

## Royal Commission on Renewing and Strengthening Our Place in Canada

## Demographic Trends and Implications for Public Policy

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### **Abstract**

The population of Newfoundland and Labrador is declining due to falling birth rates and persistent outward migration. The population that remains is ageing and becoming more urbanised. This report examines the co-evolution of settlement, settlement policy and economic development initiatives in Newfoundland and Labrador.

It is argued that out-migration is not unique to rural Newfoundland and Labrador, and that rural economic development initiatives are unlikely to result in substantial population gains in outlying areas. Moreover, there is no compelling argument that increases in rural population are desirable for their own sake, or as a way to improve overall economic efficiency. The motivation for a policy response to demographic change is based on the entitlement of all citizens to reasonable levels of public services, even those residing in small, rural communities. If no attempt is made to alter the delivery of public programmes, it will become increasingly difficult to provide medical care and municipal services to the more thinly populated, rural areas of the province.

Even if it were desirable, it is very difficult for policy makers to exert direct control over the evolution of population structure. However, policy makers need to be aware of demographic trends and the associated challenges. These challenges are best met by attempts to foster industries with important local linkages, and continued upgrading of the skills base of the economy. Two of the areas most affected by the projected demographic trends are health care and municipal services. Policy makers need to focus attention on discovering and implementing the most effective uses of scarce resources in these two vital areas.

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## Introduction

Newfoundland and Labrador is the newest province of Canada, but its population is fast becoming one of the oldest. Over the last three decades, declining birth rates, out-migration, and increased life expectancy have contributed to a remarkable shift in the human face of Newfoundland and Labrador. According to most demographic measures, the overall population of Newfoundland and Labrador has aged faster than the Canadian average. Rural Newfoundland and Labrador has aged faster still. With changes in the people of Newfoundland and Labrador come changes in its society, economy and institutions. Governments face a changing constituency, with evolving needs. The often voiced concern over the sustainability of publicly funded health care in the face of an ageing population is an important issue, but by no means the only challenge posed by an ageing population.

At the same time, government policy has the power to shape demography. Newfoundland and Labrador is no stranger to population policies. The Resettlement programmes of the 1960s are among the most striking examples of policies intended to influence the composition of population. Yet, the choice of where to live is a complex decision, influenced by the overall quality of life enjoyed by individuals and families. Any policy that affects the well-being of Newfoundlanders and Labradorians can induce people to leave the province or attract migrants to the province, even if population redistribution is not among its objectives.

This report summarises the recent demographic history of Newfoundland and Labrador in light of wider trends in settlement and economic development. A summary and evaluation of some the major policy initiatives of the last four decades is provided to set the context for the current debate. The arguments for demographic policy are presented and interpreted in the Newfoundland and Labrador setting. Comparison with national migration patterns and the characteristics of some other regions of the country reveals the distinctive, and sometimes not distinctive, features of Newfoundland and Labrador. A brief look at the efforts of other jurisdictions is offered to suggest promising avenues for reform.

The policy challenges faced by Newfoundland and Labrador are not unique, but the demographic structure of the province makes them somewhat more pronounced. This report concludes with some recommendations that, it is hoped, will help policy makers to meet these challenges.

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## The Demography of Newfoundland and Labrador

Newfoundland and Labrador joined Confederation with approximately 360,000 inhabitants, and the population grew to just over 580,000 by the early 1990s, when population began to fall to the current level of approximately 520,000. As in all of North America, the province saw accelerated population growth between Confederation and the early 1980s, owing to the post-World War II baby boom and increased life expectancy. Total births climbed steadily until the mid-to-late 1960s, fell slightly in the late 1960s and remained steady in the early 1970s, a time when Canada as a whole was experiencing a more pronounced baby bust. The fertility rate (births per female of child-bearing age) has fallen dramatically since the mid-1970s, to the extent that the province now has the lowest fertility rate in the country. The death rate in the province has crept upward in the last 30 years, as the population has aged. While births exceeded deaths by more than 12,000 in early 1960s, fertility and mortality are roughly equal today.

Population is shaped by more than just births and deaths. People move across borders. Migration has had a profound effect on Newfoundland and Labrador demographics. Confederation removed all legal impediments to Newfoundlanders and Labradorians taking up residence in other parts of Canada — and many have taken the opportunity.<sup>2</sup> In most years since Confederation, more people left the province for other parts of Canada than moved to the province from the rest of the country. Indeed, this fact, combined with the province's relative lack of success in attracting immigrants to Canada, has meant that even when the province's population was growing, it never grew at a rate equal to the national rate of population growth (Statistics Prince Edward Island, 2002, p.2). Appendix Figure A1 shows that Newfoundland and Labrador had the lowest rate of inflow of immigrants of any province from 1996 to 2001, and that only Quebec had a lower rate of inward migration from the rest of Canada. The outflows of population during the 1960s and 1970s have reinforced the fall in the rate of natural population growth by siphoning off families that would have had children in the late 1980s and early 1990s. While Canada as a whole was experiencing a baby echo in this period, birth rates steadily declined in Newfoundland and Labrador. Newfoundland and Labrador has recently experienced another period of sustained out-migration. While total outflows have been high recently, they have not been outrageously so. Between the censuses of 1991 and 2001, the population of Newfoundland and Labrador fell by 10.1 per cent, while the rate of natural increase was 3.3 per cent, so net out-migration was approximately 13.4 per cent. Between the censuses of 1961 and 1971, net out-migration was approximately 9.7 per cent, but the population increased by 14 per cent. The rapid decline in natural population increase has made the demographics of Newfoundland more sensitive than ever to net migration flows.

