GROWTH CENTRE POLICY AND THE QUALITY OF LIFE*

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Introduction

This paper presents the results of an analysis of intraregional disparities on the frontier of northern Alberta. A centre-periphery framework is employed, the small town of High Prairie, located just west of Lesser Slave Lake, being the region's central place, and the two smaller communities of Grouard and Gift Lake, some 35 kilometres and 90 kilometres respectively from High Prairie, being located in the periphery (Figure 1). These areas were selected because previous work [9] had focused upon the town of Slave Lake at the east end of Lesser Slave Lake, and because of the need to include communities of different population size, native and non-native composition, as well as function and distance apart, in a centre-periphery framework. No other satisfactory alternative communities existed in the region.

The considerable body of literature on growth centres was succinctly analyzed by Moseley in 1974 [14]. Since then academic attention has shifted away from this spatial development policy because of its apparently disappointing results compared to other strategies. The fact still remains that other than locating public and private investments in existing settlements or between them, there are few spatial alternatives. More frequently, the presence of labour and producer,

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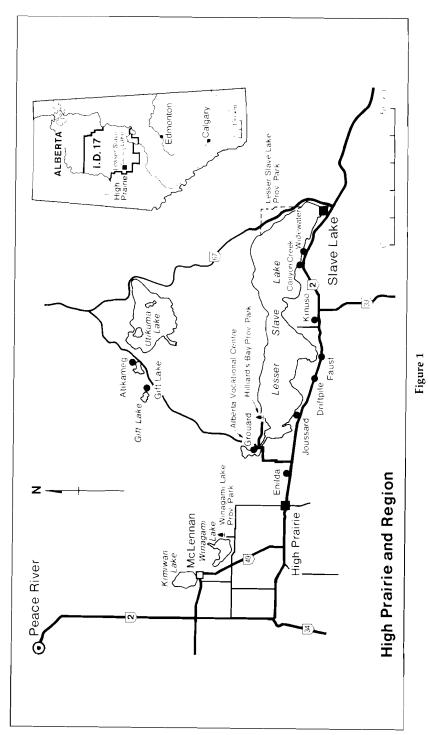
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retail, and other services located in existing settlements attracts business and industrial investments and government expenditure. Pragmatically, therefore, politicians and planners have continued to allocate funds and facilities to settlements, no matter where academic interest has turned. High Prairie has been the recipient of such support since 1970.

The theoretical antecedents for such policies stem from the concepts of "spread" and "backwash" effects coined by Myrdal [15] in describing the impact of development in a place such as a growth centre. While spread effects have been shown to be spatially constrained, people and capital resources are attracted from peripheral regions to centres of development. In the absence of guaranteed incomes for disadvantaged people, there has been a reliance on individual choice with respect to jobs and other benefits arising from concentration of public and private investments in growth centres.

At the end of his book Moseley [14] makes some suggestions for future research, few of which have subsequently been pursued. In particular, he notes that the benefits arising from growth centres have rarely been analyzed in terms of groups such as the hard-core lowincome poor, the long-term unemployed, the long-term resident versus the in-migrant, and different ethnic or racial groups. While benefits can be assessed by income earned or new jobs filled, the fundamental measure is really that of the overall improvement in quality of life attained and enjoyed by people in the growth centre and its hinterland. Indicators other than the above standard measures should be used, therefore, to determine the standard of living objectively as well as subjectively perceived by the residents themselves. This approach was adopted in this study, which was begun in 1984. Such research, coincidentally, has been advocated recently by Savoie [20]. It is noted, however, that a previous study by Knox and Cottam [12] examined the material amenities of residents in the Scottish Highlands as well as their personal satisfaction in order to assess quality of life. As they indicate, the key to assessing the balance of urban and rural life seems to lie in people's affective response to their "objective" circumstances [12:449].

Ironside and Mellor [9], reviewing the impact of growth centre policy on the town of Slave Lake, reported that growth was heavily concentrated in Slave Lake and a few small centres, and inequality within the region appeared to be increasing. Warner [22] too has observed that population, health personnel and resources were draining towards secondary centres in northern Alberta. Furthermore, whereas interregional disparities between northern Alberta and the rest of the province appear to be decreasing, intraregional disparities may have increased with the development of such centres as Fort



HIGH PRAIRIE AND REGION

McMurray, Grande Prairie, Slave Lake and High Prairie. Thus, the quality of life of people is related to their spatial location. In short, it matters where you live.

