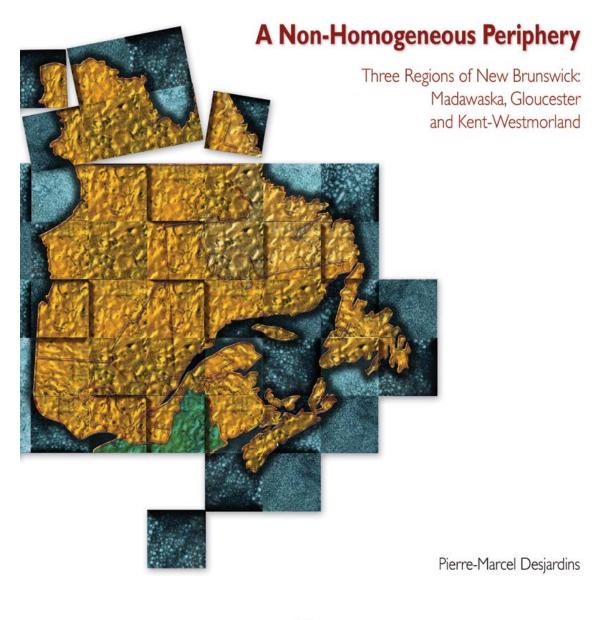
Regions in the Knowledge Economy





Université du Québec Institut national de la recherche scientifique Urbanisation, Culture et Société



INSTITUT CANADIEN DE RECHERCHE SUR LE DÉVELOPPEMENT RÉGIONAL THE CANADIAN INSTITUTE FOR RESEARCH ON REGIONAL DEVELOPMENT Regions in the Knowledge Economy

**Pierre-Marcel Desjardins** 

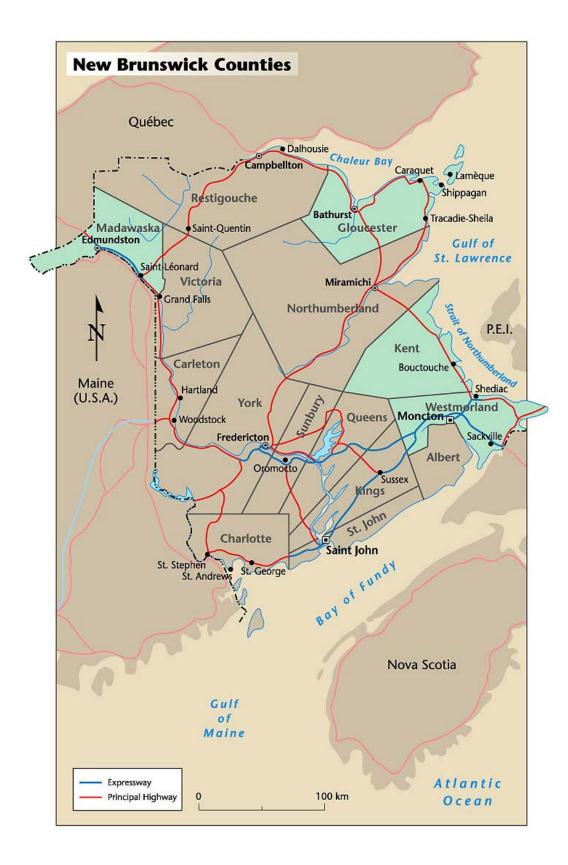
# **A Non-Homogeneous Periphery**

Three Regions of New Brunswick: Madawaska, Gloucester and Kent-Westmorland

 Institut canadien de recherche sur le développement régional / Canadian Institute for Research on Regional Development Institut national de la recherche scientifique – Urbanisation, culture et société

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#### FOREWORD

This study of three regions of New Brunswick — Madawaska, Gloucester, and Kent and Westmorland counties — is part of the watch project on the peripheral economies of eastern Canada, a comparative research program covering a total of eleven regions: Abitibi-Témiscamingue, Saguenay–Lac-Saint-Jean, Bas-Saint-Laurent, Gaspésie and Côte-Nord in Quebec; Madawaska, Gloucester, Kent and Westmorland counties in New Brunswick; Prince County on Prince Edward Island; the West Coast of Newfoundland; and Southwestern Nova Scotia.

The objective of this study is to acquire a better understanding of the distance factors that affect the economy of Canada's peripheral regions and to identify possible ways of revitalizing these regions. The approach taken involves a dual comparison: first, a comparison of the eleven peripheral regions studied; and second, a comparison of eastern Canada and northern Europe, which share several characteristics in terms of geography and economic structure and policies.

The research program is conducted jointly by the Institut national de la recherche scientifique – Urbanisation, culture et société (Montreal) and the Canadian Institute for Research on Regional Development (Moncton). In addition, researchers from the Université du Québec à Chicoutimi, the Université du Québec à Rimouski, and the Université de Moncton are contributing to this in-itiative. The program is funded by Canada Economic Development for Quebec Regions and the Atlantic Canada Opportunities Agency.

The principal results of this regional study are reproduced in the final research report. It also makes a synthesis of the other regional studies, the review of the international literature on peripheral economies, the cross-Canada statistical analysis and comparative analyses done in cooperation with researchers from northern Europe. These documents are available on the Web at www.umoncton.ca/icrdr.

Pierre-Marcel Desjardins November 2001

#### Ι

### **REGIONAL PROFILE**

New Brunswick has often been cited in recent years as an economic development success story. For many, the Moncton region has become the embodiment of this success. The objective of this study is not to evaluate the performance of the New Brunswick economy or to make judgements about it. In this regard, readers may refer to other studies, among them a recent book by Donald J. Savoie, which analyses the actions taken by the governments led by Frank McKenna in the area of economic development.<sup>1</sup> As pointed out in the foreword, the objective of this study is to shed light on how the geographic situation of Canada's peripheral regions acts on the economic situation observed there and to propose approaches likely to revitalize the economy of peripheral regions by considering specific cases in New Brunswick in this section.

To this end, we have selected three regions in New Brunswick. The first is Madawaska County, located in the northwest part of the province. There were many reasons for choosing this region for the study. Madawaska shares a border with Quebec and with the state of Maine (United States). In the next stage of the research project, a comparative analysis of the various regions studied, it will be interesting to compare the relative performance of Madawaska with the bordering regions on the Quebec side. Madawaska's economic performance, as we will see, is relatively good. Despite the fact that the region is fairly distant from populous urban centres, it appears to be performing successfully. What factors help explain this phenomenon? Can we learn from Madawaska's experience?

The second region in the study is Gloucester County, which includes two economic regions, each of which has characteristics of interest for this study. First, there is the Acadian Peninsula, a region with a large concentration of seasonal jobs, which offers all kinds of possible comparisons with the Gaspé Peninsula, another region studied in this research project. There is also the Chaleur region, where economic life is dominated by three companies (a mine, a smelter, and a pulp and paper mill). Even the most optimistic studies predict the closing of the mine in the next few years if major new sources of ore are not discovered. Once again, the Chaleur region offers numerous opportunities for comparison, particularly with the Abitibi-Témiscamingue region, where more or less imminent mine closures are also expected.

Finally, the third region is Westmorland-Kent, in southeast New Brunswick, which covers the two counties of the same name. One feature of Westmorland County is that it includes the city of Moncton, which appears to be becoming a mini-metropolis. The economy of the region has changed completely in the past

<sup>1.</sup> Donald J. Savoie, *Pulling Against Gravity: Economic Development in New Brunswick During the McKenna Years* (Montreal: The Institute for Research on Public Policy, 2001).

quarter century, a transformation that is of interest in a number of ways for this study. The Moncton region, as we may recall, experienced numerous economic setbacks in the late 1970s and in the 1980s.<sup>2</sup> For example, in 1976, Eaton's (retail trade) restructured and closed its Moncton catalogue sales centre, putting 1,300 people out of work. In 1978, Marven's, a cookie manufacturing plant, closed its doors, eliminating sixty-five jobs. At its peak, the firm employed 200 people. In 1985, Canadian National (CN) shut down its repair shop operations, which caused the disappearance of 1,150 jobs. The shops had employed up to 3,500 people in the 1960s. Another blow, the 1992 federal budget announced closure of the Canadian Armed Forces base (distribution) in Moncton, thus eliminating 102 military jobs and 343 civilian jobs.<sup>3</sup> How has a regional economy that has experienced so many problems been able to recover to make what Higgins and Breau describe as a "transition from a 'Company Town' to a Competitive and Diversified Business Centre?"<sup>4</sup> And, most important, does the Moncton model offer exportable elements?

We have included Kent County with Westmorland County for the purposes of this study to create the Westmorland-Kent region. Kent County, which just twenty-five years ago ranked second among the poorest regions in Canada, according to the former Department of Regional Economic Expansion, is now experiencing a certain degree of growth.<sup>5</sup> Is proximity to Moncton working in its favour? Have the regional development efforts of various levels of government borne fruit?

Let's begin the analysis by sketching a profile of the New Brunswick regions studied.

#### Population

New Brunswick is not a heavily populated province. Its total population (less than 750,000 inhabitants in 1996) would not even make it a metropolitan centre of over a million inhabitants! It is thus no surprise, in analysing the regions under study, to see that they generally have a low population (see table 1 in appendix).

<sup>2.</sup> Maurice Beaudin (ed.), *Economic Region of Southeast New Brunswick* (Moncton: Canadian Institute for Research on Regional Development, Maritime Series: The State of the Regions, 1996), 19.

Donald J. Savoie and Yves Bourgeois, "Moncton, Making the Transition: Myth or Reality?," in George J. De Benedetti and Rodolphe H. Lamarche (eds.), *Shock Waves: The Maritime Urban System in the New Economy* (Moncton: Canadian Institute for Research on Regional Development, 1994), 232–33; Maurice Mandale and P.-Y. Chiasson, *Partnerships in Community Economic Development: Greater Moncton*, report prepared for the Atlantic Canada Opportunities Agency (Moncton, 1998), 5–6.

<sup>4.</sup> Benjamin Higgins and Andrew Breau, "Entrepreneurship and Economic Development: The Case of Moncton," in Donald J. Savoie and Ralph Winter (eds.), *The Maritime Provinces: Looking to the Future* (Moncton: Canadian Institute for Research on Regional Development, 1993), 167.

<sup>5.</sup> Donald J. Savoie, *Community Economic Development in Atlantic Canada: False Hope or Panacea?* (Moncton: Canadian Institute for Research on Regional Development, 2000), 62.

Madawaska, for example, with 36,305 inhabitants in 1996, is the least populated of the regions selected for this research project. In 1996, the population of Madawaska was 4.9 percent of the province's population. It is interesting to note that the number of inhabitants in the region remained relatively stable in the period, as is shown by the rate of increase. This suggests that the region is characterized by sustained emigration. Madawaska is also a mainly urban region (Edmundston is its urban centre), with a demographic structure in 1996 very similar to the Southeast in this regard.<sup>6</sup> Those two characteristics may partially explain the relative economic health of the regions, which we will analyse later.

Gloucester, which includes two economic sub-regions, as we have seen, had a population of 87,140 inhabitants in 1996, i.e., 11.8 percent of the population of New Brunswick. Unlike Madawaska and the Southeast, Gloucester is mainly a rural region, despite the presence of Bathurst, which is, proportionately, a relatively large urban centre (14,409 inhabitants in the city of Bathurst, not counting the suburbs outside the city limits). It should be noted that the Acadian Peninsula, a well-defined economic region that includes a significant proportion of the county's population, is a rural area. Another interesting fact is that the percentage of the county's population living in a rural area has not tended to drop. The percentage, which was 58.3 percent in 1971, rose to 59.1 percent in 1996. Given that the regional population growth rate showed a major drop in the period, it appears that migration is not from rural areas to urban areas in the region, but from rural and urban areas in the region to outside. This trend is confirmed by the work of Monique Boudreau, who shows that although some counties — mainly in the southeast part of the province, particularly Westmorland — benefited from a positive migratory balance from 1976 to 1986, the majority of counties distant from the province's three large urban centres have had the opposite experience.<sup>7</sup> We will examine migratory flows in more detail later. A final important point is, as we have mentioned, the spectacular drop in the county's population growth rate. From 1971 to 1981, the national rate was higher than the Canadian rate. Moreover, demographic growth in rural areas of the county, which was 16.5 percent, was not only higher than the national average, but also higher than the Canadian rate for urban areas! The various rates subsequently dropped well below the equivalent Canadian rates. In fact, from 1991 to 1996, the county even recorded a slight decrease in population, under the influence of near-stagnation in rural areas and, in particular, a drop of 1 percent in urban areas.

The situation in the Southeast (the counties of Westmorland, Kent, and Albert) is fairly different from the situation in the two other regions. The population is much larger (176,430 inhabitants in 1996) and, while the growth rate has slowed down in recent decades, it is much higher, although still lower than some national rates. The region is mainly urban, with Greater Moncton as its population

<sup>6.</sup> By Southeast, we mean the economic region formed by the counties of Westmorland, Kent, and Albert. We have to use different territorial divisions depending on the data source.

<sup>7.</sup> Monique Boudreau, *Estimation de la fonction d'émigration pour le Nouveau-Brunswick*, Master of Arts (Economics) thesis (Moncton: Université de Moncton, 1993), 162.

centre, consisting of the municipalities of Moncton, Dieppe, and Riverview. We note that between 1971 and 1981, demographic growth in the Southeast was greater in rural areas than urban areas, but the situation was subsequently reversed, and growth is now much greater in the urban Southeast.

#### Structure by Age

The structure of the Canadian population by age shows a strong trend toward overall demographic ageing (see table 2). For example, the percentage of the population sixty-five years old and over climbed from 8.1 percent in 1971 to 11.4 percent in 1996. In the same period, the percentage of the population less that fifteen years of age went from 29.6 to 20.7 percent. The three regions in the study are no exception to this strong trend, although the situation is not homogeneous (see tables 3 to 5).

In Madawaska and Gloucester counties, we see that the population is younger than in Canada as a whole. The ageing population trend is, nonetheless, making itself felt, particularly in the age group less than fifteen years of age. In fact, in the two counties, the proportion of individuals in this age group fell below national figures in 1996, after greatly exceeding them in 1971 and 1981. The same trend is not, however, seen in the Southeast.

In examining the age groups between fifteen and sixty-four years old, the working-age population, it is interesting to note that they make up a higher percentage of the population in the three regions than the national percentage. According to Cyr, Duval, and Leclerc, this is the result of a drop in the birth rate related to the ageing of the baby-boomers.<sup>8</sup> Thus, it is the *relatively low* rate of the less than fifteen years of age group that, at least partially, generates a positive statistic in the fifteen to sixty-four years age groups.

#### **Official Languages**

Not only is New Brunswick the only officially bilingual Canadian province, but its bilingual workforce, particularly in some regions, is often seen as an advantage in regional economic development efforts. This aspect is analysed in greater depth in the next chapter. In New Brunswick, nearly one third of the population (32.6 percent) speaks both of the country's official languages (see table 6), i.e., approximately double the proportion for Canada as a whole. In the four counties studied, the percentage is even greater: 50 percent in Westmorland and Gloucester, 60 percent in Madawaska, and 70 percent in Kent. Another important point is that approximately 40 percent of the population of Gloucester (40.6 percent) and Madawaska (38.9 percent) is unilingual francophone. In an economic environment where the English language is dominant, one may ask whether that

Hubert Cyr, Denis Duval, and André Leclerc, L'Acadie à l'heure des choix (Moncton: Éditions d'Acadie, 1996), 133.

characteristic constitutes a barrier to development. Finally, in New Brunswick as a whole, as in the four counties studied, the number of individuals who do not speak either of the country's two official languages is minimal.

#### **Population Mobility**

We alluded to migration earlier. Data from the 1996 census give us a look at this issue, showing the place of residence of the population of different regions five years earlier, i.e., in 1991 (see table 7). We can thus analyse immigration, although the statistics do not show emigration.

We note that the population of New Brunswick is generally less mobile than the population of Canada as a whole. The percentage of interprovincial immigration, however, is relatively higher in New Brunswick (5.0 percent) than in Canada as a whole (3.3 percent). The reverse is true of intraprovincial migration (8.5 compared to 13.4 percent) and international migration (0.8 compared to 3.4 percent).

In the four counties studied, we note relatively low immigration levels in Madawaska, Gloucester, and Kent, at all levels. In Westmorland County, although the percentage of the population that has moved is lower than national figures, it is notably higher than provincial figures.<sup>9</sup> In Westmorland, the percentage of internal migrants (17.1 percent) is higher than the national average (16.8 percent). The percentage of international immigrants in this county, however, is significantly lower than the Canadian average, and this is also true of the other regions and the province. In fact, 70 percent of immigrants in Westmorland County are from other regions in the province, 13 percent from Ontario, and 9 percent from Nova Scotia.<sup>10</sup>

#### **Economic Sectors**

There are a number of statistical sources that provide a picture of the economic sectors in a region. We use two of them; the first is a review of businesses conducted by the government of New Brunswick (tables 8 to 19). We note that many industries are not covered and, even in the sectors covered, all firms are not inventoried. Despite these weaknesses, an interesting aspect of this source of statistics is that it gives the size of various firms, showing the minimum and maximum number of jobs they generate. We should clarify that this distinction is particularly important when information is desired on the seasonal nature of various economic sectors. The second source of data is various Statistics Canada

<sup>9.</sup> A study by the Canadian Institute for Research on Regional Development concluded there was a migratory flow even within the Southeast region, "The internal flow is basically directed towards the urban agglomeration of Moncton, and away from the rural areas." Beaudin (ed.), *The Economic Region of Southeast New Brunswick*, 33.

<sup>10. &</sup>quot;Moncton: Growth Centre of Atlantic Canada," Times & Transcript (20 March 1998), B1, B8.

censuses, which provide a more complete picture of the economic sectors (tables 20 to 29).

In the economic region of northwest New Brunswick, an area that includes a large part of Madawaska County, there was a major concentration, in 1998, of enterprises in the textiles and clothing sectors (17), business services (10), and metals (9) (see table 8). In recent years, the textiles and clothing sector has grown considerably, due to the appearance of new businesses between 1992 and 1998, growth seen in an increase of 299 jobs (minimum number) in this sector.<sup>11</sup> In other sectors, such as plastic and rubber and lumber products, the number of businesses has remained stable. The number of jobs recorded, however, has significantly increased.

An interesting characteristic of businesses in the region, in view of the relatively low population of the economic region (28,650 inhabitants in the area covered, which is not all of Madawaska County), is the considerable number of firms with at least 100 jobs (see table 14). In fact, there are six firms of that size in sectors as varied as pulp and paper (680 jobs), textiles and clothing (210 and 100 jobs), manufactured wood products (180 jobs), agricultural products (165 jobs), and plastic and rubber (120 jobs). Remember that this is the minimum number of jobs in the firm. The presence of such businesses has the dual advantage of providing year-round jobs and contributing to diversifying the economy, both sectorally and within the small number of major employers. In terms of the seasonal nature of jobs, we note that there are no very marked fluctuations between the minimum and maximum number of jobs among major employers in the region.

Job distribution data by industrial sector (see table 21) show the transformation that has taken place in the Madawaska economy in recent decades. In 1971, the primary nature of the economy was much more marked than in the national economy (see table 20), which was no longer the case in 1996. However, although the proportion of jobs in primary processing decreased nationally by almost half, Madawaska experienced only a slight decrease. In fact, proportionately, there are two and a half times as many jobs in primary processing as in the country as a whole. These activities are relatively diversified in the region in this period. The paper sector, which accounted for approximately half the primary processing jobs in the region in 1971, only had approximately 28 percent of jobs in 1996. The food, wood processing, and leather and textiles sectors also provide a large proportion of these jobs. The region has thus been able to develop a niche, not in a specific sector, but in the wider primary processing category, which is confirmed by analysis of the growth in various industrial sectors (see table 28).

A somewhat different approach to analysing the structure of the regional economy allows us to both confirm the previous conclusions and obtain an even

<sup>11.</sup> The minimum number of jobs is the lowest number of jobs reported by a firm in a year. The minimum number of jobs for a sector is the total minimum number of jobs in the sector inventory of firms.

fuller picture (see table 25). We can see that, between 1971 and 1996, the relative number of primary sector jobs decreased significantly, approaching the Canadian average (see table 24), while the proportion of low value added processing jobs in the region decreased, with the number of jobs going from approximately 150 to over 220 percent of the Canadian average. An increase was also seen in the proportion of jobs in medium value added processing, which illustrates the extent of diversification in processing activities. We also note the relative weakness of the regional economy in sectors such as advanced technology services, wholesale trade, and personal and other services. Finally, we note a significant increase in public service jobs in the region, with a proportion now very close to the national average.

From this data, we can conclude that the economy in the region has changed to a certain extent, with the primary sector shrinking in favour of primary processing activities. Moreover, the relative weakness in sectors such as wholesale trade clearly reflects the fact that Madawaska is not a regional metropolitan centre serving other regions located in its hinterland, assuming that these types of jobs are relatively abundant in metropolitan centres.

As we saw previously, Gloucester County is divided into two economic regions. In the Acadian Peninsula, fish processing is the largest sector, although the number of businesses and jobs there decreased between 1992 and 1998 (see table 9). In 1998, there were thirty-four fish processing plants left, employing a maximum of 4,452 people in the Acadian Peninsula. However, this is a sector where employment is highly seasonal, as is shown by the variance between the minimum (260) and maximum (4,452) number of jobs. Among the other major sectors inventoried, peat ranks second with thirteen firms and from 280 to 858 jobs. An overall characteristic observed is the seasonal nature of numerous major sectors in the Peninsula.

The seasonal aspect is even more striking when we consider the largest employers inventoried (see table 15). Although a single firm — now defunct — has a minimum number of at least 100 jobs, twenty-three firms supply a maximum of at least 100 jobs.<sup>12</sup> This reflects an important characteristic of the economy of the Acadian Peninsula, i.e., the relatively high number of seasonal jobs there. The seasonal nature of employment presents a dual challenge for economic development. Businesses that are major contributors to the local economy need a seasonal labour force to meet their particular needs. The seasonal nature of employment often creates problems for the labour force, particularly job instability and the need for additional income, usually from the employment insurance plan.