The aggregate picture of migration from Newfoundland and Labrador tells only part of the story. Perhaps more telling is the timing of net migration. Roughly speaking, net migration from Newfoundland and Labrador is pro-cyclical; that is, the largest net losses in the province's population occur when the economy in the remainder of Canada is booming.<sup>3</sup> Copithorne (1986) attributes this phenomenon to the composition of migrants. Out-migrants tend to be of working age, and respond to the pull of jobs elsewhere. Children are more likely

to be represented among the in-migrants, perhaps the offspring of returning migrants. Total in-migration is therefore less sensitive to the business cycle than out-migration. Thus, the cyclical pattern of out-migration is replicated by net migration. The most recent increase in out-migration, occurring over the past few years, also coincided with a boom in the national economy, but is attributed to events at home surrounding the Atlantic Groundfish Moratorium. It is too early to tell if large numbers of these migrants (and their families) will eventually return. However, the Economics and Statistics Branch (2002a) predicts some improvements in economic conditions in the province, so that by 2010 there may be net in-migration. However, the continued decline in the natural growth rate of the population is expected to ensure that the overall population of the province will continue to fall until 2015.

Migrants tend to be young. Hence, the net effect of decades of population outflow is a rapid ageing of the population. According to the Economics and Statistics Branch (2002a), the fraction of the province's population below the age of 20 years fell from one-half to one-quarter from 1971 to 2002. Meanwhile, the share of persons over 50 years of age climbed to one-quarter from one-sixth. The median age of provincial residents has risen nearly 17 years in that time, pushing the provincial median age from four years below the national median to over half a year above it. Health Canada (2002, p.7) projects that the percentage of seniors in Newfoundland and Labrador will approximately double over the next two decades, and the province will make the transition from having the fewest seniors per capita among the 10 provinces to the most seniors per capita.

Just as the overall demography of Newfoundland and Labrador has diverged, in detail at least, from the national picture, population change has impacted the regions within the province differently. On average, rural areas of the Island have seen the largest decreases in population over the last 10 years and have the highest median ages. Internal migration has tended to be from the rural areas to larger centres, particularly to the St. John's region. While all of the Island's economic zones experienced a decline in population between 1991 and 2001, the Capital Coast (the St. John's region) experienced a modest decline (1.2 per cent), while the Marine and Mountain (southwestern Newfoundland), Nordic (eastern Northern Peninsula) and Avalon Gateway (southwest Avalon) regions all experienced declines in excess of 20 per cent of their population (Economics and Statistics Branch, 2002a, p. 9). Not surprisingly, the median age in the Marine and Mountain economic zone is 41 years, more than three years above the provincial median. Only the Exploits Valley, St. John's and the Southeast Avalon and Western and Northern Labrador (where birth rates are the highest in the province) are expected to see any increases in population between 2001 and 2016. Rural Newfoundland is expected to shrink and age.

## Migration From Newfoundland and Labrador in Context

In a series of papers analysing the Canadian Longitudinal Administrative Database, Finnie (1998, 2001), tracks the pattern of inter-provincial mobility of Canadians between 1982 and 1995. On average, Canadians tend to move to nearby provinces, larger provinces or more westerly provinces. Newfoundland and Labrador is none of the above. Rates of inter-provincial migration fell with age. Newfoundlanders and Labradorians were, on a per capita basis, the third most likely to move at least once in the study period, behind Saskatchewanners and Albertans, while Newfoundlanders and Labradorians were the most likely to move away and return home (Finnie, 1998, p.43). At the national level, men and women have roughly similar migration behaviour, but men were more likely to leave Newfoundland and Labrador than women (Ibid, p.27). Nationally, higher income induces greater mobility for men, but appears to reduce the mobility of women. The evidence on the effects of mobility on earnings are mixed. It appears that men, especially young men (even more so young men from have-not provinces), experience significant earnings increases after changing provinces. The earnings of women appear to fall after changing provinces. Return migrants tended to have the lowest wages of all, both before moving at all and upon returning home. Finnie (2001) remarks that the gender differences in the impact of mobility on earnings may reflect a family decision-making process. The decision to move may be primarily determined by career considerations for husbands, with wives making sacrifices. No analysis of differences between single and married women was carried out to test this claim, however. Given the propensity to return migration shown by Newfoundlanders and Labradorians, the poor performance of return migrants is particularly troubling. It is the most poorly equipped for labour market success, perhaps, who fail to adjust to life on the mainland and subsequently return home.

