

'The Bright Lights of the City': Intra-Regional Migration and the Challenge for Resource-Dependent Towns

Greg Halseth
University of Northern
British Columbia*

Lana Sullivan
BC Center of Excellence
for Women's Health**

The migration of households from rural and small town places to larger urban centers has been a dominant migration theme in North America since the start of the twentieth century. Even at a regional scale, rural and small town population loss was closely connected to the movement of households to urban service centers. Accompanying this population loss was a concomitant loss of service and functions that threatened the viability of these rural and small town places. The settlement pattern in northern British Columbia is one of dispersed resource towns together with a few regional urban centers. Just as resource industries have been experiencing a restructuring of production, so too have resource town migration patterns been undergoing a restructuring. An emerging phenomenon has workers moving to regional urban centers while commuting back to small resource towns for work. The purpose of this research was to examine the scale of intra-regional migration and extra-community commuting in a forestry dependent small town near a large regional center. Using a survey of mill employees with the three major forest products firms in Mackenzie, BC, 'mover' and 'at-risk' populations were identified. At present, the scale of extra-community commuting is approximately 10 percent for our sample. While this may not seem particularly high, it foreshadows a problem, as the 'at-risk' population is a significant component of our respondents. A number of reasons are identified in the literature as to why resource industry employees may leave their town. Some of the common push factors are stress over economic uncertainty and instability in resource industries, the vulnerability of local employment, and concern over a lack of services. Many respondents identified these issues as important in their own dissatisfaction with living or working in Mackenzie. The paper argues that a better understanding of shifting migration behaviors will inform the literature on rural and small town restructuring.

Keywords: *Small towns, resource dependent, intra-regional migration, employment commuting*

With the exception of a dispersed urban ecumene along its southern border most of

* Geography Program, University of Northern British Columbia, Prince George, BC, Canada V2N 4Z9. E-mail: halseth@unbc.ca

** Rural and Remote Research Associate, British Columbia Center of Excellence for Women's Health, E-311-4500 Oak Street, Vancouver, BC, Canada V6H 3N1. E-mail: sullivan@cw.bc.ca

With the exception of a dispersed urban ecumene along its southern border most of Canada's territory is comprised of a resource hinterland. This hinterland has experienced a succession of resource-based economic activities ranging from fur, to gold and minerals, to fishing and farming, to forestry and hydroelectric developments. Over time, these resource activities have created a regional differentiation of life, livelihoods, and landscapes across the country. In northern British Columbia (BC), the settlement pattern is one of dispersed small towns together with a few regional centers. Forestry is the dominant resource industry and many people are attracted to northern towns for work in this industry. However, limited services and employment diversity in small forestry-dependent towns can create an attraction to regional centers. In this paper, we will illustrate an aspect of intra-regional migration from small resource towns to regional centers even while at least one household member maintains employment in the resource town.

The paper is comprised of five parts. Following this introduction, a review of the migration literature will set the stage for household moves within a regional setting comprised of small single-industry resource-dependent towns and a much larger regional service center. The third part includes a description of the survey methodology and the town where the research was undertaken. The fourth part includes the analysis of the survey results. Given our focus upon households, this analysis examines their characteristics and migration motivations. While the decisions and actions of resource firms are important in resource town restructuring, the firm is not the focus of our investigation. The fifth part of the paper includes a discussion of the implications of these results for resource town sustainability. While the data may be from a particular place, the paper speaks to a larger international issue of single-industry towns and their survival *vis-à-vis* the concentration of economic and other activities in regional centers.

MIGRATION

The movement of households from small towns to urban centers has been a dominant migration theme in North America since the start of the twentieth century. Even at a regional scale, population loss in rural and small town places was closely connected with the movement of households to larger centers (Stabler and Olfert, 1992; 1996). For this paper, we shall refer to this population movement from rural and small town places to regional urban centers as 'intra-regional migration'. Accompanying this population loss was a concomitant loss of services and functions in these rural and small town places. Through most of this period, this intra-regional migration was spurred by the loss of rural employment opportunities, such as through the mechanization of farm work, and the rise of employment opportunities in urban-based manufacturing and management functions. This is not, however, always the case. The amenities of regional service centers also attract households that maintain an employment connection in rural or small town places. In this case, workers commute from an urban place of residence to jobs in an adjacent small town or rural area. For this paper,

we refer to this process of commuting back to a rural or small town place for work as 'extra-community commuting'. This extra-community commuting mirrors the behaviors widely described with respect to metropolitan suburbs, where households often live and work in quite different jurisdictions (Yeates, 1990). However, it marks a departure from other metropolitan commuting behaviors where rural and small town residents on the fringe commute into the urban area for work (Evenden and Walker, 1993; Smith, 2000).

The story of intra-regional migration and extra-community commuting is familiar to many towns across Canada's resource frontier. Recalling the impacts in a small sawmill town along the Fraser River, a long time resident recalled:

[s]ome people worked equipment, and others had various jobs within the sawmill. As they lived in an isolated town, it took them a long time to go to the city, but people still went. They went for shopping, for a treat, or to see a movie. Then the road was fixed up, then paved, and you could get to town much quicker. As there wasn't much to do in the sawmill town, not a lot of stores, and the schooling was just elementary, more and more people decided to live in a big town and sawmill workers would just commute. The big mill is still there but the town has disappeared. (personal communication, 2000)

Not only are there attractions to larger urban centers, but shift work in resource industries can create an additional incentive by allowing workers to commute to work on a four day, or some similar weekly, rotational basis.

Issues of intra-regional migration and extra-community commuting remain important ones for rural and small town Canada. They are especially important in resource hinterland regions where limited alternatives for economic development leave small communities vulnerable. One key to community resiliency is the ability to hold residents and have them invest their time in local activities and re-circulate their employment earnings through local businesses. Intra-regional migration and extra-community commuting disrupts these contributions and weakens local resiliency, the result of which can be significant implications for rural and small town sustainability. To set a context for the case study data, we will introduce two sets of issues from the literature. The first concerns the general topic of population migration with special attention to household decision-making. The second set concerns specific migration issues identified for resource-dependent towns. Before introducing these migration literatures, however, this part of the paper begins with an overview of single-industry resource-dependent towns.

Single-Industry Towns

Single-industry towns are very important to the geographic makeup of BC and Canada (Robinson, 1962; Himelfarb, 1976; Bowles, 1992). They serve as economic

engines, as well as homes and communities. Not only does a quarter of the Canadian population live in such places, but the resources extracted there provide the raw materials which sustain the economies of our urban centers. Yet, almost all decisions affecting resource hinterlands are directed from far-off metropolitan centers (Bradbury, 1987). The resulting pervasive sense of powerlessness is coupled with the uncertainty inherent with a narrow economic base. As such, resource-dependent towns 'are especially vulnerable' (Everitt and Gill, 1993:256).

Lucas' (1971) classic study *Minetown, Milltown, Railtown*, identified some key characteristics of single-industry towns. These include 'isolation', 'economic dependence', and an 'unbalanced' labor force. Porteous (1987) focused upon single-industry towns in British Columbia and identified four characteristics. First, the community is typically isolated. Second, the community most often has a very small population. Third, a single company or industry typically provides most of the basic sector employment. Lastly, the companies are expected to provide the bulk of the employment, houses, and services for residents. More recently, Randall and Ironside (1996) suggest that these characteristics are not static and must be interpreted depending on the community. They also suggest that 'despite inevitable booms and busts facing these communities, the population and labor market are extremely resilient to change' (Randall and Ironside, 1996:23). Against this resiliency, however, each of the characteristics which define these towns reinforces a local potential for economic and social vulnerability (Barnes and Hayter, 1994).

Why People Move

Perceptions about a place, and how that place meets the needs of the household, influence the level of satisfaction residents have with their community and can motivate people to move. Causes of stress which might push people to move, and factors which might hold people in place, have been well identified. Rossi's (1980) classic work on 'Why Families Move' describes life cycle stage and vital processes such as births, deaths, marriages, and divorces as critical triggers affecting household mobility and migration behavior. Rossi argues that residential mobility is mainly a product of households trying to meet their particular housing needs. Satisfaction with the size, choice, and quality of dwellings in a housing market is important. Tkocz and Kirstensen (1994) update some of Rossi's life cycle ideas and point out that women and men have very different migration and commuting patterns. Women typically adjust their commuting patterns depending on their life cycle, and once children are introduced it often becomes the woman's role to include them into her daily routine and commute. In resource industries, shift work patterns not only reinforce a gendered construction of work but further concentrate household maintenance with women (Rose and Villemaire, 1997; Preston et al., 2000).

Shift work has additional implications for household mobility patterns. Shift patterns in resource towns (such as four days on and four days off) and in remote work camps (such as 2 weeks on and 2 weeks off) provide ample opportunity for workers

to get away from the resource industry (Storey and Shrimpton, 1989; Preston et al., 2000; Halseth and Sullivan, 2002). In such cases it is possible to maintain a house in a distant urban center while sharing an apartment close to work with several other workers who are also engaged in commuting.