In the other economic region in Gloucester County, the Chaleur region, the situation is different. The main sector in the region is the mining sector, which

<sup>12.</sup> It should be noted that the Fédération des caisses populaires acadiennes, which has its head office in Caraquet in the Acadian Peninsula, generates over 100 jobs, but is not included in the provincial profile. The same is true for jobs in the public and parapublic sectors.

provided employment for a minimum of 1,533 people in 1998 (see table 10). Adding the pulp and paper sector gives a base of nearly 1,900 stable jobs. In other sectors, a high concentration of firms can be seen in metals, business services, and manufactured wood products.

Despite the presence of a considerable number of firms in the Chaleur region, table 16, which shows the main firms, eloquently reveals that the regional economy depends heavily on a very small number of firms. The two main employers are in the mining sector (Brunswick Mine, 995 jobs; and Brunswick Smelter, 530 jobs). The third largest employer is a pulp and paper mill (364 jobs). We should add that various waves of modernization have significantly decreased the number of jobs in this mill; in the 1970s, there were approximately 1,200 jobs.

However, there is a shadow on the horizon when it comes to the Brunswick Mine (995 jobs). According to projections, there is not even sufficient ore remaining for another ten years. One step toward terminating operations was just taken with the announcement of the closure of the company's exploration office at Bathurst. It is fairly easy to see that closure of the mine would — or will — be a blow for the local economy. Moreover, analysts indicate that it represents a risk for the smelter, which provides 530 jobs. At our meetings, studies were cited showing that approximately seventy firms in the Chaleur region, representing approximately 1,200 jobs, depend directly on the mine for survival.

Despite the picture of an economy heavily based on exploitation of natural resources, the industrial structure of Gloucester County has changed profoundly in recent decades (see table 22). In 1971, two out of five jobs were in the primary sector or primary processing. In 1996, only one out of five jobs was in this category. This drop might be seen as the result of a decrease in these two sectors, which is partly the case. Between 1971 and 1996, the number of jobs fell from 3,941 to 3,300 in the primary processing sector and rose from 3,540 to 3,720 in the primary sector. The "rest of the economy" also showed greater growth in Gloucester County than in Canada as a whole in this period (see table 28). The relative weight of sectors such as forestry, metal mines, fish processing, and paper greatly decreased in this period. However, the region remains dependent on the primary and primary processing sectors, which account for a proportion of jobs nearly twice as high as the Canadian average.

A slightly more in-depth analysis of census data completes the picture (see table 26). The reduction in the relative size of the primary sector is not in doubt, but this sector still remains large (more than double the Canadian average). The relative proportion of jobs in low value added processing has also dropped. It is interesting to note that between 1971 and 1996, the relative number of low value added processing activities decreased in similar proportions in the region and nationally, which means that, in this regard, the economy of Gloucester only followed the national trend.

Other sectors where the economy in the region falls behind are medium value added and high value added activities. However, the proportion of public service jobs increased, reaching the national average in 1996. Finally, as in Madawaska, we note a relatively low number of jobs in sectors such as advanced services (technology), wholesale trade, transportation, and so on. This confirms that the region is not — like Madawaska — a regional urban centre with its own hinterland.

In the Greater Moncton economic region, with a population of more than 100,000, we see a much more diversified economy than in the previous regions (see table 11). Many of the sectors inventoried have over ten firms, up to thirty or forty, and even sixty-five in the business services sector, keeping in mind that the retail sales sector and public and parapublic sectors are not even included. There are a minimum of 988 jobs in the agricultural products sector, 650 in the metals sector, 597 in business services, 537 in the food and beverage sector, and 526 in the printing sector. These activities clearly show that the economy can be described as diversified.

The analysis of the main firms inventoried shows the diversity of the economy (see table 17). At the top of the list is Hub Meat Packers, a meat packing plant with between 850 and 900 employees. Next is Apex Industries (metals), which employs some 180 to 230 people. In fact, what is revealed in this study — which is incomplete because all economic sectors are not inventoried — is the absence of a cluster of dominant employers. The economy of Greater Moncton appears to be very diversified, both in terms of the number of relatively large employers and industries. A review of the southeast New Brunswick economic region<sup>13</sup> shows a striking contrast with the bordering Greater Moncton economic region (see table 12). The largest economic sector is clearly fish processing, with thirty-six firms and between 715 and 2,810 jobs. It should be noted that many of these businesses are in a specific niche, smoked herring. In 2001, there were twenty-eight smokehouses with approximately 500 employees; their main markets are in Haiti and the Dominican Republic.<sup>14</sup> The sectors with the next largest number of firms are business services (15 firms and between 48 and 59 jobs) and manufactured wood products (12 firms and 263 to 322 jobs). In terms of jobs, the chemical products and food and beverage sectors are also in the top ranks.

As might be expected, the size of the fish processing sector means that although the major businesses are mainly in this sector, they show large fluctuations in number of jobs due to the seasonal nature of the sector (see table 18). However, we note that some plants seem to succeed in reducing the extent of seasonal job variations, particularly by obtaining raw material supplies from outside the region and by focussing on diversifying the species processed. Apart from this sector, Consumer Glass (chemical products), which provides 180 to 220 jobs, is the main employer in the region among the firms inventoried.

<sup>13.</sup> This is the southeast portion of Westmorland County, i.e., the portion of the county not included in the Moncton economic region: 32,170 inhabitants.

<sup>14. &</sup>quot;L'industrie du hareng fumé menacée," L'Acadie Nouvelle (25 January 2001), 8.

The economy of Kent County is dependent on the fish processing sector, with fifteen plants and between 214 and 1,404 jobs in 1998 (see table 13). Other sectors contribute to diversifying the county's economy — at least to a certain extent. The metals sector has nine firms and between 309 and 465 jobs; building products, eleven firms and between 111 and 224 jobs; and manufactured wood products also eleven firms and between 99 and 166 jobs.

Table 19 shows that fish processing plants remain among the largest employers. The main employer is in another sector, however; Imperial Sheet Metal (metals) employed between 150 and 225 people in 1998. Similarly, Kent Homes, which builds prefabricated houses, and Kanalflakt, a manufacturer of ventilation systems, are in "non-traditional" sectors and provide work for a significant number of employees.

In the southeast New Brunswick geographic region as a whole, which includes Westmorland, Kent, and Albert counties, we note that when the primary and primary processing sectors are combined, they provide a smaller proportion of jobs — both in 1971 and in 1996 — than nationally (see table 23). Given that the region includes a relatively large rural area, the results show the "minimetropolis" role played by Greater Moncton, which means a large concentration of jobs outside the primary and primary processing sectors. There is, however, a negative note: although growth in employment was slightly higher in the region than in Canada as a whole, growth in employment in the "rest of the economy"<sup>15</sup> was lower there than for the country as a whole (see table 28).

In conclusion, it should be pointed out that the economy of Greater Moncton also benefits from the presence of a number of public and parapublic agencies,<sup>16</sup> including the Atlantic Lottery Corporation Inc., where the number of jobs went from 170 to 310 between 1990 and 1996, Canada Post Corporation, the Canadian Broadcasting Corporation, the head office of the Atlantic Canada Opportunities Agency (ACOA), two major hospitals (approximately 4,000 jobs), two universities (approximately 1,200 jobs), and so on. Finally, as we will see later, some sectors that have not been inventoried (e.g., call centres) have experienced major growth in recent years.

#### **Activities and Income**

The employment situation has noticeably improved in Madawaska in recent years (see table 30). Census data show that in 1991 the unemployment rate in the region was higher than the provincial rate (17.4 compared to 15.4 percent) but was lower than the rate for New Brunswick as a whole in 1996 (15.0 compared to 15.5 percent). This trend appears to be confirmed by more recent data (see table 31: Edmundston-Woodstock) which, unfortunately for the purposes of this study, covers a significantly larger area than just Madawaska County. The labour force participation rate in the region also increased during this period.

<sup>15.</sup> Note that this category includes the service sector, in particular.

<sup>16.</sup> Mandale and Chiasson, Partnerships in Community Economic Development, 9.

The reduction — even elimination — of the gap between the unemployment rate in the region and provincial and national averages appears to be a fairly recent phenomenon. In fact, a team of researchers led by economist André Leclerc, on the Edmundston campus of the Université de Moncton, came to the opposite conclusion in a study of the Acadian regions of New Brunswick, based on data up to 1991.<sup>17</sup>

The income situation in the region improved between 1971 and 1996 (see table 32). This is particularly true for rural Madawaska, for example, where the average employment income per worker went from approximately 56 to 66 percent of the Canadian average, and the average income per capita went from 44.7 percent of the Canadian average to slightly more than 68 percent. However, urban Madawaska has lost ground slightly in average employment income per worker. It is possible that the drop is a result of the loss of jobs (generally very well-paid) in the pulp and paper sector we commented on earlier. Nevertheless, average income per capita in urban Madawaska jumped from 68 to 80 percent of the national average, probably as a result of various improvements in government transfer payments to individuals. We also note that the percentage of the working-age labour force earning employment income increased compared to the national average, both in rural and urban Madawaska.

Finally, the region is slightly more dependent on government transfer payments than New Brunswick as a whole (see table 33). This dependence increased slightly from 1991 to 1996, but at a lower rate than the average increase seen in New Brunswick and in Canada.

In Gloucester County, unemployment remains a major problem. In 1991 and in 1996, the unemployment rate there was over 20 percent. In addition, the labour force participation rate there decreased in this period (see table 30). Although the data does not show the situation for Gloucester County alone, more recent data (see table 31: Campbellton-Miramichi) confirm that the unemployment rate remains relatively high, and the labour force participation rate remains relatively low.

An analysis of income for Gloucester County reveals similar trends to the ones observed previously in Madawaska for the same period (from 1971 to 1996). We note that rural Gloucester made slight progress compared to the national average (see table 32). Average employment income per worker went from 62 to 64 percent of the Canadian average, while average income per inhabitant went from 43 to 62 percent. Average employment income per worker decreased in urban Gloucester compared to the national average, dipping from nearly 86 percent to slightly less than 80 percent. This decrease is probably the result of job losses in the mining and pulp and paper sectors, where jobs are very well-paid. However, we note an improvement in average income per capita, which rose from 74.5 percent of the Canadian average to 82.5 percent. Again, the increase seems to be

<sup>17.</sup> Cyr, Duval, and Leclerc, L'Acadie à l'heure des choix, 130.

attributable, to a large extent, to improvements in various forms of transfer payments to individuals.

Dependence on government transfer payments is very high in Gloucester County (see table 33). In 1991 and 1996, more than a quarter of average income came from government transfer payments. However, we note that, as in Madawaska, the increase in dependence during the period was lower in Gloucester than the increase reported in Canada and New Brunswick as a whole.

The Westmorland-Kent region, formed by the two counties, shows interesting internal contrasts. Kent, a rural region, has a very high unemployment rate, even higher than the unemployment rate in Gloucester (see table 30). The labour force participation rate is rising there, however, and approaching the provincial rate. Westmorland, on the other hand, has a lower unemployment rate than New Brunswick as a whole and a higher labour force participation rate than the provincial average. An even more encouraging fact, from the perspective of regional economic development efforts, is that an analysis of recent data for an area roughly corresponding to the southeast New Brunswick geographic region (see table 31: Moncton-Richibouctou) reveals that the unemployment rate appears to be dropping consistently, and the labour force participation rate remains relatively stable. It should be remembered that, based on the work done by the team led by André Leclerc, this trend toward improved labour market conditions appears to be fairly recent.<sup>18</sup>

An analysis of income in 1971 and 1996 in the geographic region of southeast New Brunswick (Westmorland, Kent, and Albert) offers an interesting perspective (see table 32). We note that the situation has improved right down the line, both in rural and urban areas. Average employment income per worker increased slightly in both urban and rural areas. Given the loss of relatively well-paid jobs in Canadian National shops (losses spread over the years 1970 to 1980), the average employment income per worker might have been expected to fall in the urban Southeast, which was not the case. Average income per capita in the rural Southeast went from 58 percent of the national average to 75 percent, while this percentage in the urban Southeast went from over 88 to nearly 94 percent. Another interesting point is that the percentage of the working-age labour force earning employment income in the urban Southeast is higher not only than the Canadian rural average but also the Canadian urban average. In addition, this percentage in the rural Southeast is just below the percentage for urban Canada and higher than the percentage for rural Canada.

Dependence on government transfer payments in very high in Kent County (see table 33), although the increase in the proportion of this income was minimal between 1991 and 1996. The proportion of income attributable to government transfer payments also increased in Westmorland County, but is lower than for the province as a whole, both in 1991 and 1996. A 1996 study by the Canadian Institute for Research on Regional Development concluded that this dependence

<sup>18.</sup> Ibid.

is closely related to the unemployment insurance program (which has since become the employment insurance program) and "increases considerably in rural areas dominated by resource-based activities, such as Kent County."<sup>19</sup>

#### **Education and Skills**

In an economic environment where human capital is increasingly a necessary condition for economic development, an analysis of the education level of the population fifteen years of age and over is very important for a full understanding of both the dynamics of development in various regions and the potential for development in those regions.

First, in Madawaska County, the percentage of the population fifteen years of age and over with a university degree increased between 1971 and 1996, while the percentage of the population that did not complete high school dropped, both in urban and rural areas (see table 34). The presence of a university in Edmundston and two community colleges (in Edmundston and Grand Falls) in the region certainly contributed to this trend.<sup>20</sup> There is a problem, however, when the region is compared with the national average in this regard: the gap widens over the period. We must therefore conclude that, although there has been an improvement in the education and skills of the adult population, the disparity with the country as a whole is increasing. Another perplexing statistic is that the percentage of the population with a trade or technical certificate or diploma fell between 1991 and 1996, not only relative to Canada as a whole, but also within the county, in both urban and rural areas. Is this again due to the impact of the drop in employment in the pulp and paper sector?

In Gloucester County, we see roughly the same trend as in Madawaska County. The percentage of the population fifteen years of age and over that has not completed high school decreased significantly between 1971 and 1996, but the gap between the region and the country as a whole widened. Moreover, the percentage of the adult population with a university degree has consistently increased in this period. We note that the region appears to be relatively well-supplied with a labour force with a trade or technical certificate or diploma, particularly in urban Gloucester, although the advantage over the national urban average has decreased slightly. The presence of the Shippagan campus of the Université de Moncton and the community college in Bathurst certainly has something to do with the progress accomplished, although the situation is far from ideal.

A review of the education levels of the population aged fifteen years and over in southeast New Brunswick is slightly more complex than for the other regions. In Madawaska and Gloucester counties, we generally saw identical trends in rural and urban areas, which is not the case in the Southeast. In the urban Southeast, we

<sup>19.</sup> Beaudin (ed.), The Economic Region of Southeast New Brunswick, 46.

<sup>20.</sup> Although the city of Grand Falls is located in Victoria County, it undeniably influences the southeast part of Madawaska County.

note not only a significant drop in the proportion of the population that has not completed high school, but also a narrowing of the gap with the urban Canadian average. Although this percentage also decreased in the rural Southeast, the disparity with the national average increased in rural areas. The percentage of the population with a university degree rose both in rural and urban areas, and the difference with the national average also decreased in urban areas. In rural Southeast, the situation is both different and interesting. In 1971, the proportion of university graduates there was well above the average for rural Canada. This advantage slipped in 1981, and the rural Southeast was even slightly below the national rural average in 1991. In 1996, the proportion of university graduates there was slightly higher than the national rural average. Finally, the region makes a relatively good showing in the percentage of the adult population with a trade or technical certificate or diploma; however, it falls behind in the broader category of certificates and diplomas in applied sciences, engineering, agricultural sciences, mathematics and physical sciences.

Finally, we note that the region has three universities, Université de Moncton (francophone), Mount Allison University (anglophone), and Atlantic Baptist University (anglophone), and two community colleges, one in Moncton (anglophone) and the other in Dieppe (francophone).

#### **Recent Trends**

The great majority of data presented so far is at least five years old, as the latest census for which data are available is 1996. Five years in the area of economic development is both a very short and a long time. We will now take a look at the trends that have appeared recently in the regions studied or had an impact on development efforts in these regions.

Previously, we saw that the economy in several of the regions studied involved a large number of seasonal jobs. Labour force dependence on government transfer payments is also very often high, something not unrelated to the seasonal nature of the jobs. A factor that has influenced the economy of New Brunswick in recent years is the series of cuts made in the unemployment insurance plan, which subsequently became the employment insurance plan.<sup>21</sup> A study by the Canadian Labour Congress concludes that the financial loss as a result of reform, for the province of New Brunswick as a whole between 1993 and 2000 is approximately \$2 billion. This series of reforms particularly affected seasonal workers. On a regional basis, the study estimates the annual loss in employment insurance benefits at \$69 million in the federal riding of Acadia-Bathurst, which basically corresponds to Gloucester County; \$33.7 million in the riding of Madawaska-Restigouche (Madawaska and Restigouche counties); \$35.8 million in the riding of Beauséjour-Petitcodiac (Kent, Westmorland, and Albert counties, less the urban area of Greater Moncton); and finally, \$15.5 million in the riding of

<sup>21. &</sup>quot;Ottawa confirms: UI reforms will hurt," Telegraph Journal (24 January 1996), A1, A2.

Moncton (Greater Moncton).<sup>22</sup> We should add that some measures have been eased since the last federal election.

The reforms had an adverse effect on several levels. Not only did claimants see the amount of their benefits decrease, but the reforms also reduced the number of weeks of benefits, creating what has been called the "black hole," a period that could extend for several weeks in which the individuals have no income.<sup>23</sup> To make matters worse, some weaknesses in the system were not corrected, often making incentives to work longer very weak. In fact, the result is a system in which incentives often have the opposite effect; the method of calculating benefits means that a claimant may actually lose money by going back to work for a certain period of time!

There is no doubt the economy of Madawaska has succeeded in diversifying, and diversification is now paying dividends. For example, one observer notes that there are generally more young people working in businesses in this region compared to many other regions in the province. The fact that a relatively high number of new businesses have been created, generating a significant number of jobs, probably allows young people to find work more easily than in regions where there are fewer of this type of employer, particularly in regions where the major employers have hired few, if any, new employees for some time.

Among the new businesses are Prelco, a Quebec company that specializes in manufacturing safety glass. In a statement in December 2000, this firm announced its intention of creating 120 jobs in a three-year period. Among the reasons given for choosing Edmundston, a manager of the company, which already has a plant in Rivière-du-Loup, mentioned proximity to the first plant and proximity to the United States.<sup>24</sup>

Another example of diversification: although it is not a new business in the region, the firm IPL opened its new building in summer 2001 for the manufacture of food containers. The company needed new facilities for its workers, whose numbers rose to 150 with the opening of the new building and should increase by twenty by 2002. The company previously employed 80 people.<sup>25</sup> Another expanding firm is Shermag, a furniture manufacturer that operates a plant in Saint-François-de-Madawaska (212 jobs) and another in Edmundston (103 jobs). The company has its head office in Quebec and showed 7 percent growth in sales in 2000–01. It is vertically integrated, and its activities range from logging to furniture manufacturing.<sup>26</sup> Another example is the Grande-Rivière sawmill, in Saint-Léonard, which invested in modernizing in 2001. The company, which opened its

<sup>22. &</sup>quot;Une perte de 2 milliards \$," L'Acadie Nouvelle (20 November 2000), 3.

<sup>23. &</sup>quot;Des centaines d'employés d'usine font à nouveau face au 'trou noir'," *L'Acadie Nouvelle* (19 June 2001), 8.

<sup>24. &</sup>quot;Prelco s'installe à Edmundston : 120 emplois en trois ans," *L'Acadie Nouvelle* (12 December 2000), 5.

<sup>25. &</sup>quot;IPL graduates to new Edmundston plant," Telegraph Journal (16 June 2001), B1, B3.

<sup>26. &</sup>quot;Furniture maker enjoys comfortable sales growth," *Telegraph Journal* (22 June 2001), C1.

doors in 1988, provides work for 210 people, and sells approximately 98 percent of its production on the New England market.<sup>27</sup>

In the textiles sector, a number of new projects have been announced in recent years (e.g., WHK Woven Labels, Goodison Textiles,<sup>28</sup> Farah Originals,<sup>29</sup> JB Woven Labels<sup>30</sup>). Unfortunately, of that list, only the WHK Woven Labels company is still operating.<sup>31</sup> Despite the failures, the sector appears to be doing relatively well. The company Chemise JML, for example, present in the region since 1963, has two plants there (70 jobs in Grand Falls and 210 in Edmundston), and its situation appears very solid.<sup>32</sup> One of its products is boxer shorts for men; approximately half its production is distributed on United States markets under the trade names Van Heusen, Prodige, Moores, and Gold Star. Relative proximity to markets in central Canada and New England is generally considered an advantage of the region. Observers also believe that stricter labour legislation and regulation in Quebec, at least at a certain point in time, encouraged some businesses to set up shop in this region.

Despite the shadow cast by the potential closure of the Brunswick Mine in the next few years, the study of the Chaleur region economy contains some positive aspects. The port of Belledune, for example, with its advantageous geographical location,<sup>33</sup> has seen traffic double in one year, since management was transferred to local authorities. The pulp and paper mill is trying to reduce its dependence on often problematic wood supplies and intends to use 100 percent recycled products by 2010.

In another area, the textiles sector is the target of efforts by the Action Committee for the Economic Development of the Acadian Peninsula (we will come back to these efforts in the next chapter). In fall 2000, construction began on the Atlantic Fine Yarns Inc. plant in Pokemouche.<sup>34</sup> The construction of the plant, with an area equivalent to the size of eleven football fields, will take two

<sup>27. &</sup>quot;La Scierie Grande-Rivière continue sa modernisation," *L'Acadie Nouvelle* (17 July 2001), 11.