Some indication of the mobility of young, skilled individuals is found in a study of the National Graduate Surveys of 1982, 1986 and 1990, conducted by Burbidge and Finnie (1999, 2000). They find that baccalaureate graduates are more geographically mobile than the general population. The mobility behaviour of male and female graduates is roughly similar. Unlike general migration, moving to university tends to be dominated by proximity. Most individuals who study out-of-province study in a nearby province. The only exception to this rule is that Nova Scotia appears to attract students from many provinces. Newfoundland and Labrador had the second largest net outflow of students (Burbidge and Finnie 1999, p.15). While in the middle of the pack with respect to retaining home students, Newfoundland and Labrador had the second lowest percentage of out-of-province graduates. Moreover, students who attend university elsewhere tend not to return. This was especially true for the 1986 cohort of Newfoundlanders and Labradorians. A mere 11.5 per cent of the Newfoundlanders and Labradorians educated elsewhere in Canada from this cohort were residing in Newfoundland and Labrador five years after graduation. The 1982 and 1990 cohorts had return rates of just over 20 per cent. (Ibid, p.21.) This behaviour of graduates is consistent with the general pattern of pro-cyclical migration from Newfoundland and Labrador. For new entrants in the labour market, the pull of the mainland in good times is stronger than the push from Newfoundland and Labrador in bad times. The effects of gender on wage differentials between movers and non-movers found in the general population also holds for recent graduates.

It has been suggested by Conway and Houtenville (2001) that the elderly may become more mobile in the near future. Increased life expectancy increases the potential gains to moving upon retirement. Moreover, the lack of attachment to the labour force that accompanies retirement might spur mobility. Based on US data, Conway and Houtenville show that cost-of-living and climate considerations are more important than public policy variables in shaping the residential choices of seniors. Surprisingly, differences in medicaid programmes across states appears to have little impact on mobility. States that exempt food from sales taxation are more attractive to seniors, though. Liaw et. al. (2002) find that the presence of adult children can also act as a magnet for seniors. This effect is most pronounced among older, widowed seniors. It is not certain that this evidence can be generalised to the Canadian context, but if it can, one can imagine a relatively large outflow of seniors from Newfoundland and Labrador in the years to come, given the significant numbers of Newfoundlanders and Labradorians with adult children on the mainland.

## A Brief Sketch of Economy and Population

All economic activity originates from people. People choose where to live, where to employ their labour and capital, and where to consume. Part of consumption may be tied to the place of consumption, and some parts of the production process are facilitated by the location of inputs, both naturally occurring and those brought to a location by its people. At the same time, the choice to settle, work, raise children, or retire in a particular location is affected by economic conditions. Few working families are attracted to areas with minimal job prospects, low pay and few amenities. The managers of firms shy away from regions with few inputs, uncertain business environments or insufficient access to markets. What economic forces have led to the current demographic situation in Newfoundland?

The proximate cause of the recent population exodus is the closure of much of the Atlantic cod fishery, perhaps combined with favourable economic conditions elsewhere in Canada which gave displaced fishers and fish processing workers jobs to go to elsewhere. But a full explanation of the recent exodus requires that the sources of dependence of the provincial economy on the fishery be identified, and an explanation of why other sectors of the economy were unable to absorb more displaced workers than they have to date.

The importance of the fishery to the economic development, indeed to the very existence, of Newfoundland and Labrador is well-studied and documented. Yet even in the 1970s observers commented on the persistence of a labour-intensive inshore fishery well past the time at which more capital intensive offshore and mid-range fisheries proved feasible, and perhaps more profitable.4 Numerous explanations have been offered for the continued attachment of Newfoundlanders and Labradorians to the inshore fishery. Copes (1972) and Copithorne (1986) place some emphasis on the open-access nature of the fishery. That is, modest attempts at licensing schemes notwithstanding, anyone was free to enter the fishery. Given the relatively low fixed costs of acquiring boats and equipment (and these were often subsidised), the inshore fishery was an employer of last resort. There exists an incentive to enter the fishery as long as there is some, no matter how small, excess of total revenue over total cost. However, new entrants reduce the profits of existing fishers in two ways. First, if they catch significant new volumes of fish, prices fall. Second, by competing for the stock, they make it more difficult for others to maintain their catch. Thus, with new entrants, one would expect the net income of fishers to fall. This phenomenon, known as rent dissipation, continues until all net profits are erased. The standard cure for rent dissipation prescribed by economists is a set of tradeable fishing quotas. A requirement to buy a quota limits access, thereby ameliorating the reduction in rents. Trade in the permits allows the price of the quota to adjust as the rents from fishing change, which gives potential fishers accurate signals as to the true value of entering the industry. A recommendation by the Economic Council of Canada (1980) in favour of the adoption of a tradeable permit scheme was strongly rejected by the provincial government of the day. Income support policies in place throughout the 1970s and 1980s, which supplemented seasonal fishing and fish processing incomes with Unemployment Insurance payments, may have also played a part by further encouraging entry into the industry. These programmes remained essentially unchanged between 1971 and 1995.