In terms of factors which would hold people in a town or neighborhood, Knox (1995) argues that people are affected by subjective factors such as the desire to improve their quality of life. For Knox, emotional attachment to place, and to the people living in that place, are as important as a household's need for space. In retaining residents, town planners have recognized the need to provide a diverse range of well-designed housing and to provide the amenities and community infrastructure to develop an attachment to place. These two factors have been widely applied in efforts to reduce transience in single-industry towns (Berry et al., 1975; Veit and Associates, 1978; IBI Group, 1980; Barton, 1999).

Regardless of the push or pull factors encountered, households must still weigh the potential impacts and implications for the household. Brown and Moore (1970) focus on this decision-making aspect of migration motivated by stresses in the household's environment. Their model includes a two-stage process, where the first involves a decision on whether or not to move and the second involves a decision about where to move. Two types of stress, internal and external, prompt households to begin the decision-making process. Internal stress is often associated with life cycle changes and space or facility needs while external stress occurs from changes within the local environment such as neighborhood characteristics or the location of employment opportunities.

To the migration debate, Clark (1986) adds that it is the net benefit to the household that may determine whether the choice is made to proceed through the entire decision-making process. Migration is thus seen as an investment in the household's human capital and it is 'net family gain rather than net personal gain... which motivates migration' (Mincer, 1978:750). Norton (1998) discusses the phenomena of push and pull migration factors in the evaluation of household net benefit. These push-pull factors can be related to household, economic, political, and environmental issues. For example, the economic pull of high wages associated with forestry industry work may bring residents into a small town but the lack of employment options for a spouse may create an economic push. Household mobility and migration behavior is complex and there are still many questions about whether such actions meet the needs of households (Moore and Rosenberg, 1993). There is no simple calculus of pluses and minuses that determines migration, instead, as Lee (1966) argues, it is how a household adjusts to changes in life cycle stage or other factors which influences decisions to move.

Push and pull factors are also strongly linked to community satisfaction. Presaging Knox's arguments, Lewis (1979) suggested that if an individual is happy within his/her town, despite the enticing pull factors of another town, he/she will not migrate. Conversely, if an individual is unhappy then it will take only a relatively little push before he/she decides to move. People's subjective interpretation of their quality of

life plays a significant role in the decision-making process to stay in, or move out of, a town (Bowles and Beesley, 1991). Such subjective quality of life indicators are not stagnant. They change over time. One recent trend is for urban residents to migrate to small towns or rural areas to live (Boyle and Halfacree, 1998). They are attracted to such environments by the perception of these places as being quiet, family environments, with less pollution and less crime, and a more relaxed way of life (Field, 1988; Marsden et al., 1990; Davies and Yeates, 1991). Yet, the availability of high quality transportation networks allows both 'exurban' settlers and rural residents to commute to jobs in the metropolitan core (Taaffe et al., 1980; Mitchelson and Fisher, 1987; Stabler and Olfert, 1996). This sometimes tumultuous aspect of rural and small town migration has again raised the issue of resident retention, and whether quality of life and the attractiveness (or pull) of the rural community is stronger than any dissatisfaction (or push) with respect to the limited range of local employment, shopping, or services (Brown and Wardwell, 1980). This paper is interested in a different orientation to this migration pattern—when small town residents move to the urban center and commute back to the small town for work.

Although there may be general sets of push and pull factors which affect migration patterns, some types of people are more likely to migrate than others. Like community satisfaction, the mobility of these different groups is a reflection of the way households balance long term decisions such as changing residence locations versus more short term issues such as commuting for work, services, or other needs. For example, Everitt and Gfellner (1996) studied the migration of elderly residents in rural Manitoba and found a preference for remaining in their local communities regardless of how deficient these places may be in terms of services and amenities. This attachment to place is built over time creating bonds which have a strong hold on residents. Similarly, Green and Meyer (1997) suggest that in resource-dependent towns, people in their 30s and 40s are most likely to migrate, or at least commute, beyond their town because they have not yet built up such an intense attachment to place. High amounts of social involvement within the community (Nickels et al., 1976), such as through volunteering in community groups which provide a range of services, activities, and facilities to the community (Bruce et al., 1999), is just one of the many ways such attachment to place is constructed.

Migration in Single-Industry Towns

Migration in single-industry resource-dependent towns differs in some ways from general migration patterns. Field (1988) found that isolation, climate, and lack of services pushed people to migrate to larger urban centers. In addition, Parson (1991–92) argued that resource towns are particularly vulnerable to changing economic conditions and may decline quickly if resource extraction ceases (Bradbury and St.-Martin, 1983). As a result, high rates of population turnover are characteristic of these towns as people arrive in response to lucrative opportunities, stay a few years, and then move on.

Krahn and Gartrell (1981:2) studied residential mobility in single-industry towns and argued that 'the pull of migration is the prospect of upward social mobility, of being better off by moving elsewhere than by staying put'. In these towns, higher than average incomes and good fringe benefits create a 'pull' attraction. In contrast, there are also sets of 'push' factors. Pinfield and Etherington (1982) investigated three coal mining towns in the East Kootenay region of BC and identified three sets of push factors. Job related factors unique to single-industry towns include the likelihood of being laid off and the regularity of strikes, lockouts, or work shortages. Some community-related factors included lack of housing availability, isolation, and climate. Finally, residents reportedly felt their living costs were too high and that shopping, entertainment, and public transportation were all inadequate and resulted in them leaving the towns in search of better facilities and services. (For similar studies, please see Matthiasson (1971) for Fort McMurray, Alberta, and Nickels et al. (1976) for Lynn Lake, Manitoba.)

A recent study by Halseth (1999) reported that people are attracted to these towns 'for the work'. Yet, it is also clear that not all of these people stay (Halseth, 1999; Hayter, 1979). Despite the wage incentive, other aspects of resource town life, including limited employment options for spouses, may contribute to re-evaluations of net household benefits in advance of a migration decision. In this case, intra-regional migration to an urban center while the resource industry employee takes up a practice of extra-community commuting may resolve some of the tensions in calculating net household benefits. Such moves, if they should become widespread, would have significant implications for the sustainability of single-industry towns within the resource hinterland.

Intra-regional migration and extra-community commuting is becoming an increasingly important issue in resource hinterlands as the structure of resource industry work is changing (Barnes and Hayter, 1997; Mackenzie and Norcliffe, 1997) and with it are changing the dynamics of resource town migration. One of the key trends has been the decoupling of home and work (Miron, 1988). Bone (1992) examines this decoupling with specific reference to 'fly-in/fly-out' mining operations in northern Saskatchewan (see also Gagnon, 1992; Keyes, 1992; McTiernan, 1999). In this case, the employee and his/her family typically live in one of the urban centers in the southern part of the province. As part of a weekly or bi-weekly routine, the employee is flown to the mine site for an intense period of work marked by long shifts and accommodation in a work camp. At the end of that work period, the employee is flown back to a southern center. The wages earned at the northern mine are spent in distant southern towns and cities.

Similarly, Storey and Shrimpton (1989) look at the process of 'long distance labor commuting' in the Canadian mining industry.¹ This includes not just 'fly-in/fly-out' options, but a range of other commuting mechanisms as well. Long distance labor commuting has been represented as an attractive alternative for companies as it relieves them of the substantial costs of building and operating resource towns which might have only a limited life span. It can also reduce the environmental disruption

and costs of resource development in remote or sensitive locations. Long distance labor commuting has also been represented as attractive to resource industry employees. In this case, workers' families typically live in larger, more diverse, urban locations and thus have access to a wider range of social, cultural, educational and recreational amenities. Spouses and children also have access to a wider range of employment options and choices.

But long distance labor commuting also carries with it potentially negative social, environmental, and economic implications (Bone, 1992; McAllister and Alexander, 1997). Included among these is the limited use of local labor, especially native labor, in hinterland areas where a trained workforce is brought in from afar to work the operations. As well, limited economic spin off benefits accrue to the hinterland region where the resource extraction activity is occurring (Storey and Shrimpton, 1989). Such economic benefits could include the purchase of equipment, materials, and supplies by the industry and the spending of wages by labor. As the source of wealth generation, the resource hinterland sees few benefits through long distance labor commuting.

