Problems of Life in Gift Lake

Problem	*% of Responses*
Alcoholism and drug abuse	21%
Unemployment	21%
Inadequate good housing	10%
Lack of recreational facilities	10%
Favouritism of Settlement Council	8%
Uncontrolled vandalism and crime	6%
Lack of running water	6%
Lack of community feeling and co-operation	6%
Too dusty and/or too muddy	4%
Child delinquency	2%
Lack of law enforcement	2%
No daycare	2%
Total	98%

Source: Field work conducted between December, 1985 and January, 1986.

E. Appendix 1.5 - Improving the Quality of Life

What Must Be Done to Improve the Quality of Life in High Prairie

Opinion Expressed	*% of Responses*
Community unity and co-operation	21%
Create more and better-paying jobs	16%
Improve recreational facilities	10%
Town must encourage business development and growth	8%
Improve entertainment facilities	6%
Address alcoholism and drug abuse	6%
Improve housing	5%
Improve and diversify local economy	3%
Develop work programme that will keep people from welfare	3%
Community as a whole must turn to God	3%
Involve community in government	2%
Co-operation among government agencies	2%
Make welfare less easily accessible	2%
Discourage handout policy - welfare	2%
Better transportation to major centres	2%
Clean the town and check air pollution	2%
Total	93%

Source: Field work conducted between December, 1985 and January, 1986

What Must be Done to Improve the Quality of Life in Grouard

Opinion Expressed	*% of Responses*
Community must unite and work together	34%
Set up local government to work for development	14%
Create more and better-paying jobs	11%
Improve recreational facilities	9%
Improve water quality and supply	9%
Improve housing	5%
Expand / Improve local shopping facilities	5%
Stimulate economic growth (government investment)	2%
Selfless, dedicated Council members are needed	2%
Co-operation among government agencies and local organizations	2%
Expand AVC in Grouard, not move it out	2%

Source: Field work conducted between December, 1985 and January, 1986

What Must be Done to Improve the Quality of Life in Gift Lake

Opinion Expressed	*% of Responses*
Improve recreational facilities	13%
Selfless, dedicated Council members are needed	13%
Improve housing	11%
Community unity and co-operation	10%
Create more and better-paying jobs	9%
Pave the road	6%
Expand / Provide local shopping facilities	4%
Better control of vandalism and crime	4%
Improve water quality and supply	4%
Provide daycare	4%
Involve community in Council	4%
Better transportation service	2%
Fairer allocation of housing by Council	2%
Solve the school dropout problem	2%
Allow year-round fishing	2%
Provide street lights	2%
Total	92%

Source: Field work conducted between December, 1985 and January, 1986

F. Appendix 1.6 - Per Capita Monthly Expenditures

Monthly Per Capita Expenditure by Ethnic Groups in $

Item	Indians	Metis	White Canadian	Non-Canadian
Rent	154.1	87.0	242.4	264.6
Food	114.7	101.7	121.4	147.3
Clothing	34.3	29.2	48.1	105.7
Child Care	79.8	52.3	110.4	193.9
Health Care	30.1	6.9	15.6	18.2
Utilities	53.8	48.4	51.5	69.8
Transportation	59.9	50.8	72.7	109.6
Social and Recreation	32.0	26.7	41.1	40.6
Household Goods	28.2	20.0	33.5	40.7
Home Upkeep	14.2	14.6	24.6	70.2
Debts and Repayments	131.5	81.2	150.9	237.8
Other Expenditure	36.6	31.6	243.3	86.1
Total	769.2	540.4	1155.5	1384.2

Per Capita Expenditure by Place of Residence in $

Item	High Prairie	Grouard	Gift Lake
Rent	221.8	118.6	60.9
Food	124.6	99.8	98.2
Clothing	46.4	36.9	32.7
Child Care	105.0	69.3	41.2
Health Care	16.4	8.5	8.6
Utilities	52.9	50.1	49.2
Transportation	73.2	48.7	55.1
Social and Recreation	36.3	37.7	29.0
Household Goods	32.5	27.6	16.1
Home Upkeep	32.0	12.1	8.3
Debts and Repayments	152.9	138.3	53.5
Other Expenditure	195.5	33.7	49.2
Total	1089.5	681.3	502.0