Regions in the Knowledge Economy

Peripheral but Vigorous

Southwestern Nova Scotia

Marc L. Johnson

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

INSTITUT CANADIEN DE RECHERCHE SUR LE DÉVELOPPEMENT RÉGIONAL
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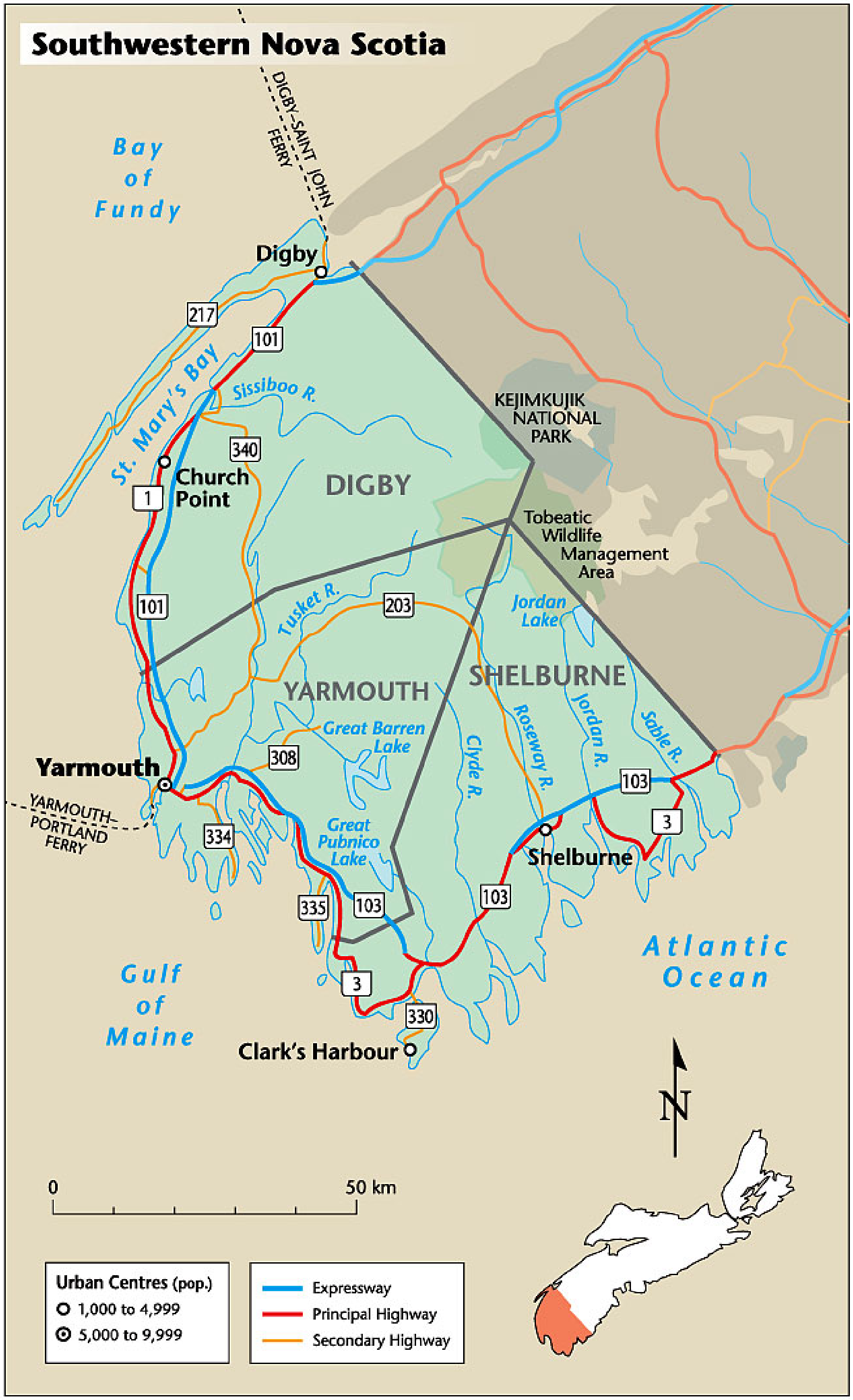

Southwestern Nova Scotia
Bay of Fundy
DIGBY–SAINT JOHN FERRY
Digby
217
101
St. Mary's Bay
Sissiboo R.
340
Church Point
1
DIGBY
KEJIMKUJIK NATIONAL PARK
Tobeatic Wildlife Management Area
Tusket R.
203
Jordan Lake
YARMOUTH
SHELBURNE
Great Barren Lake
308
Roseway R.
Jordan R.
Sable R.
Clyde R.
Yarmouth
YARMOUTH–PORTLAND FERRY
334
Great Pubnico Lake
103
3
Shelburne
335
Gulf of Maine
Atlantic Ocean
330
Clark's Harbour
N
0
50 km
Urban Centres (pop.)
1,000 to 4,999
5,000 to 9,999
Expressway
Principal Highway
Secondary Highway

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The institute views the study of regional development from a broad perspective and encourages a multidisciplinary approach including economy, economic geography, political science, public policy and sociology.

The institute's goals are twofold:

1. To act as a catalyst in promoting informed public debate on regional development issues
2. To make available to all interested parties objective information and data pertaining to the study of regional development

Scholars with an interest in undertaking research on regional development issues are invited to contact the institute. Our Web site is: www.umoncton.ca/icrdr.

The Atlantic Canada Opportunities Agency (ACOA) represents the interests of the Atlantic region in Government of Canada policy making and has a mandate to encourage federal policies and programs which promote economic development in the four Atlantic provinces. In support of this role, ACOA carries out policy-relevant research on a broad range of issues, challenges, and opportunities associated with the development of the region's economy.

The Agency's policy research efforts are strategically focused and actively involve public and private sector partners and key stakeholders from across Atlantic Canada and outside the region. Partners include: independent public policy organizations; government departments and agencies; universities; colleges; economics community; business associations; and individual firms.

ACOA provided support to this study through the Atlantic Policy Research Initiative (APRI). The objective of the Initiative is to enhance the capability of the Agency to coordinate and plan pan-Atlantic federal activities contributing to economic growth in Atlantic Canada.

About the author

Since January 2001, Marc Johnson has been Senior researcher at the Canadian Institute for Research on Regional Development at Université de Moncton. A sociologist, he is a graduate of the universities of Moncton, Strasbourg and Bordeaux, where he completed his doctorate in 1992. He has worked as a research and program evaluation consultant in collaboration with several government organizations, including Human Resources Development Canada, Canadian Heritage, the Canadian International Development Agency, the Office of the Commissioner of Official Languages and the Ministry of Education of Ontario. He has also worked for the National Anti-Poverty Organization and the Canadian Council of Professional Fish Harvesters.

His fields of interest include social, community, and economic development. He has examined the issues of literacy and adult education, employability measures, the vitality of linguistic minorities, and the capacity building of communities in Canada, as well as in Africa, South America, and Eastern Europe.

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FOREWORD

This study of Southwestern Nova Scotia 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 research 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 double comparison: first, a comparison of the eleven peripheral regions under study; 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 initiative. 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, a review of the international literature on peripheral economies, the cross-Canada statistical analysis, and the comparative analyses done in cooperation with researchers from northern Europe. These documents are available on the Web at www.umoncton.ca/icrdr.

Marc L. Johnson
October 2001

I
REGIONAL PROFILE

For those arriving in North America by way of the Atlantic Ocean, Southwestern Nova Scotia is one of the points of entry to the continent. Thus, in 1605, this region received Canada's first settlers, when the French established the Acadian colony of Port-Royal here, alongside the Micmac nation *Gespogoite*. This part of the Nova Scotia peninsula was subsequently inhabited by a large number of Loyalists and a small population of Blacks. It is not surprising that many human groups have chosen to live here, as the region's climate is uncommonly mild. Snow covers the landscape less than one-third of the year. As well, the sea provides countless resources, while the land offers a valuable agri-forest heritage.

The region we selected for this study comprises three counties, each named for its main population centre: Digby, Yarmouth, and Shelburne. We subtracted Queens and Lunenburg counties from Statistics Canada's economic region, as both are too close to Halifax to meet our definition of a peripheral region.[1] The region selected is fairly symmetrical, with the small regional capital of Yarmouth in the middle, and Digby and Shelburne on either side. Southwestern Nova Scotia is essentially a rural region, and it is the only region in our research program that has no census agglomeration. In addition, this region has the highest concentration of francophones in Nova Scotia, in the rural municipalities of Clare and Argyle.

Geographically, Southwestern Nova Scotia is a peripheral area of the province, particularly in relation to Halifax, the metropolitan centre of the Atlantic region. Geography is also what gives Southwestern Nova Scotia, bounded on the south by the Atlantic Ocean and on the west by the Bay of Fundy, an economy based on marine resources. Given the cycles typical of marine resource development, the economy of the Southwestern experiences the kinds of highs and lows that have shaped the history of the Atlantic provinces. During the 1990s, for instance, the groundfish crisis that shook the whole Atlantic region did not spare Southwestern Nova Scotia, although some diversification in the species caught, together with excellent lobster catches, afforded a degree of protection from the disaster.

While this region is peripheral in relation to Halifax, it has some invaluable access routes. In Yarmouth, two ferry services link it to the state of Maine, while in Digby, another ferry service links it to the industrial city of Saint John,

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1. Our cross-Canada research program defines a peripheral region as one that has some industrial and urban fabric, but is located more than 200 km from a metropolitan area (urban centre having a population greater than 500,000), with no centre having a population greater than 150,000.

New Brunswick. Since the Southwestern's primary market is the New England states, following the north-south axis, these links represent strategic assets.

Nevertheless, in the pages that follow, we will see that Southwestern Nova Scotia remains a peripheral region from the structural standpoint. While its resource-based economy continues to flourish, it is not benefiting from the development of the knowledge-based economy, which remains essentially an urban phenomenon. The region is also heavily dependent on government transfer payments. Still, there are some promising development initiatives. In the Digby area, for example, a dynamic industrial park has successfully replaced the former Cornwallis military base, while at the regional level, the two regional development agencies show unparalleled vitality. To begin with, however, let us look at the profile of the regional population, which has stopped growing and is becoming older.

Population

The 1996 census shows that Southwestern Nova Scotia had 64,090 inhabitants (see table 1). This ranks the region as the third smallest of the regions under study in our comparative research program, after Madawaska (N.B.) and Prince County (P.E.I.). Since 1971, the population has grown slightly, an average of 0.15 percent annually, compared with 1.08 percent annual growth in Canada as a whole. It can be seen that the growth in population gradually slowed, becoming negative from 1991 on, with the result that, in 1996, the region had some 1,800 fewer inhabitants than in 1991.