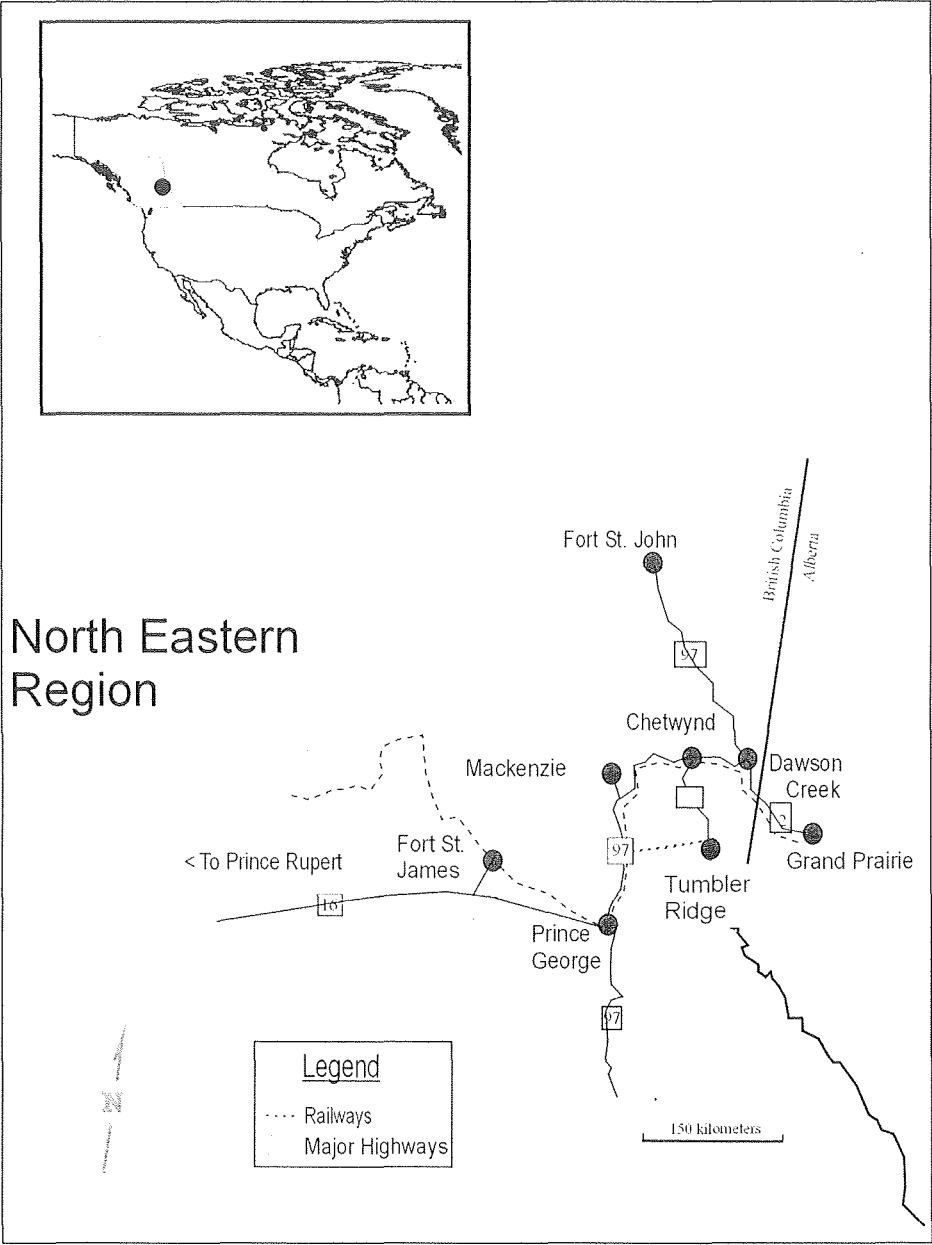
The balancing of costs and benefits associated with long distance labor commuting has been charted across a range of international contexts (Jackson, 1987; Lewis et al., 1988; Shrimpton and Storey, 1991). In fact, it is just this tension between household advantages of living in larger centers and resource hinterland disadvantages from lost economic opportunity that identifies intra-regional migration and extra-community commuting as an important issue in rural and small town Canada and elsewhere. To date, much of the interest has been with mining/oil industries. In this paper we examine a case of workers in one forestry town in northern BC.

METHODOLOGY

The data for this paper is from a questionnaire survey of mill workers in the town of Mackenzie, BC. Mackenzie is located about 200 kilometers north of Prince George in the north-central region of the province (Figure 1). It is a resource-based, single-industry, 'instant town' founded in 1966 in conjunction with the massive hydroelectric project that created the Williston Lake reservoir. The town was built to serve as the processing center for a new regional forest industry. At present, two large sawmills (Abitibi-Consolidated and Slocan Forest Products), a pulp mill facility (Pope and Talbot Ltd.), and a pulp and paper plant (Abitibi-Consolidated) provide almost all basic sector employment. There are also a number of smaller value-added forest companies and forest support industries in the town. With a 1996 population of approximately 6,000 people, a local service and administration economy has also developed.

The total population of Mackenzie has remained relatively steady at around 6,000 for the past twenty years. This apparent stability belies that there has been considerable turnover in local residents. Since the early 1970s, new firms and industrial plants

Figure 1: Mackenzie and the north-central region of British Columbia.



have come on line, adding jobs and bringing people into town. At the same time, automation and other restructuring outcomes have meant job reductions in many of the major industrial operations (see also Mackenzie and Norcliffe, 1997; Hayter, 2000). All of this means considerable in-migration and out-migration of workers and their families.

Since its founding, Mackenzie has developed into a well-equipped town. It has most basic requirements for a small community including childcare centers, an impressive recreation center, public Internet at the local library, grocery stores, two small shopping malls, restaurants, a fire department, police office, and an active municipal government. There is also an active network of volunteer groups which provides a wide range of services, activities, and facilities for residents. In addition, the town is situated in a wilderness area abundant in outdoor recreation opportunities. However, Mackenzie's location about two hours north of Prince George generates considerable retail sector leakage. Mackenzie residents are attracted to Prince George by the range of shopping and entertainment options which include large 'wholesale' and 'big-box' stores. Although there are six general practitioners in Mackenzie, many residents travel to Prince George for specialist medical attention, and while Mackenzie's hospital does handle emergencies, most cases are transferred to Prince George Regional Hospital. Thus, despite a wide range of local services, the need for higher order or more specialized services often necessitates regular travel to Prince George. Over time, the road connections to Prince George have improved tremendously (Veemes, 1985). This has considerably shortened average travel time and made winter travel much safer. One outcome has been that some mill employees have chosen to relocate to Prince George and commute to Mackenzie for work. The scale and rationales behind this intra-regional migration, and the resulting extra-community commuting, is the focus of our study.

The research methodology involved three stages. The first involved a series of site visits to meet with our research partners, establish local logistics, and conduct an archival search of local newspapers. The second stage involved conducting fourteen interviews to collect background information needed to design the questionnaire. The interviewees had a wide mix of experience in terms of place of residence, place of employment, and history with extra-community commuting. There were eight open-ended questions, used in a face-to-face interview format (Li, 1981), to probe satisfaction with the town and possible costs/benefits of moving to Prince George while keeping a job at a Mackenzie mill. The final stage was the questionnaire survey itself. The draft questionnaire was pre-tested and then readied for distribution to our sample.

We opted for a mail-out questionnaire so as to allow for a large number of respondents to be surveyed within a relatively short period of time. In addition, a questionnaire is relatively inexpensive and allows respondents to answer the questions at a time convenient for them (Jackson, 1988; Mangione, 1995). The questionnaire was distributed to all employees of the three large forestry companies in Mackenzie via the Human Resources Managers and the Union Presidents during the spring of 2000.

Table 1: Questionnaire summary.

<i>Mill</i>	<i>Questionnaires sent</i>	<i>Valid responses</i>	<i>Response rate (%)</i>
Slocan Forest Products	410	79	19
Abitibi-Consolidated Inc.	205	93	45
Pope and Talbot Ltd.	251	120	48
Total	866	292	34

Source: Questionnaire.

Locked drop boxes were placed in lunchrooms in order to collect the completed questionnaires. Mill employees were chosen because their processing industry is central to Mackenzie's economy and they have also been subjected to considerable job restructuring and change over the past two decades. The questionnaire procedure was carried out during May and June 2000.

The response rate demonstrated that the questionnaire piqued the interest of many mill employees (Table 1). The 34 percent response rate yields an error of between 2.1 and 3.5 percent (with 95 percent confidence) (Babbie, 1979). One reason for the lower response rate at Slocan Forest Products could be that the mill was in the process of contract negotiations at the time and employees may have been nervous about filling out any type of survey. This highlights one of the problems with mail out, as opposed to in-person, surveys in that respondents must feel some motivation to put in the effort to participate. The response rate is considered good given the size of the questionnaire and the procedures employed (Sosdian and Sharp, 1980; Feitelson, 1991).

ANALYSIS

Profile

The first task in any questionnaire analysis is to outline a general profile of respondents. This provides a foundation for evaluating the degree to which the survey can be said to represent the broader community. In this case, we shall focus upon the age, sex, and marital status of respondents.