Despite the seemingly heavy subsidisation of inshore fishing activities, rural Newfoundland and Labrador was gradually de-populated in the first three decades after Confederation. As

Reid (1980) observed, the pattern of settlement transformed from one scattered around bays to one with prominent peninsulas. By 1976, much of the commercial activity of the province was located at a series of towns and cities along the Trans Canada Highway (St. John's, Gander, Grand Falls, Corner Brook, Stephenville and Port-aux-Basques). Each of these centres served as a shopping and distribution centre for a rural hinterland, connected to its centre by roads jutting out from the Trans Canada Highway. St. John's was (as it is today) the primary retail and wholesale location, while Grand Falls and Corner Brook comprised a second tier of the urban hierarchy. While more geographically concentrated than at the dawn of Confederation, the population remained much more dispersed than the populations of other urban hierarchies of the day.<sup>5</sup> As House (1986) observed, by the late 1970s the people of the outports had two viable options for employment: move or engage in the fishery. In 1992, for many, it seems, the number of options shrank from two to one.

## Some Economic Theory of the Location of Production

Are the current trends in the demography of Newfoundland and Labrador a natural consequence of the evolution of the market economy, or are they essentially policy-induced? Was the population of Newfoundland and Labrador too large or too dispersed during its first 50 years in Confederation? Are we on an inevitable transition to a less populous, more urbanised province? Will those who remain be better off for it? These are, undoubtedly, difficult questions to answer. Given the difficulties in social science research, these are perhaps questions that only history (written in the future) will ultimately answer. Nevertheless, economic theory can shed some light on the labour market conditions and industrial structure of Newfoundland and Labrador.

Neoclassical economic theory provides a straightforward explanation of the location of economic activity. Production is said to occur according to the factor abundance theory. Regions with a relatively greater endowment of skilled labour, say, will specialise in goods that require a relatively large skilled labour input. Areas with easy access to natural resources will specialise in their extraction and production. By specialising in the appropriate activities, regions can maximise their overall productivity and trade surpluses of their production for the surpluses of other regions. Thus, Newfoundland and Labrador is better off trading shrimp for bananas than attempting to produce its own tropical fruits. This part of neoclassical trade theory has long been appreciated in policy circles. As Copithorne (1979) pointed out, some other lessons from neoclassical trade theory were learned much later. First, in the absence of labour mobility, trade in goods leads to an equalisation of the price of un-traded inputs, including labour. If labour were more expensive in a region that specialises in, say, yams, then the price of yams would rise beyond equilibrium levels. The equilibrating reduction in the quantity demanded of yams would depress the demand for inputs used in their production, and the price of these inputs would fall. Second, labour mobility tends to equalise wages across regions. Thus, despite the excess supply of workers in Newfoundland and Labrador, one might not expect to see a significant difference in wages between the province and the rest of Canada. While average wages have been consistently lower in Newfoundland and Labrador than in the rest of Canada, Copithorne (1986) provides evidence that changes in wages in Newfoundland and Labrador track changes in wages in Ontario. Indeed, as Appendix Figure A2 demonstrates, real wages in Newfoundland and Labrador continued to move roughly in step with wages elsewhere in Canada during the 1990s. If this view of inter-regional trade is correct, which essentially boils down to the acceptance of pervasive perfect competition in the economy, then forced out-migration is unlikely to raise the wages of those who remain. Moreover, a reallocation of labour within Newfoundland and Labrador toward, say, the oil and gas industry would not increase equilibrium wages either.

An hypothesis consistent with neoclassical trade theory is that the persistent gap in wages between the province and the rest of Canada is caused by a different mix in the skill endowments of the populations. Average wages in Newfoundland and Labrador could be raised by changing the level of human capital embodied in labour. While market re-allocations of labour of the same quality cannot increase relative wages in one region, a change in nature of the inputs

themselves can. On this view of the economy, special emphasis on education and training is to be recommended as a way to improve income. This same policy conclusion could be arrived at by considering Newfoundland and Labrador as a closed economy. An increase in the skill level of workers increases their productivity, thereby increasing the demand for labour. Along with an increased demand comes increased employment and perhaps an increase in wages.