Table 1

Population Levels and Population Growth, Canada and Southwestern Nova Scotia, 1971–96

	Total Population			
	1971	**1981**	**1991**	**1996**
Canada	21,568,255	24,083,395	26,993,800	28,528,015
Southwestern N.S.	61,700	64,690	65,850	64,090
	Average Annual Growth (%)			
	1971–81	**1981–91**	**1991–96**	**1971–96**
Canada	1.01	1.04	0.93	1.08
Southwestern N.S.	0.43	0.16	-0.45	0.15

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

With regard to the francophone population, the number of people having French as their mother tongue declined by 5.2 percent between 1991 and 1996.[2] In 1996, the number of Acadians in Yarmouth and Digby counties, where they are concentrated, was roughly 11,300.[3]

Two main phenomena are associated with this generally weak growth, the first being the aging of the population. Table 2 shows the changes in population struc-ture, by age, since 1971. The constant decline in the youngest segments of the population can be seen. The under fifteen years of age declined an average of 1.6 percent annually from 1971 to 1996, and the fifteen to twenty-four years of age had an average 1.0 percent annual decline over the same period. Conversely, the oldest age groups experienced positive growth. As Maurice Beaudin has noted, the francophone population seems to be a significant contributor to these changes, as the youngest age groups, all things being equal, are much smaller in this population than the average for the region. Such an observation leads this researcher to fear that this minority group[4] will be unable to maintain its numbers.

The second phenomenon that adversely affects population growth is the region's negative migration balance. Table 3 shows migration flow in Southwestern Nova Scotia, by type of migration and by age group, for two over-lapping periods. Generally, it can be seen that, during the 1990s, the net migration was always negative. As well, in the second period, the numbers showed an even greater loss than in the first. Thus, Digby County lost 338 inhabitants in the first period and 379 in the second; Yarmouth County, 409 and 527; and Shelburne County, 587 and 769. Shelburne, in spite of its smaller population, had the greatest migration loss during the two periods. The same data presented by age group show that it is indeed younger people who are leaving the region in greater numbers. Throughout the periods studied, 68 percent of the migration loss was due to the under-twenty-five years of age. Only the forty-five to sixty-five years of age had a positive migration balance.

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2. Maurice Beaudin, *Les groupes et régions francophones au Canada : état de la situation en 1996*, study prepared for the National Committee for Francophone Human Resources Development (Ottawa, October 1999).
3. Maurice Beaudin, ed., *The Economic Region of Southwestern Nova Scotia*, Maritime Series: The State of the Regions (Moncton: Canadian Institute for Research on Regional Development, 2000), 25.
4. Ibid., 28.

Table 2

Population Levels and Population Growth, Southwestern Nova Scotia, by Age Group, 1971–96

Age Group	1971	1981	1991	1996
Under-15-year-olds	18,470	15,010	13,155	12,285
15- to 24-year-olds	10,975	12,225	9,850	8,345
25- to 54-year-olds	19,150	22,430	27,430	27,725
55- to 64-year-olds	5,870	6,620	5,565	5,890
65-year-olds and over	7,220	8,400	9,800	9,850
Total[a]	**61,700**	**64,690**	**65,850**	**64,090**
	Average Annual Growth (%)			
Age Group	**1971–81**	**1981–91**	**1991–96**	**1971–96**
Under-15-year-olds	-1.9	-1.2	-1.1	-1.6
15- to 24-year-olds	1.0	-1.9	-2.7	-1.0
25- to 54-year-olds	1.4	1.8	0.2	1.4
55- to 64-year-olds	1.1	-1.6	1.0	0.0
65-year-olds and over	1.4	1.4	0.1	1.2
Total	**0.4**	**0.2**	**-0.5**	**0.1**

Source: Statistics Canada, 1971, 1981, 1991, and 1996 censuses; compiled by INRS – UCS.
[a] Because of rounding off, the totals do not add up.

This negative balance is obviously not to Southwestern Nova Scotia's advantage, but it is less pronounced than in the province's rural regions as a whole. As well, it compares favourably with the migration balance in Canada's rural regions among the fifteen to seventeen years of age, although it is greater in the twenty to twenty-four years of age.[5] The demographic data do not present a very dark picture of Southwestern Nova Scotia, whose weak population growth can be compared with that of the province. Statistics Canada projections for this province indicate that population growth should reach its point of decline in 2006.[6] By comparison, it is expected that this threshold will be reached in 2015 in Prince Edward Island, and in 2001 in New Brunswick, while Newfoundland and Labrador already reached it in 1994. Quebec, like Canada, does not anticipate any decline before 2016.

5. R. Dupuy, F. Mayer, and R. Morissette, *Rural Youth: Stayers, Leavers and Return Migrants*, report submitted to the Rural Secretariat, Agriculture and Agri-Food Canada, and the Atlantic Canada Opportunities Agency (Ottawa: Statistics Canada, March 2000), tables 21 and 22.
6. Statistics Canada, CANSIM, *Population Projections for Canada, 1993-2016*, SDDS 3602 STC (91-520), projection 1.

Table 3

Migration Balance, by Type of Migration and Age Group, by County, Southwestern Nova Scotia, 1991–92 to 1995–96 and 1993–94 to 1997–98

	1991–92 to 1995–96					1993–94 to 1997–98				
		Type of Migration					Type of Migration			
County	**Population in 1991**	**Intra-provincial**	**Inter-provincial**	**Inter-national**	**Migration Balance**	**Population in 1993**	**Intra-provincial**	**Inter-provincial**	**Inter-national**	**Migration Balance**
Digby	21,656	-263	-140	65	-338	21,384	-328	-133	82	-379
Yarmouth	28,343	-181	-319	91	-409	28,253	-197	-410	80	-527
Shelburne	17,605	-397	-206	16	-587	17,764	-523	-278	31	-769
Total	**67,604**	**-841**	**-665**	**172**	**-1,334**	**67,401**	**-1,048**	**-821**	**193**	**-1,675**
	1991–92 to 1995–96					**1993–94 to 1997–98**				
		Age Group					**Age Group**			
County	**0–17 yrs.**	**18–24 yrs.**	**25–44 yrs.**	**45–65 yrs.**	**65+ yrs.**	**Total**	**0–17 yrs.**	**18–24 yrs.**	**25–44 yrs.**	**45–65 yrs.**	**65+ yrs.**	**Total**
Digby	-119	-220	-97	99	-1	**-338**	-120	-214	-117	102	-30	**-379**
Yarmouth	-38	-234	-137	39	-39	**-409**	-121	-278	-133	23	-18	**-527**
Shelburne	-199	-96	-261	28	-59	**-587**	-242	-165	-306	0	-56	**-769**
Total	**-356**	**-550**	**-495**	**166**	**-99**	**-1,334**	**-483**	**-657**	**-556**	**125**	**-104**	**-1,675**

Sources: Statistics Canada data obtained from tax files and compiled by the author on the basis of Province of Nova Scotia, *Statistical Review 1997* and *Statistical Review 2000*, Halifax, Department of Finance, Statistics Division; Statistics Canada, *Annual Demographic Statistics 1999*.

Employment Sectors

The economy of Southwestern Nova Scotia is greatly influenced by its geographic location. It is essentially a maritime economy, oriented towards the fishing industry and marine product processing. The primary sector, manufacturing, and trade all rely heavily on, but are not limited to, this industry. Table 4 shows the breakdown of jobs by industry in 1971 and in 1996.

Between 1971 and 1996, the total number of jobs in Southwestern Nova Scotia rose from 18,848 to 25,610. The primary sector, trade, and manufacturing accounted for half the jobs in both 1971 and 1996. The main change during that twenty-five-year period was a shift of jobs from manufacturing to the trade sector. The former, which accounted for 21 percent of jobs in 1971, dropped to 16 percent in 1996, while the latter rose from 15 percent of jobs in 1971 to 21 percent in 1996. The primary sector remained relatively stable, increasing from 15 to 16 percent over the same period. Contrary to the Canadian trend, the service sector (excluding trade) therefore did not gain a substantially larger share of jobs in the southwestern region.

Figure 1 illustrates the distribution of jobs among the primary, secondary, and tertiary sectors in Southwestern Nova Scotia and Canada in 1996. In spite of its significant trade activity, the southwest actually has an underdeveloped tertiary sector. Of the regions under study in this research program, Southwestern Nova Scotia is most like Prince County, Prince Edward Island, in the sense that these regions have the smallest tertiary sector (64 percent of jobs) and the largest prima-ry sector (17 percent in Prince; 16 percent in Southwestern Nova Scotia). As can be seen from figure 1, this situation contrasts with the employment structure at the national level where the size of the tertiary sector (77 percent) and the primary sector (5 percent) is concerned.

In the service sector, a noticeable increase in the proportion of jobs related to education (three percentage points) and to hotels, restaurants and recreation (three points) can be seen in Southwestern Nova Scotia, while there was a decline in the share of jobs in the public service (five points) and transportation and communication (three points).

Table 4

Jobs by Major Industrial Sectors, Southwestern Nova Scotia and Canada, 1971 and 1996

	1971				1996			
	Southwestern Nova Scotia		Canada		Southwestern Nova Scotia		Canada	
Industrial Sector	**Number of Jobs**	**%**	**Number of Jobs**	**%**	**Number of Jobs**	**%**	**Number of Jobs**	**%**
Primary sector	2,920	15	445,287	6	4,090	16	683,580	5
Trade	2,855	15	1,195,327	16	5,400	21	2,318,710	17
Manufacturing sector	4,045	21	1,577,117	21	3,985	16	1,799,015	13
Education	1,510	8	631,426	8	2,780	11	1,419,600	11
Hotels, restaurants, bed and breakfasts, camping, recreation	965	5	412,290	5	1,935	8	1,183,825	9
Public service	1,744	9	615,514	8	940	4	815,250	6
Transportation and communications	1,280	7	652,588	9	1,100	4	982,125	7
Construction	1,095	6	482,650	6	1,195	5	668,285	5
Health and social services	670	4	421,792	6	1,480	6	841,705	6
Personal services	725	4	330,613	4	1,000	4	846,190	6
Finance, insurance, real estate	260	1	344,689	5	670	3	740,010	6
Other	670	4	261,044	3	805	3	397,355	3
Advanced services – technology[a]	85	0	80,901	1	170	1	271,820	2
Advanced services – others[b]	25	0	62,917	1	60	0	379,555	3
Total	**18,848**	**100**	**7,514,155**	**100**	**25,610**	**100**	**13,347,025**	**100**

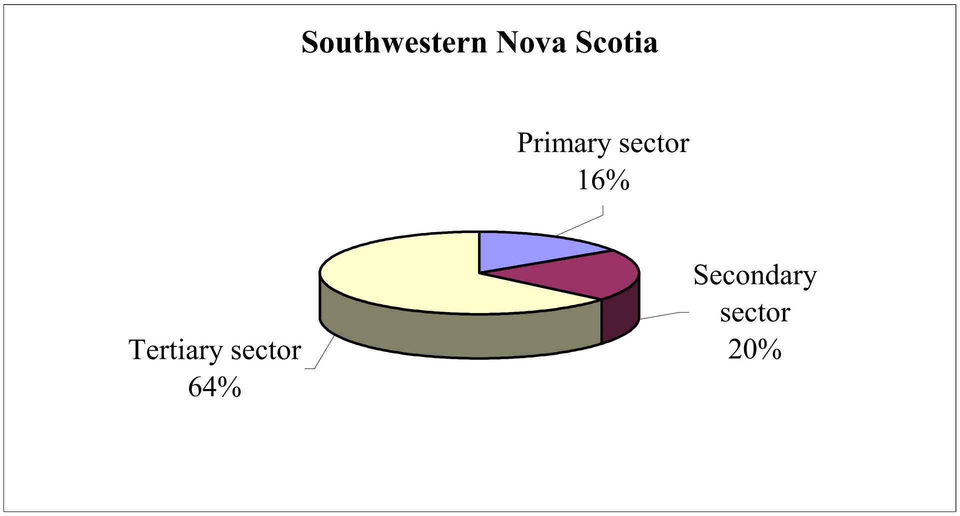
Source: Statistics Canada, 1971 and 1996 censuses; compiled by INRS – UCS.