In terms of age and sex distributions, the respondent profile fits that expected for resource towns in BC. The responses for age suggest some concentration in the working age categories from 25 to 55 years of age (Table 2). In general, this pattern closely follows the population age distribution for Mackenzie if the pre-working age groups are excluded (Statistics Canada, 2000). One difference between the sample and the census counts is that there are proportionately fewer young respondents (<25 years) and more older respondents (44–55 years). These differences likely

Table 2: Age of respondents.

<i>Age Group (years)</i>	<i>Survey Valid percent (%)</i>	<i>1996 Vensus for Mackenzie (19+ years)</i>
<25	5.6	10.9
25-35	25.0	29.7
36-45	34.7	33.4
46-55	26.7	16.8
56-65	8.0	7.4
65+	0	1.8
	n = 288	n = 3,860

Source: Questionnaire, Statistics Canada, 2000.

Table 3: Sex of respondents.

	<i>Survey Valid percent (%)</i>	<i>1996 Census for Mackenzie</i>
Male	84.3	55.1
Female	15.7	44.9
	n = 274	n = 6,000

Source: Questionnaire, Statistics Canada, 2000.

reflect the limited hiring of new employees at Mackenzie mills over the last decade and the role of union seniority agreements in cases of layoffs. Traditionally, resource industry employment has been dominated by male workers. As most respondents were mill employees (to increase response rates we did allow spouses to fill out the survey and this accounted for 4.2 percent of returned surveys), it is not surprising that over 80 percent of respondents are male (Table 3). In comparison, males comprise 55 percent of the local population (over age 19) (Statistics Canada, 2000).

As a reflection of the age pattern, it is not surprising that most respondents reported they were married or in a common law relationship (Table 4). This generally fits with the 1996 census data, acknowledging the large share of the population (15.3 percent) between the ages 15 and 24 (BC Stats, 2000), and is again a quite typical pattern for resource industry towns in Canada. It reflects an industry preference for hiring workers with young families, a preference historically linked to the idea that they would be less mobile than singles and that, therefore, company costs for worker recruitment and training could be reduced (Lucas, 1971; Halseth, 1999). Also, fitting with the age and marital status pattern is that 87 percent of respondents reported they have children at home.

Table 4: Marital status of respondent.

	<i>Survey Valid percent (%)</i>	<i>1996 Census for Mackenzie (15+ years)</i>
Single	11.1	31.5
Married/common law	80.6	56.1
Separated/divorced	6.9	11.4
Widowed	0.7	1.0
Other	0.7	0
	n = 289	n = 4,355

Source: Questionnaire, BC Stats, 2000

'Stayers', 'Movers', and 'At-Risk'

The second part of the analysis is concerned with distinguishing between 'stayers', 'movers', and 'at-risk' populations within the respondent group. The 'movers' were identified as those who continue to work in the Mackenzie mills but who have already moved out of town and reside elsewhere. The 'at-risk' population included those who continue to work and live in Mackenzie but who have seriously considered moving out of town. Defining the at-risk group as including people who thought of moving at some point in the past does not necessarily imply that they will move. However, they clearly do not have a permanent commitment to the town and with the right push or pull factors, could be motivated to leave. Finally, the 'stayers' were identified as those who live and work in Mackenzie and have never thought seriously about leaving town. By grouping respondents into these three groups we can establish the scale of the extra-community commuting.

To start, the questionnaire asked respondents to identify where they lived. Following our definition of movers, approximately 9 percent of the 292 respondents who answered this question lived in Prince George or other locations within the general Prince George region of BC's central interior (Table 5).

For respondents who identified Mackenzie as their place of residence, it was important to distinguish those who may be at-risk of moving. The identification of the at-risk population was based on the question: 'If you live in Mackenzie, have you ever seriously considered moving away' (Table 5). For respondents living and working in Mackenzie, approximately 69 percent said they had seriously considered moving away. Resource-based towns in Canada and elsewhere have historically recorded high rates of population turnover (Robinson, 1962; Hayter, 1979; Neil et al., 1992; Halseth, 1999), thus the high proportion of households who have considered moving is likely to include many with previous resource town population mobility experience. This group is identified as the at-risk population.

Table 5: Defining 'movers' and 'at-risk'.

<i>Place of residence</i>	<i>Valid %</i>		
Out of 292 workers surveyed:	#	%	
Live in Prince George / other	26	8.9	[‘movers’]
Live in Mackenzie	266	91.1	
Out of 266 workers living in Mackenzie:	#	%	
Have seriously considered moving away	183	68.8	[‘at-risk’]
Have NOT seriously considered moving away	83	31.2	

Source: Questionnaire.

'Movers'

For both movers and the at-risk population it is important to identify push and pull factors associated with out-migration decision-making. Local organizations need to know what issues are connected with residents moving away from Mackenzie in order to focus their attention on worker/resident retention. In this section, a series of issues connected with movers is explored. At present about 10 percent of the mill workforce has moved to the Prince George area and is commuting back to Mackenzie for work.

When asked about their experience with living in small towns, about 31 percent of the movers who responded had either grown up in Mackenzie or had come from a town similar in size to Mackenzie (Table 6). When we include 'rural', nearly 40 percent of movers had previous experience and familiarity with living in a small

Table 6: Previous community—Movers only.

<i>Previous community lived in</i>	<i>Movers (%)</i>
Always Mackenzie	11.5
Rural	7.7
Town (1,000–10,000)	19.2
Small city (10,000–30,000)	23.1
Medium city (30,000–100,000)	19.2
Large city (>100,000)	3.8
Other	15.4
n = 26	

Source: Questionnaire.

Table 7: Age group—Movers only.

<i>Age (in years)</i>	<i>Movers (%)</i>
<25	15.4
25–35	26.9
36–45	34.6
46–65	23.1
n = 26	

Source: Questionnaire.

place. A further 23 percent reported they came from a small city of between 10,000 and 30,000 people. In terms of age, most (approximately 58 percent) of the movers fit into the 36–65 year age categories (Table 7). This fits with the age distribution for both Mackenzie and all questionnaire respondents. When we look at the distribution by males/females, we also see that the general pattern fits with the sex distribution of the questionnaire respondents. Thus movers are not confined to a particular age or sex category, and their migration behavior cannot be explained away simply as people 'unfamiliar with small town life'.

Given that the profile of movers is not unique, it is important to consider some of the reasons they had for moving away from town while continuing to work at local mills. As shown in Table 8, there is no single reason which dominates as to why movers left Mackenzie. Respondents were permitted to identify as many reasons as they felt applied to them. The most common responses included a lack of local

Table 8: Reasons for moving—Movers only.

<i>Causes of moving away</i>	<i>Movers (%)</i>
Long winters	7.3
Sense of isolation	10.9
Jobs for spouse	9.1
Spouse unhappy	10.9
High cost of living	16.4
Lack of services	20.0
Social problems in town (drugs, alcohol)	7.3
Wanted farm property	5.5
Dislike of small town life	5.5
Other	7.3
n = 55	

Source: Questionnaire.

Table 9: Attraction to new community—'Movers' only.

<i>Attraction to new community</i>	<i>Movers (%)</i>
Spouse got job	8.5
Better housing investment	16.9
Better employment security	3.4
More recreation opportunities	13.6
Better education	16.9
Better medical	15.3
Better shopping	18.6
Other	6.8
n = 59	

Source: Questionnaire.

services and a perceived high cost of living. The removal in 1993 of Mackenzie as one of the places eligible for the 'northern living tax allowance' through Revenue Canada has exacerbated local cost of living concerns. Other reasons including long winters, a sense of isolation, local social problems, and the respondent's spouse (job prospects or overall satisfaction with Mackenzie) were also noted as important motivations for moving.

Besides push factors associated with people moving away from Mackenzie, it is important to consider the pull factors which attracted people to another town. For our study, most of these movers relocated to the city of Prince George or to one of the communities in close proximity to Prince George. Respondents were invited to identify as many reasons as they felt applied to their circumstances. Most movers were attracted to their new town by the wider availability of general community services, including shopping, education, and medical services (Table 9). Movers also indicated that better housing investment and more recreation opportunities also pulled them into the town where they presently live.

Since they had made a decision to move away, we asked these movers to identify the types of services which might help hold residents in Mackenzie. Again, respondents were allowed to identify as many services as they thought appropriate. More medical services, better shopping choices, and better customer services were key suggestions for resident retention (Table 10). In addition, more jobs for spouses were identified as needing improvement. Those citing 'other' listed items like lower taxes, larger properties, and better air travel connections.

No single reason explains why movers left town. If we collect their reasons, at least two topic areas can be identified: the nature of single-industry towns, and the availability of shopping and service choices. Many of the problems identified by movers as reasons which led them to leave are not unique to Mackenzie but rather reflect

Table 10: Retention factors—'Movers' only.