Neoclassical trade theory is not the only lens with which to view the working of the economy. Indeed, the labour market equilibrium conditions underlying neoclassical theory assume away the existence of involuntary unemployment. A staunch advocate of neoclassical theory might argue that unemployment in Newfoundland and Labrador can be explained by households withdrawing labour from the market in order to concentrate on home production. It is difficult to imagine, however, that the high and sustained levels of unemployment experienced in the province are purely illusory. Equally troubling is the inability of neoclassical trade theory to square with recent trends toward the concentration of economic activity. Urban areas cannot be gaining a comparative advantage in everything. Moreover, as Brakman et. al. (2001) argue, there are several features of international trade that cannot be explained by the neoclassical theory. Notable among these is that much international trade is intra-industry (cars for cars) instead of, as the factor abundance theory suggests, inter-industry (cars for fish). Recently, economists have begun building models of spatial economic equilibrium that attempt to shed some light on agglomerations and the pattern of trade. This is the so-called New Geographical Economics.

The New Geographical Economics is based on increasing returns to scale. Some sets of industries, usually referred to as manufactured goods, are assumed to be produced by firms with average costs that decrease with output. Thus, perfect competition, which requires a large number of firms, is not possible. Instead, a monopolistic competitive economy is envisaged. Each manufacturer produces a slightly different good, and consumers have a preference for diversity. This preference for diversity gives each firm some degree of market power, so that it can charge a price in excess of marginal cost. However, firms can enter the market until pure economic profit is whittled away. The larger the demand for manufactured goods, the greater is the potential for firms to profitably enter the market. Geography enters the model through the costs of transporting goods. All else equal, if one region has a greater demand for manufactured goods, perhaps due to a larger initial population, then firms will wish to locate there in order to minimise transportation costs. But increases in transportation costs do not make agglomeration more likely. There comes a point when transportation costs are so high that all production has to move near its demand. (There is always some income generated in all regions due to the presence of a set of non-traded commodities.) Put differently, if globalisation entails a reduction in transportation costs, then it may act as an inducement to agglomeration. The formation of an urban hierarchy in Newfoundland following the building of the Trans Canada Highway is certainly consistent with this view of the world.

There is more to agglomeration than just concentration of the demand for final goods. Fujita et. al. (1999) argue that important linkages among production activities can help explain the spatial structure of the economy. Just as a large variety of final goods are preferable to consumers, a large variety of intermediate inputs is, they argue, beneficial to firms. If production is characterised by costs that decrease in the variety of intermediate inputs available, then regions with relatively large manufacturing sectors have two additional advantages in attracting still more firms. First, a large manufacturing sector implies a large variety of inputs

available on the local market; hence, reduced costs. This is sometimes called forward linkages — intermediate goods manufacturers pass cost advantages up the production chain. Second, a large final manufacturing sector offers opportunities for more producers of intermediate goods to operate. This type of interaction is called backward linkage. In this kind of economy, the forces of agglomeration may be so strong as to lead to persistent differences in real wages across regions. Lower real wages are not enough to entice manufactures away from the region with larger demand (be it from consumers or other producers) for their products.

A world dominated by forward and backward linkages is a world of virtuous and vicious circles. Markets breed production and income, which increase the size of markets; low incomes cause an exodus of industry, causing a further decline in income. If that were a complete description of the modern economy, then there would be little hope for the development of poorer regions. Yet, from time to time, nations or regions experience rapid increases in per capita income. It is easy to imagine that a virtuous circle of industrial agglomeration cannot continue indefinitely. If wage differentials become sufficiently pronounced, some industries will eventually leave the agglomeration. Fujita et. al. (1999, pp.270-276) identify the characteristics of industries that are most prone to leave a pre-existing agglomeration. First, there are the most labour intensive, which gain the most from migrating to a lower wage region. Second, there are final-demand oriented industries and industries with modest intermediate input requirements, which benefit least from the cost savings associated with a thick market for intermediate inputs. If industrial structure is decidedly upstream-downstream, then firms in the most upstream industry will move away first, and downstream firms will soon follow (See Appendix Figure A3). If, on the other hand, industrial structure has some firms that are strongly linked, and others weakly linked, then the weakly linked firms will split off first, but new agglomerations tend to grow slowly. The new firms fail to attract others in large numbers.

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## Bringing People to Jobs and Bringing Jobs to People

Policy makers have had no shortage of ideas and advice on how to best allocate the population of Newfoundland and Labrador. Nor is there any shortage of prima facie reasons for policy makers to be concerned with the distribution of population. If agglomeration economies are significant, then it is simply inefficient to have a population scattered among the bays and inlets of Newfoundland and Labrador. Moving individuals might increase productivity enough to simultaneously improve the lot of the movers and the current residents of larger locations. Economies of scale in the provision of public services is also a major concern. There are large fixed costs involved with establishing schools and hospitals, which would be difficult to spread among a small number of inhabitants. Greater dispersal of population also increases the cost of roads, or necessitates the use of more expensive forms of transportation, such as air and sea links. Given that one's place of residence is typically near one's place of primary economic activity, population policy and economic development policy are intertwined.