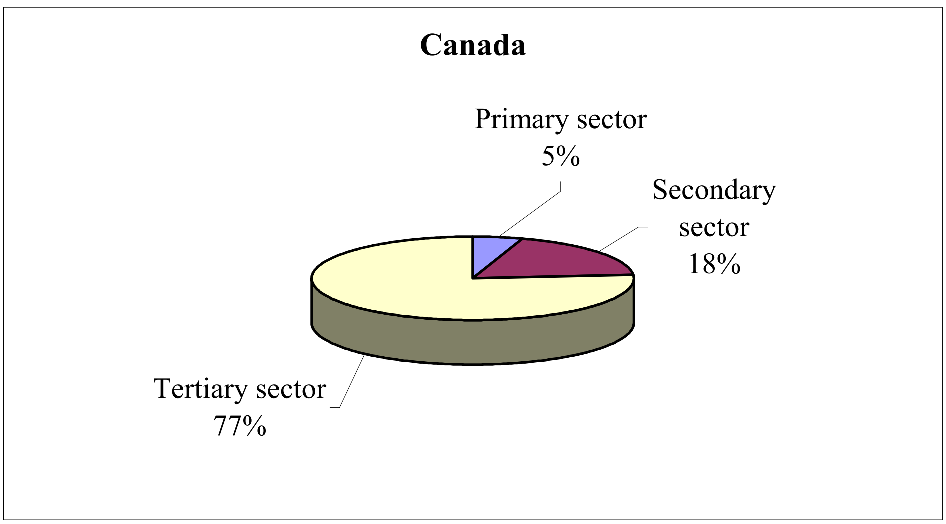
[a] Advanced services related to technology (engineering services, architects, information technology services, management services).

[b] Other advanced services (lawyers, notaries, advertising, etc.).

Figure 1

Jobs by Economic Sector, Southwestern Nova Scotia and Canada, 1996





Source: Statistics Canada, 1996 census; compiled by INRS – UCS.

Table 5 presents a more detailed picture of employment growth by sector over the past twenty-five years. From this table, it can be seen that the health and social services, hotels, trade, and education sectors more or less doubled their employ-ment figures. The primary sector grew appreciably, as did the smaller sector of personal services. The sectors that did not experience any significant growth were construction, manufacturing, transportation and communications, and the public service, the last three of which recorded a net drop. In this figure, we have not included advanced services, which, in spite of their growth in the order of 3 percent annually, account for a negligible share of the work force (230 jobs in 1996).

This brief overview shows us that jobs are concentrated mainly in the primary sector and the trade sector, with the latter enjoying the strongest employment growth. The manufacturing sector is predominant, although its relative share has declined, chiefly because of the 1991 closure of the Dominion Textile plant in Yarmouth (375 jobs). Some services, such as education and health and social services, grew between 1991 and 1996, while the public service declined by half. For a more detailed examination of the employment structure, we will now turn our attention to jobs in the resources sector, especially the fishing industry, and jobs in dynamic industries and the public sector.

Table 5

Employment Growth, Major Industrial Sectors, Southwestern Nova Scotia, 1971–96

	1971	1981	1991	1996
Primary sector	100	118	144	140
Trade	100	149	150	189
Manufacturing	100	120	123	99
Education	100	133	157	184
Hotels, restaurants, bed and breakfasts, campgrounds, recreation	100	145	175	201
Public sector	100	95	118	54
Transportation and communications	100	104	99	86
Construction	100	121	129	109
Health and social services	100	194	190	221
Personal services	100	86	173	138
Finance, insurance, real estate	100	252	294	258

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

Natural Resources

As is true for most of the peripheral regions, natural resources are crucial to the economy of Southwestern Nova Scotia. Table 6 shows the breakdown of resource-related jobs, i.e. in the primary sector (agriculture, hunting and fishing, forestry, mining, oil and gas) and those in processing industries directly related to resources (food, fish, lumber, furniture, leather and textiles, etc.). In all, some 7,300 out of 25,600 jobs (roughly one-third) were resource-related in 1996, whereas the proportion at the national level was 12 percent. Among the regions under study in our comparative research program, Southwestern Nova Scotia has the largest resources sector, followed by Prince County (P.E.I.). In twenty-five years, this aggregate sector grew an average of 0.4 percent annually in Southwestern Nova Scotia, slightly less than the rest of the regional economy (1.5 percent).

Among the sectors that rely on the exploitation and processing of resources, the fishing industry is, beyond the shadow of a doubt, the pacesetter. Hunting and fishing alone generated some 3,350 jobs in 1996,[7] while marine product processing provided another 2,510 jobs. Therefore, in 1996, a total of 5,860 jobs, or 80 percent of resource-related jobs, depended on this industry. We will come back to this in the next section.

The forestry sector is in second place, but far behind, with some 775 jobs in wood harvesting and processing, and furniture manufacturing. This sector has had very low average annual growth (0.3 percent) for twenty-five years. Employment in forestry operations grew noticeably from 1971 on, at an average rate of 1.6 percent annually, reaching 330 jobs in 1996. Employment in wood processing, for its part, grew in an uneven (saw-toothed) pattern, reaching 335 jobs in 1996, or about one hundred fewer jobs than in 1971. From 1995 on, the forestry industry did not do very well on a province-wide basis. Its contribution to the Gross Domestic Product (GDP) declined continuously, dropping from $109.3 million in 1995 to $60.8 million in 1999. Capital investment in this industry fell by more than 60 percent in 1999, and jobs, by 12 percent. Conversely, the total log production

7. The two industries are taken together, but the number of commercial hunters is negligeable.

Table 6

Jobs Related to Natural Resources, by Sector, Canada and Southwestern Nova Scotia, 1971–96

	Number of Jobs				Average Annual Growth (%)			
	1971	1981	1991	1996	1971–81	1981–91	1991–96	1971–96
Primary Sector								
Agriculture								
Canada	238,607	457,648	483,283	433,605	6.1	0.5	-1.8	2.3
Southwestern N.S.	230	625	465	400	9.5	-2.7	-2.5	2.2
Hunting and fishing								
Canada	23,953	31,915	34,216	33,560	2.6	0.6	-0.3	1.3
Southwestern N.S.	2,450	2,605	3,280	3,350	0.6	2.1	0.4	1.2
Forestry								
Canada	62,519	78,157	76,582	66,820	2.1	-0.2	-2.2	0.3
Southwestern N.S.	220	200	295	330	-0.9	3.6	1.9	1.6
Mining, oil and gas								
Canada	120,208	173,136	169,490	149,595	3.4	-0.2	-2.1	0.8
Southwestern N.S.	20	25	175	10	2.0	19.3	-37.9	-2.6
Secondary Sector – Primary Processing								
Food, other than fish								
Canada	206,860	231,492	220,232	196,420	1.0	-0.5	-1.9	-0.2
Southwestern N.S.	270	135	219	125	-6.1	4.5	-8.9	-2.9
Fish processing								
Canada	27,044	48,384	39,931	25,035	5.4	-1.7	-7.5	-0.3
Southwestern N.S.	2,300	2,880	3,385	2,510	2.1	1.5	-4.9	0.3
Wood processing								
Canada	92,472	135,436	108,650	133,085	3.5	-2.0	3.4	1.4
Southwestern N.S.	425	390	185	335	-0.8	-6.5	10.4	-0.9
Furniture								

Canada	41,267	63,314	59,209	52,480	4.0	-0.6	-2.0	0.9
Southwestern N.S.	65	60	130	110	-0.7	7.3	-2.7	2.0
Leather and textiles								
Canada	194,583	233,066	165,957	155,145	1.7	-3.0	-1.1	-0.9
Southwestern N.S.	470	520	230	85	0.9	-7.2	-15.3	-6.4
Other – Primary Processing								
Canada	418,327	528,370	424,380	406,500	2.1	-2.0	-0.7	-0.1
Southwestern N.S.	110	140	205	80	2.2	3.5	-14.5	-1.2
Total Resources								
Canada	1,425,840	1,980,918	1,781,930	1,652,245	3.0	-1.0	-1.3	0.6
Southwestern N.S.	6,560	7,580	8,569	7,335	1.3	1.1	-2.6	0.4
Rest of Economy								
Canada	6,088,315	8,948,752	11,033,708	11,694,780	3.6	1.9	1.0	2.5
Southwestern N.S.	12,288	15,949	17,947	18,275	2.4	1.1	0.3	1.5
Total Jobs								
Canada	**7,514,155**	**10,929,670**	**12,815,638**	**13,347,025**	**3.5**	**1.5**	**0.4**	**2.2**
Southwestern N.S.	**18,848**	**23,529**	**26,516**	**25,610**	**2.0**	**1.1**	**-0.3**	**1.2**

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

volume increased slightly as of 1995.[8] Table 7 presents a summary of lumber production in Southwestern Nova Scotia in 1999. Provincially, this region appears to play a secondary role in the forest industry, except perhaps for Digby County. The wood harvested mainly goes to supply the Bowater Mersey paper mills in Liverpool and Bridgewater, outside the region, and the J. D. Irving plant in Weymouth (Digby County), for subsequent shipment to New Brunswick[9]. In short, in view of its small share of provincial production, the forest industry does not seem to be a significant factor in the economic development of Southwestern Nova Scotia.

Table 7

Forest Production, Southwestern Nova Scotia, by County, 1999

	Solid Wood (cubic metres)	Share of Southwestern Nova Scotia Production (%)	Share of Nova Scotia Production (%)
Digby	358,254	60	6
Shelburne	69,265	12	1
Yarmouth	172,000	29	3
Southwestern Nova Scotia	599,519	100	10
Nova Scotia	6,163,710	–	100

Source: Province of Nova Scotia, *Nova Scotia Statistical Review 2000*, Halifax, Department of Finance, Statistics Division, 2000, 68.

Relatively speaking, the agri-food sector appears to play a small role in the regional economy. In 1996, it accounted for some 525 jobs, and its average annual growth rate in the past twenty-five years has been almost nil (0.2 percent). At that time, Southwestern Nova Scotia had 294 farms, or 7 percent of all the farms in the province, and they recorded gross receipts of $20 million, or 5 percent of the province's farm receipts.[10] The textile industry, for its part, which had formerly flourished, especially in the Yarmouth area, almost completely disappeared in 1996. Lastly, the oil and natural gas sector, on which many hopes are still pinned, did not play a significant role during this period.