<i>Services needed to retain residents</i>	<i>Movers (%)</i>
More medical	20.3
More jobs for spouse	18.6
Better customer services	17.0
Better shopping/more choices	23.7
Daycare linked to shift work	8.5
Other	11.9
n = 59	

Source: Questionnaire.

conditions common within single-industry and resource-dependent towns. Some of these conditions include the limited economic and employment opportunities for spouses or children, the stresses associated with the economic boom and bust cycles of resource commodities, and the negative consequences which stem from these first two attributes and small population levels. Finally, economic downswings (and the commensurate loss of services and related economic opportunities) were identified as important push factors for people leaving Mackenzie. Retention during difficult economic times is an especially important matter.

A second key area identified by movers as something which either pushed them out of Mackenzie, or pulled them towards their new town, concerns a perceived lack of local shopping choices. In addition to the changing nature of employment, Stabler et al. (1992) also identify changes in services availability and adjustments to resident shopping patterns as important components in the reorganization of settlement systems in Saskatchewan. Two issues were noted here. The first was the need to maintain as diversified a shopping and services base as possible within Mackenzie. This is especially important, and difficult, during times of economic downturn. The second was that increased accessibility to 'big box' stores in Prince George is beginning to set a pattern of routine shopping excursions. Such routine trips can increase the likelihood that a household will seek to relocate and substitute commuting to work in Mackenzie. While the Prince George economy does react to the cyclic fortunes of BC's forest industry, the increasing diversification of its economy through additional government, service, and educational functions has provided both buffering and opportunity. This provides a strong attraction for 'footloose' residents of adjacent resource-based settlements. Finally, the issue of health services was noted especially by residents who had children. While health care provision has been a difficult topic across both urban and rural Canada, the perceptions and realities of local health services were regarded as a source of stress for Mackenzie parents.

'At-Risk'

Approximately 70 percent of the questionnaire respondents who live in Mackenzie were identified as being at-risk of leaving. It is, therefore, important to understand how these at-risk residents feel about living and working in town. To begin, the at-risk sample was asked about the benefits of living and working locally. Respondents were allowed to identify multiple answers, and although they had seriously considered moving away, they still found a great variety and number of benefits to both living and working in Mackenzie (Table 11). Although good paying jobs were seen as the main benefit (approximately 18 percent), factors such as community safety, small town atmosphere, friendly people, nature and outdoors, and recreation opportunities were also said to be key benefits.

To probe potential migration motivations, at-risk respondents were also asked to identify difficult aspects of living and working in Mackenzie (Table 12). Lack of shopping services was identified as one of the most difficult aspects (19.6 percent), as was isolation (11.9 percent), and the level of health services (11.3 percent). Again, respondents were allowed to identify multiple answers. It is interesting to compare Tables 11 and 12 as a number of general issues, such as characteristics of small town life and location in a wilderness setting, appear in both lists and reflect different perceptions and preferences by respondents. As Beesley and others found in studies of migration to rural amenity locations in Canada, there are a good many contradictions

Table 11: Benefits to living/working in Mackenzie. At-risk residents only.

	<i>At-Risk (%)</i>
Morfee Lake recreation area	7.4
Safe atmosphere	10.8
Scenic	7.9
Nature and outdoors	9.3
Quiet	5.3
Love of winter	1.2
People/friendly	9.2
Family town	6.2
Small town atmosphere	10.3
Good paying job	17.7
Community center	4.6
Recreation opportunities	9.2
Other	0.3
n = 941	

Source: Questionnaire.

Table 12: Difficult aspects of living/working in Mackenzie—'At-risk' residents only.

	<i>At-Risk (%)</i>
Long winter	12.8
Isolation	11.9
Closed community—resistant to change	4.6
High cost of living	8.7
Notion of nothing to do	1.5
Gossip in town	6.3
Uncertainty in forest industry	6.5
Lack of shopping services	19.6
Amount of health services	11.3
Quality of education for kids	7.6
Lack of activities for youth	5.3
Spouse unhappy	2.2
Other	1.0
n = 1,140	

Source: Questionnaire.

in attitudes and behaviors both within and between resident groups in small towns (Beesley and Walker, 1990; Bowles and Beesley, 1991).

At-risk respondents were asked about their level of satisfaction with a range of services and features of Mackenzie (Table 13). A standard five-point scale ranging from very satisfied through to very dissatisfied was used. In terms of health services, the at-risk respondents are generally dissatisfied (approximately 73 percent) and very few indicated any level of satisfaction with health services. This result fits well with recent public debate in Canada and across northern BC. In terms of education services, at-risk respondents were divided. About half were dissatisfied while another quarter were neutral on the matter. A quite different response came from the recreation question. In this case, over 70 percent of at-risk respondents were satisfied (15 percent strongly satisfied). In terms of housing, the at-risk respondents were again divided. About half were dissatisfied with local housing while another quarter were satisfied and the remainder were neutral. In terms of both shopping services and services for youth in Mackenzie, the at-risk respondents were dissatisfied. For shopping services, approximately 84 percent were dissatisfied, while for youth services, approximately 70 percent were dissatisfied.

With respect to services for women, about 45 percent of the at-risk respondents were dissatisfied. It should be noted that an additional 30 percent were neutral on the matter. Given that most questionnaires were completed by men, the dissatisfaction with services for women must be strong enough to make a clear impression on these male respondents.

Table 13: Satisfaction with services—'At-risk' residents only.

<i>Services</i>	<i>Very satisfied</i>	<i>Satisfied</i>	<i>Neutral</i>	<i>Dissatisfied</i>	<i>Very dissatisfied</i>	<i>Don't know</i>
Health	0.6	8.9	16.2	43.0	30.2	1.0
Education	0.6	18.4	23.5	27.4	21.2	8.9
Recreation	15.1	55.9	19.0	6.1	3.9	—
Housing	2.8	22.3	27.9	29.1	15.6	2.2
Shopping	—	3.9	11.7	36.3	48.0	—
Youth	1.1	5.0	17.9	34.6	35.2	6.1
Women	2.2	11.7	30.7	25.7	19.0	10.6
Small business	0.6	17.3	35.2	29.1	15.1	2.8
Employment	3.9	24.0	29.0	25.7	11.7	5.0
Rec. orgs	5.6	50.8	27.7	6.8	5.6	3.4
Comm. events	1.7	31.1	38.4	18.1	9.0	1.7
Comm. pride	2.8	20.1	41.9	20.7	9.5	5.0
Vol. orgs	4.5	36.0	41.0	2.2	5.1	11.2
n = 181						

Source: Questionnaire.

There were large shares of neutral responses to questions on satisfaction with services for small businesses and for employment. About 45 percent of the at-risk respondents were dissatisfied with services for small businesses while about 37 percent were dissatisfied with employment services. In concert with the strong levels of support shown for recreational services in general, there was also strong satisfaction with services and facilities provided by local recreational organizations. Levels of satisfaction among at-risk respondents with community events, community pride, and voluntary organizations is, however, difficult to discern. For all three, about 40 percent of respondents were neutral. Given the critical importance of these to building community attachment, enhancing resident satisfaction, and retaining residents (Teather, 1997; Wilson and Musick, 1997; Jones, 2000; Lacy, 2000), these are clearly topics to which Mackenzie residents and decision-makers should direct attention.

At-risk residents were asked to agree or disagree with five statements in order to gauge how they felt about some general aspects of living in Mackenzie (Table 14). In terms of Mackenzie being isolated, at-risk respondents overwhelmingly agreed. In terms of Mackenzie being too small to provide sufficient services, most at-risk respondents again agreed with this statement, but it should be noted that approximately 22

percent disagreed. This suggests that a proportion of the at-risk population believes that Mackenzie has the potential to provide needed services. This is an important issue as service availability in rural and small town places has a role to play in community sustainability, especially during times of economic restructuring (Gill and Everitt, 1993; Furuseth, 1998). Obviously it is not logistically or financially feasible to offer every type of service in every location, but services must come close to aligning with a settlement's place in the regional hierarchy of settlements (Conkling and Yeates, 1976; Pinch, 1985; de Souza, 1990).

In comparing Prince George to Mackenzie, almost all at-risk respondents agreed with the statement that Prince George will always have better shopping and entertainment facilities. This is not surprising as the size and economic profiles of the two towns are so different. Prince George has a population of approximately 85,000 people. Over the past 20 years it has also diversified into a service and administrative center with many federal and provincial government offices, and major educational institutions. In fact, Prince George has adopted the civic motto of BC's 'Northern Capital' as a reflection of its growth and changing role within the region. While it shares many of the physical geography characteristics of Mackenzie, including long winters, heavy snowfalls, and remoteness from metropolitan Vancouver, Prince George is the dominant central place in the northern interior of the province and thus holds an attraction for northern residents.

In terms of Mackenzie being a good place to live, the majority of at-risk respondents agreed. In terms of Mackenzie being a good place to raise a family, at-risk respondents again overwhelmingly agree. These characteristics likely play an

Table 14: Agreement with statements—'At-risk' residents only.