<sup>28.</sup> The arrival of Goodison Textiles was announced in the summer of 1994, with a prediction that the company would create 300 new jobs: "Textile plant will bring 300 jobs to Edmundston," *Telegraph Journal* (20 August 1994), B1, B2.

In 1995, this company announced its upcoming arrival in the region, which would result in the creation of 50 jobs that year: "Farah Originals s'installera à Grand-Sault," *L'Acadie Nouvelle* (31 January 1995), 5.

<sup>30.</sup> JB Woven Labels announced its arrival in 1994, promising to create 50 jobs: "Edmundston getting 50 more textile jobs," *Telegraph Journal* (13 October 1994), B1, B2.

 <sup>&</sup>quot;Province has a future in textiles, former bureaucrat says," *Times & Transcript* (18 October 2000), A4; "New Brunswick's north reeling from company failures," *Globe and Mail* (22 March 1999), A5; "Textile: Fredericton maintient le cap," *L'Acadie Nouvelle* (4 March 1999), 3.

<sup>32. &</sup>quot;La Chemise JML prend de l'expansion à Grand-Sault," L'Acadie Nouvelle (15 October 1998), 7.

<sup>33. &</sup>quot;North Shore: Hard work, hope and the new economy," *Telegraph Journal* (30 December 1996), A1, A2.

<sup>34.</sup> Consult Web site: www.gnb.ca/rdc/bulletin/IAsept2000e.htm.

years and create a minimum of 150 jobs. Once work is completed, the plant will provide 350 permanent jobs. Described as one of the most modern of its kind in the world, the plant will produce forty-five metric tons of ring-spun yarn per day.

In this case, an available resource was "used" to successfully carry out the project. Trucks transporting peat produced in the region to outside markets often came back empty. With the establishment of this company, the trucks can deliver peat and bring back the cotton used in the new plant, a good example of complementary activity in different sectors in the same region.

A second major project, also in the textiles industry, is Sunshine Mills, which will also open its doors in 2002, at Tracadie this time.<sup>35</sup> The company will create 110 permanent jobs and plans to produce 9.5 million linear metres of grey cloth annually.

Other companies in the textiles sector also set up shop in the region, or tried to, in recent years: Wink<sup>36</sup> (Caraquet), Paquet Yarns (Paquetville); Calicloth International<sup>37</sup> (Bathurst), Ranka (Caraquet and Bathurst), Medina Mills<sup>38</sup> (Caraquet), and Adeem Sportswear<sup>39</sup> (Bathurst). Of that list, only the Paquet Yarns<sup>40</sup> plant is still in operation.<sup>41</sup>

An interesting initiative in the "new economy" context is the Smart Community pilot project, sponsored by the agency Concertation rurale Centre-Péninsule Inc. and carried out in cooperation with Industry Canada.<sup>42</sup> Its objective is to introduce and use new technology and deliver services throughout the area by integrating information and communications technology in community life and

<sup>35.</sup> Consult Web site: www.gnb.ca/rdc/bulletin/IAfev2001e.htm.

<sup>36.</sup> This company closed its doors in November 1999, a victim of competition: "A saviour for Wink Industries will be hard to find: Analysts," *Telegraph Journal* (20 November 1999), B1.

<sup>37.</sup> In 1995, Calicloth closed one of its plants in Smith Falls, Ontario, and opened a new plant in Bathurst. Originally, the plant was to result in the creation of 250 jobs. What appears to have been a cash-flow problem led to closure of the plant in 1998. See "The demise of Calicloth International," *Telegraph Journal* (17 April 1999), B1, B5.

<sup>38.</sup> The plant, which did not even remain in operation for a full year, closed in spring 2001. "L'avenir est très sombre pour Medina," *L'Acadie Nouvelle* (15 June 2001), 10. In June 2001, the finishing facilities equipment was dismantled: "Medina Mills démonte ses installations de finition," *L'Acadie Nouvelle* (19 June 2001), 6.

The company closed its doors in March 1999 as a result of financial problems. "Les exemployés d'Adeem Sportswear confiants d'avoir fait bouger les choses," *L'Acadie Nouvelle* (2 March 1999), 5.

<sup>40.</sup> This plant opened its doors in 1995, creating approximately 40 full-time jobs at that time: "Company Brings 40 Jobs to Paquetville," *The Brunswick Business Journal* (October 1995), 3.

 <sup>&</sup>quot;Province has a future in textiles, former bureaucrat says," *Times & Transcript* (18 October 2000), A4; "New Brunswick's north reeling from company failures," *Globe and Mail* (22 March 1999), A5; "Textile: Fredericton maintient le cap," *L'Acadie Nouvelle* (4 March 1999), 3. Although bankruptcy is usually the explanation for the disappearance of these businesses, in the case of Ranka, the project never came through because ultimately the provincial government considered the provincial government assistance required unacceptable: "N.B. gives up on 1,500 textile plant jobs," *Times & Transcript* (3 September 1998), A1, A2.

<sup>42.</sup> Consult Web site: www.gnb.ca/rdc/bulletin/IAsept2000e.htm.

applying it in areas such as health care, education, occupational training and business.

In education, the provincial government established a community college in the Acadian Peninsula in 2000.<sup>43</sup> This initiative is part of a strategy to improve labour force training and also to give a greater role to advanced technology, as with the Smart Community project. The new college thus offers training in fields related to fishing, business, new technology and academic upgrading.

Other activities emanating from the Action Committee for the Economic Development of the Acadian Peninsula include development projects in the aquaculture sector.<sup>44</sup> An amount of \$1 million will be spent over a four-year period to support the development of the shellfish farming industry (such as oysters, mussels, etc.). Infrastructure is another investment target often focussed on tourism or industrial development (industrial parks).

The region has also welcomed some call centres. Although their impact is not comparable to the impact they had in the Moncton region, Gloucester's bilingual labour force has nevertheless been a factor in the arrival of firms such as Canadian Facts (creating the equivalent of 48 full-time jobs),<sup>45</sup> DMS Marketing Services (240 jobs) and Insight Canada Research (300 jobs).<sup>46</sup>

Among recent trends observed in other sectors is the case of the Lamtrac Inc. company, which manufactures machines used to maintain snowmobile trails. The size of this Acadian Peninsula business tripled in recent years. It is interesting to note that Lamtrac uses very few inputs from outside the region; approximately 90 percent of the parts used in its \$140,000 machines are manufactured by Lamtrac and its local partners.<sup>47</sup> Another example is the company Les Systèmes Erin Ltée, owned by a firm in Rivière-du-Loup, which manufactures equipment for the peat sector. It opened its doors in Caraquet in 1998, creating seventy-five jobs at that time and plans to create another 110 jobs before 2004.<sup>48</sup>

Initiatives have also been seen in more traditional sectors. Lamèque Quality Group, for example, is trying to incorporate greater value added in its peat products. A 1997 initiative was, in fact, intended to create fifty new jobs in the production of soil mix.<sup>49</sup> A fish processing plant, Blue Cove Packing, announced a

<sup>43.</sup> Ibid.

<sup>44.</sup> Consult Web sites: www.gnb.ca/rdc/bulletin/IAsept 2000e.htm and www.gnb.ca/rdc/bulletin/IAfev2001.htm.

<sup>45. &</sup>quot;Bathurst wins 48-job market research call centre," *Telegraph Journal* (20 December 1997), B2.

<sup>46. &</sup>quot;North Shore: Hard work, hope and the new economy," *Telegraph Journal* (30 December 1996), A1, A2.

<sup>47. &</sup>quot;Lamèque firm on fast track," Telegraph Journal (14 June 2001), C1, C3.

<sup>48. &</sup>quot;Un succès et un échec à Caraquet," *L'Acadie Nouvelle* (28 October 1998), 5; "Caraquet lands 75 manufacturing jobs," *Telegraph Journal* (29 October 1998), B1, B7.

<sup>49. &</sup>quot;La tourbe à valeur ajoutée rapportera 50 emplois," *L'Acadie Nouvelle* (10 December 1997), 11.

project in 1997 to produce jars of marinated herring that would also generate fifty new jobs.<sup>50</sup>

One of the most important developments in recent years in Westmorland-Kent is the emergence of the call centre or telecentre niche.<sup>51</sup> Today, this sector includes approximately twenty businesses that provide approximately 3,000 jobs.<sup>52</sup> Mandale and Chiasson believe that various factors played a role in producing these results. First, there was a provincial strategy to attract call centres, headed by a partnership between the provincial government and NBTel, the provincial telephone company.<sup>53</sup> Secondly, Greater Moncton officials took a proactive approach. The provincial partnership also called on the services of the two community colleges in the Moncton region (one anglophone and the other francophone) to offer "customized training and new core programs for workers at the new call centres. The community offered low cost working space, and a loyal, reliable, and considerably bilingual labour force."<sup>54</sup>

The well does not appear about to run dry. In January 2000, the *National Post* published an article stating: "New Brunswick is the most attractive place in North America to set up a call centre, especially for financial services companies, and should expect a flurry of new business [. . .]."<sup>55</sup> A number of examples appear to confirm this statement. The Fairmont Hotels and Resorts chain, now owner of the former Canadian Pacific Hotels, initially established a call centre in Moncton with approximately 60 employees a few years ago. This centre, which just moved into more spacious facilities, now employs 300 people.<sup>56</sup> Camco is another example. It was the first call centre in New Brunswick created as part of the provincial government strategy. The number of its employees rose from its initial 25 to 140 in 1999.<sup>57</sup> A third example: Minacs Worldwide which opened a new call centre in October 2000, was to hire 600 employees within two years. When the centre opened, 290 people had already been hired. The centre is located in a complex in Riverview, in a suburb of Moncton, where the ICT call centre is also located with its 500 employees.<sup>58</sup>

<sup>50. &</sup>quot;Blue Cove produira du hareng mariné en pots," L'Acadie Nouvelle (10 December 1997), 10.

<sup>51.</sup> Savoie, Pulling Against Gravity, 99-100.

<sup>52.</sup> It was impossible to obtain a complete, up-to-date list of call centres in the Moncton region. A complete list dating from 1995, however, offers an interesting overview: Camco (32 jobs); Purolator Courier (400); CP Express (170); Federal Express (60); Business-to-Business Telemarketing (21); Livingston International (20); Royal Bank (500); Harvey's/P. Lawson Travel (6); UPS (200); UPS (500); Canadian Pacific Hotels (75). See "Moncton, capitale des centres d'appels," L'Acadie Nouvelle (9 March 1995), 12.

<sup>53.</sup> We should clarify that, since 1993, New Brunswick has been the first Canadian province where all users of telephone services had access to computerized digital service: "N.B. Tel goes digital," *Globe and Mail* (30 November 1993), B7.

<sup>54.</sup> Mandale and Chiasson, Partnerships in Community Economic Development, 5.

<sup>55. &</sup>quot;N.B. seen as best for call centres," *National Post* (13 January 2000). Consult Web site: www.nationalpost.com/financialpost.asp?f=000113/175079&s2=canadianbusiness.

<sup>56. &</sup>quot;Hotel takes call centre," Times & Transcript (18 June 2001), C2.

<sup>57. &</sup>quot;Camco call centre expands," Times & Transcript (13 January 1999), D1.

<sup>58. &</sup>quot;New Riverview call centre brings 600 jobs," Times & Transcript (13 October 2000), A7.

The presence of the call centres also raises some criticism.<sup>59</sup> Some think the region regressed by trying to replace very well-paid jobs in Canadian National shops<sup>60</sup> with less well-paid jobs in call centres.<sup>61</sup>

Moncton has also seen the arrival and development of some advanced technology companies, such as, Com Dev Atlantic, a company that started out in Moncton in 1992 with approximately ten employees. In early 2001, it employed approximately 400 people and planned to create 200 more jobs. However, the company was a victim of the vagaries of international markets; in the summer of 2001, the number of jobs fell to approximately 250.<sup>62</sup> OAO Technology Solutions is another example. The United States software development company opened an office in Moncton in 1999 with the objective of creating 200 jobs.<sup>63</sup> In 2000, the company had already hired 215 people. This figure could have been higher, but a shortage of qualified workers slowed the company's efforts.<sup>64</sup> Whitehill Technologies is going against the recent trend in financial markets, in which "new economy" firms seem to have lost ground. The company recently received an injection in the form of \$5 million equity from a financial services company in Toronto.<sup>65</sup> The firm has developed a niche in the market for software that helps convert data used by Internet. It generates approximately seventy jobs.

Another success story is the video lottery terminals niche. In fact, it's fair to say that a genuine industrial cluster is developing in the Moncton region in this sector, although its size is still relatively modest. The cluster revolves around two firms, Spielo Gaming International and Hi-Tech Gaming, which supply approximately half the Canadian market, as well as being significant international players. Spielo has its roots in a research centre at the Université de Moncton. Other businesses have been added to the sector. Nanoptix, for example, manufactures thermal printers used in video lottery terminals. The number of employees in the company, which is located in Dieppe, a suburb of Moncton, has risen in recent years from three to twenty, and it just obtained a major contract with a British company to produce printers for use in casinos throughout the world. The new contract should generate twenty-five new jobs.<sup>66</sup> Another Dieppe firm, Custom Electronic Assemblies, will also benefit from the contract by assembling electronic components for the printers.

Greater Moncton has also experienced growth in businesses in slightly more "traditional" sectors. Atlantic Waffles, for example, is in the process of expan-

<sup>59. &</sup>quot;Plusieurs emplois, petits salaires," L'Acadie Nouvelle (13 July 1996), 5.

<sup>60.</sup> Savoie and Bourgeois, "Moncton, making the transition," 233.

<sup>61. &</sup>quot;Call centre jobs, wages on increase in New Brunswick," *Times & Transcript* (8 January 2001), A5. It should be clarified that the average salary in call centres in New Brunswick went from \$8/hr. a few years ago to between \$12 and \$17/hr.

<sup>62. &</sup>quot;Com Dev rises again with 200 new jobs," *Times & Transcript* (12 January 2001), A1, A2; "Com Dev caught in wireless downturn," *Times & Transcript* (24 July 2001), C2.

<sup>63. &</sup>quot;Technology company hiring new people weekly," Times & Transcript (15 May 1999), E1.

<sup>64. &</sup>quot;Moncton overflows with jobs," Times & Transcript (26 August 2000), A1, A2.

<sup>65. &</sup>quot;Whitehill gains \$5-million financing," Times & Transcript (14 August 2001), C1.

<sup>66. &</sup>quot;Dieppe company lands high-tech deal," Times & Transcript (1 May 2001), C2.

ding. The company, which set up shop in the region in 1995 and produces Belgian waffles, sweetened waffles, French toasts, pancakes, and so on, has nearly 145 employees. It supplies approximately 65 percent of the major supermarkets in the United States and 98 percent of the major supermarkets in Canada.<sup>67</sup> Another example is Master Packaging Inc., a cardboard box factory set up in Dieppe in 1997, which generates approximately 100 jobs.<sup>68</sup>

In another vein, on 31 May 1997, the Confederation Bridge connecting Prince Edward Island and New Brunswick was officially opened, bringing southeast New Brunswick closer, not physically but time-wise, to the market of approximately 135,000 people in the island province. Although it is true that the bridge brings Prince Edward Island producers closer to their various markets, it also strengthens Moncton's position as the geographic centre of the Maritime provinces.

In Kent County, an area that has developed substantially in recent years is Bouctouche, in the southeast part of the county. In ten years, 164 businesses have been started there.<sup>69</sup> Bouctouche is the village where K.C. Irving, founder of the Irving empire, was born; his family has contributed to community development by investing significant funds in the Irving Ecocentre<sup>70</sup> (approximately 50 seasonal jobs and an annual average of 160,000 visitors) and the Bouctouche marina. The principal employer in the area, Kent Homes (250 jobs), is owned by the Irvings. Among other major businesses are Mills Sea Foods, a plant specializing in steamer clams, with 150 employees; Kanalflakt, a firm working in the heating and ventilation sector (125 jobs); and the Pays de la Sagouine, a cultural and artistic entertainment centre, originating from Antonine Maillet's books, which annually attracts more than 80,000 visitors and generates approximately 100 jobs (mostly seasonal). Among the factors that explain the success of the Bouctouche area is its proximity to Moncton (approximately 40 km). Another factor that is difficult to quantify is the impact of the people born in Bouctouche, such as K.C. Irving and Antonine Maillet, who have made an undeniable contribution to its growth.

The picture of the region's economy is not, however, entirely positive. In fact, one of the largest employers in Kent County, Pêcheries Cap-Lumière (approximately 200 jobs), went bankrupt in 2001. The company's recent reverses are attributed to what turned out to be a bad decision made in 1999: "in view of major anticipated demand for lobster to celebrate the new millennium, the company

 <sup>&</sup>quot;Waffle firm expansion will add 55 jobs," *Telegraph Journal* (8 May 1999), B1; "Deux entreprises de Moncton créent 113 nouveaux emplois," *L'Acadie Nouvelle* (22 September 1997), 11.

<sup>68. &</sup>quot;Mary Jean Irving installera son usine à Dieppe," L'Acadie Nouvelle (27 March 1997), 2.

 <sup>&</sup>quot;Les bonnes nouvelles sont courantes à Bouctouche," L'Acadie Nouvelle (2 October 2001), 6;
 "Bouctouche's success should encourage others," *Telegraph Journal* (27 July 1999). Consult Web site: www.telegraphjournal.com/page011.htm.

<sup>70. &</sup>quot;L'Écocentre Irving s'est refait une beauté," L'Acadie Nouvelle (22 May 2001), 7.

stocked a large quantity of canned lobster to meet demand that ultimately never surfaced and had to sell lobster bought at high prices at low prices."<sup>71</sup> [translation]

Finally, in the southeastmost part of Westmorland County, the university town of Sackville (Mount Allison University) has also had success attracting businesses, such as Groupe Chagnon International Ltd. (150 jobs) and one of its suppliers, Acier Leroux (41 jobs). The announcement of the arrival of Groupe Chagnon, incidentally, was the last announcement made by Frank McKenna as premier.<sup>72</sup>

<sup>71. &</sup>quot;La faillite pour Pêcheries Cap-Lumière," L'Acadie Nouvelle (5 July 2001), 2.

<sup>72. &</sup>quot;Sackville gets 150 new jobs," Times & Transcript (11 October 1997), A1, A2.

#### Π

# **ECONOMIC DEVELOPMENT IN NEW BRUNSWICK**

There are a number of factors that can explain economic development in New Brunswick in recent years. In this chapter, we will examine some of those factors in more detail, both from a historical perspective and from the perspective of the regions under study.

#### The Robichaud Government and its Programme of Equal Opportunity

To gain a clear understanding of New Brunswick's dynamics today, we need to look back forty years, to 1960, when the province elected a new premier, Louis J. Robichaud. In power for ten years, the Robichaud government is often seen as the instigator of economic growth in New Brunswick in general, and in the Acadian community in particular.

The legacy of the Robichaud government is threefold. First, because Robichaud was Acadian, his election toppled a cultural barrier, and as premier, he was the force behind major improvements in language rights. There was also another aspect of the Acadian community's cultural development: because half of the Robichaud cabinet — including the premier himself — were members of the Ordre de Jacques-Cartier<sup>73</sup> (the "Patente"), the Ordre's activities virtually ceased in New Brunswick. With representatives of the Acadian community now in position of authority, the Patente was no longer essential. From that point on, new generations of Acadians would be seen less and less as members of a minority, and increasingly, would participate fully in New Brunswick's economic development.

Second, Robichaud was responsible for an in-depth modernization of the provincial public service.<sup>74</sup> This was New Brunswick's quiet revolution. Finally, and this point is related to the previous one, the Robichaud government adopted an initiative that became known as the Programme of Equal Opportunity. "The [Program's] guiding principle was that all residents of the province should have access to a basic standard of service regardless of the fiscal capacity of the locality in which they lived."<sup>75</sup> The purpose of the program was to centralize a number of elements of the government apparatus so as to reduce major regional disparities (mainly between urban and rural areas), with respect to both income and the

<sup>73.</sup> Michel Cormier, "The Robichaud Legacy: What Remains?," in *The Robichaud Era, 1960–70: Colloquium Proceedings* (Moncton: The Canadian Institute for Research on Regional Development, 2001), 192.

<sup>74.</sup> Maurice Beaudin, "The State as the Engine of Development: Louis Robichaud and New Brunswick," in ibid., 101.

<sup>75.</sup> Robert Young, "The Program of Equal Opportunity: An Overview," in ibid., 23.

delivery of services, such as health and education. That centralization was accompanied by an elimination of county councils and the creation of a new level of local administration by cities, towns, villages and local service districts.<sup>76</sup> The initiative proved particularly beneficial to the mainly rural Acadian community. As our colleague Maurice Beaudin points out, "In New Brunswick at that time, the concern for vertical equity (i.e., equity between individuals) was quickly shifted to a concern for horizontal equity (i.e., equity between regions)."<sup>77</sup>

Robichaud's efforts to reduce regional disparities within the province did not end with the Programme of Equal Opportunity. "...from the first, he worked hard to attract outside investment and to make economic development more equitable across the regions."<sup>78</sup> Although the Robichaud government's initiatives did not pay immediate dividends, they sowed the seeds that today are bearing fruit.<sup>79</sup>

#### The Université de Moncton

The Université de Moncton, created with the merger of classical colleges, is another factor in the progress made over the last few decades with respect to economic development in New Brunswick in general, and in the Acadian community in particular. Without the Université de Moncton, one could indeed ask whether Moncton's economic growth would have been possible. Interestingly, when Louis Robichaud is asked to name his proudest accomplishment, he invariably and unhesitatingly answers "the Université de Moncton."<sup>80</sup>

We could examine the direct economic impact of the three campuses of the Université de Moncton (Moncton, Edmundston, and Shippagan) in more depth, as did Maurice Beaudin and the late Benjamin Higgins in 1988.<sup>81</sup> However, the impact of the Université has been much more than simply economic. To cite just one example of its role in New Brunswick's development, the province's current premier and the head of the opposition are both graduates of the Université de Moncton, as are numerous business leaders. The impact of the Université de Moncton can also be felt elsewhere.<sup>82</sup> Research done at the Université has resulted in major spin-offs in several niches of the new economy, and is helping the more traditional sectors of the economy to adapt more effectively to the new economic climate. According to Mandale and Chiasson,<sup>83</sup> "the contribution that the Université de Moncton has made to Moncton's economic development,

<sup>76.</sup> Ibid., 24.