8. Province of Nova Scotia, *Nova Scotia Statistical Review 2000* (Halifax: Department of Finance, Statistics Division,), 58, 66–68.
9. Beaudin, ed., *The Economic Region of Southwestern Nova Scotia*, 31.
10. Province of Nova Scotia, *Nova Scotia Statistical Review 2000*, 65.

Fisheries Sector

The fishing industry in Southwestern Nova Scotia is the envy of the other parts of eastern Canada. The primary reason for its success is the year-round fishing. Table 8 compares this industry in the five provinces of eastern Canada from 1990 to 1998. The first thing that can be seen from this table is the effect of the groundfish crisis that struck the overall region in 1991. In 1992, the full effect of the fishing moratoriums could be felt and it translated into a substantial drop in landed volume. The low point seems to have been reached in 1995, when landings of 638,379 tonnes were reported, half the 1990 numbers. However, a contrary trend is noted in landed values, which reached a peak of $1.36 billion the same year, up 43 percent compared with 1990!

The crisis affected Nova Scotia a bit later and less brutally than it did the neighbouring provinces. Nova Scotia took advantage of this fact to wrest first place from Newfoundland and Labrador in regard to the quantities landed as of 1991. The main species that were most abundant in Nova Scotia in 1998 were herring (76,361 mt), scallops (48,738 mt), shrimp (23,946 mt), hake (19,437 mt), lobster (18,964 mt) and redfish (15,349 mt).[11] Nova Scotia also maintained its first-place ranking in regard to landed value. This enviable position is due to its lobster ($232.5 million), shrimp ($72.5 million), and scallops ($68.7 million) landings. Even though the gap between the two leading provinces gradually diminished from 1996 on, because of Newfoundland and Labrador's recovery, the fishing industry in Nova Scotia is doing quite well. Between 1997 and 1998, groundfish landings rose again by a few percentage points, their volume increasing by 4.7 percent, and their value by 10.3 percent. Between 1998 and 1999, the number of jobs in this industry rose by 8.7 percent, while the employment income grew by 1.1 percent. In 1999, marine products were Nova Scotia's main category of exports (25 percent), and their value was in excess of $990 million, an increase of roughly 12 percent over 1998.[12]

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11. Fisheries and Oceans Canada data, compiled by Maurice Beaudin, *Towards Greater Value: Enhancing Eastern Canada's Seafood Industry* (Moncton: Canadian Institute for Research on Regional Development, Maritime Series, 2001), Appendix B.
12. Province of Nova Scotia, *Nova Scotia Statistical Review 2000*, 69.

Table 8

Volume and Value of Wild Fish Landings,
Eastern Canada, 1990–98

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Newfoundland									
Volume (metric tons)	545,423	424,808	285,595	247,602	138,237	138,606	195,346	215,467	266,950
Value ($000)	279,474	261,972	199,177	209,112	225,343	345,818	289,758	328,737	413,937
Prince Edward Island									
Volume (metric tons)	71,504	59,645	47,372	43,370	47,635	47,501	53,726	57,916	54,097
Value ($000)	62,093	70,612	79,715	73,708	93,353	115,545	100,956	112,665	111,314
Nova Scotia									
Volume (metric tons)	493,382	517,335	492,930	402,418	340,155	271,064	279,331	299,840	297,395
Value ($000)	444,861	498,239	511,572	478,255	504,555	512,157	466,227	511,817	540,502
New Brunswick									
Volume (metric tons)	157,789	116,785	126,492	122,040	142,170	133,436	107,346	110,941	110,630
Value ($000)	93,334	97,153	104,850	106,625	174,542	208,439	157,906	147,154	129,906
Quebec									
Volume (metric tons)	74,330	73,872	70,426	58,553	51,230	47,772	50,691	51,156	49,378
Value ($000)	74,137	86,042	88,881	91,560	130,026	177,274	134,036	114,196	98,777
Eastern Canada									
Volume (metric tons)	1,342,428	1,192,445	1,022,815	873,983	719,427	638,379	686,440	735,320	778,450
Value ($000)	953,900	1,014,018	984,195	959,260	1,127,819	1,359,233	1,148,883	1,214,569	1,294,436

Source: Fisheries and Oceans Canada data, compiled by Maurice Beaudin, *Towards Greater Value: Enhancing Eastern Canada's Seafood Industry* (Moncton: Canadian Institute for Research on Regional Development, Maritime Series, 2001).

Table 9 summarizes Southwestern Nova Scotia's fishing capacity. This table shows that the region has 40 percent of the province's fishing fleet (the rest being concentrated mainly in Cape Breton and the province's north shore), which provides nearly half the landed value, or $263.4 million in 1998. Within the region, Shelburne County has the largest fishing fleet, followed by Yarmouth and Digby. The ratio between the volume and value of landings gives an indication of the type of fishing that is dominant in each county. Digby, for instance, is characterized by a lower return ($1,300/mt) due to the predominance of scallop fishing.[13] In this "scallop capital of the world," however, the fishing effort calls for the use of fewer (404) but larger boats. In Shelburne, a substantial fleet of small boats (1,007) records a very good yield ($3,260/mt), which reflects the lucrative lobster catch. Yarmouth achieves an intermediate yield ($1,485/mt) and also has a substantial fleet (707), but this county's landed volume is greater, which is the sign of a mixed fishery that includes lobster as well as pelagic and ground-fish species.

Table 9

Fishing Capacity, Southwestern Nova Scotia, by County, 1998

		Value		Fishers		Vessels	
	Volume of Landings (metric tons)	($000)	(% N.S.)	Number	(% N.S.)	Number	(% N.S.)
Digby	38,329	49,796	9	1,281	9	404	8
Shelburne	31,972	104,159	19	2,388	17	1,007	20
Yarmouth	73,623	109,429	20	2,002	14	707	14
Southwestern N.S.	143,924	263,384	49	5,671	40	2,118	41
Nova Scotia	–	542,444	100	14,035	100	5,141	100

Source: Fisheries and Oceans Canada data, compiled in Province of Nova Scotia, *Nova Scotia Statistical Review 2000* (Halifax: Department of Finance, Statistics Division, 2000), table 72.

The lobster fishery, which enjoys a long season, is certainly the region's main asset. Half the lobster catches in eastern Canada are from Nova Scotia, and the southwestern part of the province is the region where most lobster fishing takes place. Most of the catch is exported live to the New England states. Little value is therefore added to this production, but its price remains exceptionally high. Since Southwestern Nova Scotia is the only Canadian region to market its catches in winter, it obtains a higher price.

13. On average, scallops brought in $1,418/t in Nova Scotia in 1998, while lobster brought in $12,122/t, according to Fisheries and Oceans Canada data, compiled in Province of Nova Scotia, *Nova Scotia Statistical Review 2000*, 70–71.

While little lobster is processed, fish processing is nonetheless an important industry. As noted earlier, it creates a considerable number of jobs (2,510 in 1996). Some of the main processors are Comeau's Sea Foods (750 jobs), Kenney & Ross (55), Clearwater Fine Foods (90), Skipper Fisheries Ltd, I. Deveau Fisheries (200), and Sable Fish Packers (300). The increase in fish imports for processing in the region curbed moratorium-related job losses in the processing sector. Groundfish imports from Norway, Russia, Iceland, and the United States added some $155 million to the value of Nova Scotia's marine products.[14] The data do not specify, however, where these landings were processed. Be that as it may, the processing industry now helps to make marine products Nova Scotia's principal export product.

The aquaculture sector is not yet fully developed, but it is growing rapidly. At the provincial level, aquaculture production in 1998 came to 5,360 mt, for a value of $25.4 million, while in 2000 it reached 11,619 mt, for a value of $50.5 million. Nova Scotia thus lagged far behind New Brunswick, which produced 15,748 mt, for a value of $115 million.[15] Within the region, it seems Shelburne County benefits most from aquaculture, having about 25 companies that farm primarily Atlantic salmon, oysters, and halibut.[16]

Dynamic Industries

The new economy is based mainly on service sector jobs. Within this sector, the term "dynamic services" is used to designate jobs in the areas of distribution, trade, and business services, as well as finance, insurance, and real estate. In addition, the medium and high value-added manufacturing sector remains a central element of the new economy, insofar as its products involve high technological input. For the purposes of this study, we are including all these employment sectors in the dynamic industries category.

Table 10 presents the dynamic industries in Southwestern Nova Scotia and in Canada. The region under study is lagging behind the national average where

14. According to Beaudin, ed., *The Economic Region of Southwestern Nova Scotia*, 73.
15. Province of Nova Scotia, *Nova Scotia Aquaculture Statistics* (Halifax: Department of Fisheries and Agriculture), www.gov.ns.ca/nsaf/aquaculture/stats/2000.html (consulted on 13 August 2001).
16. South West Shore Development Authority, *Industry: Fishing, Boatbuilding, Manufacturing and Forestry. Shelburne County, Nova Scotia, Canada*, fact sheet [1999].

Table 10

Jobs in Dynamic Industries, by Sector, Canada and Southwestern Nova Scotia, 1971 and 1996

	1971				1996			
	Canada		Southwestern Nova Scotia		Canada		Southwestern Nova Scotia	
Sector	**Number of Jobs**	**%**	**Number of Jobs**	**%**	**Number of Jobs**	**%**	**Number of Jobs**	**%**
Manufacturing – medium value added	382,616	5	330	2	527,225	4	625	2
Manufacturing – high value added	113,864	2	10	0	160,565	1	40	0
Transportation	397,945	5	830	4	539,205	4	595	2
Communications	254,643	3	450	2	442,920	3	505	2
Finance, insurance, real estate	344,689	5	260	1	740,010	6	670	3
Advanced services – technology	62,917	1	25	0	379,555	3	60	0
Wholesale trade	329,305	4	685	4	714,100	5	2,005	8
All dynamic industries	1,885,979	25	2,590	14	3,503,580	26	4,500	18
Rest of the economy	5,628,176	75	16,258	86	9,843,445	74	21,110	82
Total	**7,514,155**	**100**	**18,848**	**100**	**13,347,025**	**100**	**25,610**	**100**

Source: Statistics Canada, 1971 and 1996 censuses; compiled by INRS – UCS.

dynamic industries are concerned. Over the past twenty-five years, the proportion of these services in the total number of jobs in the region increased from 14 to 18 percent. The number of jobs in the medium or high value-added manufacturing sector doubled, but their relative weight remains negligible. The number of jobs in the transportation sector declined, undoubtedly because of the closure of the railway in 1988, the privatization and reduction of ferry services (1998) and the drop in traffic at the Yarmouth airport. Financial services showed considerable growth, with the number of jobs increasing from 260 to 670, but here again the sector's relative weight remains negligible. Wholesale trade was the sector that showed the greatest growth, tripling its work force in twenty-five years.[17]

The 1996 data show that Shelburne County (12.4 percent) and Digby County (13.2 percent) have few jobs in the dynamic services sector, while in Yarmouth County, the regional centre, this sector accounts for a somewhat larger share of jobs (14.5 percent).[18] Southwestern Nova Scotia, being essentially a rural region, is unlikely to attract a significant number of jobs in dynamic industries, which more often than not prefer large urban centres, where there is an abundant supply of skilled personnel and business services. In this regard, Southwestern Nova Scotia is at a distinct disadvantage: only 1 percent of jobs in Shelburne, 2 percent in Yarmouth, and less than 1 percent in Digby are related to business services! In Nova Scotia and in the Maritimes as a whole, however, this share is normally in the 4 percent range.