<i>Statement</i>	<i>Strongly agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly disagree</i>
Town of Mackenzie is isolated	58.9	33.3	5.0	2.8	—
Mackenzie too small to provide services	25.0	40.6	11.1	22.2	1.1
Prince George will always have better shopping and entertainment	68.3	28.9	0.6	2.2	—
Mackenzie is a good place to live	15.0	51.1	24.4	7.2	2.2
Mackenzie is a good place to raise a family	21.7	55.0	16.1	4.4	2.8
n = 181					

Source: Questionnaire.

important role in retaining residents, especially those with young families or who may be nearing retirement, two age groups shown to be particularly conscious of community safety issues.

This review of the at-risk population raises a number of important issues. First, there are many attributes about Mackenzie that at-risk residents enjoy and with which they are satisfied. Second, the natural and wilderness setting of this small town fosters an atmosphere of safety and a positive family and child rearing environment. These issues are clearly important to people and they have been shown in research to play positive roles in community development and in retaining/attracting residents and economic activity (Fitchen, 1991; Everitt and Gill, 1993; Allen and Dillman, 1994; Pierce and Dale, 1999). Third, it is quite clear that at-risk residents enjoy the improvements and expansions recently completed in the recreation center. These improvements seem wisely targeted to enhancing residents' satisfaction with the town. While it is encouraging to note the great number of benefits at-risk residents identified about Mackenzie, it must also be noted that many of the factors at-risk residents do not like are the same push factors that encouraged some of the movers to relocate. For some at-risk respondents, these factors are related to the lack of local economic diversity thereby forcing the town and its residents to be affected by the ever-changing state of the forestry industry. Some factors, such as winter snowfalls, are obviously beyond the ability of the town to change, although some actions can help mitigate the more negative aspects and turn challenges into advantages. In the case of Mackenzie, the long winter is a foundation for a robust recreation season with the local government active in developing cross-country and downhill skiing facilities, snowmobile trails, and outdoor skating rinks. The lack of shopping and limited health services were also identified as problems for both the movers and at-risk respondents. That there are similarities in their perceptions is not too surprising since there are socio-economic and demographic similarities between movers and at-risk respondents.

Finally, one of the important topics identified by at-risk respondents concerned a sense of dissatisfaction with opportunities for youth living in Mackenzie. Several identified that 'kids had nothing to do', while others were concerned with broader issues such as drug and alcohol use which confront all communities. Concerns seem to include both opportunities for positive recreation and opportunities for local full- or part-time employment. These are important matters as most respondents had children and the population profile of Mackenzie still maintains a large proportion of young families.

Stabler and Olfert have examined this phenomena of population migration from small towns to larger regional centers in Saskatchewan. They found that since the 1940s such movements have often resulted in the 'stagnation or decline of small communities' (Stabler et al., 1992:43). While settlement concentration is more advanced across the agricultural regions of Saskatchewan than in British Columbia's northern forestry towns, Stabler and Olfert (1996) also identify the resource commodity crises of the 1980s as a crucial turning point for the small Saskatchewan

settlements they studied. They found that changes in technology (which resulted in job losses) and improvements in transportation networks have been important in facilitating migration out of rural and small town places even while resource (in their case agricultural) production in those places continues. They go on to argue that public policy (both federal and provincial) has contributed to this concentration of population, especially through the closure of service and facilities (such as schools and hospitals). Each of these pressures mirrors those identified in our study of Mackenzie. This is clearly a more general concern for resource towns as even small population losses through the substitution of labor with technology or through public policy changes may result in the crossing of minimum thresholds to retain critical local services. Finally, Stabler et al. (1992) suggest that shopping patterns may be a good predictor of the direction of change in the settlement system. As our study in Mackenzie showed, a permanent move is often prefaced by shopping travel. If settlement pattern changes in Saskatchewan are being followed in BC, then difficult decisions will be required if public and corporate policy are to work cooperatively in resolving how this reorganization of rural centers and infrastructure can best proceed (Stabler and Olfert, 1992).

DISCUSSION

Out-migration from rural and small town places to larger centers has been a long-standing phenomena in Canada, and indeed, around the world. Such migration has been most often identified with employment losses in rural locales as much as it has been with the attractive pull of the high order functions found in cities. In Canada's resource hinterland, however, there is a change in this push/pull relationship. In this case, households are migrating to regional centers for services or other amenities valued by the household while at least one member substitutes commuting back to the resource town for work. The viability of resource towns has always been precarious, and the restructuring of resource industries over the past 20 years has increased their vulnerability. Against this backdrop, intra-regional migration and extra-community commuting are critical concerns as they further constrict the ability of resource towns to sustain local services and functions. Holding jobs is not the only key to resource town sustainability, these towns must also hold their residents.

The purpose of this research was to examine the scale of intra-regional migration and extra-community commuting in a forestry dependent town near a large regional center. The research was also interested in identifying whether there might be a potential for further migration and commuting behavior. This was done through a survey of mill employees at the three major forest products firms in Mackenzie, BC. This group form by far the largest component of the local workforce and the town was built to support their employment. From the survey results, mover and at-risk populations were delineated. At present, the scale of extra-community commuting reaches to an order of approximately 10 percent for our respondents. While this may

not seem particularly high, it foreshadows a problem, as the at-risk population is a significant component of our respondents. The results also suggest the need to look beyond mill employees to see whether white collar or service sector employees in Mackenzie share these types of migration characteristics and outcomes.

A number of reasons were identified in the literature as to why resource industry employees may leave their town. Some of the common push factors are stress over economic uncertainty or instability in resource industries. This links to a second concern over the vulnerability of employment in those industries and associated support industries. Finally, there is the general concern over a lack of services (shopping, entertainment, food, and health) in these small towns. Many of our survey respondents identified these types of issues as important in their dissatisfaction with living or working in Mackenzie. The mover population was much more adamant about things which pushed them to leave, while the at-risk population identified a combination of factors which collectively increased their thoughts of leaving.

Residential satisfaction is a complex issue linking work and family to broader issues in the community. While Halseth (1999) argued that employment migration was an important issue in resource-dependent regions, the findings here suggest that employment motives in two-income households create complexity for household decision-making. In this case, Clark's (1986) argument for net household benefits, including the educational or special needs of children, clearly seems to be playing a role. As Bowles and Beesley (1991) identified, people's subjective interpretation of their quality of life plays a significant role in decisions to stay or move.

Special attention was directed to the movers population in an effort to identify critical pressures in the town which may increase the likelihood of out-migration. Certainly, improvements to the highway between Mackenzie and Prince George have played a role in reducing travel times and increasing travel safety. This has had an influence upon shopping patterns and even recreational visits outside of the town. Such improvements, and an increasingly routine need to travel outside the town for shopping or medical services, are important as households decide whether to relocate and simply commute to Mackenzie for work. In resource-dependent towns, individual and household stresses are situated both within the economic boom and bust cycles of resource industries and the limited services base of a small town setting.

One of the perplexing issues identified by some movers was concern over the lack of security in their housing investment. Those who mentioned this issue often cited the economic swings within the forest industry as having an effect upon housing prices. While there have certainly been economic swings and fluctuations in housing prices, a recent study completed for Canada Mortgage and Housing Corporation identified that property values in Mackenzie have increased at a rate exceeding inflation since 1976 (Halseth and Sullivan, 2000). Negative perceptions of resource towns have been identified as important in migration decision-making. The comments about housing investments, which do not fit with local housing market trends, are a good illustration of how perceptions can affect decision-making.

When the analysis was directed towards at-risk respondents, the potential push factors turned out to be very similar to the actual push factors identified by movers. Some of these stress areas are clearly beyond the purview of local decision-makers, but there are topics which can be usefully addressed to send a message that the town is working on things that matter to local residents.

There was also a strong set of pull factors identified by respondents. These pull factors are attributes of Mackenzie which respondents (movers and at-risk) liked and which attracted them to the town. Included among these pull factors was a perception of a very safe community and a good environment within which to raise children and a family. The abundance of recreation opportunities, both outdoor and indoor, and both formally and informally organized, also received high praise. Given the strength of some of these pull factors, the town should ensure continued maintenance of these attributes and publicity of services or opportunities connected to them. As a large share of the population is involved with raising young children, some particular attention may be directed at opportunities, services, and facilities for youth. Also identified as important are the opportunities for social involvement afforded by living in communities like Mackenzie. Such social involvement builds attachment to place.

Just as resource industries have been experiencing a restructuring of production, so too has resource town migration patterns been undergoing a restructuring. Intra-regional migration and extra-community commuting are changing the relationship between home and workplace to the extent that the viability of resource towns may be threatened. Unfortunately, while movers have already left, at present we have no idea what might constitute a 'last straw' for an at-risk population. Given the importance of resource towns in the Canadian rural landscape, and the potential implications of intra-regional migration and extra-community commuting, this is clearly a research topic which needs further investigation.