<sup>77.</sup> Beaudin, "The State as the Engine of Development...," 93.

<sup>78.</sup> Ibid.

<sup>79.</sup> Savoie, Community Economic Development in Atlantic Canada..., 65.

<sup>80.</sup> Cormier, "The Robichaud Legacy...," 191.

<sup>81.</sup> Benjamin Higgins and Maurice Beaudin, *Impact of the Université de Moncton on the Regions of Moncton, Edmundston and Shippagan* (Moncton: The Canadian Institute for Research on Regional Development, 1988).

<sup>82.</sup> Beaudin (ed.), The Economic Region of Southeast New Brunswick, 66.

<sup>83.</sup> Mandale and Chiasson, Partnerships in Community Economic Development..., 7.

indeed to the development of Acadian enterprise and society as a whole in New Brunswick, is critical."

#### **Governments and Regional Development**

Another important factor is the federal and provincial contribution to economic development. Those contributions for many years were often aimed at infrastructure improvements, resulting today in more vigorous economic development. For example, in his analysis of economic development in Kent county, Donald J. Savoie points out that "Government measures especially designed to promote economic development in Atlantic Canada and the Kent region have also had an impact."<sup>84</sup> And in another study, Savoie suggests that a very large percentage of the region's gains with respect to income and quality of life are directly attributable to federal transfer payments.<sup>85</sup>

The creation of the Atlantic Canada Opportunities Agency (ACOA) and the locating of its head office in Moncton have also had a positive impact. On the one hand, ACOA's regional presence ensured that this federal agency would be more attentive to Atlantic Canada and its regions. However, the choice of Moncton had a further impact: "Not only did it mean new jobs (over 100, and highly-paid), it also meant Moncton would become more visible to the business community throughout Atlantic Canada since business would have to turn to the agency's head office whenever it had business plans of a large or significant nature to promote."<sup>86</sup> Also, the mere presence of government offices — whatever their activities — contributes to a region's development: stable and well-paying jobs, leased office space, purchases of supplies, and so on.<sup>87</sup>

Federal transfer payments that help fund health, education and other programs, are also key. It is, however, deplorable that the federal government in the last few years has been much less disposed to contribute financially.<sup>88</sup> Another program that deserves mention is the *Canadian Rural Partnership*, a federal initiative aimed at bolstering development in rural areas. This initiative, designed to "help communities help themselves," offers interesting perspectives aimed at integrating elements that are more social in nature, such as the environment and literacy, within development efforts.

The provincial government is also an important player; however, we will address that topic in other sections.

In his recent book, Donald J. Savoie eloquently demonstrates that despite the positive impact of government contributions in general, and federal assistance in particular, the dice are loaded in favour of the richest regions of the country when

<sup>84.</sup> Savoie, Community Economic Development in Atlantic Canada..., 65.

<sup>85.</sup> Savoie, Pulling Against Gravity, 15.

<sup>86.</sup> Savoie and Bourgeois, "Moncton, making the transition," 238.

Donald J. Savoie, *Regional Economic Development: Canada's Search for Solutions* (Toronto: University of Toronto Press, 1992), 2<sup>nd</sup> ed., 214–15.

<sup>88.</sup> See, for example, Savoie, Pulling Against Gravity.

it comes to stimulating economic development. "Other economic programs of the federal government have been of far greater benefit to the richer regions over the years. Grants and repayable loans to industry are highly visible and at times give rise to heated public debate over their value. Less visible, but often more lucrative for firms, are tax credits, which do not involve a direct transfer of money. Never-theless, they represent government revenue forgone."<sup>89</sup> Others have criticized the efforts by the New Brunswick government, in a vein very similar to Savoie's criticisms of the federal government: "the member [of the Liberal government at that time] for Nigadoo-Chaleur reported that [...] for each dollar injected into the northern part of the province, the provincial government spends five in the south."<sup>90</sup> [translation]

#### **A Bilingual Workforce**

According to numerous analysts and business leaders,<sup>91</sup> the bilingualism of the workforce — particularly in the Moncton area — is extremely important to the relative successes in economic development. Savoie and Bourgeois go so far as to state that the bilingualism of the workforce in Greater Moncton is in fact the region's main competitive advantage.<sup>92</sup> Although it was not too long ago that bilingualism was seen by many as a burden, it is in fact increasingly proving to be an investment in the future, which a growing number of people in the anglophone community recognize. Under the rules of the new economy, particularly a global economy, communication is becoming more important. The bilingual workforce — which includes more and more anglophones who have become bilingual via immersion programs — is a fundamental asset to development.<sup>93</sup>

A recent study by the Atlantic Provinces Economic Council (APEC) confirms the importance of bilingualism. In its growth forecasts for the province of New Brunswick, APEC states that bilingual (francophone) regions in the province will experience stronger growth than anglophone regions. And APEC credits that difference in growth rates within the province to bilingualism.<sup>94</sup>

<sup>89.</sup> Ibid., 54.

<sup>90. &</sup>quot;'Albert Doucet a raison,' dit l'économiste André Leclerc," *L'Acadie Nouvelle*, (27 February 1997), 3.

Higgins and Breau, "Entrepreneurship and Economic Development: The Case of Moncton," 176; "CP Hotels comes calling," *Times & Transcript* (17 January 1995), A1; "UPS call centre example of Moncton's ability to rebound," *Times & Transcript* (12 October 1994), 15; "Province beckons to U.S. call centres," *Telegraph Journal* (31 January 1995), A1, A2.

<sup>92.</sup> Savoie and Bourgeois, "Moncton, making the transition," 234.

<sup>93.</sup> Beaudin (ed.), The Economic Region of Southeast New Brunswick, 73.

<sup>94. &</sup>quot;APEC sees growth in northern cities," Telegraph Journal (24 November 2000), C1, C3.

#### The McKenna Strategy

The McKenna government, in power from 1987 to 1997, is often credited, not without some justification, for having succeeded in transforming New Brunswick's economy.<sup>95</sup> Although not miraculous, the McKenna government's contribution to the province's economic development should not be underestimated.

Donald J. Savoie summarizes the impact of Frank McKenna and his government on the New Brunswick economy as follows: "The McKenna years did make a difference in New Brunswick, so Three Cheers! They encouraged greater selfreliance, led New Brunswick to outperform provinces of similar size on several fronts in the area of economic development and gave rise to important new economic activities. McKenna came to power with a *projet de société*, a sense of purpose and a vision. He stayed the course. If McKenna had not been premier for those ten years, New Brunswick would likely be worse off today... But McKenna's success can hardly be described as complete."<sup>96</sup>

A few factors merit attention. The McKenna government truly played a leadership role, and was among one of the first Canadian provinces to clean house financially. As a result, the provincial government was able to attack the problem gradually, rather than all at once. Another example of the government's leadership was its decision to target sectors of the new economy, particularly the call centre market, as we saw earlier.

However, the McKenna government's greatest success was its ability to change the perception of the province, both inside and outside New Brunswick,<sup>97</sup> a move away from a not too distant past when people were ashamed to admit they were from New Brunswick. Media attention on the province's success has also enhanced its image. That in fact may be the real economic miracle worked by Frank McKenna, one which, although it had a psychological impact that is difficult to quantify, produced clear economic spin-offs.

#### Geography

Geography can partly explain the economic development of the regions under study. Obviously, that development is heterogeneous, and is more easily achieved in or near urban areas. This would explain the success of Westmorland-Kent in general and Greater Moncton in particular. Savoie states that the proximity of an urban centre like Moncton had a positive impact on economic development in Kent County.<sup>98</sup> That is also why regions such as Gloucester and, to a certain

<sup>95.</sup> See, for example, Savoie, Pulling Against Gravity.

<sup>96.</sup> Ibid., 166.

<sup>97.</sup> Ibid., 165.

<sup>98.</sup> Savoie, Community Economic Development in Atlantic Canada..., 67.

point, Madawaska, which do not have major urban centres, are having more problems.

Higgins and Breau<sup>99</sup> point out that in the case of Moncton, the city is located at the geographic centre of the Maritime provinces. All land transportation heading west from Halifax, Sydney, Prince Edward Island, and even Newfoundland and Labrador, must invariably pass through Moncton. As a result, Moncton has developed a specialization in distribution. According to Higgins and Breau, because approximately 1.2 million people are less than three hours by car from Moncton, the city is a preferred retail centre.

That "geographic advantage" can have spin-offs in other areas. For example, the new local authority that manages the Moncton airport hopes to make it the largest airport in the Maritimes, and it is already expected that the number of passengers using the airport in 2001 will be equal to the combined total number of passengers using the airports in Saint John and Fredericton, Moncton's two main provincial competitors.<sup>100</sup> There also appears to be some centralization of flights in New Brunswick at the Moncton airport. In addition to Air Canada/Air Nova, WestJet, for example, offers a daily Moncton-Hamilton flight, and Canada 3000, which recently purchased Royal Aviation Inc. and CanJet, now has a daily Moncton-Toronto flight. CanJet had announced a daily flight between Saint John and Toronto, but that project was cancelled when Canjet was bought by Canada 3000.<sup>101</sup> Finally, the airport expansion will soon boost its capacity.

Another geographical aspect is the province's relatively small size, which, although in many respects can prove an obstacle to development, is in fact an advantage in the case of some initiatives. For example, it was less expensive to install a fibre optic network in New Brunswick than in a larger province, thus making it easier to adopt certain types of technology.

A final geographical aspect — albeit a demographic aspect also — is an argument put forth by the Atlantic Provinces Economic Council. According to the Council, the fact that New Brunswick does not have a dominant centre, like Halifax in Nova Scotia for example, results in more evenly distributed development, including in rural areas.<sup>102</sup>

<sup>99.</sup> Higgins and Breau, "Entrepreneurship and Economic Development," 176.

<sup>100. &</sup>quot;More passengers using Moncton Airport," Times & Transcript (13 July 2001), A3, A4.

<sup>101. &</sup>quot;CanJet lands in Moncton," Times & Transcript (11 April 2001), A1, A2.

<sup>102.</sup> Atlantic Provinces Economic Council, *Learning from the Nineties: Strategic Analysis of the New Brunswick Economy* (Halifax, 1999), 12.

## Acadian Entrepreneurship and the *Conseil économique du Nouveau-Brunswick*

One way in which the Acadian community has perhaps contributed best to Acadian economic development in New Brunswick, and as a result, to the economic development of the province as a whole, is through its vibrant spirit of entrepreneurship.<sup>103</sup> There is a large cohort of entrepreneurs, most often "first generation" entrepreneurs, active both in traditional sectors and in the new economy. The members of that new class of entrepreneurs, very often graduates of the Université de Moncton, have very specific characteristics that merit their own study. They are, in general, very well-educated and are go-getters. Because steady growth is their goal, they are rarely content with the status quo. Very often active on international markets, they network and provide mutual support, and place huge emphasis on community development. One example that clearly illustrates that last quality is the recent Université de Moncton fundraising campaign, where the Université received proportionally more financial donations from friends and alumni than any other Canadian university.

Another important element in the development of the Acadian business community was the creation in the late 1970s of the *Conseil économique acadien*, later renamed the *Conseil économique du Nouveau-Brunswick* (CENB), which operates in French.<sup>104</sup> The CENB's two greatest achievements are probably the development of a business network and, above all, the enhancement of the value of entrepreneurship. In New Brunswick's Acadian community, not so long ago, business dealings were almost taboo — that was an area for anglophones or others, certainly not for Acadians. Now, however, the Acadian business community is almost venerated. It is a kind of revenge of the cradle, but on an economic level.

Greg Allain also suggests that the cultural influence of Quebec, combined with the policies of the McKenna government, may help explain the emergence of Acadian entrepreneurship. He states that it was really during the 1980s that a critical mass was reached, and an Acadian business community could be identified as such. That coincided with the promotion in general of entrepreneurship: the "Québec Inc." model was getting full play in the province next door, and in 1987, New Brunswick's then-new premier Frank McKenna made entrepreneurship the official mantra of the province.<sup>105</sup>

<sup>103.</sup> Mandale and Chiasson, Partnerships in Community Economic Development..., iii.

<sup>104.</sup> Greg Allain, "L'entrepreneurship minoritaire et le développement économique local : le rôle des gens d'affaires acadiens dans la croissance récente du Grand Moncton," rewritten version of a speech presented to the "Centralité de la marginalité" conference, i.e., 66<sup>th</sup> ACFAS Congress, Université Laval, 1998, 17.

<sup>105.</sup> Ibid., 13.

#### The Mouvement des caisses populaires acadiennes

Another factor that merits attention is the role played by the *Mouvement des caisses populaires acadiennes*. The control of economic development requires ownership of at least some of its levers. Inspired in part by the *Mouvement Desjardins* in Quebec, but mainly by the Antigonish Movement in Nova Scotia, Acadians created *caisses populaires* in almost all of their communities. Today, the *Mouvement des caisses populaires acadiennes*, with assets of over \$1.6 billion and involvement in the commercial and venture capital sectors, has become a key player in economic development in New Brunswick's Acadian community. In the rural regions covered by our study, the *caisses populaires* are sometimes the only financial institution in the community.<sup>106</sup>

On the anglophone side, credit unions do not enjoy as great a presence as *caisses populaires*. Nevertheless, in the wake of a recent wave of bank branch closures, credit unions are exploring the possibility of filling that gap.<sup>107</sup>

#### **Bottom-up Development**

Moncton is an example of bottom-up development. In 1985, despite numerous setbacks, community leaders, under the direction of Moncton Industrial Development Ltd., implemented a marketing and promotion strategy to enhance Moncton's image as a business centre.<sup>108</sup> Those publicity campaigns are still ongoing, and the region also periodically comes up with a development strategy supported by a host of community members. The importance of those strategies cannot be underestimated. More importantly, nor can community involvement in its own development. In September 1994, for example, 650 people each paid \$8 just to attend the unveiling of the economic strategy!<sup>109</sup> The most recent strategy was announced in August 2001.<sup>110</sup> Interestingly, the cost of that initiative, assessed at \$600,000, will be paid for by several partners, including the private sector (\$250,000). Also, the marketing campaigns are not exclusive to the Greater Moncton area, and although they all have a local flavour and scope, similar campaigns are conducted in other regions.<sup>111</sup>

<sup>106.</sup> See, for example, Jean Daigle, Une force qui nous appartient : la Fédération des caisses populaires acadiennes (Moncton: Éditions d'Acadie, 1990); and Omer Chouinard, Pierre-Marcel Desjardins, Éric Forgues, and Ugo de Montigny, Coopératives financières, cohésion sociale et territoire : la Caisse populaire Moncton-Beauséjour et la Caisse populaire de Néguac issues de fusions de caisses en milieux urbain et rural (Montreal: Cahiers du CRI-SES (Centre de recherche sur les innovations sociales), collection "Études de cas d'entreprises d'économie sociale," no. 0107).

<sup>107. &</sup>quot;Credit union sees gold in rural N.B.," Times & Transcript (14 October 2000), D2.

<sup>108.</sup> Savoie and Bourgeois, "Moncton, making the transition," 234.

<sup>109.</sup> Michel Cormier, "1-800-Moncton," Ven'd'Est, Fall 1995, 9.

<sup>110. &</sup>quot;Moncton hatches growth strategy," Times & Transcript (8 August 2001), A1, A2.

See, for example, "Kent County mounts marketing campaign," *Telegraph Journal* (28 February 1998), B1.

To emphasize the importance of local leadership in economic development efforts, Mandale and Chiasson point out that in Moncton, "Setbacks mobilized the community to act, there was a refusal to accept defeat, and simply it had to work as there was no reasonable alternative."<sup>112</sup> The authors add that "The community itself must drive development, drawing on the energies and potential of individuals, businesses and institutions. It must be led locally, and renew itself periodically. This makes the community the principal partnership, whether it is Greater Moncton or somewhere else."<sup>113</sup> One could well wonder whether this would have been possible if community leaders had waited for "salvation" from outside!

In Kent County, bottom-up development took the form of the Local Economic Development Agency (LEDA) program. The goal of that program, initially managed by the Department of Regional Economic Expansion (DREE) and then the Canadian Employment and Immigration Commission (CEIC), was "to involve local interests, particularly businesses, in managing the program, and to promote new business activities in small rural regions."<sup>114</sup> This is accomplished on a day-to-day basis both by providing technical assistance to existing and aspiring entre-preneurs, and financial assistance. That financial assistance often represents initial funding for projects, apart from the funds invested by the entrepreneur, and is thus the cornerstone of a future financing package. The program generally targets low-tech firms, such as door and window manufacturers, fish processing plants, furniture manufacturers, and so on.<sup>115</sup> The Kent-LEDA is one of the only agencies of its kind in Canada that has been a success, and numerous observers agree that it is in part responsible for the economic development progress made in the region.<sup>116</sup>

# The Action Committee for the Economic Development of the Acadian Peninsula

The Acadian Peninsula has often been the target of special regional economic development initiatives. Frank McKenna, for example, unveiled a job creation initiative for the region in 1997.<sup>117</sup> In 1999, a commission chaired by Ted Gaudet presented a development strategy, but with the June 1999 change in government, the recommendations in the report were never implemented directly.<sup>118</sup>

<sup>112.</sup> Mandale and Chiasson, Partnerships in Community Economic Development..., xi.

<sup>113.</sup> Ibid., xiii.

<sup>114.</sup> Savoie, Community Economic Development in Atlantic Canada..., 67.

<sup>115. &</sup>quot;N.B.'s secret: the province as venture capitalist," Financial Post (27 May 1995), 12.

<sup>116.</sup> See, for example, Savoie, Community Economic Development in Atlantic Canada; and Omer Chouinard, Pierre-Marcel Desjardins, and Éric Forgues, Capital social et développement régional : le cas des Corporations locales de développement économique (CLDE) au Nouveau-Brunswick, report submitted to Canadian Heritage (Moncton: Chaire des Caisses populaires acadiennes en études coopératives, 2001).

<sup>117. &</sup>quot;McKenna unveils new job initiative for Acadian Peninsula," *Telegraph Journal* (19 September 1999), B1.

<sup>118. &</sup>quot;Un statut spécial pour relancer la Péninsule," L'Acadie Nouvelle (1 April 1999), 3.

The most recent initiative was the creation of the Action Committee for the Economic Development of the Acadian Peninsula, which seems to have met with some success.<sup>119</sup> The provincial government created the Acadian Peninsula Economic Development Fund to support that initiative.<sup>120</sup> The \$25 million fund will be spent over a five-year period. Projects target four key areas: education and training, research and development, economic diversification, and infrastructure.

One aspect of that initiative is decentralization of power. For example, projects that receive a maximum of \$25,000 government funding are approved directly in the Acadian Peninsula.<sup>121</sup> Moreover, the government has opened new offices in the Peninsula, such as offices of the Department of Agriculture, Fisheries and Aquaculture in Tracadie to deal with agricultural matters.<sup>122</sup> Finally, this major strategy is supported by a publicity campaign to promote development efforts in the region, perhaps modelled on similar efforts in Greater Moncton.

<sup>119.</sup> This initiative was implemented in the wake of a Conservative Party campaign promise made during the provincial election in 1999: "Election campaign promises," (7 June 1999), A2.

<sup>120.</sup> Consult Web site: www.gnb.ca/rdc/rapan2000/parite49.htm.

<sup>121.</sup> Consult Web site: www.gnb.ca/rdc/bulletin/IAnov2000f.htm.

<sup>122.</sup> Consult Web site: www.gnb.ca/rdc/bulletin/IAfev2000f.htm.

#### III

### THE CHALLENGES OF ECONOMIC DEVELOPMENT

We have drawn what we believe to be a fairly positive picture of our regions. That picture would be incomplete, however, if it did not include the challenges that economic development poses for those regions.

#### The Knowledge Economy

As Donald J. Savoie notes, "only 11 to 13 percent of the New Brunswick economy is knowledge-based. Traditional low-tech industries are still producing 53 percent of economic activity and many of them aren't modernizing."<sup>123</sup> Savoie concludes that the province's economic growth could run out of steam, given that only a minority of firms are fully involved in the new knowledge economy.

The provincial government is doing what it can to attract such firms to the province, but that is proving to be a difficult task. One problem is the amount of grants. In recent months, Nova Scotia has managed to attract new call centres by doubling the maximum per-job grants that the New Brunswick government is prepared to give.<sup>124</sup>

However, a number of observers believe that the call centre market still offers numerous opportunities: "Call centers, which have become a large employer in the province, could be the proverbial tip of the iceberg. 'Back-officing' is a natural fit for the New Brunswick economy; cheaper office and operating costs, a bilingual workforce, a world-class telecommunications structure and low job turnover are all important determinants of the province's success."<sup>125</sup> It remains to be seen whether those promising factors will materialize and whether other knowledge economy niche markets will emerge in New Brunswick.

#### **Research and Development (R&D) and Innovation**

Still within the context of the knowledge economy, R&D, as well as innovation, will assume an increasingly important role. In the regions studied, R&D initiatives are already bearing fruit. Spielo is an excellent example, as we saw in the first part of this study.

Other R&D initiatives are resource based. A number of regional research centres are interested in natural resource development, and hope to contribute to regional development. Because of R&D at the Shippagan Marine Centre, the time it takes to breed oysters in suspension has been reduced from seven years to three years. There have also been innovative scallop farming projects, for example, the

<sup>123.</sup> Savoie, Pulling Against Gravity..., 166-67.