The Research Problem: High Prairie and its Hinterland — Improvement District (ID) 17

In the past, unemployment has generally been higher in northern Alberta, incomes have been lower, and social problems such as alcoholism and suicide more prolific than in the rest of the province. It is no coincidence that in 1981 about 10 percent of the population of Alberta, but about 40 percent of the native population, were in Census Divisions 12 and 15, which include northeast and northwest Alberta respectively. As one of several institutional efforts to address these problems, the Lesser Slave Lake region was designated a Special Area by the federal and provincial governments in April 1970. One objective of the DREE/Alberta Joint Planning Committee was to provide assistance for the development of High Prairie and Slave Lake as the major growth centres in the central subregion.

Subsequently, in the case of High Prairie, a deliberate policy of locating provincial and federal government agencies established the town as the major centre for public services and jobs in the Lesser Slave Lake region. This diversified its economic base as a central place for the surrounding farming area and its sawmilling and transportation activities. In 1985, High Prairie was a town of 2,580 people [16] serving a region with a population of 15,000.

To put the growth of High Prairie relative to its hinterland into perspective, statistical data on levels of education, income, and unemployment, for 1971, 1976, and 1981, are presented (Table 1). The conditions shown by the 1971 census data represent those prior to the concentration of public investment in High Prairie and its effects. Data for ID17 are used because they were not available for Gift Lake or Grouard. An examination of Table 1 reveals that while there has been a drastic improvement in the lower levels of education for ID17, leading to a decrease in the proportion of people with less than Grade 9 education from 52 percent in 1971 to less than 35 percent in 1981, a similar improvement is not seen at the higher levels of education. An average change of 6.3 percent for High Prairie contrasts with 9.0 percent for ID17 in this category. However, at any one time ID17 had about one and a half times the proportion of people of High Prairie with less than Grade 9 education. On the other hand, High Prairie has a higher percentage increase in those gaining university degrees, averaging 3.1 percent every five years, compared to 1.2 percent for ID17. By 1981, High Prairie had three times as many people with university degrees as did ID17. While the change could be accounted for by the differential rate of migration of people into the region, if the holding of a university degree is a criterion for securing a high-paying job then High Prairie residents had advantages over those in ID17.

Table 1
EDUCATION, EMPLOYMENT AND INCOME, 1971, 1976 and 1981

Item	High Prairie			ID17_		
	1971	1976	1981	1971	1976	1981
Level of Education (%)						
Less than Grade 9	33.3	30.5	20.8	52.3	42.0	34.4
Grade 9 - 13	40.5	41.5	47.0	34.3	38.6	42.6
PostSec (Non-univ.)	14.7	13.5	17.1	8.9	12.1	16.1
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	\$2,676	_	\$11,715	\$2,793	_	\$ 6,603

⁻ Not available.

Source: Statistics Canada, Census Reports, 1971, 1976, and 1981.

There was little difference in unemployment rates between High Prairie and ID17 in 1971, yet in 1981 male unemployment in the latter was twice that in the former. Female unemployment shows even more dramatic differences. Whereas unemployment in ID17 in 1971 was just under 1.1 times that existing in High Prairie, it was four times as much in 1981. An examination of total personal incomes for 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 ID17 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 income for females in ID17 was actually about \$100 higher than for females 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 ID17 was 64 percent that of males in High Prairie, but in 1981 it had risen to 74 percent. The opposite was true for female incomes. While average personal income for females in 1971 in ID17 was actually 104 percent that of High Prairie, in 1981 it was only 56 percent.

The questions that spring to mind as a consequence of High Prairie's growth are: To what extent did residents of communities in its hinterland benefit from the new jobs created? Despite the differences in income and employment, do people in the smaller communities enjoy the same standard of household amenities and access to facilities as those in High Prairie? What is the degree of satisfaction expressed by residents of the three communities with their quality of life? How has this level of satisfaction changed with time to reflect the effects of government policy for the region?