Newfoundland and Labrador entered Canada with a small local manufacturing sector, a land-based natural resources sector (forestry and mining) and, of course, the fishery. Confederation gave Newfoundlanders and Labradorians access to cash payments from the federal coffers (notably the baby bonus) and tariff-free access to Canadian manufactured goods. Economies of scale in mainland industries, combined with transportation subsidies, eroded the position of indigenous manufacturing. People used mainland money to buy mainland products. Economic policy of the 1950s centred on attracting large industries to the province with cash subsidies, hoping that they might eventually become profitable and that Newfoundland and Labrador would develop an industrial economy comparable to the one on the mainland. Few of these industries thrived in Newfoundland and Labrador. The reasons for their demise, as summarised by the Economic Council of Canada (1980, p.7), include the costs of acquiring inputs and transporting outputs, a lack of skilled workers, and inadequate or antiquated equipment. In short, the large-scale industries chosen as vehicles of development required a set of forward and backward linkages unavailable in the province at that time.

As notorious as the industrial development initiatives of the 1950s turned out to be, the Resettlement Programmes proved even more so. The first of these programmes, the Centralization Program, began in 1954 as a cash subsidy to households who wished to move from isolated outports. In order to qualify for a subsidy, every household in a settlement would have to agree to move. The unanimity criterion reflected the programme goal of moving people to locations where public services and infrastructure could be most easily provided, or, what amounts to the same thing, to save the costs of providing services in isolated areas. Further evidence of this interpretation of the programme's objectives is that households receiving grants could move anywhere they wished. The Federal-Provincial Newfoundland Fisheries Household Resettlement Program replaced the Centralization Program in 1965 and operated until 1975. The Resettlement Program gave more generous levels of subsidy and eliminated the unanimity requirement. Settlements in which 90 per cent (later 80 per cent) of the households applied for assistance were termed designated areas. Individual households applied for grants, and while residence in a designated area aided in the approval of an application, it was not

necessary.<sup>6</sup> Some control over the destination was exerted in the operation of the Resettlement Program, hoping to push families toward areas targeted as economic growth centres. The Economic Council of Canada (1980) suggests that the attempts to control the destination of resettled families helped to increase resistance to Resettlement, contributing to its political demise. In all, more than 200 communities were closed down and over 28,000 people (about six per cent of the 1961 population of the province) were moved (Economic Council of Canada, 1980, p.14).

Resettlement, highway construction and an increased demand for public services contributed to the emergence of the peninsular structure of Newfoundland settlement. At the same time, inflows of transfer payments and various subsidies to the fishing industry provided incentives to stay in fishing communities along the bays. It is impossible to tell what the pattern of settlement in Newfoundland and Labrador would have been without the policies that were in place. Nevertheless, it is known that much of the subsidised relocation was from very small fishing communities to nearby small fishing communities. Copes (1972) argues that departure from an isolated fishing village represents the first step in a movement up a hierarchy of places that leads from small isolated outports, through larger centres in the province and ultimately to the mainland (See Appendix Figure A4). This line of reasoning leads one to applaud the Resettlement Programmes for accelerating the natural process of development. Indeed, Copes argued that Resettlement should have been extended to cover all moves up the hierarchy, even relocations outside the province. This recommendation met with little favour in policy circles. Adoption of such a recommendation in 2002 would serve only to accelerate the current ageing and decline of population in rural areas, which the Economics and Statistics Branch (2002a) views as cause for concern.

While Resettlement undoubtedly helped to economise on the provision of public services, it did little to fundamentally alter the industrial mix of the economy. The fishery remained king through the 1960s and 1970s. Mineral finds, hydroelectric projects, and, by the late 1970s, the discovery of offshore oil led to much optimism that resource wealth could help to diversify the provincial economy and provide sufficient employment. Too often, concessions were made to the developers of resources that limited the impact of discoveries to a temporary boom during a construction phase. Few of the resource rents (excess in the value of deposits over the costs of development and extraction) flowed to the province. Newfoundland and Labrador never managed to harness its resources toward even a meagre public savings programme. It is widely recognised, especially in the context of the Upper Churchill hydroelectric development, that potential benefits to the province have been lost. While there is little that can be done to recapture these benefits now, it is worth being mindful of the lessons of the past. Economists would argue that the most efficient way to harness the rents from natural resources is to tax the economic rents they generate. These rents are maximised when the least costly methods of extraction and processing are used. A cash flow tax can be used to capture the rent. Local preference policies run the risk of increasing costs and wasting rents. The dollars of lost profit used to secure five or six construction jobs might generate enough tax revenue to hire eight or 10 health professionals, for example. The ability of the Province to capture these tax dollars is limited, however, by the clawback of entitlements under the current Equalization programme.<sup>7</sup> Perhaps the only way to keep any rents in Newfoundland and Labrador is through payments to local suppliers, but this is surely done at a loss to the combined federal and provincial coffers.