<sup>124. &</sup>quot;N.B. can't compete with N.S. for call centres," Times & Transcript (1 August 2001), A7.

<sup>125.</sup> Atlantic Provinces Economic Council, Learning from the Nineties..., 7.

Pecton program, an initiative of the Maritime Fishermen's Union to breed seven to eight million scallops at three sites: Chaleur Bay, the Northumberland Strait, and the Miramichi. The scallops seeded this year will be harvested in 2006. The goal of the project is to increase stocks and thus ensure greater stability in the sector.<sup>126</sup>

Another R&D project is the initiative of the Lamèque Island coop and Université de Moncton to develop profitable wind-power sites in the Acadian Peninsula.<sup>127</sup> And the Shippagan campus of the Université de Moncton is home to the Peat Research and Development Centre, the Marine Products Research and Development Centre, and the Équipe de recherche sur la valorisation du patrimoine [heritage development research team].<sup>128</sup>

R&D efforts, however, both in the regions studied and throughout New Brunswick as a whole, are relatively limited. The economic structure, which includes a strong SME presence, is certainly no stranger to that situation. In an economy where knowledge and innovation are so important, the lack of R&D is an obstacle to regional economic development.

#### **Local Control of Development**

The example of economic development in Greater Moncton and the success of agencies like Kent-LEDA are proof that an approach that focuses on local control of development could ensure its success. A new provincial initiative — the creation of community economic development agencies (CEDA) — is indeed a step in that direction. CEDAs will replace the regional economic development commissions.<sup>129</sup> Their overall purpose is to stimulate greater local participation in development. Each CEDA will have an advisory board, providing a permanent forum for local stakeholders to take part in decision-making. An interesting feature of the CEDAs is that their mandate will cover not only economic and commercial development, but human resources development as well.

#### **Local Governance**

A major challenge facing New Brunswick is governance in rural areas. In 1966, when the Robichaud government's Programme of Equal Opportunity was implemented, county councils were eliminated. What the government was attempting to do, among other things, was establish greater equity among the regions, leaving "a large portion of New Brunswick's population and land mass as *unincorporated* 

<sup>126. &</sup>quot;Scallop project revives stocks," *Times & Transcript* (21 June 2001), A3, A4.

<sup>127. &</sup>quot;Le projet d'éoliennes franchit un pas de plus," L'Acadie Nouvelle (9 July 2000), 9.

<sup>128.</sup> Consult Web site: www.cus.ca/dynamic/view\_doc.cfm?id=50.

News release, "Community economic development agencies to be established." Consult Web site: www.gov.nb.ca/cnb/news/pre/2001e0306pr.htm, 6 April 2001.

*areas*, that is, with no local government.<sup>3130</sup> In those areas, local services were to be henceforth authorized and coordinated by the provincial government.

Today, that reality is sometimes an obstacle to development or, at the very least, makes it much more difficult for local communities to take responsibility for their own development. "Development, except in a few cases, is not being controlled, planned and managed effectively and this inevitably leads to a variety of land use conflicts (e.g., farming versus residential and commercial development)..."<sup>131</sup> Within such a context, a number of regions, even though they may have several thousand residents, are without local elected officials and without any real power over their own development. Today, approximately 40 percent of the province's population live in unincorporated areas.<sup>132</sup>

The provincial government thus decided to begin a process that should lead to in-depth reform of local governance in New Brunswick. That reform should have a positive impact on economic development in the province in general, and in its rural areas in particular.

#### **The Rural Exodus**

Several of the stakeholders we met stated that the rural exodus — mainly young people — is a major problem for these regions. The exodus issue is not a new one, but it mainly affects rural areas: during public consultations held in the Acadian Peninsula in 1998, it was emphasized that the youth exodus was proving to be a barrier to development.<sup>133</sup> An ACOA-sponsored study concluded that New Brunswick's rural areas "are having problems maintaining the size of their youth population and their population aged 15 and over."<sup>134</sup>

#### **The Labour Force**

Our profile of the regions shows that in some, the economy is dominated by seasonal sectors. Although they do not want to abandon those traditional sectors, several observers told us that the regional economies facing that problem have had to diversify to create more year-round jobs. Making that challenge even more difficult are, as we saw earlier, certain employment insurance rules that discourage those receiving benefits from working once they have achieved the minimum number of hours required to qualify for benefits.

<sup>130.</sup> Government of New Brunswick, A Vision for Local Governance in New Brunswick: Report of the Minister's Round Table on Local Governance (Fredericton, 2001), 5.

<sup>131.</sup> Ibid., 10.

<sup>132.</sup> Ibid., 9.

 <sup>&</sup>quot;L'exode des jeunes et les services aux PME à l'ordre du jour," L'Acadie Nouvelle (18 November 1998), 2.

<sup>134.</sup> Richard Dupuy, Francine Mayer, and René Morissette, *Rural Youth: Stayers, Leavers and Return Migrants* (Ottawa: Statistics Canada, 2000), 14.

There is also another problem: there is in those communities an almost universal desire to turn young people away from the "seasonal" workforce and encourage them to continue their education or find jobs in more stable sectors. That strategy, combined with deficiencies in the employment insurance program, is now creating labour shortages. Some fish processing plants, for example, have to look to Newfoundland and Labrador for workers. Furthermore, there are fears that the shortage of seasonal workers could, in the medium term, become a much more serious problem than it is today.

Among the remedial actions proposed not only to directly resolve the shortage of seasonal workers, but mitigate problems such as the precarious nature and short duration of jobs in those sectors, is Maurice Beaudin's 1998 suggestion that 2,000 seasonal jobs in processing plants be eliminated, which would lead to the closing of some plants, but would provide more stable employment for approximately 3,000 people.<sup>135</sup>

Another major obstacle is the shortage of skilled workers. As we have seen, the regions studied are facing major gaps in education, which often is a barrier to development. In the Acadian Peninsula, for example, at least one large firm, with the potential to create several hundred jobs, has had to decide against setting up shop in the region because of the shortage of skilled workers.<sup>136</sup> However, that problem is not confined to rural areas. Company heads in the Moncton area often say that the shortage of skilled workers is a barrier to growth. Moreover, in Greater Moncton, there is not only a shortage of skilled workers, but also a shortage of workers in the retail, restaurant, and other sectors. Part of the problem in Moncton is competition from call centres, which generally offer better working conditions than retail sales or restaurants.<sup>137</sup>

#### **Rural Access to Natural Gas**

The development of natural gas fields off the coast of Sable Island, Nova Scotia, led to the construction of a pipeline in southeast New Brunswick to ship natural gas to New England. The pipeline has had an immediate impact in the area — the distribution of gas to neighbouring markets, particularly in urban areas. Many observers, however, fear that access to natural gas in southeast New Brunswick, excluding the northeast part of the province, will exacerbate regional disparities.<sup>138</sup> Indeed, in February 2000, the New Brunswick and Quebec governments signed a memorandum of understanding aimed at interconnecting the two provinces, which would at least give northwest New Brunswick access to natural

 <sup>&</sup>quot;2,000 emplois et des usines devront disparaître dans la péninsule," L'Acadie Nouvelle (9 December 1998), 5.

<sup>136. &</sup>quot;La relance se bute à une pénurie de travailleurs qualifiés," *L'Acadie Nouvelle* (4 December 2000), 4.

<sup>137. &</sup>quot;Moncton overflows with jobs," Times & Transcript (26 August 2000), A1, A2.

<sup>138. &</sup>quot;Cheap fuel vital to us, say firms in north," *Telegraph Journal* (29 August 1998), B1, B2.

gas.<sup>139</sup> However, northeast New Brunswick will have to wait, even though the need for natural gas is just as great.

 <sup>&</sup>quot;'Il ne faut pas croire que le gaz naturel va tout régler', dit Lord," L'Acadie Nouvelle (3 May 2000), 5.

#### CONCLUSION

In conclusion, we can say that, although there are major challenges to be met, the regions of New Brunswick we have studied are doing relatively well, particularly Westmorland-Kent, and, to a certain degree, Madawaska. In the Chaleur region, however, the planned closing of the Brunswick mine is a major threat, and in the Acadian Peninsula, the seasonal nature of the economy is still a significant problem.

In Madawaska, the main factors favouring economic development are the relative stability of the population (for over a quarter of century), regional economic diversification via entrepreneurship, and finally, the region's geographic location. In the county of Gloucester, the economic region of Chaleur faces a major challenge with the probable closing of the mine, the area's largest employer. In the Acadian Peninsula, seasonal employment is a problem, but diversification efforts seem to be paying off. To meet those challenges, the region has adopted a joint-action approach bringing together various stakeholders, and aimed at more effective strategic planning. Finally, in Westmorland-Kent, with the dynamism of Greater Moncton, its bilingual workforce, and its geographic location, the region is a "mini-metropolis" with an impressive economic performance.

APPENDIX

	Ta	ble	1
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Population and Demographic Growth, Canada and Selected Regions
of New Brunswick, Rural/Urban, 1971–96

Total Canada21,568,25524,083,39526,993,80028,524Rural Canada5,414,1555,815,2305,994,0906,235Urban Canada16,154,10018,268,16520,999,71022,292Total Madawaska34,97535,96536,03536Rural Madawaska13,77013,89513,96011Urban Madawaska21,20522,07022,07522Total Gloucester74,75585,64087,38087Rural Gloucester31,17034,86035,96535Total Southeast NB54,38062,89064,67066Urban Southeast NB85,49597,105105,345110Urban Canada74.975.977.8Rural Canada25.124.122.210Urban Madawaska39.438.638.710Urban Madawaska60.661.461.31.3Rural Gloucester58.359.358.810Urban Madawaska39.438.638.710Urban Madawaska60.661.461.31.3Rural Gloucester58.359.358.810Urban Southeast NB38.939.338.010Urban Southeast NB61.160.762.062.0Urban Southeast NB61.160.762.010			Total Pop	oulation	
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Urban Canada         16,154,100         18,268,165         20,999,710         22,292           Total Madawaska         34,975         35,965         36,035         36           Rural Madawaska         13,770         13,895         13,960         11           Urban Madawaska         21,205         22,070         22,075         22           Total Gloucester         74,755         85,640         87,380         87           Rural Gloucester         43,585         50,780         51,415         55           Urban Gloucester         31,170         34,860         35,965         33           Total Southeast NB         54,380         62,890         64,670         66           Urban Southeast NB         85,495         97,105         105,345         110           Urban/Rural Distribution (in %)           Rural Canada         25.1         24.1         22.2           Urban Canada         74.9         75.9         77.8           Rural Gloucester         58.3         59.3         58.8           Urban Gloucester         58.3         59.3         58.8           Urban Gloucester         41.7         40.7         41.2           Rural Gloucester         4	Total Canada	21,568,255	24,083,395	26,993,800	28,528,015
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Rural Canada	5,414,155	5,815,230	5,994,090	6,235,660
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Urban Madawaska       21,205       22,070       22,075       22         Total Gloucester       74,755 $85,640$ $87,380$ $86$ Rural Gloucester       43,585 $50,780$ $51,415$ $55$ Urban Gloucester $31,170$ $34,860$ $35,965$ $33$ Total Southeast NB <sup>a</sup> $139,875$ $159,995$ $170,015$ $176$ Rural Southeast NB $54,380$ $62,890$ $64,670$ $66$ Urban Southeast NB $85,495$ $97,105$ $105,345$ $116$ Urban/Rural Distribution (in %)         Rural Canada $25.1$ $24.1$ $22.2$ Urban Canada $74.9$ $75.9$ $77.8$ Rural Madawaska $39.4$ $38.6$ $38.7$ Urban Madawaska $60.6$ $61.4$ $61.3$ Rural Gloucester $58.3$ $59.3$ $58.8$ Urban Gloucester $41.7$ $40.7$ $41.2$ Rural Southeast NB $61.1$ $60.7$ $62.0$ Total Canada $7.4$ $3.1$ $15.0$ Total Canad	Total Madawaska	34,975	35,965	36,035	36,305
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Rural Gloucester         43,585         50,780         51,415         55           Urban Gloucester         31,170         34,860         35,965         33           Total Southeast NB <sup>a</sup> 139,875         159,995         170,015         176           Rural Southeast NB         54,380         62,890         64,670         65           Urban Southeast NB         85,495         97,105         105,345         116           Urban/Rural Distribution (in %)           Rural Canada         25.1         24.1         22.2           Urban Canada         74.9         75.9         77.8           Rural Gloucester         58.3         59.3         58.8           Urban Madawaska         60.6         61.4         61.3           Rural Gloucester         58.3         59.3         58.8           Urban Gloucester         41.7         40.7         41.2           Rural Southeast NB         38.9         39.3         38.0           Urban Southeast NB         61.1         60.7         62.0           Total Canada         7.4         3.1         199         199         199           Total Canada         7.4         3.1         15.0	Urban Madawaska	21,205	22,070	22,075	22,545
Urban Gloucester $31,170$ $34,860$ $35,965$ $33$ Total Southeast NB $139,875$ $159,995$ $170,015$ $170$ Rural Southeast NB $54,380$ $62,890$ $64,670$ $66$ Urban Southeast NB $85,495$ $97,105$ $105,345$ $110$ Mural Canada $25.1$ $24.1$ $22.2$ $100$ Urban Canada $74.9$ $75.9$ $77.8$ Rural Madawaska $39.4$ $38.6$ $38.7$ Urban Madawaska $60.6$ $61.4$ $61.3$ Rural Gloucester $58.3$ $59.3$ $58.8$ Urban Gloucester $41.7$ $40.7$ $41.2$ Rural Southeast NB $38.9$ $39.3$ $38.0$ Urban Southeast NB $61.1$ $60.7$ $62.0$ Growth Rate During the Period (in %)         1071-81 $1981-91$ $199$ Total Canada $7.4$ $3.1$ $15.0$ Total Canada $7.4$ $3.1$ $15.0$ Total Madawaska $2.8$ $0.2$ $0.5$	Total Gloucester	74,755	85,640	87,380	87,140
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Urban Gloucester         41.7         40.7         41.2           Rural Southeast NB         38.9         39.3         38.0           Urban Southeast NB         61.1         60.7         62.0           Growth Rate During the Period (in %)           1971-81         1981-91         199           Total Canada         7.4         3.1         1           Urban Canada         13.1         15.0         1           Total Madawaska         2.8         0.2         0.5           Urban Madawaska         4.1         0.0         0.5	Urban Madawaska	60.6	61.4	61.3	62.1
Rural Southeast NB         38.9         39.3         38.0           Urban Southeast NB         61.1         60.7         62.0           Growth Rate During the Period (in %)           1971–81         1981–91         199           Total Canada         7.4         3.1         15.0           Urban Canada         13.1         15.0         15.0           Total Madawaska         2.8         0.2         0.5           Urban Madawaska         4.1         0.0         0.0					59.1
Urban Southeast NB         61.1         60.7         62.0           Growth Rate During the Period (in %)           1971–81         1981–91         199           Total Canada         11.7         12.1           Rural Canada         7.4         3.1           Urban Canada         13.1         15.0           Total Madawaska         2.8         0.2           Rural Madawaska         0.9         0.5           Urban Madawaska         4.1         0.0	Urban Gloucester		40.7	41.2	40.9
Growth Rate During the Period (in %)           1971–81         1981–91         199           Total Canada         11.7         12.1           Rural Canada         7.4         3.1           Urban Canada         13.1         15.0           Total Madawaska         2.8         0.2           Rural Madawaska         0.9         0.5           Urban Madawaska         4.1         0.0	Rural Southeast NB				37.2
1971-81         1981-91         199           Total Canada         11.7         12.1           Rural Canada         7.4         3.1           Urban Canada         13.1         15.0           Total Madawaska         2.8         0.2           Rural Madawaska         0.9         0.5           Urban Madawaska         4.1         0.0	Urban Southeast NB	61.1			62.8
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Total Southeast NB14.46.3					3.8
Rural Southeast NB 15.6 2.8					1.5
Urban Southeast NB 13.6 8.5	Urban Southeast NB		13.6	8.5	5.1

*Source:* Statistics Canada, census data from 1971, 1981, 1991, and 1996; compiled by INRS – UCS. <sup>a</sup> Southwest New Brunswick comprises the counties of Kent, Westmorland, and Albert; our study covers

Westmorland-Kent.

Topulation and Demographic Growin, Canada, by fige Group, 1971 90					
	Total Population				
Age Group	1971	1981	1991	1996	
Under-15-year-olds	6,378,865	5,473,430	5,688,640	5,898,560	
15- to 24-year-olds	3,998,495	4,637,545	3,832,385	3,848,500	
25- to 54-year-olds	7,714,300	9,643,525	12,153,020	13,020,710	
55- to 64-year-olds	1,732,685	2,142,290	2,384,795	2,477,475	
65-year-olds and over	1,743,950	2,184,085	2,931,855	3,279,000	
Total	21,568,255	24,083,395	26,993,800	28,528,015	
Age Group	]	Population Distributi	on by Age Group (in <sup>e</sup>	%)	
Under-15-year-olds	29.6	22.7	21.1	20.7	
15- to 24-year-olds	18.5	19.3	14.2	13.5	
25- to 54-year-olds	35.8	40.0	45.0	45.6	
55- to 64-year-olds	8.0	8.9	8.8	8.7	
65-year-olds and over	8.1	9.1	10.9	11.4	
	Growth Rate During the Period (in %)				
Age Group		1971-81	1981–91	1991–96	
Under-15-year-olds		-14.2	3.9	3.7	
15- to 24-year-olds		16.0	-17.4	0.4	
25- to 54-year-olds		25.0	26.0	7.1	
55- to 64-year-olds		23.6	11.3	3.9	
65-year-olds and over		25.2	34.2	11.8	
Total		11.7	12.1	5.7	

Table 2Population and Demographic Growth, Canada, by Age Group, 1971–96

Source: Statistics Canada, census data from 1971, 1981, 1991, and 1996; compiled by INRS – UCS.

# Population and Demographic Growth, County of Madawaska, by Age Group, 1971–96

	Total Population				
Age Group	1971	1981	1991	1996	
Under-15-year-olds	11,860	9,085	7,785	6,885	
15- to 24-year-olds	7,760	7,680	5,335	5,365	
25- to 54-year-olds	10,205	13,185	15,940	16,830	
55- to 64-year-olds	2,640	3,020	3,085	3,150	
65-year-olds and over	2,525	2,990	3,885	4,070	
Total <sup>a</sup>	34,975	35,965	36,035	36,305	
Age Group	]	Population Distribution	on by Age Group (in	%)	
Under-15-year-olds	33.9	25.3	21.6	19.0	
15- to 24-year-olds	22.8	21.4	14.8	15.2	
25- to 54-year-olds	29.2	36.7	44.2	44.1	
55- to 64-year-olds	7.5	8.4	8.6	8.4	
65-year-olds and over	7.2	8.3	10.8	12.3	
Age Group		Index Canada =	= 100		
Under-15-year-olds	114.7	111.1	102.5	91.7	
15- to 24-year-olds	119.7	110.9	104.3	109.5	
25- to 54-year-olds	81.6	91.6	98.3	101.6	
55- to 64-year-olds	94.0	94.4	96.9	99.9	
65-year-olds and over	89.3	91.7	99.3	97.5	
		Growth R	ate During the Perio	od (in %)	
Age Group		1971-81	1981–91	1991–96	
Under-15-year-olds		-23.4	-14.3	-11.6	
15- to 24-year-olds		-1.0	-30.5	0.6	
25- to 54-year-olds		29.2	20.9	5.6	
55- to 64-year-olds		14.4	2.2	2.1	
65-year-olds and over		18.4	29.9	4.8	
Total	1 4 6 1071	2.8	0.2	0.7	

Source: Statistics Canada, census data from 1971, 1981, 1991, and 1996; compiled by INRS – UCS.

<sup>a</sup> Totals do not add up because of rounding off.

# Population and Demographic Growth, County of Gloucester, by Age Group, 1971–96

	Total Population				
Age Group	1971	1981	1991	1996	
Under-15-year-olds	27,180	23,670	18,720	16,365	
15- to 24-year-olds	16,130	17,910	14,325	13,270	
25- to 54-year-olds	21,730	31,505	39,605	41,020	
55- to 64-year-olds	4,750	5,980	6,350	7,255	
65-year-olds and over	4,950	6,575	8,375	9,200	
Total <sup>a</sup>	74,755	85,640	87,380	87,140	
Age Group		<b>Population Distribu</b>	tion by Age Group (	(in %)	
Under-15-year-olds	36.4	27.6	21.4	18.7	
15- to 24-year-olds	21.6	20.9	16.4	15.2	
25- to 54-year-olds	29.1	36.8	45.3	47.1	
55- to 64-year-olds	6.4	7.0	7.3	8.3	
65-year-olds and over	6.6	7.7	9.6	10.6	
Age Group		Index Ca	nada = 100		
Under-15-year-olds	122.9	121.6	101.7	90.8	
15- to 24-year-olds	116.4	108.6	115.5	112.9	
25- to 54-year-olds	81.3	91.8	100.7	103.1	
55- to 64-year-olds	79.1	79.5	82.3	95.9	
65-year-olds and over	81.9	84.7	88.2	91.9	
	-	Gro	wth Rate During the	Period (in %)	
Age Group		1971-81	1981–91	1991–96	
Under-15-year-olds		-12.9	-20.9	-12.6	
15- to 24-year-olds		11.0	-20.0	-7.4	
25- to 54-year-olds		45.0	25.7	3.8	
55- to 64-year-olds		25.9	6.2	14.3	
65-year-olds and over		32.8	27.4	9.9	
Total	1 4 6	14.6	2.0	-0.3	

*Source:* Statistics Canada, census data from 1971, 1981, 1991, and 1996; compiled by INRS – UCS. <sup>a</sup> Totals do not add up because of rounding off.