To answer these questions (particularly the first) is difficult without analyzing who took the jobs at the time of their provision fifteen years ago, and where they came from. Thus, the distribution of benefits between people and places can only be approached indirectly. The approach adopted in this study, therefore, was to review comparatively the objective conditions of life in the growth centre of High Prairie and two smaller hinterland communities. In recognition of the fact that what contributes to the quality of life of people is ultimately determined by them, and also that people's notion of quality of life is thoroughly infused with normative values concerning what is good and right in life [17;8;2], a comprehensive set of indicators was used based on the Alberta Bureau of Statistics' study on what Albertans, including residents of High Prairie, considered to be important components of a good quality of life [1]. In addition, Atkinson's conclusions on what Canadians considered to be important components of the "good life" [3;4] were included. The conditions examined included personal incomes of respondents, employment status of respondents and spouses, household income, household sizes, social assistance recipients, access to bank credit, and household amenities. The respondents' subjective responses to public and private life components were also examined.

Following a pretest of the questionnaire, a random selection of respondents was undertaken using the list of customers of Alberta Power, the most comprehensive sampling base available. From 1,139 subscribing households, a random sample of 200 was drawn. Out of the 200, the heads of 166 households were interviewed, resulting in an overall response rate of 83 percent [18;41-52]. This included 100 from High Prairie (14.3 percent of the total number of subscribing households in the town), 35 from Grouard (31 percent of households), and 31 from Gift Lake (28.8 percent of households).

Three major social groups were identified in the study area: Treaty Indians, Métis, and Whites. All who did not fit into these categories were classified as Other, and all of these resided in High Prairie. Sixty-six percent of the High Prairie sample were Whites, 16 percent were Treaty Indians and 10 percent were Métis. In Grouard, 32 percent were Treaty Indians, 50 percent were Métis and the rest, Whites. Most (94 percent) of the residents of Gift Lake were Métis.

The Results

An important indicator of the quality of life is income, because it determines access to goods and services desired by a consumer society. Table 2 shows the level of income of respondents by place of residence. Gift Lake residents have a mean income less than half that of High Prairie residents, while that of Grouard residents is one and a half times that of Gift Lake. Sixty-three percent of respondents from Gift Lake earned less than \$10,000 annually, compared to 12 percent in Grouard and 12 percent in High Prairie. Conversely, about 48 percent of respondents from High Prairie had incomes higher than \$25,000, from Grouard, 24 percent, and from Gift Lake, only 10 percent. Ninety percent of respondents from Gift Lake earned less than \$20,000.

Table 2
ANNUAL PERSONAL INCOME BY PLACE OF RESIDENCE (%)

Annual Income	High Prairie	Grouard	Gift Lake
Less than \$5,000	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	\$22,299	\$14,270

Source: Field work conducted between December 1985 and January 1986

Total household incomes followed a similar pattern. They were 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. Only 15 percent were found in this category in Grouard, while High Prairie, as expected, had 12.9 percent. In terms of higher incomes, only one household in the Gift Lake sample (3.2 percent) earned more than \$50,000, while 14 percent were found in Grouard, and 26 percent in High Prairie. The evidence clearly indicates a sharp income gradient between High Prairie and Gift Lake.

The lowest income levels are also exacerbated in the smaller centres, Grouard and Gift Lake, because they tend to have larger household sizes (Table 3). The average of 5.8 for Gift Lake is extremely high compared to 2.9 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.

Table 3
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
v - 9	5.1	20.0	41.9
10 and over	0.0	0.0	12.9
Average household size	2.9	4.1	5.8
Average Household Size	N=98	N=35	N=31

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

If income reflects the level of educational attainment, then this relationship is confirmed by Table 4, which shows that 64.5 percent of the respondents from Gift Lake had less than Grade 9 education while respondents from High Prairie had 5 percent in the same category and those from Grouard, 11.4 percent. Conversely, only 3 percent of respondents in Gift Lake had some college or university education without a degree, compared to 16 percent in High Prairie and 25 percent in Grouard. The number of university degree holders seemed to vary directly with size of town. It was highest in High Prairie (27 percent), followed by Grouard (11.4 percent), and Gift Lake (3.2 percent).