CLOSING COMMENT

Intra-regional migration decision-making for households in resource-dependent regions is a complex matter. At the level of basic push/pull factors, there are the shortcoming and attractions of small town life balanced against the shortcomings and attractiveness of urban centers. On the crucial issue of employment as a migration motive, there is an attraction to the resource town for its high wage jobs which is balanced by the paucity of employment options for spouses and youth. In two-income households, this lack of fit raises the potential for out-migration.

At this point, the research on intra-regional migration identifies a number of topics for further consideration. The first is that improvements to local shopping, services, and access to health care will be important in keeping residents in town. It will also reduce the number of trips which residents will have to make out of the community for routine needs. When households feel that these routine needs are no longer met they are more likely to move. Second, it is crucial that efforts to diversify the local

economy continue. This will not only help to somewhat reduce vulnerability to resource industry cycles, but will provide a greater range of employment opportunities for spouses and youth. Shift work was identified as an enabling element which allowed workers to commute for work from a more diverse and distant town. For community sustainability, there are clearly a lot of positive aspects to living in small resource-dependent towns. These positive aspects provide opportunities for local community development efforts, and these efforts may help stem out-migration by some households by enhancing their ties to place. This includes both enhancement of some facilities or services, as well as the need to promote those which may not be well known by local residents. This can initiate a positive and reinforcing trajectory of community improvements and community pride. Towns can become proactive in implementing services and amenities that will help retain residents and reduce economic leakage. Although there should be concern about why some residents are intent on leaving one town for another, more attention should be paid to the at-risk residents, those considering a move.

ACKNOWLEDGMENTS

The authors would like to thank the Mackenzie Town Council, the Mackenzie Chamber of Commerce, and the staff and employees of Pope and Talbot Ltd, Donohue Industries, and Slocan Forest Products operations in Mackenzie for their support and cooperation. We would also like to acknowledge funding support by UNBC's Northern Land Use Institute. Finally, the suggestions from the anonymous referees were much appreciated. The usual disclaimers apply.

NOTE

1. The term 'long distance labor commuting' has gained a currency in the literature and has often been applied to situations involving work travel to a remote work camp. We have employed the term 'extra-community commuting' to cover the different case of commuting from an urban center to an adjacent small town.

REFERENCES

- Allen, J.C. and Dillman, D.A. (1994) *Against all Odds: Rural Community in the Information Age*. Boulder Colorado: Westview Press.
- Babbie, E.R. (1979) *The Practice of Social Research*. Belmont, California: Wadsworth Publishing Company, Inc.
- Barnes, T.J. and Hayter, R. (1994) Economic restructuring, local development, and resource towns: Forest communities in coastal British Columbia. *Canadian Journal of Regional Science*, XVII:289-310.

- Barnes, T.J. and Hayter, R. (1997) (eds.) *Troubles in the Rainforest: British Columbia's Forest Economy in Transition*. Victoria, BC: Canadian Western Geographical Series Vol. 33, Western Geographical Press.
- Barton, M. (1999) Planning and design for children in northern communities. *Winter Cities*, 18:12–14.
- BC Stats (2000) *Census Subdivision Profiles-Regional Districts, municipalities, SRDs, Indian Reserves: Mackenzie, DM*. <http://www.bcstats.gov.bc.ca/DATA/CEN96/C96INDEX.HTM>, December 2000.
- Berry, D., Derrick, S., Lajzerowicz, J., Reilly-Roe, P., Mercier, N. and McGee, G. (1975) *Mining Communities in Canada: Mining Policy Series Preliminary Study*. Ottawa, Ontario: Ministry of Energy, Mines and Resources Canada.
- Beesley, K.B. and Walker, G.E. (1990) Residence paths and community perception: A case study from the Toronto urban field. *The Canadian Geographer*, 34: 318–330.
- Bone, R.M. (1992) *The Geography of the Canadian North*. Toronto: Oxford University Press.
- Bowles, R.T. (1992) Single-industry resource communities in Canada's North. In Hay, D.A. and Basran, G.S. (eds.) *Rural Sociology in Canada*. Don Mills, ON: Oxford University Press, pp. 63–83.
- Bowles, R.T. and Beesley, K.B. (1991) Quality of life, migration to the countryside and rural community growth. In Beesley, K.B. (ed.) *Rural and Urban Fringe Studies in Canada*. Toronto: York University, Geographical Monograph No. 21, pp. 45–66.
- Boyle, P. and Halfacree, K. (1998) (eds.) *Migration into Rural Areas*. New York: Wiley.
- Bradbury, J. (1987) British Columbia: Metropolis and hinterland in microcosm. In McCann, L.D. (ed.) *Heartland and Hinterland: A Geography of Canada*. Scarborough, Ontario: Prentice-Hall Canada, Inc, pp. 400–441.
- Bradbury, J. and St. Martin, I. (1983) Winding down in a Quebec mining town: A case study of Schefferville. *Canadian Geographer*, 27:128–144.
- Brown, L.A. and Moore, E.G. (1970) The intra-urban migration process: A perspective. *Geografiska Annaler*, B, 25.
- Brown, D. and Wardwell, J.M. (eds.) (1980) *New Directions in Urban-Rural Migration: The Population Turnaround in Rural America*. New York, Toronto, Sydney, San Francisco: Academic Press.
- Bruce, D., Jordan, P. and Halseth, G. (1999) *The Role of Voluntary Sector Organizations in Rural Canada: Impacts of Changing Availability of Operational and Program Funding*. Montreal: New Rural Economy Project, Canadian Rural Restructuring Foundation and the Human Resources Development Canada.
- Clark, W.A.V. (1986) *Human Migration*. Beverly Hills, California: Sage Publications.
- Conkling, E. and Yeates, M. (1976) *Man's Economic Environment*. New York: McGraw-Hill Book Company.

- Davies, S. and Yeates, M. (1991) Ex-urbanization as a component of migration: A case study in Oxford County, Ontario. *Canadian Geographer*, 35:177–186.
- De Souza, A. (1990) *A Geography of World Economy*. New York: Macmillan Publishing Company.
- Evenden, L.J. and Walker, G.E. (1993) From periphery to center: The changing geography of the suburbs. In Bourne, L.S. and Ley, D.F. (eds.) *The Changing Social Geography of Canadian Cities*. Montreal and Kingston: McGill-Queen's University Press, pp. 234–251.
- Everitt, J. and Gfellner, B.G. (1996) Elderly mobility in a rural area: The example of Southwest Manitoba. *Canadian Geographer*, 40:338–351.
- Everitt, J. and Gill, A.M. (1993) The social geography of small towns. In Bourne, L.S. and Ley, D.F. (eds.) *The Changing Social Geography of Canadian Cities*. Montreal and Kingston: McGill-Queen's University Press, pp. 252–264.
- Feitelson, E. (1991) The potential of mail surveys in geography: Some empirical evidence. *The Professional Geographer*, 43:190–205.
- Field, N. C. (1988) Migration through the rural-urban hierarchy: Canadian Patterns. *Canadian Journal of Regional Science*, 11(1):33–56.
- Fitchen, J.M. (1991) *Endangered Spaces, Enduring Places: Change, Identity and Survival in Rural America*. Boulder Colorado: Westview Press.
- Furuseth, O. (1998) Service provision and social deprivation. In Ilbery, B. (ed.) *The Geography of Rural Change*. Essex: Longman, pp. 233–256.
- Gagnon, J. (1992) Native labor commuting to uranium mines in Northern Saskatchewan: Its economic significance for indigenous communities. In Neil, C., Tykkäläinen, M., and Bradbury, J. (eds.) *Coping with Closure: An International Comparison of Mine Town Experiences*. New York: Routledge, pp. 291–312.
- Gill, A. and Everitt, J. (1993) The social geography of small towns. In Bourne, L. and Ley, D. (eds.) *The Changing Social Geography of Canadian Cities*. Montreal: McGill-Queen's Press, pp. 252–264.
- Green, M.B. and Meyer, S.D. (1997) An overview of commuting in Canada with special emphasis on rural commuting and employment. *Journal of Rural Studies*, 13:163–175.
- Halseth, G. (1999) We came for the work: Situating employment migration in B.C.'s small, resource-based communities. *Canadian Geographer*, 43(4):363–381.
- Halseth, G. and Sullivan, L. (2002) *Building Community in an Instant Town: A Social Geography of Mackenzie and Tumbler Ridge, British Columbia*. Prince George, BC: University of Northern British Columbia.
- . (2000) *Housing Transition in Single Industry 'Instant Towns'*. Ottawa, ON: Canada Mortgage and Housing Corporation.
- Hayter, R. (1979) Labor supply and resource-based manufacturing in isolated communities: The experience of pulp and paper mills in north-central British Columbia. *Geoforum*, 10:163–177.
- . (2000) *Flexible Crossroads: The Restructuring of British Columbia's Forest Economy*. Vancouver, BC: UBC Press.