# Population and Demographic Growth, Southeast New Brunswick,<sup>a</sup> by Age Group, 1971–96

	Total Population				
Age Group	1971	1981	1991	1996	
Under-15-year-olds	42,645	38,185	33,940	33,210	
15- to 24-year-olds	27,790	30,595	25,770	25,155	
25- to 54-year-olds	44,905	60,935	75,060	80,635	
55- to 64-year-olds	11,605	14,330	14,295	15,300	
65-year-olds and over	12,945	15,945	20,900	22,095	
Total <sup>b</sup>	139,875	159,995	170,015	176,430	
Age Group	Popul	ation Distribution by	Age Group (in %)		
Under-15-year-olds	30.5	23.9	20.0	18.8	
15- to 24-year-olds	19.9	19.1	15.2	14.3	
25- to 54-year-olds	32.1	38.1	44.1	45.7	
55- to 64-year-olds	8.3	9.0	8.4	8.7	
65-year-olds and over	9.3	10.0	12.3	12.5	
Age Group		Index Canada =	= 100		
Under-15-year-olds	103.1	105.0	94.7	91.0	
15- to 24-year-olds	107.2	99.3	106.7	105.9	
25- to 54-year-olds	89.8	95.1	98.1	100.1	
55- to 64-year-olds	103.3	100.7	95.2	99.9	
65-year-olds and over	114.5	109.9	113.2	109.0	
		Growth Rat	te During the Period	(in %)	
Age Group		1971-81	1981–91	1991–96	
Under-15-year-olds		-10.5	-11.1	-2.2	
15- to 24-year-olds		10.1	-15.8	-2.4	
25- to 54-year-olds		35.7	23.2	7.4	
55- to 64-year-olds		23.5	-0.2	7.0	
65-year-olds and over		23.2	31.1	5.7	
Total		14.4	6.3	3.8	

Source: Statistics Canada, census data from 1971, 1981, 1991, and 1996; compiled by INRS – UCS.

<sup>a</sup> Southeast New Brunswick comprises the counties of Kent, Westmorland, and Albert; our study covers Westmorland-Kent.

<sup>b</sup> Totals do not add up because of rounding off.

Canada, New Brunswick, and Selected Regions, 1996						
Official Language	Canada	New Brunswick	Westmorland	Kent	Madawaska	Gloucester
English	19,134,250	417,970	54,195	5,275	575	7,780
(%)	67.1	57.3	45.7	16.6	1.6	9.0
French	4,079,085	73,410	4,485	4,120	14,110	35,145
(%)	14.3	10.1	3.8	13.0	38.9	40.6
English and French	4,841,320	237,770	59,740	22,275	21,605	43,675
(%)	17.0	32.6	50.4	70.3	59.5	50.4
None	473,475	480	45	35	10	55
(%)	1.7	0.1	0.0	0.1	0.0	0.1

# Table 6Population by Knowledge of Official Languages,Canada, New Brunswick, and Selected Regions, 1996

Source: Statistics Canada, 1996 census; compiled by the author.

and Selected Regions, 1996						
	Canada	New Brunswick	Westmorland	Kent	Madawaska	Gloucester
Non-movers	15,079,415	461,660	68,330	23,035	24,755	62,530
(%)	56.7	67.4	61.2	77.0	71.9	76.2
Movers	11,524,725	223,385	43,350	6,890	9,675	19,520
(%)	43.3	32.6	38.8	23.0	28.1	23.8
Non-migrants	6,130,735	125,735	23,490	3,445	5,465	11,820
(%)	23.0	18.4	21.0	11.5	15.9	14.4
Migrants	5,393,985	97,650	19,860	3,440	4,215	7,700
(%)	20.3	14.3	17.8	11.5	12.2	9.4
Internal migrants	4,465,295	92,215	19,145	3,245	3,955	7,575
(%)	16.8	13.5	17.1	10.8	11.5	9.2
Intraprov. migrants	3,575,025	58,155	11,930	2,515	3,085	5,290
(%)	13.4	8.5	10.7	8.4	9.0	6.4
Interprov. migrants	890,270	34,055	7,215	730	870	2,285
(%)	3.3	5.0	6.5	2.4	2.5	2.8
Internat. migrants	928,690	5,430	715	200	260	125
(%)	3.4	0.8	0.6	0.7	0.8	0.2

Table 7
Population Mobility for the Last Five Years, Canada, New Brunswick,
and Selected Regions, 1996

Source: Statistics Canada, 1996 census; compiled by the author.

	Number of	Number of Jobs	Number of	Number of Jobs
Industry	Firms	(min. – max.)	Firms	(min. – max.)
	1	992	1	998
Agricultural products	6	231 - 322	6	203 - 216
Auto parts rebuilding	3	13 – 13	2	10 - 10
Construction consulting	n.a.	n.a.	6	23 - 33
Building products	3	39 - 63	2	74 - 93
Building services	n.a.	n.a.	10	36 - 44
Chemical products	1	2 - 8	1	2 - 8
Asphalt and cement	1	14 - 24	5	19 – 119
Handicrafts	3	11 – 15	3	9 - 20
Electrical/electronic products	4	44 - 70	4	18 - 20
Environmental industry	1	1 - 2	2	53 - 57
Disk/film/translation services	n.a.	n.a.	4	7 - 8
Food and beverage	0	0 - 0	2	16 - 16
Health	3	5 – 7	2	5 – 5
Metals	8	57 - 102	9	56 - 95
Plastic/rubber	6	140 - 213	6	255 - 340
Lumber products	5	150 - 208	5	268 - 443
Printing	4	39 - 42	6	46 - 48
Pulp and paper	2	668 - 668	1	680 - 715
Manufactured wood products	6	123 - 165	5	229 - 233
Surveying services	n.a.	n.a.	1	5 - 5
Textiles and clothing	12	459 - 676	17	758 - 844

Table	8
Lanc	U

Selected Firms, by Industry, Northwest New Brunswick,<sup>a</sup> 1992 and 1998

<sup>a</sup> Data are for the economic region of northwest New Brunswick, i.e., the northern part of the county of Madawaska (28,650 residents, compared with 36,305 residents for the entire county). The data were obtained from a survey that does not include all firms.

	Number of Firms	Number of Jobs (min. – max.)	Number of Firms	Number of Jobs (min. – max.)
Industry		992		998
Agricultural products	2	48 - 48	4	19 - 228
Auto parts rebuilding	0	0 - 0	1	2 - 3
Construction consulting	n.a.	n.a.	1	1 – 1
Building products	6	24 - 61	5	55 - 86
Building services	n.a.	n.a.	9	28 - 51
Asphalt and cement	8	36 - 258	8	82 - 452
Handicrafts	9	24 - 37	5	24 - 32
Electrical/electronic products	0	0 - 0	1	7 – 14
Environmental industry	6	43 - 64	4	15 - 27
Disk/film/translation services	n.a.	n.a.	2	2 - 2
Fish processing	46	954 - 4 898	34	260 - 4452
Food and beverage	9	50 - 95	9	18 - 103
Health	3	12 - 17	2	16 – 19
Metals	8	54 - 86	9	80 - 104
Peat	11	159 – 775	13	280 - 858
Plastic/rubber	5	19 – 29	5	33 - 46
Lumber products	5	41 – 67	4	20 - 62
Printing	6	82 - 106	8	129 - 149
Pulp and paper	0	0 - 0	1	3 – 3
Manufactured wood products	8	21 - 31	8	32 - 41
Shipbuilding, etc.	8	38 - 71	8	89 - 131
Textiles and clothing	4	131 – 168	5	141 – 161

Table 9

Selected Firms, by Industry, Acadian Peninsula,<sup>a</sup> 1992 and 1998

<sup>a</sup> Data are for the economic region of the Acadian Peninsula (including a large part of the county of Gloucester, as well as a small part of the county of Northumberland). The data were obtained from a survey that does not include all firms.

	Number of Firms	Number of Jobs (min. – max.)	Number of Firms	Number of Jobs (min. – max.)
Industry	<b>FILINS</b>	1992	01111115	1998
Agricultural products	2	9-12	2	3-12
Auto parts rebuilding	6	26 - 38	5	18 - 25
Construction consulting	n.a.	n.a.	4	105 - 110
Building products	4	21 – 49	5	17 - 70
Building services	n.a.	n.a.	13	80 - 290
Chemical products	1	10 - 27	2	29 - 68
Asphalt and cement	6	23 - 120	3	25 - 97
Handicrafts	3	7 – 109	1	2 - 2
Electrical/electronic products	2	27 - 33	2	30 - 30
Environmental industry	1	17 – 53	4	22 - 79
Disk/film/translation services	n.a.	n.a.	3	6 - 6
Fish processing	3	16 - 285	3	7 - 228
Food and beverage	2	5 – 7	2	11 – 13
Metals	14	157 - 301	16	178 – 299
Mines, mine exploration	4	1,648 - 2,050	3	1,533 - 1,555
Mining services	0	0 - 0	2	18 - 115
Plastic/rubber	4	27 - 36	4	31 - 35
Lumber products	7	47 - 151	6	216 - 238
Printing	8	53 - 72	9	47 – 96
Pulp and paper	1	360 - 410	1	364 - 364
Manufactured wood products	10	50 - 88	11	27 - 37
Surveying services	n.a.	n.a.	2	2 - 10
Textiles and clothing	7	38 - 73	8	195 - 240

Table 10

Selected Firms, by Industry, Chaleur Region,<sup>a</sup> 1992 and 1998

<sup>a</sup> Data are for the economic region of Chaleur (including a large part of the county of Gloucester, as well as a small part of the counties of Restigouche and Northumberland). The data were obtained from a survey that does not include all firms.

Selected Films, by industry, Moncton Region, 1992 and 1996						
	Number of	Number of Jobs	Number of	Number of Jobs		
	Firms	(min. – max.)	Firms	(min. – max.)		
Industry		1992		1998		
Agricultural products	12	842 - 987	13	988 - 1,064		
Auto parts rebuilding	10	91 - 107	7	50 - 54		
Construction consulting	n.a.	n.a.	27	186 - 243		
Building products	16	187 - 354	11	255 - 363		
Building services	n.a.	n.a.	65	597 - 1,016		
Chemical products	5	67 – 79	5	51 - 68		
Asphalt and cement	6	120 - 247	8	210 - 388		
Handicrafts	10	25 - 52	9	17 - 33		
Electrical/electronic products	9	128 - 224	17	499 - 553		
Environmental industry	19	128 - 212	19	213 - 290		
Disk/film/translation services	n.a.	n.a.	21	162 - 217		
Food and beverage	14	451 - 541	17	537 - 682		
Health	10	90 - 113	9	81 - 87		
Metals	32	403 - 575	30	650 - 822		
Mines, mine exploration	1	40 - 40	1	50 - 50		
Mining services	0	0 - 0	2	62 - 78		
Plastic/rubber	12	112 - 138	11	104 - 120		
Lumber products	10	156 - 217	5	225 - 273		
Printing	32	340 - 453	44	526 - 583		
Pulp and paper	3	114 - 185	3	295 - 295		
Manufactured wood products	16	243 - 353	17	343 - 446		
Boat repair	1	1 – 1	1	1 – 1		
Surveying services	n.a.	n.a.	7	35 - 58		
Textiles and clothing	12	159 - 204	11	186 - 204		

Table 11

Selected Firms, by Industry, Moncton Region,<sup>a</sup> 1992 and 1998

<sup>a</sup> Data are for the economic region of Moncton (including the municipalities of Moncton, Dieppe, Riverview, Salisbury, Petitcodiac, Alma, Riverside-Albert, and Hillsborough, i.e., parts of the counties of Westmorland and Albert). The data were obtained from a survey that does not include all firms.

Selected I II IIIs, by Industr		,		
	Number of	Number of Jobs		
	Firms	(min. – max.)	Firms	(min. – max.)
Industry	1	1992		1998
Agricultural products	2	2 - 3	2	4 - 4
Auto parts rebuilding	1	4 - 4	1	3 – 5
Construction consulting	n.a.	n.a.	3	10 - 10
Building products	8	324 - 474	5	68 - 157
Building services	n.a.	n.a.	15	48 - 59
Chemical products	1	160 - 220	1	180 - 220
Asphalt and cement	5	25 - 35	3	13 - 25
Handicrafts	4	6 – 15	4	6 - 10
Electrical/electronic products	2	31 – 51	2	39 - 59
Environmental industry	4	47 - 81	3	77 - 85
Disk/film/translation services	1	8 - 14	2	44 - 46
Fish processing	39	710-2,867	36	715 - 2,810
Food and beverage	14	128 - 230	9	120 - 242
Health	1	3 – 7	1	8-10
Metals	6	67 - 88	4	60 - 83
Mines, mine exploration	3	45 - 25	2	22 - 24
Mining services	0	0 - 0	1	2 - 2
Peat	1	4 – 5	1	25 - 25
Plastic/rubber	1	23 - 48	1	50 - 95
Lumber products	1	2 - 7	2	6 – 14
Printing	7	43 - 58	7	47 - 63
Manufactured wood products	13	170 - 243	12	263 - 322
Shipbuilding and boat repair	7	29 - 29	9	35 - 48
Textiles and clothing	1	2 - 3	6	14 – 16

Table 12

Selected Firms, by Industry, Southeast New Brunswick,<sup>a</sup> 1992 and 1998

<sup>a</sup> Data are for the economic region of southeast New Brunswick (including the southeast portion of the county of Westmorland, meaning that portion of the county not included in the economic region of Moncton: 32,170 residents). The data were obtained from a survey that does not include all firms.

	Number of	Number of Jobs	Number of	Number of Jobs
	Firms	(min. – max.)	Firms	(min. – max.)
Industry		1992		1998
Agricultural products	12	47 – 179	6	32 - 53
Auto parts rebuilding	3	9-17	3	18 - 18
Construction consulting	0	0 - 0	1	2 - 2
Building products	8	86 - 247	11	111 - 224
Building services	0	0 - 0	5	12 - 14
Chemical products	3	37 - 81	3	32 - 64
Asphalt and cement	4	25 - 35	5	91 - 100
Handicrafts	3	3 – 5	5	5-6
Electrical/electronic products	0	0 - 0	1	7 - 14
Environmental industry	4	51 - 90	2	74 - 112
Disk/film/translation services	0	0 - 0	1	1 – 11
Fish processing	19	171 – 1,719	15	214 - 1,404
Food and beverage	9	36 - 79	8	25 - 56
Metals	8	78 - 155	9	309 - 465
Peat	6	37 - 248	6	76 - 350
Plastic/rubber	5	13 - 48	7	24 - 40
Lumber products	7	78 - 178	6	95 - 176
Printing	5	11 – 19	4	14 - 16
Manufactured wood products	14	88 - 167	11	99 – 166
Shipbuilding and boat repair	8	55 - 86	7	35 - 62
Surveying services	0	0 - 0	2	3 - 6
Textiles and clothing	2	4 – 19	4	7 – 21

Table 13Selected Firms, by Industry, Kent,<sup>a</sup> 1992 and 1998

<sup>a</sup> Data are for the economic region of Kent (including the entire county of Kent, and the civil parish of Hardwick and the civil parish and village of Rogersville, in the county of Northumberland). The data were obtained from a survey that does not include all firms.

17166		itest i tett bi unstitler, 1990	
By Minimum Number of Jobs		By Maximum Number of Jobs	
Firm	Number of Jobs	Firm	Number of Jobs
Fraser Papers (pulp and paper)	680	Fraser Papers (pulp and paper)	715
Chemise JML	210	Chemise JML	210
(textiles and clothing)		(textiles and clothing)	
Nadeau Division Shermag	180	Nadeau Division Shermag	180
(manufactured wood products)		(manufactured wood products)	
Nadeau Poultry Farm Ltd. (agricultural products)	165	Imperial Signs (plastic/rubber)	180
Imperial Signs	120	Nadeau Poultry Farm	165
(plastic/rubber)		(agricultural products)	
Intertape Polymer Group	100	CBR Forest Management	120
(textiles and clothing)		Services (lumber products)	
		Alliance Forest Products – Couturier Inc. (lumber products)	110
		Bégin Lumber (lumber products)	107
		Daigle, Clarence & Fils (asphalt and cement)	100
		Intertape Polymer Group (textiles and clothing)	100

Table 14Major Firms, Northwest New Brunswick,<sup>a</sup> 1998

<sup>a</sup> Data are for the economic region of northwest New Brunswick, i.e., the northern part of the county of Madawaska (28,650 residents, compared with 36,305 residents for the entire county). The data were obtained from a survey that does not include all firms.

By Minimum Numbe	er of Jobs	By Maximum Number of Jobs	
Firm	Number	Firm	Number
TT 7' 1	of Jobs		of Jobs
Wink (textiles and clothing)	105	Néguac Seafoods (fish processing)	450
		Island Fishermen's Cooperative Association Ltd. (fish processing)	412
		St-Isidore Asphalte (asphalt and cement)	320
		C-Gem Exports (fish processing)	265
		Fruits de mer Oceanis (fish processing)	255
		Pêcheries F.N. (fish processing)	250
		Pêcheries St-Paul (fish processing)	250
		Produits Belle Baie (fish processing)	250
		Maisonnette Seafoods (fish processing)	240
		Ichiboshi (fish processing)	231
		Belle Île Fisheries (fish processing)	224
		Méga Bleu (agricultural products)	201
		Blue Cove Packing (fish processing)	185
		Carapro (fish processing)	180
		Produits de pêche A. Jones (fish processing)	151
		Canadian Ocean Products (fish processing)	150
		Lamèque Quality Group Limited (peat)	150
		Haveco (peat)	140
		Fruits de mer Landry (fish processing)	125
		Wink (textiles and clothing)	115
		Pêcheries GEM (fish processing)	110
		Jiffy Products (peat)	105
		Sun Gro Horticulture (peat)	100

		Table 1	5	
Major	Firms,	Acadian	Peninsula, <sup>a</sup>	1998

*Source:* Business New Brunswick; compiled by the author. <sup>a</sup> Data are for the economic region of the Acadian Peninsula (including a large part of the county of Gloucester, as well as a small part of the county of Northumberland). The data were obtained from a survey that does not include all firms.

By Minimum Number of Jobs		By Maximum Number of Jobs		
Firm	Number of Jobs	Firm	Number of Jobs	
Brunswick Mining (mines)	995	Brunswick Mining (mines)	995	
Noranda (Brunswick Smelter) (mines)	530	Noranda (Brunswick Smelter) (mines)	530	
Stone-Container (pulp and paper)	364	Stone-Container (pulp and paper)	364	
		Alfo Fisheries (fish processing)	201	
		POLLARA Inc (business services)	200	
		North Eastern Enterprises (metals)	110	

Table 16Major Firms, Chaleur Region,<sup>a</sup> 1998

<sup>a</sup> Data are for the economic region of Chaleur (including a large part of the county of Gloucester, as well as a small part of the counties of Restigouche and Northumberland). The data were obtained from a survey that does not include all firms.

By Minimum Number of Jobs		By Maximum Number of Jobs	
Firm	Number of Jobs	Firm	Number of Jobs
Hub Meat Packers (agricultural products)	850	Hub Meat Packers (agricultural products)	900
Moncton Publishing Company (printing)	200	Apex Industries (metals)	230
Com Dev Wireless Group	185	Moncton Publishing Company	200
(electrical and electronic services)		(printing)	
Apex Industries (metals)	180	BBM Bureau of Measurement (business services)	200
Eastern Bakeries	175	Com Dev Wireless Group	185
(food and beverage)		(electrical and electronic services)	
Irving Tissue (pulp and paper)	160	Eastern Bakeries (food and beverage)	175
Modern Construction (asphalt and cement)	150	Irving Tissue (pulp and paper)	160
Fawcett, H.A. and Sons (lumber products)	125	ICT Group (business services)	160
Norampac (pulp and paper)	120	Allsco Building Products (building products)	150
Tandem Fabrics (textiles and clothing)	120	Modern Construction (asphalt and cement)	150
Allsco Building Products	100	Pepsi-Cola Canada	150
(building products)		(food and beverage)	
Spielo Manufacturing (electrical and electronic services)	100	TransTech Intermodal Industries (metals)	150
Pepsi-Cola Canada (food and beverage)	100	Fawcett, H.A. and Sons (lumber products)	125
Rivenwood Furniture (manufactured wood products)	100	Tandem Fabrics (textiles and clothing)	122
		Norampac (pulp and paper)	120
		Spielo Manufacturing	120
		(electrical and electronic services)	
		MacDonald Paving and	105
		Construction (asphalt and cement)	
		Ben's (food and beverage)	100
		Rivenwood Furniture	100
		(manufactured wood products)	

Table 17Major Firms, Moncton Region,<sup>a</sup> 1998

<sup>a</sup> Data are for the economic region of Moncton (including the municipalities of Moncton, Dieppe, Riverview, Salisbury, Petitcodiac, Alma, Riverside-Albert, and Hillsborough, i.e., parts of the counties of Westmorland and Albert). The data were obtained from a survey that does not include all firms.

By Minimum Number of Job	S	By Maximum Number of Jobs	
	Number		Number
Firm	of Jobs	Firm	of Jobs
Consumer Glass(chemical products)	180	Paturel Seafood (fish processing)	750
Beauséjour Seafoods (fish processing)	150	Westmorland Fisheries (fish processing)	408
Gagnon, Edmond (fish processing)	150	Beauséjour Seafoods (fish processing)	259
		Consumer Glass (chemical products)	220
		Cape Bald Packers (fish processing)	169
		Gagnon, Edmond (fish processing)	150
		Leger, Leslie & Sons (fish processing)	150
		Shediac Lobster Shop (fish processing)	128
		Atlantic Window (building products)	120
		Sea Tide Import & Export (fish processing)	120

Table 18 Major Firms, Southeast New Brunswick,<sup>a</sup> 1998

<sup>a</sup> Data are for the economic region of southeast New Brunswick (including the southeast portion of the county of Westmorland, meaning that portion of the county not included in the economic region of Moncton: 32,170 residents). The data were obtained from a survey that does not include all firms.