The relatively high educational level of Grouard respondents may be explained by the presence of the Alberta Vocational Centre (AVC), higher educational qualifications of its staff and graduates, and the educational up-grading programs offered. There appears to be little impact from AVC on Gift Lake. The high educational levels for High Prairie were expected because of its many government employees with higher educational qualifications.

Table 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 cert.)	14.0	25.7	12.9
Grade 9 - 12 (with cert.)	22.0	2.9	6.5
Trades certificate or diploma	7.0	5.7	9.7
Other non-university education (without cert.)	1.0	5.7	0.0
Other non-university education (with cert.)	8.0	11.4	0.0
College or University (without deg.)	16.0	25.7	3.2
University degree	17.0	11.4	3.2
Total	100	100	100
	N = 100	N=35	N=31

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

With regard to employment status, there is a marked contrast between High Prairie and Gift Lake in full-time jobs (84 versus 32 percent of respondents) and unemployed (3 versus 26 percent). Grouard's conditions were more like High Prairie. Part-time employment showed small differences, and seasonal work was highest in Gift Lake (Table 5).

Table 5
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.

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, the employment status of the spouse of the respondent was also examined. Advantageous access to jobs in High Prairie was clearly evident. About 63 percent of spouses in High Prairie were employed full-time as compared to 57 percent in Grouard and only 28 percent in Gift Lake.

Do similar proportions of respondents in the three communities depend on income supplements? To answer this question, 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 therefore be an indication of the relative affluence or poverty of its people. The findings are presented in Table 6.

Table 6
SOCIAL ASSISTANCE RECIPIENTS BY TOWN (%)

Supplement Type	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
medine subsidy	N=99	N=35	N=31

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

While less than 10 percent in High Prairie indicated that they, or a member of their household, had received Unemployment Insurance during the past year, and Grouard reported 11 percent, in Gift Lake it was 23 percent. The seasonal nature of most jobs in Gift Lake is probably the reason for this. Social welfare was obtained by only 1 percent of respondents in High Prairie and 3 percent in Grouard, but again Gift Lake's conditions were reflected by 19 percent being recipients. Income subsidy was provided to 5 percent of the respondents from High Prairie, 14 percent from Grouard, and 3 percent from Gift Lake. The relatively large size of Grouard families may be an explanation. The incidence of poverty is, therefore, highest in Gift Lake, moderate in Grouard and lowest in High Prairie.

Do residents of the three communities have similar access to banking and credit? The results indicate that this access is not equitably distributed (Table 7). Access to banking and credit seems to vary with the size of community, and inversely with distance from High Prairie. Eighty-four percent of respondents in High Prairie had savings

accounts and 85 percent had chequing accounts. In contrast, 69 percent of Grouard respondents had savings accounts, with about 66 percent having chequing accounts. In Gift Lake, 32 percent had saving accounts, while about 36 percent had chequing accounts. Seventy-two percent of the High Prairie respondents had both, as compared to 46 percent in Grouard and 10 percent in Gift lake. Credit cards were also more common in High Prairie than in Grouard or Gift Lake.

Table 7
BANKING AND CREDIT 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 card	14.0	6.0	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.

What these data suggest is that whereas High Prairie respondents had reasonably secure incomes and maintained bank accounts, many in Gift Lake did not maintain bank accounts, probably because they lack a secure income. Residents of Gift Lake are, therefore, not only limited in access to jobs, they are limited in access to credit.

Amenities Available to Households

The quality of life that a person enjoys can be gauged fairly accurately by the amenities available for the private use of their household. Table 8 presents the relative pattern of affluence or deprivation in terms of households. Fundamental amenities such as hot and cold running water, indoor plumbing and toilets, and electricity were available to most households in High Prairie and Grouard, but were present in decidedly fewer households in Gift Lake. The relative lack of private telephones in Grouard and Gift Lake had a wider impact, because public facilities do not exist in these communities. Most households had refrigerators and television sets. Video cassette recorders, as a more recent material acquisition, were popular for home entertainment. It was found that 41 percent of the respondents in High Prairie owned a VCR, but only 17 percent in Grouard and 11 percent in Gift Lake.

Likewise, fewer households in the smaller towns had dishwashers. Again an amenity gradient is observed, with 38 percent in High Prairie, 17 percent in Grouard and 7 percent in Gift Lake owning one. The higher income, better educated residents of High Prairie also had purchased the most personal computers.