The persistent lack of employment and wealth generation in Newfoundland and Labrador gave rise to much study and analysis. In 1980, the Economic Council of Canada released a study of some 200 pages in length, documenting the salient characteristics of the economy. As Feehan (1991) noticed, its 25 recommendations were hardly commensurate with the depth of its analysis. On the question of population, the Economic Council argued that out-migration from the Province be neither encouraged nor discouraged, that job creation efforts not be concentrated on the outports when they could feasibly be targeted toward larger centres within commuting distance from outports, and that public services be located at the nodes of the urban hierarchy; that is, located near the Trans Canada Highway.<sup>8</sup> These recommendations expressed a belief in the benefits of agglomeration, and, perhaps, an echo of Copes's (1972) view that policy should reinforce the dynamics that the private market had unleashed. Peninsulas were replacing bays, why not formulate policy consistent with that fact?

A decidedly different stance was taken by House (1986) in the report of the Royal Commission on Employment and Unemployment. The Commission's recommendations, numbering 242, were supportive of small-scale, community-based development initiatives. The mega-projects of the previous decades had not produced lasting benefits, so a new approach was needed. While none of its recommendations made direct mention of a desired distribution of population, many were targeted explicitly toward rural areas. 9 Moreover, there is almost no mention of migration in the report, except to comment on migration as one of the determinants of labour supply, and to comment on the potential for housing price collapses in the event that a one-industry town shuts down. The solutions to the province's economic woes, the House Commission argues, are to harness the skills already embodied in rural Newfoundland and Labrador and to find ways to increase their value added. Fish products, skilled handicraft, tourism and secondary processing of natural resources hold the key to rural development. Policies to enhance local entrepreneurship, combined with aggressive marketing of Newfoundland and Labrador products and services, would build the economy, especially the rural economy, from the ground up. The fishery, it argued, would remain a vital source of income in rural Newfoundland and Labrador. This income (and additional government initiatives) would provide start-up capital and fuel demand for nascent local industries. The policy advice for the resource and industrial sectors of the province included local preference policies at every turn. Implicit in this advice is a belief that spin-offs (linkages) are important to maximising the benefits from these sectors. If linkages do not exist, local preference might be a way to create them. Thus, the Commission appears ambivalent on issues of agglomeration. It appears to accept that economies of scale and scope exist in some sectors, but argues that Newfoundland and Labrador would be better served by concentrating its development efforts on sectors that are not characterised by strong forward and backward linkages. The collapse of the groundfish stocks and reform of the Employment Insurance system reduced the prerequisite local income needed to nourish the local development initiatives of the House Commission. The impact of the Economic Recovery Commission, which operated from 1989 to 1996 with House as its chair, is yet to be measured. Whatever its effect, it did not stem the recent exodus from rural Newfoundland and Labrador.

The emphasis on local initiative and small scale entrepreneurship continues in policy circles. A recent study of the options for rural Newfoundland and Labrador (Government of Newfoundland and Labrador, 2001) stresses the need for the maintenance of a good business environment, education and training, regional partnerships and community development.

Several key sectors, including a diversified fishery, aquaculture, petroleum, tourism, and cultural industries, are singled out as possible engines for growth. While local preference for the processing of mineral resources is reiterated, policy recommendations for the petroleum sector include a close look at royalty policy and a need to balance local preference with international competitiveness. Outside investment complementary with existing opportunities, the report states, is to be encouraged. The guiding principles seem to be gradualism, realism and linkage — a House Commission updated in light of new realities.

## Policy-Making for a Smaller, Older Population

Can Newfoundland and Labrador cope with the expected increases in the ratio of individuals out of the labour force to individuals in the labour force? If this were the extent of the policy challenge posed by the latest demographic trends, then the answer would be a resounding yes, because the province has coped with high dependency ratios before. In 1971, the ratio of total population to population aged 20-64 was 2.20; in 2002, it is 1.56. Denton et. al. (2000, p.44) project that this measure of the dependency ratio will not reach its 1991 value until after 2021, and will not even reach the 1971 level by 2046, the end of their projection horizon. Denton and Spencer (1999) argue that, at the national level, there is no impending crisis of increased dependency or ageing-induced increase in public expenditures. They project overall demands on the public purse to grow no faster than the rate of population growth. The composition of public expenditure is likely to change, but ageing is gradual and policy should be able to adapt.

In fact, Denton and Spencer (1999) express more concern for the possible effects of ageing on aggregate productivity than for its impact on aggregate consumption and public services. A shrinking labour force (which, in Newfoundland and Labrador is accelerated by migration) should decrease unemployment and perhaps result in increased wages. The Economic and Statistics Branch (2002a) points out that, because migrants tend to be younger and more skilled, the average skill level of the Newfoundland and Labrador labour force might fall. If these skills are not replaced by upgrading the human capital of those left behind, wages and economic growth might decline. The net effect on average earned income (and average tax collections from this income) is difficult to predict.