By Minimum Number of .	Jobs	By Maximum Number of Jobs	
Firm	Number	Firm	Number
	of Jobs		of Jobs
Imperial Sheet Metal (metals)	150	Imperial Sheet Metal (metals)	225
Village Bay Oyster Company	130	Pêcheries Cap-Lumière (fish processing)	225
(fish processing)			
		Crown Seafood (fish processing)	200
		O'Neill, Raymond & Son Fisheries	176
		(fish processing)	
		Kent Homes (building products)	150
		Coopérative des pêcheurs de	133
		Baie-Sainte-Anne (fish processing)	
		Village Bay Oyster Company	130
		(fish processing)	
		Groupe Berger (peat)	110
		Richard, B.A. (fish processing)	104
		Kanalflakt (environmental industry)	100

Table 19Major Firms, Kent<sup>a</sup>, 1998

<sup>a</sup> Data are for the economic region of Kent (including the entire county of Kent, and the civil parish of Hardwick and the civil parish and village of Rogersville, in the county of Northumberland). The data were obtained from a survey that does not include all firms.

	1971		1996	
Industrial Sector	Number of Jobs	%	Number of Jobs	%
Primary sector	445,287	5.93	683,580	5.12
Agriculture	238,607	3.18	433,605	3.25
Forestry	62,519	0.83	66,820	0.50
Hunting and fishing	23,953	0.32	33,560	0.25
Metal mines	63,799	0.85	40,875	0.31
Coal mines	8,422	0.11	9,540	0.07
Oil and natural gas	19,455	0.26	41,205	0.31
Non-metal mines	21,766	0.29	18,900	0.14
Oil wells and other mining services	6,767	0.09	39,075	0.29
Primary processing	980,553	13.05	968,665	7.26
Food, excluding fish	206,860	2.75	196,420	1.47
Fish processing	27,044	0.36	25,035	0.19
Wood processing	92,472	1.23	133,085	1.00
Furniture	41,267	0.55	52,480	0.39
Paper	115,804	1.54	104,905	0.79
Metals processing	104,804	1.39	85,545	0.64
Metal products	126,441	1.68	153,260	1.15
Non-metallic mineral products	52,553	0.70	48,240	0.36
Petroleum and coal products	19,132	0.25	14,550	0.11
Leather and textiles	194,583	2.59	155,145	1.16
Other				
Rest of the economy	6,088,315	81.02	11,694,780	87.62

Table 20Jobs by Major Industrial Sectors, Canada, 1971 and 1996

Source: Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS.

	1971		1996	
Industrial Sector	Number of Jobs	%	Number of Jobs	%
Primary sector	870	9.24	815	5.42
Agriculture	325	3.45	505	3.36
Forestry	515	5.47	280	1.86
Hunting and fishing	20	0.21	30	0.20
Metal mines	10	0.11	0	0.00
Coal mines	0	0.00	0	0.00
Oil and natural gas	0	0.00	0	0.00
Non-metal mines	0	0.00	0	0.00
Oil wells and other mining services	0	0.00	0	0.00
Primary processing	2,057	21.86	2,795	18.59
Food, excluding fish	243	2.58	470	3.13
Fish processing	0	0.00	0	0.00
Wood processing	415	4.41	660	4.39
Furniture	105	1.12	125	0.83
Paper	1,004	10.67	785	5.22
Metals processing	0	0.00	0	0.00
Metal products	15	0.16	55	0.37
Non-metallic mineral products	30	0.32	30	0.20
Petroleum and coal products	5	0.05	30	0.20
Leather and textiles	240	2.55	640	4.26
Other				
Rest of the economy	6,485	68.90	11,425	75.99
Source: Statistics Canada, census data fr	om 1971 and 1996; cor	npiled by	INRS – UCS.	

Table 21Jobs by Major Industrial Sectors, Madawaska, 1971 and 1996

	1971		1996		
-	Number of Jobs	%	Number of Jobs	%	
Industrial Sector					
Primary sector	3,540	18.36	3,720	11.73	
Agriculture	165	0.86	265	0.84	
Forestry	870	4.51	245	0.77	
Hunting and fishing	810	4.20	1,725	5.44	
Metal mines	1,430	7.42	845	2.67	
Coal mines	0	0.00	10	0.03	
Oil and natural gas	0	0.00	20	0.06	
Non-metal mines	240	1.24	375	1.18	
Oil wells and other mining services	25	0.13	235	0.74	
Primary processing	3,941	20.44	3,300	10.41	
Food, excluding fish	260	1.35	155	0.49	
Fish processing	1,855	9.62	1,645	5.19	
Wood processing	180	0.93	315	0.99	
Furniture	50	0.26	20	0.06	
Paper	990	5.13	305	0.96	
Metals processing	446	2.31	435	1.37	
Metal products	105	0.54	180	0.57	
Non-metallic mineral products	30	0.16	50	0.16	
Petroleum and coal products	5	0.03	0	0.00	
Leather and textiles	20	0.10	195	0.62	
Other					
Rest of the economy	11,802	61.20	24,685	77.6	

Table 22Jobs by Major Industrial Sectors, Gloucester, 1971 and 1996

Source: Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS.

# Jobs by Major Industrial Sectors, Southeast New Brunswick,<sup>a</sup> 1971 and 1996

	1971		1996	
Industrial Sector	Number of Jobs	%	Number of Jobs	%
Primary sector	1,579	3.48	2,760	3.41
Agriculture	580	1.28	1,195	1.47
Forestry	375	0.83	510	0.63
Hunting and fishing	505	1.11	780	0.96
Metal mines	29	0.06	10	0.01
Coal mines	10	0.02	10	0.01
Oil and natural gas	10	0.02	0	0.00
Non-metal mines	60	0.13	170	0.21
Oil wells and other mining services	10	0.02	85	0.10
Primary processing	5,320	11.73	6,830	8.43
Food, excluding fish	1,796	3.96	1,765	2.18
Fish processing	1,670	3.68	2,035	2.51
Wood processing	545	1.20	955	1.18
Furniture	95	0.21	220	0.27
Paper	110	0.24	380	0.47
Metals processing	85	0.19	85	0.10
Metal products	364	0.80	660	0.81
Non-metallic mineral products	511	1.13	460	0.57
Petroleum and coal products	15	0.03	30	0.04
Leather and textiles	130	0.29	240	0.30
Other				
Rest of the economy	38,448	84.78	71,430	88.16

*Source:* Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS. <sup>a</sup> Southeast New Brunswick comprises the counties of Kent, Westmorland, and Albert; our study covers Westmorland-Kent.

Table	24
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# Jobs Distribution by Major Industrial Sectors, Based on Activity, Canada, 1971 and 1996

	1971		1996		
Industrial Sector	Number of Jobs	%	Number of Jobs	%	
Primary sector	445,287	5.93	683,580	5.12	
Low value-added processing	1,080,637	14.38	1,111,225	8.33	
Medium value-added processing	382,616	5.09	527,225	1.71	
High value-added processing	113,864	1.52	160,565	0.44	
Construction	482,650	6.42	668,285	5.36	
Transportation	397,945	5.30	539,205	6.84	
Communications	254,643	3.39	442,920	4.35	
Advanced services – technology <sup>a</sup>	62,917	0.84	379,555	1.38	
Wholesale	329,305	4.38	714,100	6.94	
Retail	866,022	11.53	1,604,610	12.02	
Personal and other services	330,613	4.40	846,190	6.34	
Hotels, restaurants, bed and breakfasts,	298,831	3.98	852,650	6.39	
camping, recreation					
Leisure	113,459	1.51	331,175	2.48	
Finance, insurance, real estate	344,689	4.59	740,010	5.54	
Advanced services – others <sup>b</sup>	80,901	1.08	271,820	2.04	
Education	631,426	8.40	1,419,600	10.64	
Health and social services	421,792	5.61	841,705	6.31	
Public service	615,514	8.19	815,250	6.11	
Other	261,044	3.47	397,355	2.98	

<sup>a</sup> Advanced services related to technology (engineering services, architects, information technology services, management services).

<sup>b</sup> Other advanced services (lawyers, notaries, advertising, etc.).
 *Source:* Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS.

# Jobs Distribution by Major Industrial Sectors, Based on Activity, Madawaska, 1971 and 1996

	1971		1996	
Industrial Sector	Number of Jobs	%	Number of Jobs	%
Primary sector	870	9.24	815	5.42
Low value-added processing	2,002	21.27	2,780	18.49
Medium value-added processing	150	1.59	405	2.69
High value-added processing	10	0.11	30	0.20
Construction	630	6.69	750	4.99
Transportation	635	6.75	565	3.76
Communications	200	2.12	225	1.50
Advanced services – technology <sup>a</sup>	10	0.11	75	0.50
Wholesale	225	2.39	450	2.99
Retail	965	10.25	1,900	12.64
Personal and other services	379	4.03	480	3.19
Hotels, restaurants, bed and breakfasts,	440	4.67	970	6.45
camping, recreation				
Leisure	225	2.39	330	2.19
Finance, insurance, real estate	170	1.81	565	3.76
Advanced services – others <sup>b</sup>	40	0.42	235	1.56
Education	1,001	10.63	1,800	11.97
Health and social services	700	7.44	1,040	6.92
Public service	460	4.88	885	5.89
Other	300	3.19	735	4.89

Source: Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS.

<sup>a</sup> Advanced services related to technology (engineering, architects, information technology services, management services).

<sup>b</sup> Other advanced services (lawyers, notaries, advertising, etc.).

# Jobs Distribution by Major Industrial Sectors, Based on Activity, Gloucester, 1971 and 1996

	1971	1996	1996		
Industrial Sector	Number of Jobs	%	Number of Jobs	%	
Primary sector	3,540	18.36	3,720	11.73	
Low value-added processing	4,086	21.19	3,785	11.94	
Medium value-added processing	185	0.96	305	0.96	
High value-added processing	15	0.08	0	0.00	
Construction	1,530	7.93	1,855	5.85	
Transportation	625	3.24	580	1.83	
Communications	318	1.65	595	1.88	
Advanced services – technology <sup>a</sup>	65	0.34	260	0.82	
Wholesale	525	2.72	995	3.14	
Retail	2,201	11.41	4,510	14.22	
Personal and other services	745	3.86	1,700	5.36	
Hotels, restaurants, bed and breakfasts,	515	2.67	1,845	5.82	
camping, recreation					
Leisure	260	1.35	620	1.96	
Finance, insurance, real estate	305	1.58	1,290	4.07	
Advanced services – others <sup>b</sup>	70	0.36	320	1.01	
Education	1,550	8.04	4,285	13.52	
Health and social services	905	4.69	2,250	7.10	
Public service	849	4.40	1,925	6.07	
Other	995	5.16	865	2.73	

Source: Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS.

<sup>a</sup> Advanced services related to technology (engineering, architects, information technology services, management services).

<sup>b</sup> Other advanced services (lawyers, notaries, advertising, etc.).

# Jobs Distribution by Major Industrial Sectors, Based on Activity, Southeast New Brunswick,<sup>a</sup> 1971 and 1996

	1971		1996		
Industrial Sector	Number of Jobs	%	Number of Jobs	%	
Primary sector	1,579	3.48	2,760	3.41	
Low value-added processing	5,594	12.34	7,220	8.91	
Medium value-added processing	940	2.07	1,385	1.71	
High value-added processing	170	0.37	355	0.44	
Construction	3,110	6.86	4,340	5.36	
Transportation	5,699	12.57	5,540	6.84	
Communications	1,522	3.36	3,525	4.35	
Advanced services – technology <sup>b</sup>	200	0.44	1,115	1.38	
Wholesale	2,260	4.98	5,625	6.94	
Retail	6,557	14.46	10,195	12.58	
Personal and other services	2,100	4.63	4,545	5.61	
Hotels, restaurants, bed and breakfasts,	1,650	3.64	5,155	6.36	
camping, recreation					
Leisure	711	1.57	2,150	2.65	
Finance, insurance, real estate	1,511	3.33	3,815	4.71	
Advanced services – others <sup>c</sup>	305	0.67	885	1.09	
Education	4,044	8.92	9,585	11.83	
Health and social services	2,180	4.81	5,125	6.33	
Public service	3,853	8.50	5,500	6.79	
Other	1,363	3.01	2,200	2.72	

Source: Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS.

<sup>a</sup> Southeast New Brunswick comprises the counties of Kent, Westmorland, and Albert; our study covers Westmorland-Kent.

<sup>b</sup> Advanced services related to technology (engineering, architects, information technology services, management services).

<sup>c</sup> Other advanced services (lawyers, notaries, advertising, etc.).

	Growth in %				
Industrial Sector	Canada	Madawaska	Gloucester	Southeast NB <sup>a</sup>	
Total	77.63	59.74	64.41	78.66	
		Prim	ary		
Agriculture	81.72	55.38	60.61	105.99	
Forestry	6.88	-45.63	-71.84	36.00	
Hunting and fishing	40.11	50.00	112.96	54.46	
Metal mines	-35.93	-100.00	-40.92	-65.59	
Coal mines	13.28	n.a.	n.a.	0.00	
Oil and natural gas	111.80	n.a.	n.a.	-100.00	
Non-metal mines	-13.17	n.a.	56.25	183.33	
Oil wells and other mining services	477.43	n.a.	840.00	750.00	
		Primary	Processing		
Food, excluding fish	-5.05	93.42	-40.38	-1.71	
Fish processing	-7.43	n.a.	-11.32	21.86	
Wood processing	43.92	59.04	75.00	75.23	
Furniture	27.17	19.06	-59.96	131.58	
Paper	-9.41	-21.84	-69.19	245.45	
Metals processing	-18.06	n.a.	-2.54	0.00	
Metal products	21.21	266.67	71.45	81.19	
Non-metallic mineral products	-8.21	0.00	66.67	-9.90	
Petroleum and coal products	-23.95	500.00	-100.00	100.00	
Leather and textiles	-20.27	166.68	875.00	84.62	
Other					
Rest of the economy	92.09	76.18	109.15	85.78	

# Table 28 Employment Growth by Major Industrial Sectors, Canada and Selected Regions, 1971–96

*Source:* Statistics Canada, census data from 1971, 1981, 1991, and 1996; compiled by INRS – UCS. <sup>a</sup> Southeast New Brunswick comprises the counties of Kert Wester Statistics of Kert Statistics of Kert Wester Statistics of Kert Statistics of Kert Wester Statistics of Kert Wester Statistics of Kert Statistics of Kert

<sup>a</sup> Southeast New Brunswick comprises the counties of Kent, Westmorland, and Albert; our study covers Westmorland-Kent.

# Table 29Employment Growth by Major Industrial Sectors, Based on Activity,<br/>Canada and Selected Regions, 1971–96

	Growth (in %)			
	Canada	Madawaska	Gloucester	Southeast NB <sup>a</sup>
Total	77.63	59.74	64.41	78.66
Primary sector	53.51	-6.32	5.08	74.77
Low value-added processing	2.83	38.84	-7.37	29.07
Medium value-added processing	37.79	170.02	64.91	47.37
High value-added processing	41.01	200.00	-100.00	108.82
Construction	38.46	19.06	21.24	39.55
Transportation	35.50	-11.05	-7.21	-2.79
Communications	73.94	12.54	87.05	131.67
Advanced services – technology <sup>b</sup>	503.26	650.00	300.00	457.50
Wholesale	116.85	100.00	89.55	148.89
Retail	85.29	96.89	104.94	55.49
Personal and other services	155.95	26.55	128.19	116.48
Hotels, restaurants, bed and breakfasts,	185.33	120.45	258.26	212.34
camping, recreation				
Leisure	191.89	46.43	138.45	202.32
Finance, insurance, real estate	114.69	232.47	322.95	152.42
Advanced services – others <sup>c</sup>	235.99	494.94	357.14	190.48
Education	124.82	79.87	176.46	137.00
Health and social services	99.55	48.56	148.61	135.10
Public service	32.45	92.48	126.77	42.75
Other	52.22	144.81	-13.06	61.41

Source: Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS.

<sup>a</sup> Southeast New Brunswick comprises the counties of Kent, Westmorland, and Albert; our study covers Westmorland-Kent.

<sup>b</sup> Advanced services related to technology (engineering, architects, information technology services, mana-gement services).

<sup>c</sup> Other advanced services (lawyers, notaries, advertising, etc.).

# Unemployment and Participation Rates, Canada, New Brunswick, and Selected Regions, 1991 and 1996

	Canada	New Brunswick	Westmorland	Kent	Madawaska	Gloucester
1991						
Unemployment rate (in %)	10.2	15.4	12.2	24.8	17.4	22.0
Participation rate (in %)	67.9	62.9	64.4	60.5	58.9	60.0
1996						
Unemployment rate (in %)	10.1	15.5	11.1	24.0	15.0	21.7
Participation rate (in %)	65.5	62.2	64.9	61.1	59.9	57.3

Source: Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS.

# Unemployment and Participation Rates, Selected Regions of New Brunswick, 1996–2000

	Beleeted Regio		· • • • • • • • • • • • • • • • • • • •	>0 =000	
	Campbellton- Miramichi	Moncton- Richiboucto	St. John- St. Stephen	Fredericton- Oromocto	Edmundston- Woodstock
1996					
Unemployment rate (in %)	13.7	12.4	10.5	10.6	8.9
Participation rate (in %)	51.4	64.1	59.5	62.7	54.7
1997					
Unemployment rate (in %)	17.0	12.7	11.5	10.1	10.5
Participation rate (in %)	56.1	62.7	60.0	62.6	57.4
1998					
Unemployment rate (in %)	19.0	11.0	9.8	9.6	10.2
Participation rate (in %)	55.4	62.7	61.8	64.4	60.2
1999					
Unemployment rate (in %)	16.7	9.5	7.6	7.6	8.9
Participation rate (in %)	54.0	63.7	62.8	65.0	60.5
2000					
Unemployment rate (in %)	16.1	8.6	7.7	8.3	8.9
Participation rate (in %)	55.2	64.8	63.7	63.6	61.3

Source: New Brunswick Department of Finance, The New Brunswick Economy 2001, 47.