Southwestern Nova Scotia is therefore not in a very good position to benefit from the globalized economy, which is knowledge-based, but local economic players are dealing with this situation by instituting a series of strategic measures, as we will see further on.

Public Sector

The public sector plays an important role in the dynamics of employment, particularly in peripheral regions, where it contributes to a significant increase in wages and salaries. The "public sector" category includes jobs in the areas of education, health and social services, and the public service (see table 11). In Southwestern Nova Scotia, this aggregate represented some 5,200 jobs in 1996, which put this sector in second place after trade (see table 4). It is therefore a key sector.

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17. Retail trade, not included here, is the most significant sector, with 3,395 jobs in 1996, an increase of 1,225 jobs since 1971.
18. However, these data exclude the manufacturing sector. Data compiled by Beaudin, ed., *The Economic Region of Southwestern Nova Scotia*, 40–41.

Table 11

Public Sector Jobs, Canada and Southwestern Nova Scotia, Selected Years

	1971		1981		1991		1996	
	Canada	Southwestern N.S.	Canada	Southwestern N.S.	Canada	Southwestern N.S.	Canada	Southwestern N.S.
Education	631,426	1,510	936,444	2,005	1,252,785	2,374	1,419,600	2,780
Health and social services	421,792	670	602,302	1,300	805,254	1,270	841,705	1,480
Public service	615,514	1,744	830,997	1,656	1,015,288	2,064	815,250	940
Total	**1,668,732**	**3,924**	**2,369,743**	**4,961**	**3,073,327**	**5,708**	**3,076,555**	**5,200**

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

Over the full period studied, it can be seen that the public sector in the study region grew until 1991, and dropped off somewhat in 1996. This trend is due to the public service, the only sector that experienced a decline. Between 1991 and 1996, the number of public servants in the different levels of government shrank dramatically: 54 percent of them had disappeared in the 1996 census data! The provincial public administration reduced its work force radically in the 1990s. Between 1991 and 1999, the number of provincial employees fell by 25 percent.[19] But the province was not alone in cutting back its human resources. The federal government set the pace, reducing its services over the whole decade. During the same period, the number of federal employees, including members of the military, dropped by 30 percent in this province.

Southwestern Nova Scotia was particularly affected by these job cuts, as the public service is under-represented in this region compared with the provincial average, and even the average for the Maritime provinces. While jobs in this sector represent about 9 percent of all jobs in the Maritimes and 10 percent of all jobs in Nova Scotia, they account for only 4.6 percent of jobs in Shelburne, 3.6 percent of those in Yarmouth, and 3.6 percent of those in Digby. The downsizing in Southwestern Nova Scotia hit the military bases hardest: the Cornwallis, Shelburne, and Barrington bases were closed. The Yarmouth airport and the Weymouth, Yarmouth, and Digby harbours were privatized, as were the Digby and Yarmouth ferry services. A Fisheries and Oceans Canada hatchery in Yarmouth shut down. The only addition was the creation of some 85 jobs at the former Cornwallis military base, owing to the establishment of the Lester B. Pearson Canadian International Peacekeeping Training Centre.[20] It is estimated that, between 1990 and 1998, the number of federal jobs in Yarmouth and Shelburne counties alone dropped from 600 to 100.[21]

The foregoing data refer to the distribution of jobs up until 1996. It is known, however, that the employment situation improved after 1996. The *Labour Force Survey* data for Southern Nova Scotia (including the South-West and Queens and Lunenburg counties) show an overall growth in employment of 10 percent between 1996 and 2000, which boosted the number of jobs from 48,000 to 53,000. To better understand what impact this employment structure has in the region, we will now examine the labour force and income characteristics.

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19. Province of Nova Scotia, *Nova Scotia Statistical Review 1997*, 123; and *Nova Scotia Statistical Review 2000*, 125.
20. Beaudin, ed., *The Economic Region of Southwestern Nova Scotia*, 88–89.
21. South West Shore Development Authority estimates, cited in ibid., 89.

Labour Force Participation Rate and Income Levels

The participation rate in Southwestern Nova Scotia is relatively low. Table 12 shows that in 2000, the participation rate (56.6 percent),[22] which represents the percentage of persons fifteen years of age and over who are employed or unemployed, is considerably lower than the national average (65.9 percent), and the provincial average (61.7 percent). Although from 1987 to 2000 the participation rate rose six percentage points in Southwestern Nova Scotia, that region places seventh among the eleven regions in our comparative study.

The region fares better, however, with respect to the unemployment rate, which was 9.8 percent in 2000 (see table 13), still three points above the national average, but third-best of the eleven regions studied. However, that is a recent improvement, given that the unemployment rate stayed above 12 percent from 1993 to 1998.

Incomes in Southwestern Nova Scotia reflect the low participation rate and high unemployment rate. Table 14 shows that the average income per resident in the region in 1996 was $14,436, only 78 percent of the national per capita average. However, that figure was considerably higher than the 1971 figure of 62 per-cent, and the gap seems to be shrinking gradually.

It is instructive to look at those income figures on the basis of source. Table 15 shows the distribution of sources of income for 1991 and 1996. The percentage of labour income in Southwestern Nova Scotia fell 5 percent between 1991 and 1996, with income from government transfers rising by the same amount, from 22 to 27 percent of total income. The table also shows that the reliance on federal transfer payments is clearly more marked in Southwestern Nova Scotia than in urban Canada (13 percent) and rural Canada as well (20 percent).

22. In this study, the southern region of Nova Scotia, as defined by Statistics Canada, includes the counties of Queens and Lunenburg. This inclusion enhances the socio-economic image of the region, given their proximity to Halifax.

Table 12

Labour Force Participation Rate (%), by Economic Region, 1987–2000

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada	**66.4**	**66.8**	**67.2**	**67.1**	**66.5**	**65.7**	**65.4**	**65.2**	**64.9**	**64.7**	**64.9**	**65.1**	**65.6**	**65.9**
Newfoundland	**54.1**	**55.1**	**56.0**	**56.7**	**56.2**	**54.2**	**53.6**	**53.6**	**53.0**	**52.1**	**52.5**	**53.9**	**56.3**	**55.8**
030 - West Coast- Northern Peninsula and Labrador	58.3	56.3	57.3	55.5	55.5	53.4	51.0	54.0	51.4	51.5	51.3	53.0	55.2	55.1
Prince Edward Island	**63.2**	**64.2**	**65.2**	**65.4**	**64.9**	**65.6**	**65.3**	**65.3**	**65.1**	**66.0**	**66.1**	**65.7**	**66.4**	**66.9**
Nova Scotia	**59.9**	**60.7**	**61.3**	**62.0**	**61.6**	**60.2**	**60.2**	**60.2**	**59.6**	**59.5**	**59.9**	**60.7**	**61.0**	**61.7**
240 - Southern	51.1	55.6	55.6	57.2	57.4	57.2	54.4	54.9	53.3	53.0	55.5	56.5	58.7	56.6
New Brunswick	**58.4**	**59.1**	**59.9**	**60.0**	**58.6**	**58.9**	**59.1**	**58.6**	**59.4**	**58.6**	**59.9**	**60.7**	**61.0**	**61.6**
310 - Campbellton-Miramichi	51.7	51.4	53.2	53.7	50.2	49.3	50.6	50.7	52.4	51.4	56.1	55.4	54.0	55.2
320 - Moncton-Richibucto	60.8	60.8	61.3	61.4	61.0	62.5	62.4	60.7	63.5	64.1	62.7	62.7	63.7	64.8
350 - Edmundston-Woodstock	56.5	58.4	58.3	55.9	52.7	54.4	54.9	57.4	56.9	54.7	57.4	60.2	60.5	61.3
Quebec	**63.5**	**63.7**	**64.1**	**64.2**	**63.5**	**62.5**	**62.2**	**62.3**	**62.1**	**61.9**	**62.1**	**62.6**	**62.8**	**63.2**
410 - Gaspésie–Îles-de-la-Madeleine	49.4	52.0	52.5	47.4	45.6	43.8	46.1	47.2	46.3	45.5	51.1	49.5	50.3	51.5
415 - Bas-Saint-Laurent	55.7	56.2	53.1	55.3	57.6	55.9	54.6	56.7	57.4	57.1	57.9	54.9	57.6	54.2
465 - Abitibi-Témiscamingue	58.1	62.1	64.3	60.9	60.4	59.5	59.0	59.9	62.1	61.4	63.7	61.9	62.8	63.6
475 - Saguenay–Lac-Saint-Jean	57.8	57.4	55.8	59.0	58.8	57.3	56.8	53.9	57.5	57.2	57.9	58.1	59.7	59.5
480 and 490 - Côte-Nord and Nord-du-Québec	61.9	64.8	66.1	68.9	66.9	62.3	63.0	63.8	63.5	62.5	62.4	58.3	63.8	62.3

Source: Statistics Canada, *Labour Force Historical Review*, 2000 (CD1T30AN).

Table 13

Unemployment Rate (%), by Economic Region, 1987–2000

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada	**8.8**	**7.8**	**7.5**	**8.1**	**10.3**	**11.2**	**11.4**	**10.4**	**9.4**	**9.6**	**9.1**	**8.3**	**7.6**	**6.8**
Newfoundland	**18.1**	**16.2**	**15.5**	**16.9**	**18.0**	**20.2**	**20.4**	**20.2**	**18.1**	**19.3**	**18.6**	**18.0**	**16.9**	**16.7**
030 - West Coast-Northern Peninsula and Labrador	23.0	19.5	16.1	17.6	19.5	22.2	24.4	22.5	17.6	21.0	18.9	19.8	19.3	17.8
Prince Edward Island	**12.5**	**12.4**	**13.7**	**14.6**	**16.7**	**18.1**	**17.6**	**17.2**	**15.0**	**14.7**	**15.4**	**13.8**	**14.4**	**12.0**
Nova Scotia	**12.1**	**10.2**	**9.8**	**10.5**	**12.1**	**13.2**	**14.3**	**13.5**	**12.1**	**12.3**	**12.1**	**10.5**	**9.6**	**9.1**
240 - Southern	10.5	8.3	7.8	8.9	10.9	11.2	12.1	12.8	12.2	12.1	12.1	12.0	10.4	9.8
New Brunswick	**13.2**	**11.9**	**12.1**	**12.1**	**12.8**	**13.0**	**12.5**	**12.4**	**11.2**	**11.6**	**12.7**	**12.2**	**10.2**	**10.0**
310 - Campbellton-Miramichi	15.4	14.9	16.3	17.4	17.2	18.1	17.9	18.3	14.0	13.7	17.0	19.0	16.7	16.1
320 - Moncton-Richiboucto	13.7	10.9	11.1	11.5	11.6	12.1	12.1	11.7	11.6	12.4	12.7	11.0	9.5	8.6
350 - Edmundston-Woodstock	11.9	11.7	12.4	11.0	13.0	11.6	9.5	8.8	9.6	8.9	10.5	10.2	8.9	8.9
Quebec	**10.2**	**9.5**	**9.6**	**10.4**	**12.1**	**12.7**	**13.3**	**12.3**	**11.4**	**11.9**	**11.4**	**10.3**	**9.3**	**8.4**
410 - Gaspésie–Îles-de-la-Madeleine	16.4	16.4	19.7	20.4	18.2	21.0	22.1	21.6	20.6	18.7	23.5	22.0	20.8	20.0
415 - Bas-Saint-Laurent	12.3	12.4	13.4	13.0	14.7	14.5	16.3	15.3	13.1	14.1	16.2	13.6	10.2	10.3
465 - Abitibi-Témiscamingue	8.7	9.7	11.0	13.3	13.8	13.7	14.0	12.9	11.5	10.9	14.4	15.0	13.4	11.7
475 - Saguenay–Lac-Saint-Jean	13.6	13.1	12.0	13.2	14.9	14.8	15.7	14.9	14.6	14.3	14.5	14.3	11.5	10.4
480 and 490 - Côte-Nord and Nord-du-Québec	12.5	11.8	11.1	10.9	15.5	12.9	14.4	14.5	13.4	15.1	14.8	14.0	14.4	12.6

Source: Statistics Canada, *Labour Force Historical Review*, 2000 (CD1T30AN).