Table 8
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
Motor bike	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
Canoerboat	N=100	N=35	N=31

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

In the absence of public transport, private transport is fundamental to overcoming problems of accessibility. Seventy-nine percent of households in High Prairie owned a car or truck, and this compares well with 88 percent in Grouard and 68 percent in Gift Lake. The relatively high level of ownership in Grouard and Gift Lake is understandable, because residents need private transport to conduct basic everyday transactions. While motor bikes seem to be unpopular in the study region, probably because of climate and road surface conditions, snowmobiles and three-wheelers (all terrain vehicles), because of their utility for trapping, hunting and fishing activities, are more common, particularly in Gift Lake.

Canoes and boats are used for recreation and for work. Twenty percent of the surveyed households in Grouard owned canoes or boats, while in High Prairie the proportion was 22 percent. Gift Lake had a relatively high 32 percent, which is probably explained by the fishing and hunting occupations of the Métis.

In summary, large disparities exist in the region with respect to access to jobs, income, banking and credit. Differences also exist in terms of the distribution of poverty, low incomes coinciding with large household sizes, and consequently higher expenditures. In terms of amenities and material possessions, similar differences between the communities are observed, producing a quality of life gradient from the high values for High Prairie, to the lows for Gift Lake.

Subjective Evaluation of Life Components

How do respondents perceive the quality of life available to them, recognizing that objective indicators alone are not enough to adequately describe or quantify the quality of life of a place [8;6]? As Cutter [7] 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."

Respondents' evaluation of various components of life in their communities is presented in Table 9. A 5-point scale, ranging from 1 (Very Dissatisfied) to 5 (Very Satisfied) was used. The methodology, well established by Campbell and Converse [5], Andrews and Withey [2], Kennedy et al. [11], and others is reported elsewhere [18;19]. Respondents were asked to evaluated specified components of their lives and to express how much satisfaction they derived from them. Respondents were not asked to evaluate their quality of life in isolation, but how life was hindered or enhanced by the place of residence. As McCall [13] has argued, quality of life applies to life in a certain society or region. Thus it is not the aggregated happiness, but rather the degree to which the necessary conditions for happiness in a given place have been obtained [13:235].

On the whole, satisfaction was generally higher on the personal variables (physical health, family life, job, standard of living, and so on), with Mean Satisfaction Index¹ (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 [6], Andrews and Withey [2], and Kennedy *et al.* [10;11], and partially with Knox and Cottam [12].

¹This 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.* [11:23].

Using the test for difference between means, the MSI for High Prairie was compared with those for Grouard and Gift Lake. The significance levels obtained are indicated in Table 9.

Table 9 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

^{*} Difference significant at .05.

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

Overall, life in High Prairie is more satisfactory than in the smaller communities. On most of the components, including health, transportation, recreational facilities, education, daycare, water, and safety of the environment, High Prairie residents were the most satisfied. On the other hand, Gift Lake respondents were the most dissatisfied. Grouard residents were more satisfied than Gift Lake on almost all components except water quality, cost of living, and quality of local government.

On the personal life components (Table 10), High Prairie respondents were again more satisfied than those in Gift Lake and Grouard on all items except amount of leisure time. Grouard respondents were more satisfied than Gift Lake on most items except family life, friendships, and leisure time. The subjective evaluations of respondents, therefore, give credence to the objective indicators presented and confirm the existence of substantial differences in the communities' quality of life.

Table 10 SATISFACTION ON PERSONAL LIFE COMPONENTS - MSI

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

^{*} Significant at .05.

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

How do respondents perceive the overall quality of their lives over the years in the light of these facts? Are conditions becoming better or worse? To answer this, respondents were asked the following question: "Compared to 5 and 10 years ago, how would you describe the present quality of your life?" On the whole, most respondents perceived their quality of life to have improved compared to 10 years ago. as well as when compared to 5 years ago. This was similar to the results of Knox and Cottam. When the percentage of people who stated that their lives had actually become worse was subtracted from those whose lives were better, the results were different. The value for High Prairie for both 10 years ago and 5 years ago was 54 percent. For Grouard, however, while it was 62 percent for ten years ago, it fell to 27 percent for 5 years ago. In Gift Lake, it was 61 percent and 42 percent respectively. Thus, while the majority of the people perceive conditions to have improved now compared to 1975, they appear to be worse when compared to 1980.