# Table 32 Average Income, Canada and Selected Regions of New Brunswick, Rural/Urban, 1971 and 1996

19711996Sor % Canada = 100Sor % Canada = 100Average Employment Income Per WorkerRural Canada4,23178.4722,22482.61Urban Canada5,706105.8328,123104.53Rural Madawaska2,99755.5817,83166.28Urban Madawaska4,44882.5021,91081.44Rural Gloucester3,35662.2417,23164.05Urban Gloucester4,61885.6621,46879.80Rural Southeast NB4,74788.0523,71688.15Average Income Per Person Earning IncomeRural Canada5,364106.5726,194103.96Rural Canada3,89577.3921,50085.33107.60Urban Gloucester3,00659.7216,16664.16Urban Gloucester4,22483.9220,10479.79Rural Gloucester4,22483.9220,10379.79Rural Gloucester4,22483.9220,10379.79Rural Canada1,87569.4115,34283.05Urban Southeast NB4,18389.0722,80790.52Urban Southeast NB1,20774.7012,61268.27Urban Gloucester1,16943.2811,47962.14Urban Gloucester2,977110.2519,349104.74Rural Canada1,87569.4115,34283.05Urban Gloucester<	Kur	al/Urban, 197			4007
Average Employment Income Per Worker           Rural Canada         4,231         78.47         22,224         82.61           Urban Canada         5,706         105.83         28,123         104.53           Rural Madawaska         2,997         55.58         17,831         66.28           Urban Madawaska         4,448         82.50         21,910         81.44           Rural Gloucester         3,356         62.24         17,231         64.05           Urban Gloucester         4,618         85.66         21,468         79.80           Rural Southeast NB         4,747         88.05         23,716         88.15           Overage Income Per Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         3,895         77.52         17,290         68.62           Urban Madawaska         2,895         57.52         17,290         68.62           Urban Madawaska         4,177         82.98         20,104         79.79           Rural Canada         1,875         69.41         15,342         83.05           Urban Madawaska         1,207         44.73         16,166         64.16					
Rural Canada         4,231         78.47         22,224         82.61           Urban Canada         5,706         105.83         28,123         104.53           Rural Madawaska         2,997         55.58         17,831         66.28           Urban Madawaska         4,448         82.50         21,910         81.44           Rural Gloucester         3,356         62.24         17,231         64.05           Urban Gloucester         4,618         85.66         21,468         79.80           Rural Southeast NB <sup>a</sup> 3,414         63.32         17,754         65.99           Urban Southeast NB         4,747         88.05         23,716         88.15           Average Income Per Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         3,895         57.52         17,290         68.62           Urban Madawaska         2,895         57.52         17,290         68.62           Urban Gloucester         3,006         59.72         16,166         64.16           Urban Gloucester         4,224         83.92         20,103         79.79           Rural Gloucester         4,283					
Urban Canada         5,706         105.83         28,123         104.53           Rural Madawaska         2,997         55.58         17,831         66.28           Urban Madawaska         4,448         82.50         21,910         81.44           Rural Gloucester         3,356         62.24         17,231         64.05           Urban Gloucester         4,618         85.66         21,468         79.80           Rural Southeast NB <sup>4</sup> 3,414         63.32         17,754         65.99           Urban Southeast NB         4,747         88.05         23,716         88.15           Average Income Per Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         2,895         57.52         17,290         68.62           Urban Madawaska         2,895         57.52         17,290         68.62           Urban Madawaska         4,177         82.98         20,104         79.79           Rural Oducester         3,006         59.72         16,166         64.16           Urban Southeast NB         3,177         63.13         18,357         72.86           Urban Southeast NB         3,177<					
Rural Madawaska         2,997         55.58         17,831         66.28           Urban Madawaska         4,448         82.50         21,910         81.44           Rural Gloucester         3,356         62.24         17,231         64.05           Urban Gloucester         4,618         85.66         21,468         79.80           Rural Southeast NB <sup>a</sup> 3,414         63.32         17,754         65.99           Urban Southeast NB         4,747         88.05         23,716         88.15           Average Income Per Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         2,895         57.52         17,290         68.62           Urban Madawaska         4,177         82.98         20,103         79.79           Rural Gloucester         4,224         83.92         20,103         79.79           Rural Southeast NB         3,177 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Urban Madawaska         4,448         82.50         21,910         81.44           Rural Gloucester         3,356         62.24         17,231         64.05           Urban Gloucester         4,618         85.66         21,468         79.80           Rural Southeast NB <sup>a</sup> 3,414         63.32         17,754         65.99           Urban Southeast NB         4,747         88.05         23,716         88.15           Average Income Per Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         5,364         106.57         26,194         103.96           Rural Madawaska         2,895         57.52         17,290         68.62           Urban Madawaska         2,895         57.72         16,166         64.16           Urban Gloucester         3,006         59.72         16,166         64.16           Urban Southeast NB         3,177         63.13         18,357         72.86           Urban Southeast NB         3,177         63.13         18,357         72.86           Urban Canada         2,977         110.25         19,349         104.74           Rural Canada         1,207<				· · ·	
Rural Gloucester         3,356         62.24         17,231         64.05           Urban Gloucester         4,618         85.66         21,468         79.80           Rural Southeast NB <sup>a</sup> 3,414         63.32         17,754         65.99           Urban Southeast NB         4,747         88.05         23,716         88.15           Average Income Per Person Earning Income         Person Earning Income         Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         5,364         106.57         26,194         103.96           Rural Madawaska         2,895         57.52         17,290         68.62           Urban Madawaska         2,895         57.52         17,290         68.62           Urban Gloucester         3,006         59.72         16,166         64.16           Urban Southeast NB         3,177         63.13         18,357         72.86           Urban Southeast NB         3,177         63.13         18,357         72.86           Urban Canada         1,875         69.41         15,342         83.05           Urban Canada         2,977         110.25         19,349         104.74		· · ·		· ·	
Urban Gloucester         4,618         85.66         21,468         79.80           Rural Southeast NB <sup>a</sup> 3,414         63.32         17,754         65.99           Urban Southeast NB         4,747         88.05         23,716         88.15           Average Income Per Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         5,364         106.57         26,194         103.96           Rural Madawaska         2,895         57.52         17,290         68.62           Urban Madawaska         2,895         57.52         17,290         68.62           Urban Gloucester         3,006         59.72         16,166         64.16           Urban Southeast NB         3,177         63.13         18,357         72.86           Urban Southeast NB         3,177         63.13         18,357         72.86           Urban Canada         1,875         69.41         15,342         83.05           Urban Canada         1,207         44.70         12,612         68.27           Urban Madawaska         1,207         44.70         12,612         68.27           Urban Madawaska         1,838 <td></td> <td>,</td> <td></td> <td>· ·</td> <td></td>		,		· ·	
Rural Southeast NB <sup>a</sup> 3,414         63.32         17,754         65.99           Urban Southeast NB         4,747         88.05         23,716         88.15           Average Income Per Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         5,364         106.57         26,194         103.96           Rural Madawaska         2,895         57.52         17,290         68.62           Urban Madawaska         4,177         82.98         20,104         79.79           Rural Gloucester         3,006         59.72         16,166         64.16           Urban Southeast NB         3,177         63.13         18,357         72.86           Urban Southeast NB         4,483         89.07         22,807         90.52           Average Income Per Resident           Rural Canada         1,875         69.41         15,342         83.05           Urban Canada         1,207         44.70         12,612         68.27           Urban Canada         1,207         44.70         12,612         68.27           Urban Madawaska         1,207         44.70         12,612         68.27		,		,	
Urban Southeast NB         4,747         88.05         23,716         88.15           Average Income Per Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         5,364         106.57         26,194         103.96           Rural Madawaska         2,895         57.52         17,290         68.62           Urban Madawaska         4,177         82.98         20,104         79.79           Rural Gloucester         3,006         59.72         16,166         64.16           Urban Gloucester         4,224         83.92         20,103         79.79           Rural Southeast NB         3,177         63.13         18,357         72.86           Urban Southeast NB         4,483         89.07         22,807         90.52           Average Income Per Resident           Rural Canada         1,875         69.41         15,342         83.05           Urban Madawaska         1,207         44.70         12,612         68.27           Urban Madawaska         1,207         44.70         12,612         68.27           Urban Gloucester         1,169         43.28         11,479         62.14		· · ·		· ·	
Average Income Per Person Earning Income           Rural Canada         3,895         77.39         21,500         85.33           Urban Canada         5,364         106.57         26,194         103.96           Rural Madawaska         2,895         57.52         17,290         68.62           Urban Madawaska         4,177         82.98         20,104         79.79           Rural Gloucester         3,006         59.72         16,166         64.16           Urban Gloucester         4,224         83.92         20,103         79.79           Rural Southeast NB         3,177         63.13         18,357         72.86           Urban Southeast NB         4,483         89.07         22,807         90.52           Average Income Per Resident           Rural Canada         1,875         69.41         15,342         83.05           Urban Canada         2,977         110.25         19,349         104.74           Rural Madawaska         1,207         44.70         12,612         68.27           Urban Madawaska         1,838         68.07         14,787         80.04           Rural Gloucester         1,169         43.28         11,479         62.14		,		,	
Rural Canada       3,895       77.39       21,500       85.33         Urban Canada       5,364       106.57       26,194       103.96         Rural Madawaska       2,895       57.52       17,290       68.62         Urban Madawaska       4,177       82.98       20,104       79.79         Rural Gloucester       3,006       59.72       16,166       64.16         Urban Gloucester       4,224       83.92       20,103       79.79         Rural Southeast NB       3,177       63.13       18,357       72.86         Urban Southeast NB       4,483       89.07       22,807       90.52         Average Income Per Resident         Rural Canada       1,875       69.41       15,342       83.05         Urban Canada       1,207       44.70       12,612       68.27         Urban Madawaska       1,207       44.70       12,612       68.27         Urban Madawaska       1,838       68.07       14,787       80.04         Rural Gloucester       1,169       43.28       11,479       62.14         Urban Madawaska       1,577       58.38       13,905       75.27         Urban Gloucester       2,395 <td< td=""><td>Urban Southeast NB</td><td>,</td><td></td><td>/</td><td></td></td<>	Urban Southeast NB	,		/	
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Rural Gloucester       3,006       59.72       16,166       64.16         Urban Gloucester       4,224       83.92       20,103       79.79         Rural Southeast NB       3,177       63.13       18,357       72.86         Urban Southeast NB       4,483       89.07       22,807       90.52         Average Income Per Resident         Rural Canada       1,875       69.41       15,342       83.05         Urban Canada       2,977       110.25       19,349       104.74         Rural Madawaska       1,207       44.70       12,612       68.27         Urban Madawaska       1,888       68.07       14,787       80.04         Rural Gloucester       1,169       43.28       11,479       62.14         Urban Gloucester       2,013       74.53       15,248       82.54         Rural Southeast NB       1,577       58.38       13,905       75.27         Urban Southeast NB       2,395       88.69       17,358       93.96         Percentage of Working-age Labour Force Earning Income From Employment         Rural Canada       62.7       90.93       74.1       98.55		,		,	
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Rural Southeast NB       3,177       63.13       18,357       72.86         Urban Southeast NB       4,483       89.07       22,807       90.52         Average Income Per Resident         Rural Canada       1,875       69.41       15,342       83.05         Urban Canada       2,977       110.25       19,349       104.74         Rural Madawaska       1,207       44.70       12,612       68.27         Urban Madawaska       1,838       68.07       14,787       80.04         Rural Gloucester       1,169       43.28       11,479       62.14         Urban Gloucester       2,013       74.53       15,248       82.54         Rural Southeast NB       1,577       58.38       13,905       75.27         Urban Southeast NB       2,395       88.69       17,358       93.96         Percentage of Working-age Labour Force Earning Income From Employment         Rural Canada       62.7       90.93       74.1       98.55	Rural Gloucester	3,006	59.72	16,166	
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Average Income Per Resident           Rural Canada         1,875         69.41         15,342         83.05           Urban Canada         2,977         110.25         19,349         104.74           Rural Madawaska         1,207         44.70         12,612         68.27           Urban Madawaska         1,838         68.07         14,787         80.04           Rural Gloucester         1,169         43.28         11,479         62.14           Urban Gloucester         2,013         74.53         15,248         82.54           Rural Southeast NB         1,577         58.38         13,905         75.27           Urban Southeast NB         2,395         88.69         17,358         93.96           Percentage of Working-age Labour Force Earning Income From Employment           Rural Canada         62.7         90.93         74.1         98.55	Rural Southeast NB	3,177		18,357	72.86
Rural Canada       1,875       69.41       15,342       83.05         Urban Canada       2,977       110.25       19,349       104.74         Rural Madawaska       1,207       44.70       12,612       68.27         Urban Madawaska       1,838       68.07       14,787       80.04         Rural Gloucester       1,169       43.28       11,479       62.14         Urban Gloucester       2,013       74.53       15,248       82.54         Rural Southeast NB       1,577       58.38       13,905       75.27         Urban Southeast NB       2,395       88.69       17,358       93.96         Percentage of Working-age Labour Force Earning Income From Employment         Rural Canada       62.7       90.93       74.1       98.55	Urban Southeast NB	4,483	89.07	22,807	90.52
Urban Canada2,977110.2519,349104.74Rural Madawaska1,20744.7012,61268.27Urban Madawaska1,83868.0714,78780.04Rural Gloucester1,16943.2811,47962.14Urban Gloucester2,01374.5315,24882.54Rural Southeast NB1,57758.3813,90575.27Urban Southeast NB2,39588.6917,35893.96Percentage of Working-age Labour Force Earning Income From EmploymentRural Canada62.790.9374.198.55			Average Income	e Per Reside	ent
Rural Madawaska       1,207       44.70       12,612       68.27         Urban Madawaska       1,838       68.07       14,787       80.04         Rural Gloucester       1,169       43.28       11,479       62.14         Urban Gloucester       2,013       74.53       15,248       82.54         Rural Southeast NB       1,577       58.38       13,905       75.27         Urban Southeast NB       2,395       88.69       17,358       93.96         Percentage of Working-age Labour Force         Earning Income From Employment         Rural Canada       62.7       90.93       74.1       98.55	Rural Canada	1,875	69.41	15,342	83.05
Urban Madawaska         1,838         68.07         14,787         80.04           Rural Gloucester         1,169         43.28         11,479         62.14           Urban Gloucester         2,013         74.53         15,248         82.54           Rural Southeast NB         1,577         58.38         13,905         75.27           Urban Southeast NB         2,395         88.69         17,358         93.96           Percentage of Working-age Labour Force Earning Income From Employment           Rural Canada         62.7         90.93         74.1         98.55	Urban Canada	2,977	110.25	19,349	104.74
Rural Gloucester       1,169       43.28       11,479       62.14         Urban Gloucester       2,013       74.53       15,248       82.54         Rural Southeast NB       1,577       58.38       13,905       75.27         Urban Southeast NB       2,395       88.69       17,358       93.96         Percentage of Working-age Labour Force Earning Income From Employment         Rural Canada       62.7       90.93       74.1       98.55	Rural Madawaska	1,207	44.70	12,612	68.27
Urban Gloucester         2,013         74.53         15,248         82.54           Rural Southeast NB         1,577         58.38         13,905         75.27           Urban Southeast NB         2,395         88.69         17,358         93.96           Percentage of Working-age Labour Force Earning Income From Employment           Rural Canada         62.7         90.93         74.1         98.55	Urban Madawaska	1,838	68.07	14,787	80.04
Rural Southeast NB         1,577         58.38         13,905         75.27           Urban Southeast NB         2,395         88.69         17,358         93.96           Percentage of Working-age Labour Force Earning Income From Employment           Rural Canada         62.7         90.93         74.1         98.55	Rural Gloucester	1,169	43.28	11,479	62.14
Urban Southeast NB2,39588.6917,35893.96Percentage of Working-age Labour Force Earning Income From EmploymentRural Canada62.790.9374.198.55	Urban Gloucester	2,013	74.53	15,248	82.54
Percentage of Working-age Labour Force           Earning Income From Employment           Rural Canada         62.7         90.93         74.1         98.55	Rural Southeast NB	1,577	58.38	13,905	75.27
Earning Income From EmploymentRural Canada62.790.9374.198.55	Urban Southeast NB	· · ·			
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Urban Canada 70.9 102.78 75.5 100.39					
					100.39
Rural Madawaska54.078.3163.484.27	Rural Madawaska				
Urban Madawaska 61.3 88.90 68.7 91.25					
Rural Gloucester         50.3         72.97         65.6         87.23					
Urban Gloucester 60.3 87.46 71.2 94.69					
Rural Southeast NB         62.7         90.90         74.9         99.60					
Urban Southeast NB     69.4     100.69     77.9     103.50       Source Statistics Canada cancer data from 1071 and 1000 campiled by DIRS     UCS	Urban Southeast NB				103.50

Source: Statistics Canada, census data from 1971 and 1996; compiled by INRS – UCS.

<sup>a</sup> Southeast New Brunswick comprises the counties of Kent, Westmorland, and Albert; our study covers Westmorland-Kent.

# Income Distribution, by Source, Canada, New Brunswick, and Selected Regions, 1991 and 1996

	Canada	New Brunswick	Westmorland	Kent	Madawaska	Gloucester
Source of Income	%	%	%	%	%	%
			1991			
Employment income	77.8	73.5	72.5	64.2	71.7	69.6
Government transfers	11.4	17.6	16.0	30.4	20.6	25.2
Other income	10.8	9.0	11.5	5.4	7.8	5.2
			1996			
Employment income	75.3	71.0	72.5	63.8	71.0	68.2
Government transfers	14.0	19.7	17.5	30.8	21.8	26.4
Other income	10.7	9.2	10.0	5.4	7.1	5.4

Source: Statistics Canada, census data from 1991 and 1996; compiled by INRS – UCS.

# Level of Education, Fifteen Years of Age and Over, Canada and Selected Regions of New Brunswick, Rural/Urban, 1971–96

Canada (in %) High school not completed University degree Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences	<b>Rural</b> 42.6 2.1	Urban	<u>1971 1981 1991</u>			1996		
High school not completed University degree Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe-			Rural	Urban	Rural	Urban	Rural	Urban
University degree Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe-								
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe-	2.1	27.6	28.2	17.6	20.3	12.1	17.3	10.6
engineering, agricultural sciences, mathe-		5.6	4.1	9.2	5.5	13.0	6.6	15.1
					3.0	4.6	3.4	5.3
matics or physical sciences								
Diploma or certificate from trade or					8.8	8.4	9.5	8.7
technical school								
	Madawaska (in % and Canada = 100)							
High school not completed	59.1	41.6	42.5	28.4	34.3	21.6	31.1	18.3
	138.7	150.5	150.4	161.7	169.0	178.1	180.0	172.2
University degree	2.3	5.5	3.2	6.2	4.8	9.2	5.1	11.5
	110.6	98.4	77.7	67.5	88.4	71.2	77.8	76.3
Certificate or diploma in applied sciences,					2.0	2.5	2.1	3.3
engineering, agricultural sciences, mathe-					66.7	54.1	60.6	63.0
matics or physical sciences					~ .	0.0		
Diploma or certificate from trade or					6.4	8.8	6.1	8.2
technical school					73.3	105.6	63.9	95.3
····	(0.0			<u>(in % an</u>		,		10.0
High school not completed	60.8	43.4	43.4	28.6	34.4	21.4	30.8	19.3
								181.3 8.8
		3.5			5.1	1.3		XX
University degree	1.8			(0.4	02.0	560		
	1.8 85.0	63.4	100.9	68.4	93.2	56.3	104.9	58.1
Certificate or diploma in applied sciences,			100.9	68.4	1.5	2.0	104.9 2.8	58.1 2.5
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe-			100.9	68.4			104.9	58.1
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences			100.9	68.4	1.5 50.4	2.0 44.0	104.9 2.8 51.4	58.1 2.5 47.0
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences Diploma or certificate from trade or			100.9	68.4	1.5 50.4 6.9	2.0 44.0 10.6	104.9 2.8 51.4 7.3	58.1 2.5 47.0 10.2
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences		63.4			1.5 50.4 6.9 78.3	2.0 44.0 10.6 156.9	104.9 2.8 51.4 7.3 76.4	58.1 2.5 47.0
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences Diploma or certificate from trade or technical school	85.0	63.4 Sou	theast N	B <sup>a</sup> (in %	1.5 50.4 6.9 78.3 and Car	$2.0 \\ 44.0 \\ 10.6 \\ 156.9 \\ nada = 1$	104.9 2.8 51.4 7.3 76.4 <b>00)</b>	58.1 2.5 47.0 10.2 118.3
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences Diploma or certificate from trade or	85.0 53.9	63.4 <u>Sou</u> 31.1	theast N 37.6	B <sup>a</sup> (in %) 20.9	1.5 50.4 6.9 78.3 and Can 28.5	$2.0 \\ 44.0 \\ 10.6 \\ 156.9 \\ nada = 1 \\ 14.1 \\ $	104.9 2.8 51.4 7.3 76.4 <b>00)</b> 24.4	58.1 2.5 47.0 10.2 118.3 11.0
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences Diploma or certificate from trade or technical school High school not completed	85.0 53.9 126.5	63.4 <b>Sou</b> 31.1 112.3	<b>theast N</b> 37.6 133.2	<mark>B<sup>ª</sup> (in %</mark> 20.9 118.9	1.5 50.4 6.9 78.3 <b>and Ca</b> 28.5 140.5	$2.0 \\ 44.0 \\ 10.6 \\ 156.9 \\ \mathbf{nada} = 1 \\ 14.1 \\ 115.4 \\ $	104.9 2.8 51.4 7.3 76.4 <b>00)</b> 24.4 141.2	58.1 2.5 47.0 10.2 118.3 11.0 103.0
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences Diploma or certificate from trade or technical school	85.0 53.9 126.5 2.6	63.4 500 31.1 112.3 4.0	theast N 37.6 133.2 4.3	B <sup>a</sup> (in %) 20.9 118.9 7.2	1.5 50.4 6.9 78.3 <b>and Ca</b> 28.5 140.5 5.5	$2.0 \\ 44.0 \\ 10.6 \\ 156.9 \\ 14.1 \\ 115.4 \\ 10.3 \\ 10.3 \\ 10.1 \\$	104.9 2.8 51.4 7.3 76.4 <b>00)</b> 24.4 141.2 6.7	58.1 2.5 47.0 10.2 118.3 11.0 103.0 12.8
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences Diploma or certificate from trade or technical school High school not completed University degree	85.0 53.9 126.5	63.4 <b>Sou</b> 31.1 112.3	<b>theast N</b> 37.6 133.2	<mark>B<sup>ª</sup> (in %</mark> 20.9 118.9	1.5 50.4 6.9 78.3 <b>and Ca</b> 28.5 140.5 5.5 99.8	$2.0 \\ 44.0 \\ 10.6 \\ 156.9 \\ 14.1 \\ 115.4 \\ 10.3 \\ 79.8 \\ 10.1 \\ 10.2 \\$	104.9 2.8 51.4 7.3 76.4 <b>00)</b> 24.4 141.2 6.7 101.9	58.1 2.5 47.0 10.2 118.3 11.0 103.0 12.8 85.0
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences Diploma or certificate from trade or technical school High school not completed University degree Certificate or diploma in applied sciences,	85.0 53.9 126.5 2.6	63.4 500 31.1 112.3 4.0	theast N 37.6 133.2 4.3	B <sup>a</sup> (in %) 20.9 118.9 7.2	1.5 50.4 6.9 78.3 <b>and Ca</b> 28.5 140.5 5.5 99.8 2.0	$2.0 \\ 44.0 \\ 10.6 \\ 156.9 \\ 14.1 \\ 115.4 \\ 10.3 \\ 79.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 3$	104.9 2.8 51.4 7.3 76.4 00) 24.4 141.2 6.7 101.9 2.6	58.1 2.5 47.0 10.2 118.3 11.0 103.0 12.8 85.0 3.3
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences Diploma or certificate from trade or technical school High school not completed University degree Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe-	85.0 53.9 126.5 2.6	63.4 500 31.1 112.3 4.0	theast N 37.6 133.2 4.3	B <sup>a</sup> (in %) 20.9 118.9 7.2	1.5 50.4 6.9 78.3 <b>and Ca</b> 28.5 140.5 5.5 99.8	$2.0 \\ 44.0 \\ 10.6 \\ 156.9 \\ 14.1 \\ 115.4 \\ 10.3 \\ 79.8 \\ 10.1 \\ 10.2 \\$	104.9 2.8 51.4 7.3 76.4 <b>00)</b> 24.4 141.2 6.7 101.9	58.1 2.5 47.0 10.2 118.3 11.0 103.0 12.8 85.0
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathe- matics or physical sciences Diploma or certificate from trade or technical school High school not completed University degree Certificate or diploma in applied sciences,	85.0 53.9 126.5 2.6	63.4 500 31.1 112.3 4.0	theast N 37.6 133.2 4.3	B <sup>a</sup> (in %) 20.9 118.9 7.2	1.5 50.4 6.9 78.3 <b>and Ca</b> 28.5 140.5 5.5 99.8 2.0	$2.0 \\ 44.0 \\ 10.6 \\ 156.9 \\ 14.1 \\ 115.4 \\ 10.3 \\ 79.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 2.8 \\ 3$	104.9 2.8 51.4 7.3 76.4 00) 24.4 141.2 6.7 101.9 2.6	58.1 2.5 47.0 10.2 118.3 11.0 103.0 12.8 85.0 3.3
	142.6	156.9 3.5	153.8 4.1	162.7 6.3	169.3 5.1	176.5 7.3	178.1 6.9	

Source: Statistics Canada, census data from 1971, 1981, 1991, and 1996; compiled by INRS – UCS.

<sup>a</sup> Southeast New Brunswick comprises the counties of Kent, Westmorland, and Albert; our study covers Westmorland-Kent.

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