Table 14

Average Income Per Capita, Canada, and Southwestern Nova Scotia, Selected Years

	1971	1981	1991	1996
Canada	$2,701	$8,529	$17,271	$18,473
Southwestern Nova Scotia	$1,677	$5,960	$13,397	$14,436
Southwestern Nova Scotia/Canada (%)	62.1	69.9	77.6	78.1

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

The issue of dependence on government transfers is crucial for Southwestern Nova Scotia. Overall, according to Beaudin, income from government transfers accounted for approximately 40 percent of income in the Maritimes during the 1990s.[23] Successive budget cuts by Ottawa and then by the provinces pushed disposable incomes down significantly, and, as we saw earlier, over 50 percent of the well-paying jobs in the federal and provincial public services were eliminated between 1991 and 1996. Federal spending on goods and services was also down, and employment insurance benefits dropped 24 percent between 1992–93 and 1997–98. Southwestern Nova Scotia was hard hit by that last round of cuts, given the importance of seasonal employment to its economy, estimated by Beaudin at approximately 16 percent of all jobs. It is therefore not surprising, as Beaudin points out, that economic dependence on employment insurance benefits is higher in Digby (20 percent), Shelburne (18 percent), and Yarmouth (15 percent) than Nova Scotia as a whole (8 percent) or Canada (5 percent).[24]

In the context of the new economy, one employment criterion, particularly for well-paying jobs, is the level of education and skills of the labour force, which we will now assess.

23. Beaudin, ed., *The Economic Region of Southwestern Nova Scotia*, 53 and on.
24. Economic dependence is the ratio of employment insurance income to employment income. See ibid., table 11.

Table 15

Distribution of Income, by Source, Canada and Southwestern Nova Scotia, 1991 and 1996

	1991						1996					
	Rural Canada		Urban Canada		Southwestern N.S.		Rural Canada		Urban Canada		Southwestern N.S.	
	$/res.	%	$/res.	%	$/res.	%	$/res.	%	$/res.	%	$/res.	%
Labour income	10,114	73	14,400	79	9,288	69	10,888	70	14,791	76	9,174	64
Income from federal transfers	2,233	16	1,918	10	2,900	22	3,081	20	2,477	13	3,901	27
Other income	1,462	11	1,997	11	1,266	9	1,542	10	2,137	11	1,361	9
Total income	**13,810**	**100**	**18,315**	**100**	**13,453**	**100**	**15,511**	**100**	**19,405**	**100**	**14,436**	**100**

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

Education and Skills

There is no doubt that today, education and skill-building are key factors in socio-economic development. The "knowledge" economy requires human resources with solid skills. This is true in all areas, and resource-based regions are no exception. Agriculture, forestry and fishing all use technology requiring new skills on the part of workers. An interesting development in the region's all-important fishing industry is the professionalization of fishers, an initiative led by the Canadian Council of Professional Fish Harvesters that focuses first and foremost on training, emphasizing core skills (reading, writing, math, and communication) as well as the use of technology, an understanding of regulations and environ-mental information, and business management.

In the area of training, Southwestern Nova Scotia made remarkable progress from 1971 to 1996 (see table 16). The percentage of individuals aged fifteen and over who have less than a ninth grade plummeted from 41 to 20 percent during that time, following to some degree the trend in Canada as a whole, where that figure fell from 31 to 12 percent. However, there is still a significant gap between Southwestern Nova Scotia and the national average, as is the case for most of the regions included in our comparative research program.[25] Southwestern Nova Scotia also lags behind the province as a whole, as 11 percent of the population had reached this level of education in 1996.

University graduation is a key indicator of the ability of the labour force to make the shift to the knowledge economy. In that respect, Southwestern Nova Scotia again made significant progress. The number of university graduates tripled between 1971 and 1996, however, they still accounted for only 6 percent of the population fifteen years of age and over. In fact, by 1996, the region had only reached Canada's 1971 level. Degrees in the sciences were low, at 2 percent. The region fares somewhat better with respect to technical training — 10 percent of adults have a diploma from a trade school. Overall, the region's results are fairly poor from an education perspective and, in fact, Southwestern Nova Scotia places last in this area, along with the West Coast of Newfoundland and Quebec's North Shore.

Workers with low education levels tend to move into specific industrial sectors. According to the data compiled by Maurice Beaudin (see table 17), those workers are concentrated in goods-producing industries and, to a lesser degree, in

25. The differences between the national average and the Gaspésie (29 percent), the counties of Gloucester (26 percent), Madawaska (23 percent), Abitibi-Témiscamingue (23 percent), the Lower St. Lawrence (22 percent), the West Coast of Newfoundland (21 percent), and the North Shore (21 percent) are greater than between Southwestern Nova Scotia and the national average.

Table 16

**Level of Education, Fifteen Years of Age and Over,
Canada and Southwestern Nova Scotia, Selected Years**

	1971				1981				1991				1996			
	Canada		Southwestern N.S.		Canada		Southwestern N.S.		Canada		Southwestern N.S.		Canada		Southwestern N.S.	
Education Level	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**
Less than grade nine	4,744,840	31.2	17,595	40.7	3,731,170	20.0	15,380	31.0	2,959,765	13.9	11,805	22.4	2,727,085	12.1	10,330	19.9
University degree	719,890	4.7	1,065	2.5	1,490,040	8.0	1,955	3.9	2,419,645	11.4	2,615	5.0	3,000,675	13.3	3,070	5.9
Certificate or diploma in applied sciences, engineering, agricultural sciences, mathematics or physical sciences									905,230	4.2	1,155	2.2	1,107,880	4.9	1,290	2.5
Diploma or certificate from trade or technical school									1,799,415	8.4	4,520	8.6	1,999,465	8.8	5,060	9.8

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

Table 17

Educational Attainment of Working Population by Industries, the Maritimes, Nova Scotia, and Southwestern Nova Scotia Counties, 1996

	Goods-Producing Industries		Dynamic Services		Public Services	
	Less than Grade 12 (%)	University Degree (%)	Less than Grade 12 (%)	University Degree (%)	Less than Grade 12 (%)	University Degree (%)
Maritimes	40.4	6.8	22.1	18.0	13.4	34.6
Nova Scotia	39.1	7.8	22.1	20.4	13.2	35.3
Shelburne	56.7	1.4	46.2	6.1	20.4	28.2
Yarmouth	51.2	4.2	29.6	12.4	19.2	29.3
Digby	50.6	5.7	28.6	11.8	15.7	30.6

Source: Statistics Canada, 1996 census data compiled by Maurice Beaudin, ed., *The Economic Region of Southwestern Nova Scotia* (Moncton: Canadian Institute for Research on Regional Development, 2000), table 8.

the dynamic services. Public employees, however, have higher education levels, and one-third of them have a university degree. This correlation between education and job sector is particularly applicable to the region under study, given that in Nova Scotia as a whole, and the Maritime provinces, the education gap between industrial sectors is less pronounced.

There are a number of reasons for this situation. First, Southwestern Nova Scotia is extremely disadvantaged in terms of institutions of higher learning. There is no English-language university in the region. The Université Sainte-Anne serves the Acadian community, where it plays an important role, but it is small (264 students in 1997–98).[26] Yet Nova Scotia is known for its high concentration of universities. The province has thirteen universities, the second highest among Canada's provinces. However, although Nova Scotia is home to 17 percent of Canadian universities, it accounts for only 5 percent of Canadian students. Furthermore, the province's universities are concentrated in Halifax, with a few located in the regions, including Université Sainte-Anne in the southwest.

At the college level, the Collège de l'Acadie, for francophone students, has two training centres in the region, one in Tusket, in the county of Yarmouth, and the other in La Butte, in the county of Digby. The Nova Scotia Community College also has two campuses in the southwest. The Burridge campus, in Yarmouth, is fifty years old and offers approximately twenty full-time programs. Close to five hundred students are registered full-time at the Burridge campus, with another five hundred part-time students. The campus has doubled registrations in the last five year.[27] The Shelburne campus is the smallest in the province, with only one hundred and sixty full-time and four hundred part-time students. it offers specialized training in aquaculture and recently introduced a sound recording arts program aimed specifically at the film industry.[28]

Data on education spending show that Nova Scotia reduced spending on education during the 1990s. In 1998–99, the province invested a total of $1.62 billion on education, a 4 percent drop from 1988–89. Spending at the college level was up 4 percent, but down 3 percent at the university level. In comparison, during the same period, Canada increased education spending by 13 percent, Prince Edward Island by 13 percent, and Quebec by 6 percent, whereas the education budget in Newfoundland and Labrador dropped 11 percent and was down 3 percent in New Brunswick.[29] These budget cuts are quite likely to lead to reduced access to education.

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26. Canadian Education Statistics Council, *Education Indicators in Canada* (Ottawa, February 2000), 151.
27. Nova Scotia Community College, *Burridge Campus*, www.nscc.ns.ca/campus/burridge/index.asp (as of 15 August 2001).
28. Nova Scotia Community College, *Shelburne Campus*, www.nscc.ns.ca/campyus/burridge/indes.asp (as of 15 August 2001).
29. Canadian Education Statistics Council, *Education Indicators in Canada,* table 3.22.

The level of training and education of workers has a direct impact on their ability to adapt to changes in the labour market.[30] And it is that ability to adapt that economic development leaders in Southwestern Nova Scotia are counting on. As we have seen in this section, the region's economy is not faring too badly at the moment, thanks to its strong fisheries industry. However, it is far from being a flourishing knowledge economy. Moreover, the labour force is not able to meet the skill demands of the new economy. The labour force's transition to a knowledge economy is a major challenge for the region. We will now look at this more subjective aspect.

30. Maurice Beaudin and Sébastien Breau, *Employment, Skills, and the Knowledge Economy in Atlantic Canada* (Moncton: Canadian Institute for Research on Regional Development, 2001).