When asked the question: "Have you always lived here?", 88 percent in High Prairie replied in the negative, compared to 63 percent in Grouard and 64 percent in Gift Lake. About 52 percent moved to High Prairie because of job opportunities, 6.5 percent because of job transfer, while about 8 percent moved because of business opportunities, a total of about 65 percent in these categories. In Grouard, 50 percent had moved because of job-related reasons, while 4.2 percent moved because of business opportunities. In contrast, the major reasons underlying movement to Gift Lake were family related, 26 percent; marriage, 22 percent; and only 17 percent, job opportunity. It

^{**} Significant at .01.

^{**} Significant at .01.

should also be noted that 13 percent moved in order to enjoy the rights of residence in the settlement, namely free fishing and hunting.

Of those who previously lived outside High Prairie (90), 86 percent had full-time jobs, and 4 percent had part-time jobs. Of the number who had permanent jobs (77), 25 percent were from a Canadian province other than Alberta, 23 percent were from Edmonton or Calgary, 4 percent were from outside Canada, 26 percent were from some other town or city in Alberta, and only 8.5 percent (6) were from the High Prairie region. The implication is that the incidence of benefits from jobs created in High Prairie did not extend to the region. In fact, taking into consideration the 83 people in the sample who had full-time employment in High Prairie, it means that less than 12 percent of the residents born and raised in the region are benefitting by way of full-time employment in High Prairie.2 The beneficiaries of public investment in High Prairie are, therefore, not the poor, native people within the hinterland or in High Prairie itself, but the more mobile, better educated non-natives. Native respondents, almost constantly, had larger household and family sizes, higher unemployment, lower incomes, fewer household amenities, and greater dependence on income subsidies and were generally more dissatisfied with the quality of their lives.

Aside from problems of geographical and occupational accessibility hindering residents from the periphery filling jobs created in growth centres, migration from the hinterland to the growth centre may be limited further when place preference and kinship ties rank high in the social values of the hinterland population. This seems to be very much the case with native people in the region. Only 2 percent of High Prairie workers lives in Grouard. However 7 percent of the Grouard workers in the sample lived in High Prairie. No resident of Gift Lake worked in High Prairie, but 7 percent worked in Grouard and another 7 percent in Wabasca.

Conclusion

The data presented above demonstrate the inappropriateness of areatargetting strategies for the development of backward regions. The rich in the backward community get richer, while the poor get poorer. High Prairie has had dramatic improvements in access to jobs, level of education, personal income, and an overall improvement in the objective conditions of life. This is reflected in the high level of satisfaction expressed by its residents with the quality of their lives. However, the

success story is spatially limited to High Prairie and hardly extends to those communities within its hinterland such as Gift Lake and Grouard. Interregional disparities between the High Prairie region and the rest of Alberta may have lessened, but intraregional disparities have definitely not lessened. In fact, the data suggest that they have worsened. The major beneficiaries of growth in High Prairie, therefore, are the residents of the town of High Prairie, not those in its hinterland.

Growth in the region also appears to be less beneficial to the native community than to non-natives. With low education and job skills, it becomes difficult for natives to participate in the high-paying jobs that have been created as a result of the policy. The relatively high qualifications required for most government jobs puts them at a disadvantage compared to the better-educated non-natives. Consequently, most of them remain unemployed or in seasonal employment, and as a result have lower incomes and a less satisfactory quality of life.

The empirical results of this case study add to the sparse evidence based on surprisingly few empirical studies of the results of regional development in Canada, particularly in western Canada. The results also confirm earlier work by Ironside and Mellor [9] on Slave Lake and work elsewhere [14] on the restricted impact, both spatially and to different groups of people, of growth centre policies. Focusing on the quality of life approach, this study represents one of the few attempts to assess regional disparities in a way that goes beyond the standard income and employment indicators. Data are presented for several material indicators that are not usually covered in other studies. Quality-of-life indicators help to widen the measurement of wellbeing, which is, after all, the primary objective of public regional development policies.

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²This includes the difference between 83 and 77 (6), and the number of people with full-time jobs from the vicinity (6).

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