- Himelfarb, A. (1976) *The Social Characteristics of One-Industry Towns in Canada: A Background Report to the Royal Commission on Corporate Concentration*. Ottawa: Ministry of Supply and Services.
- IBI Group (1980) *Improving Housing Construction in Remote Small Communities and Rural Areas*. Toronto, Ontario: Canada Mortgage and Housing Corporation.
- Jackson, R.T. (1987) Commuter mining and the Kidston Goal Mine: Goodbye to mining towns? *Geography*, 72:162–165.
- Jackson, W. (1988) *Research Methods: Rules for Survey Design and Analysis*. Scarborough, Ontario: Prentice-Hall Canada Inc.
- Jones, F. (2000) Community involvement: The influence of early experience. *Canadian Social Trends*, Statistics—Catalogue No. 11-008:15–19.
- Keyes, R. (1992) Mine closures in Canada: Problems, prospects and policies. In Neil, C., Tykkäläinen, M., and Bradbury, J. (eds.) *Coping with Closure: An International Comparison of Mine Town Experiences*. New York: Routledge, pp. 27–43.
- Knox, P. (1995) *Urban Social Geography: An Introduction*. Burnt Hill, Harlow: Longman Scientific and Technical.
- Krahn, H. and J.W. Gartrell (1981) *Social Mobility in a Canadian Single-industry Community*. Edmonton, Alberta: University of Alberta, Department of Sociology.
- Lacy, W.B. (2000) Empowering communities through public work, science, and local food systems. *Rural Sociology*, 65:3–26.
- Lee, E.S. (1966) Theory of Migration. *Demography*, 3:47–57.
- Lewis, G.J. (1979) *Rural Communities*. London: David and Charles.
- Lewis, J., Shrimpton, M. and Porter, M. (1988) (eds.) *Women, Work and Family in the British, Canadian and Norwegian Offshore Oil Fields*. London: Macmillan.
- Li, P. (1981) *Social Research Methods*. Toronto: Butterworth and Co. Ltd.
- Lucas, R.A. (1971) *Minetown, Milltown, Railtown: Life in Canadian Communities of Single Industry*. Toronto: University of Toronto Press.
- Mackenzie, S. and Norcliffe, G. (1997) Guest Editors—Restructuring in the Canadian newsprint industry. *Canadian Geographer*, 41:2–6.
- Mangione, T.W. (1995) *Mail Surveys: Improving the Quality*. Thousand Oaks, London, New Delhi: Sage Publications, Inc.
- Marsden, T., Lowe, P. and Whatmore, S. (eds.) (1990) *Rural Restructuring: Global Processes and Their Responses*. London: David Fulton Publishers.
- Matthiasson, J.S. (1971) *Two Studies on Fort McMurray: Resident Mobility in Resource Frontier Communities: An Examination of Selected Factors*. Winnipeg, Manitoba: University of Manitoba, Center for Settlement Studies.
- McAllister, M.-L. and Alexander, C.J. (1997) *A Stake in the Future: Redefining the Canadian Mineral Industry*. Vancouver, BC: UBC Press.
- McTiernan, T. (1999) Northern communities and sustainable development in Canada's north. In Pierce, J.T. and Dale, A. (eds.) *Communities, Development, and Sustainability Across Canada*. Vancouver: UBC Press, pp. 90–120.

- Miron, J.R. (1988) *Housing in Postwar Canada: Demographic Change, Household Formation, and Housing Demand*. Montreal and Kingston: McGill-Queen's University Press.
- Mitchelson, R.L. and Fisher, J.S. (1987) Long distance commuting and income change in the towns of upstate New York. *Economic Geography*, 63:48-65.
- Mincer, J. (1978) Family migration decisions. *Journal of Political Economy*, 86: 749-773.
- Moore, E.G. and Rosenberg, M.W. (1993) Migration, mobility, and population redistribution. In Bourne, L.S. and Ley, D.F. (eds.) *The Changing Social Geography of Canadian Cities*. Montreal and Kingston: McGill-Queen's University Press, pp. 121-137.
- Neil, C., Tykkäläinen, M., and Bradbury, J. (1992) *Coping with Closure: An International Comparison of Mine Town Experiences*. New York: Routledge.
- Nickels, J.B., Sexton, D.L. and Bayer, C.A. (1976) *Life Satisfaction in a Resource Frontier Community*. Winnipeg, Manitoba: University of Manitoba, Center for Settlement Studies.
- Norton, W. (1998) *Human Geography* (3rd ed.). Oxford: Oxford University Press.
- Parson, H.E. (1991-92) Community migration patterns of northern Canada. *Journal of Canadian Studies*, 26:112-119.
- Pierce, J.T. and Dale, A. (1999) (eds.) *Communities, Development, and Sustainability Across Canada*. Vancouver: UBC Press.
- Pinch, S. (1985) *Cities and Services: The Geography of Collective Consumption*. London, Boston: Routledge & K. Paul.
- Pinfield, L.T. and Etherington, L.D. (1982) *Housing Strategies of Resource Firms in Western Canada*. Ottawa: Canada Mortgage and Housing Corporation.
- Porteous, D.J. (1987) Single enterprise communities. In Forward, C.N. (ed.) *British Columbia: Its Resources and People*. Victoria, British Columbia: Western Geographical Series, Vol.22, pp. 383-399.
- Preston, V.A., Rose, D., Norcliffe, G. and Holmes, J. (2000) Shifts and the division of labor in childcare and domestic labor in three paper mill communities. *Gender, Place and Culture*, 7:5-29.
- Randall, J.E. and Ironside, R.G. (1996) Communities on the edge: An economic geography of resource dependent communities in Canada. *Canadian Geographer*, 40:17-35.
- Robinson, I.M. (1962) *New Industrial Towns on Canada's Resource Frontier*. Chicago: University of Chicago, Department of Geography Research Paper #73.
- Rose, D. and Villemare, M. (1997) Reshuffling paper workers: Technological change and experiences of reorganization at a Quebec newsprint mill. *The Canadian Geographer*, 41:61-87.
- Rossi, P.H. (1980) *Why Families Move*. Beverly Hills, London: Sage Publications.
- Shrimpton, M. and Storey, K. (1991) (eds.) *Long Distance Commuting in the Mining Industry: Conference Summary*. Kingston, ON: Queen's University, Center for Resources Studies, Proceedings No. 43.

- Smith, P.J. (2000) Suburbs. In Bunting, T. and Filion, P. (eds.) *Canadian Cities in Transition: The Twenty-First Century*. New York: Oxford University Press, pp. 303–332.
- Sosdian, C.P. and Sharp, L.M. (1980) Non response in mail surveys: Access failure or respondent resistance. *Public Opinion Quarterly*, 44: 396–402.
- Stabler, J. and Olfert, M.R. (1992) *Restructuring Rural Saskatchewan, The Challenge of the 1990s*. Regina, SK: Canadian Plains Research Center, University of Regina.
- Stabler, J. and Olfert, M.R. (1996) *The Changing Role of Rural Communities in an Urbanized World: Saskatchewan, An Update to 1995*. Regina, SK: Canadian Plains Research Center, University of Regina.
- Stabler, J., Olfert, M.R., and Fulton, M. (1992) *The Changing Role of Rural Communities in an Urbanized World: Saskatchewan, 1961–1990*. Regina, SK: Canadian Plains Research Center, University of Regina.
- Statistics Canada (2000) *Census '96 Statistical Profile Highlights: Mackenzie (District Municipality), British Columbia*. <http://ceps.statcan.ca/english/profil/>, December 2000.
- Storey, K. and Shrimpton, M. (1989) *Long Distance Labor Commuting in the Canadian Mining Industry*. Kingston, ON: Center for resource Studies, Queen's University.
- Taaffe, E.J., Gauthier, H.L., and Maraffa, T.A. (1980) Extended commuting and the intermetropolitan periphery. *Annals of the Association of American Geographers*, 70:313–329.
- Teather, E.K. (1997) Voluntary organizations as agents in the becoming of place. *The Canadian Geographer*, 44:226–234.
- Tkocz, Z. and Kristensen, G. (1994) Commuting distances and gender: A spatial urban model. *Geographical Analysis*, 26:1–14.
- Veemes, M. (1985) *Mackenzie B.C. Turns Twenty*. Prince George: Spee-dee Printers.
- Veit, S. and Associates. (1978) *Labor Turnover and Community Stability: Implications for North East Coal in British Columbia*. Ottawa: Federal/Provincial Manpower Sub-Committee on North East Coal Project.
- Wilson, J. and Musick, M. (1997) Who Cares? Toward an integrated theory of volunteer work. *American Sociological Review*, 62:694–713.
- Yeates, M. (1990) *The North American City* (4th ed.). New York: Harper and Row.