II

THE CHALLENGES OF ECONOMIC DEVELOPMENT

It is our belief that the challenges of economic development are targets that must first be identified by regional economic players. Those challenges may consist of overcoming problems or drawing on collective ideals, but they call for the implementation of a number of initiatives. A researcher can, in the best-case scenario, help point out those challenges, but the goals have no real value unless they are rooted in the realities experienced by the players themselves. For that reason, we have based the elements in this second section on discussions we had with socio-economic stakeholders in Southwestern Nova Scotia.[31] We selected six major challenges that reflect the main problems to be overcome, and identified the region's assets in terms of socio-economic development.

Joint Action by Socio-economic Stakeholders

Nova Scotia has a long tradition of community development. One example is the Antigonish Movement at the beginning of the twentieth century, an attempt to help Atlantic communities help themselves. It is thus no surprise to discover that this province still promotes a community economic development approach for its regions. In 1994, after several rounds of consultations, the government created Regional Development Authorities (RDA), and mandated them to implement a community economic development approach.[32] The creation of the RDAs also reduced the high number of development structures scattered across the province.[33] In 2001, Nova Scotia's Department of Economic Development is still relying on those regional agencies, one of the two pillars of its development strategy.[34] The second pillar is the private management company, Nova Scotia Business Inc., commissioned to foreign attract businesses to the province.

The funding structure of the RDAs contributes largely to their legitimacy in the regions and their ability to take action — they are funded in equal amounts by the three levels of government: municipal, provincial, and federal. By contributing financially to regional development, governments are demonstrating their com-mitment to joint action. It is particularly interesting to see municipal

31. "We" means not only the person who wrote this regional study, but the members of the INRS – UCS team who conducted field studies and, in particular, our colleague Maurice Beaudin of the CIRRD, whose studies provided us with extensive information.
32. Beaudin, ed., *The Economic Region of Southwestern Nova Scotia,* 61–62.
33. Within the specific context of Digby and Annapolis counties, a recent evaluation states that "There was more competition than cooperation between the various organizations and municipal units" before the RDA was created. See Praxis Research and Consulting, *Evaluation of the Western Valley Development Authority* (Bedford, NS: September 2000), 13.
34. Province of Nova Scotia, Nova Scotia Economic Development Department, *Business Plan 2001–02* (Halifax, March 2001).

governments participating in this initiative along with the provincial and federal governments.

There are two RDAs in Southwestern Nova Scotia: the Western Valley Development Authority (WVDA), which covers both the county of Digby and the county of Annapolis (which is not included in our study), and the South West Shore Development Authority (SWSDA), which serves the counties of Yarmouth and Shelburne.

Those two RDAs are remarkably dynamic. In Digby, the WVDA symbolically set up shop on the former Cornwallis military base. The shockwave sent through the region by the 1994 closing of the base was somewhat lessened by the efforts of the WVDA, which was founded the same year. Having taken the time to establish the foundations of a community economic development initiative, the WVDA seems to have acquired an enviable reputation, both inside and outside the region. As the authors of a recent evaluation of the agency noted, the WVDA is a solid, well-organized agency, led by a committed, dynamic, and skilled team and a dedicated board of directors. The WVDA has earned several distinctions for its work, including being named by UNESCO as an international model of development processes and being included by the United Nations Centre for Human Settlements in a listing of Best Practices for Improving Living Conditions.[35]

The WVDA has an operating budget of $300,000 used as matching funding to attract other projects or investments in renewable energy, agriculture, sawmilling, employability measures, and so on. The WVDA was recently selected to run the Industry Canada Smart Community Demonstration Project in Nova Scotia, an $11.5 million initiative aimed at integrating rural communities into the new economy through the use of information technology.[36]

The SWSDA, which serves Yarmouth and Shelburne counties, was created in 1995.[37] Although its profile is not as high as the Digby-Annapolis RDA, the SWSDA is doing everything it can. It owns three industrial parks, the former site of the Dominion Textile plant, and a new building that will be home to a large call centre, making it the only RDA that owns property, through an arrangement with the Yarmouth Area Industrial Commission. The SWSDA uses the property, valued at approximately $10 million, as a lever for its promotional and economic development activities.[38] The SWSDA focuses on six sectors of economic growth for the region: light manufacturing, berry production, film production, information technology enhancement, communications infrastructure upgrading, and value-added processing. This RDA also plans to continue its efforts to

35. Praxis Research and Consulting, *Evaluation of the Western Valley Development Authority*.
36. Western Valley Smart Community Project, www.smartcommunity.wvda.com/summary.html (as of 20 August 2001).
37. South West Shore Development Authority (SWSDA), www.swsda.com (as of 22 August 2001).
38. Discussion with the SWSDA team in Yarmouth, 29 June 2001.

stabilize and improve the transportation infrastructure in the region, and continues to develop a host of projects not only in the area of economic development, but in training and family and community services as well.

The RDAs are complemented by Community Business Development Corporations (CBDC), which assist rural communities by supporting the development of SMEs. There are three CBDCs in Southwestern Nova Scotia: in Digby, Yarmouth, and Shelburne. They provide advice and financial assistance of up to $125,000 (although the average in Nova Scotia is $30,000).[39] Since 1995, the CBDCs are under the jurisdiction of the Atlantic Canada Opportunities Agency, which has a very limited regional presence, with only one liaison officer.

The francophone community, strongly present in the southwest, also has the *Conseil de développement économique de la Nouvelle-Écosse*.[40] Also, the Université Sainte-Anne de Pointe-de-l'Église is home to the Jodrey Centre for small businesses, created in 1985 to serve as a resource centre for SMEs and create links among students, researchers, entrepreneurs, and public business assistance programs.

The region thus seems to benefit from an effective degree of joint action among socio-economic stakeholders. They have certainly set considerable development goals for themselves, but the private sector and the various levels of government seem to be moving in the same direction. We encountered very little dissension in that regard, something that cannot always be said for other regions. ACOA plays a front-line role, stimulating and financially supporting economic growth. We should also point out the singular role played by Nova Scotia premier John Hamm, whose goal is a more equitable equalization system. His political leadership on that issue should encourage Nova Scotians to take action, which can only benefit their economic development.

39. CBDC, *Community Business Development Corporations Nova Scotia Annual Review* at www.acoa.ca/f/financial/cbdc/nsrep.pdf (as of 23 August 2001).
40. Le Conseil de développement économique de la Nouvelle-Écosse, www.cdene.ns.ca (as of 22 August 2001).

A Delicate Transition to the Knowledge Economy

Like all Canadian provinces and territories, Nova Scotia wants to make the transition to the new economy. In 2000, Premier Hamm's Conservative government adopted an economic growth strategy aimed both at reinforcing the province's foundation industries (fisheries, forestry, agriculture, tourism, and culture) and at stimulating the so-called growth industries, including the digital economy, energy, advanced manufacturing, learning, and life sciences.[41] Among other measures, the government is supporting the WVDA Smart Community project, and is working to expand the benefits of that project into the other regions.

In co-operation with ACOA and a number of federal departments, the province has also developed a knowledge economy initiative with a $90 million budget, aimed at developing a better technology infrastructure to support Internet users. One quarter of that amount will be invested in research and development, mainly in universities, although colleges will eventually benefit. The R&D component has no immediate spin-off effect in Southwestern Nova Scotia, because there is no university research facility in the region. Finally, close to 50 percent of the budget is earmarked for schools, and the rest will be used to help communities connect to the Internet.

As we saw earlier, RDAs have also made these priorities their priorities. In addition to the WVDA Smart Community, the region has had a few other successes. In Yarmouth, the US firm Register.com is building a call centre that will employ 300 people. In Shelburne, the closed military base has been turned into a film production centre that has already been selected for the filming of American movies. Moreover, the Shelburne campus of the Nova Scotia Community College has introduced a sound recording arts program. In the municipality of Clare, a technology business incubator (Intellicentre@Clare)[42] is being set up and is expected to accommodate four businesses and offer services to approximately fifteen more in the next two years.

In spite of these few successes, however, we cannot ignore the fact that Southwestern Nova Scotia is not well placed in terms of the knowledge economy. The recent study by Beaudin and Breau demonstrates that, overall, Atlantic Canada is lagging behind the rest of the country — 9 percent of jobs in the Maritimes are highly knowledge-based, compared with 13 percent in Canada as a whole. Nova Scotia accounts for the greatest percentage of highly knowledge-based jobs in Atlantic Canada. Beaudin and Breau estimate that 43 percent of those jobs are concentrated in Nova Scotia, mainly in the biopharmaceutical

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41. Province of Nova Scotia, *Opportunities for Prosperity: A New Growth Strategy for Nova Scotians* (Halifax: Department of Economic Development, 2000), 13.
42. Conseil de développement économique de la Nouvelle-Écosse, *Intellicentre@Clare*, on-line document, www.cdene.ns.ca/coes/intelli1.html (accessed on 14 November 2001).

industry and the information technology sector. In fact, almost all of those jobs are in Halifax.[43]

The socio-economic stakeholders in the region under study are right to focus on information technology, but they are aware of the obstacles that still have to be overcome. Entrepreneurs who report that they already use information technology to communicate with their clients and promote their businesses are demanding enhanced connectivity. Rural areas in particular are still waiting for high-speed Internet access, and urban areas are complaining about the quality of telecommunication company MTT's lines. In short, if the knowledge economy is to become a reality in Southwestern Nova Scotia, the region has to be able to count on an adequate infrastructure. Provincial policy will have to withstand the magnetic pull of Halifax and respond to the concerns of regions like the southwestern part of the province.

The shift to the knowledge economy is essential for Southwestern Nova Scotia. However, we cannot simply count on a spectacular change that will transform the region's resource-based economy to an IT-based economy. Rather, traditional industries must continue gradually adapting to the realities of the new economy, and the traditional economic base will have to expand by creating jobs in those new sectors. The region's stakeholders are fully aware of that fact.

Diversification of Goods Production

The goods-producing sector as a whole, which includes the primary and manufacturing industries and construction, represents 37 percent of jobs in Southwestern Nova Scotia. However, as table 4 shows, jobs in that sector have fallen by 5 percent since 1971, mainly the result of job losses in manufacturing industries. With the gradual decline and closure of the Dominion Textile plant in Yarmouth in 1991, and the Atlantic groundfish crisis, the region is all too aware of the fragility of that industry.

Fortunately, crises sometimes pave the way to new successes. At least that is the case in Yarmouth, where the former Dominion Textile plant now employs more people (400) than it did when it closed (375). The situation is the same in Cornwallis, near Digby, where the industrial park that replaced the closed military base now employs approximately 1,000 people, as it did in its heyday as a base. One park tenant, Shaw Furniture, exclusive supplier to IKEA stores, employs about 200 people in its pine furniture plant. Another example is in Meteghan where A.F. Thériault & Sons Ltd. (120 jobs) has increased its boat production despite the decline in its traditional market — fishing boats — by diversifying into pleasure craft. In short, the manufacturing sector is experiencing a renewal here and there in the region.

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43. Beaudin and Breau, *Employment, Skills, and the Knowledge Economy in Atlantic Canada*.

Although the structure of the fisheries in Southwestern Nova Scotia is generally good for the economy, it does have a downside. The fishing season is twelve months long, and although it keeps some processors and workers busy on a full-time basis, most are needed only on a part-time basis, throughout the season. This does not leave much room for diversifying economic activity outside the industry. However, there is remarkable potential for diversification within the industry. First, aquaculture has made considerable progress over the last ten years, and is now seen as a stabilizing factor in the up and down fishing industry.[44] Second, the use of imported fish is keeping the processing industry in operation despite the drop in the volume of landings since the groundfish crisis.

Diversification in the manufacturing industry is seen as a good thing by everyone, but mainly occurs only when the traditional economic structure hits a slump. That is when stakeholders bring all their business acumen to bear and governments open the purse strings. Although the current climate of rapid economic change seems to some as a permanent crisis, it may generate other new initiatives in the goods-producing sector.

Transportation Infrastructure and Policy

The peripheral regions we are studying share a major common feature — their distance from metropolitan areas and major markets. With that distance comes the need for an adequate transportation infrastructure to counter its isolating effects. Southwestern Nova Scotia's location at the tip of the province makes it reliant on roads, shipping, and airports to trade outside the region. Although its infrastructure was sufficient in the past (a railway line, two highways, a national airport, three ferry services, several ports, etc.) economic stakeholders are concerned today about the gradual erosion of that infrastructure.

The railway, a symbol of Confederation circling Southwestern Nova Scotia at the beginning of the twentieth century, has been gradually abandoned in the last twenty-five years. Since 1988, with deregulation and government withdrawal from railways, the only people now using the railway right-of-way are cyclists and hikers.

In 1995, subsidies to railway, trucking, and shipping companies under the Atlantic Region Freight Assistance Act and the Maritimes Freight Rates Act were eliminated, marking the end of two policies dating back to the 1920s, a time when the Maritime provinces were questioning their membership in Confederation.[45] The effect was to widen a bit more the gap between Central and Atlantic Canada, in this instance Southwestern Nova Scotia.

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44. However, professional fishers are very cautious about the development of aquaculture, given the resulting competition and environmental impacts, which are far from reassuring.

45. See Donald J. Savoie, *Pulling Against Gravity: Economic Development in New Brunswick During the McKenna Years* (Montreal: The Institute for Research on Public Policy, 2001), 38–39.

Government withdrawal from the transportation industry also weakened air transport. The only regional airport is in Yarmouth, and its privatization in 1997 is now raising fears that it will be finally shut down, particularly given sporadic interruptions to regional service. Traffic today has been reduced to a single link to Halifax. Air service between the region and the northeastern United States is being negotiated, but nothing has yet been decided.

The region still has three ferry services, one in the north, between Digby and Saint John, New Brunswick, and two between Yarmouth to Maine: the *Scotia Prince* to Portland and the new catamaran or “cat” to Bar Harbour. Both ferries run daily from May to October. Although Yarmouth’s port is open year-round, ferry service is no longer available during the winter months.

The privatization of ferry services in 1998 led to a decrease in their usefulness for export purposes. The ferry between Yarmouth and Bar Harbour was replaced with the catamaran, a high-speed ferry that cannot carry trucks. Shipments of seafood, fresh lobster in particular, have to be hauled by road, adding close to 800 kilometres to their route. The ferry service between Digby and Saint John is an alternative, but it is not a high-capacity service, and is heavily used by trucks hauling wood to the J.D. Irving plant.[46] Negotiations are underway to establish a ferry link during the winter between Yarmouth and New England, one that could accommodate trucks.

The region thus faces considerable challenges in maintaining an adequate transportation infrastructure. It is encouraging to see that the SWSDA has made transportation one of the priorities in its action plan, and it would be even more encouraging to see government review its role in transportation so as to contribute to the region’s vitality.

Human Resources

We have mentioned several times the challenges that the region faces to improve the labour force’s level of skill if it is to compete in the new economy. Consideration must be given to creating an English-language university in the region. The institution could be an extension of an existing Nova Scotia university, and offer services in the area as well as distance education. It should play a leading role in research and development focusing on the region’s assets. Although this is a major goal, which could become a reality only in the medium term, it would contribute to the region’s intellectual vitality.

Labour skills and supply also raise concerns from another perspective. The socio-economic stakeholders we interviewed are unanimous in their concern over the shortage of people to fill jobs in the trades. There is a shortage of carpenters, plumbers, electricians, and bricklayers, all trades that used to be the backbone of community colleges. However, the information age has pushed the technical trai-

46. According to interviews at the South West Shore Development Authority, Yarmouth, 29 June 2001.

ning system toward information technologies, neglecting those trades that underpin our way of living. This is first and foremost a training policy problem. Community colleges, like other institutions that train the labour force, must once again promote the value of the trades and train individuals to meet demand.

However, the region is performing well in another area — entrepreneurship. Socio-economic stakeholders point with pride to the region's strong business tradition, which they attribute to the large number of independent fishers who manage their operations as SMEs. There are two indicators that can attest to this entrepreneurial spirit. Maurice Beaudin's study shows that Southwestern Nova Scotia is the region with the highest self-employment rate in the Maritimes (23 percent).[47] Also, the high number of jobs in the retail trade sector (13 percent of all jobs) suggests a proliferation of small businesses.

Tourism

We could not complete this socio-economic profile without addressing the tourism potential of this picturesque corner of Nova Scotia. With its beautiful valleys, arresting coastlines, excellent architectural heritage, diverse population, network of rural communities, and mild climate, Southwestern Nova Scotia has no need to envy the rest of the province. Furthermore, many visitors to the province arrive in the region's ports. We can only conclude that the tourism industry has huge potential in this region.

Data on tourism is not broken down into economic regions. The region we are studying comprises two tourism areas — the South Shore, which covers the southern half of the area between Yarmouth and Halifax, and the Annapolis Valley, the adjacent area to the north. In 2000, 89,300 visitors arrived in Yarmouth by sea, a drop of 5 percent from the previous year, and representing 4 percent of all tourists in Nova Scotia, most of them US citizens (81,600). Although Yarmouth seems to be the natural port of entry for American visitors, it accounted for only 22 percent of all tourist arrivals from our neighbour to the south in 2000. The approximately 41,500 visitors who entered Nova Scotia via Digby in 2000 represent only 2 percent of tourists province-wide. That number was also down 4 percent from the previous year.[48]

Other data indicate that both regions combined accounted for only 20 percent of tourist spending on accommodation in 2000, with the lion's share going to Halifax (49 percent) and Cape Breton (18 percent).[49] Although the hotel occupancy rate for Nova Scotia as a whole was 50 percent in 2000, it was 65 percent

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47. Beaudin, ed., *The Economic Region of Southwestern Nova Scotia*, 103.

48. Province of Nova Scotia, "Summary of Visitation to Nova Scotia, 2000," *Tourism Insights*, February 2001, on-line document at www.gov.ns.ca/dtc/pubs/insights/view_feature.asp?FeatureID=24 (as of 29 August 2001).

49. Province of Nova Scotia, "2000 Indicators," *Tourism Insights*, on-line document at www.gov.ns.ca/dtc/pubs/insights/view_indicators_2000.htm (as of 29 August 2001.)

in Halifax, 32 percent in the Annapolis Valley, and 40 percent on the South Shore.[50]

According to the socio-economic stakeholders we interviewed, tourists entering at Yarmouth and Digby are usually in transit, on their way to Halifax or Cape Breton. And although they stop in Yarmouth and Digby, they do not seem to linger in the outlying areas of Shelburne, Clare or Argyle. Without strong tourism associations or a targeted promotional strategy, those regions remain on the edges of the tourism windfall.

Promoters are already preparing to celebrate the 400th anniversary of the 1604 founding of the first French settlement in America. The Acadian community in Southwestern Nova Scotia will be hosting the World Acadian Congress of 2004, and numerous festivities are in the works. Promoting Acadia as a tourist product is seen as an interesting avenue for the entire region.

Tourism is generally considered to be an economic sector of choice for peripheral areas, attracting new dollars, particularly when promotional efforts are aimed at American tourists. Unfortunately, the tourist season often coincides with the most active period in the resource sector, limiting opportunities for tourism expansion. However, that is not necessarily true in Southwestern Nova Scotia, where the fishing season extends into the low tourist season, meaning that the region can look to tourism as a complementary activity. But that is only the first step toward a real tourism strategy based on the promotion and development of a competitive tourism infrastructure.

50. Ibid.

CONCLUSION

As the tides shape the coastlines, the maritime character of Southwestern Nova Scotia shapes its economic landscape. The sea sustains a large fishing industry, which in turn feeds a processing industry and the services that support it. Also, because it is located at the southern tip of the Nova Scotia peninsula, the region seems to be outside to the market that has Halifax as its regional hub. Given the unpredictable nature of the fisheries and the centripetal tendency of the new economy, it could be easy to see the region as a fundamentally peripheral economy. But a closer look at the region shows us that it is far from being victim of its location.

First, the fisheries. Although the groundfish crisis turned the entire industry on its head, reduced the overall volume of landings and eliminated jobs, the fisheries are still going strong in the southwestern part of the province, the only region in eastern Canada where fishing extends almost throughout the year. That fact is an advantage particularly in the lobster fishery, which is active during other regions' off-season and thus benefits from higher prices. Also, the region's fishing industry is relatively diversified and increasingly complemented by aquacultural activity. The processing sector has also learned to weather industry slumps by importing some of its raw materials.

For centuries, this region has maintained numerous trade links with New England. The bulk of its fish landings are sold to the Boston market, particularly live lobster, and the advent of NAFTA in the 1990s has facilitated that access even more. Also, the region's trade links have resulted in the development of an effective transportation system. Far from being isolated, Southwestern Nova Scotia is in direct contact with its markets. Or at least, it was…

Changes in the transportation sector over the last ten years have somewhat eroded the economic advantage that the region enjoyed. First, the railway, which a century earlier helped justify the province's membership in Confederation, was dismantled, not for political reasons, but as the result of economic rationalization. Federal differential freight subsidies were also eliminated. Ferry services linking the region with the outside, previously subsidized by the government, were privatized and now serve mainly tourism needs. Finally, as the region enters the age of communication, Yarmouth's airport is in danger of closing, and the telecommunications infrastructure is not yet able to meet the demands of the new economy.

That new economy, definitely welcome in Southwestern Nova Scotia, is having trouble taking root in the region. The soil there is not very fertile. Education levels and the number of people with degrees in the region are very low. There is only one university, and it serves the francophone minority community only. Research and development take place elsewhere. Aside from the fishing industry, young people seem to have trouble finding their place, and increasing numbers of them are leaving the area. The population is ageing, and it is difficult to see how the region will be able to make a full transition to the knowledge economy.

Nevertheless, the region is buoyed by hope and a positive outlook. It has a beautiful landscape, a mild climate, a strong resource-based economy and a vibrant spirit of entrepreneurship, and its socio-economic stakeholders rival each other in their ingenuity in developing new initiatives and attracting new investment. The province and the southwestern region are implementing a balanced approach to economic development based on the exploitation and processing of natural resources, while opening the way to the knowledge economy. The signs are encouraging, but the region faces a major challenge if it hopes to develop the human resources and infrastructures it needs to support economic diversification.

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