While increased dependency ratios may not be a major concern, there are dangers to complacency, especially in Newfoundland and Labrador with its accelerated rate of demographic change. The public sector will have to adjust to a different clientele. The Economics and Statistics Branch (2002a) has identified several potential consequences of the recent and projected changes in the demographics of the province. All else equal, an ageing population increases the demand for health care and long-term disability payments, but reduces the demand for education and social assistance payments. Older people are also less likely to commit crime, and may demand a different style of public housing than the family-style units widely utilised at present. The largest single expenditure item for the provincial government is health care, comprising some 44 per cent of the program budget in 2001/02, with expenditure growth projected at about five per cent per year for the next 27 years (Economics and Statistics Branch, 2002a, pp.12-14). Education is the second largest expenditure item, and one might expect a drop in the school-age population to provide an opportunity for a reduction in spending on education. But realising these gains may be difficult due to the large fixed costs of school buildings, and increased participation rates in post-secondary and adult education. Fundamental reform of the school system has already taken place, and costly duplication of services has been reduced. Short of a return to the one-room school, there seems to be no major policy initiative that can dramatically reduce costs. The effects of changes in other, smaller programme areas are unlikely to have a large impact on the fiscal situation. Population decline and ageing bring little good news for the provincial balance sheet: increased expenditure

(primarily on health) and few revenue gains. There is even reason to expect that equalisation payments, which are based on total population, will fall.

Restraining medical expenses is difficult, but a brief foray into the history of medical costs might help to highlight some options. Evans et. al. (2001) report on a study of health expenditures in British Columbia. They find that increases in health care expenditures per capita since the late 1960s cannot be accounted for by changes in demographics, but by increased expenditure within each age category. Increased use of physician services and the rising costs of pharmaceuticals are the underlying causes of the recent crisis in medical budgets, not an ageing population. Shifting to less physician intensive forms of treatment (home care, or increased use of nurse practitioners) would attenuate the rise in doctor's bills. Greater use of generic drugs and requiring more stringent evidence of pharmaceutical effectiveness before adopting new remedies might help reduce the cost of medicine. Cuts in public health care, either by reduced total health care quality or significant private sector involvement, are likely to have a disproportionate impact on the poor. A justification for these cuts cannot be found, they claim, in "apocalyptic demography."

Municipal governments, many already under severe financial strain, will be affected by demographic change. In areas with declining populations, the demand for water and sewer services will fall. On the other hand, property values (the municipal tax base) are likely to fall. Given the large fixed costs of many municipal services, it is possible that shrinking bases will dominate reduced variable costs, and threaten the very existence of some smaller municipal governments. Evidence on the general question of economies of scale in the provision of public services is mixed. For example, Byrnes and Dollery (2002) argue that there is no consensus on the existence of economies of scale in the provision of public services. For larger municipalities, there may indeed be diseconomies of scale. For smaller municipalities, like many in Newfoundland and Labrador, economies of scale seem more plausible. Kitchen and Slack (2001, p. 22) present evidence from Canada's North indicating that its, primarily smaller, municipalities face per capita costs significantly in excess of the national average.

Local governments will have to find ways to spread fixed costs (for example, amalgamation and sharing equipment) and risks of disastrous events, such as the costs of crises in water supply management. Kitchen and Slack (2001) make an important distinction between contiguous small municipalities and remote municipalities. The former are better able, they argue, to share infrastructure and enter into agreements for the mutual provision of services than the latter. The peninsular structure of settlement in Newfoundland and Labrador provides a natural way to organise municipalities into reasonably contiguous groupings. Settlements lying outside the major peninsulas are less likely to find partners with which to share costs and risks. The options for financing services are more stark in these areas. The province could assume responsibility for basic municipal services, effectively dissolving some municipalities. Alternatively, remote areas could receive higher per capita grants from the province.

Those who downplay the potential hazards of demographic change tend to argue for piecemeal policy solutions. A careful examination of educational requirements is needed to sustain educational quality. Problems in healthcare are best addressed within the healthcare system. There is merit in making each programme as efficient as possible, but is there not also merit in altering demography?

## A Role for Demographic Policy

The hallmark of a policy analysis by an economist is a discussion of equity and efficiency. Economic efficiency entails a state of affairs in which no one can be made better off without making someone else worse off. But who counts as a "someone"? Should the provincial government, say, be solely concerned with Newfoundlanders and Labradorians? If so, who are Newfoundlanders and Labradorians? Current residents? Expatriates? Potential migrants? If an entrepreneur heads for the mainland to increase profits (and employ people on the mainland), should policy makers be satisfied with this improvement or mourn the loss of jobs and local tax revenue? Some policies that have merit from a global point of view might be disaster for some groups. It is important to be clear on this issue before any policy recommendations can be made.

From the world perspective, there are at least four possible justifications for policy concern over where people reside. First, there may be some intrinsic value placed on the demographic profile. A large population may be good for its own sake, or there could be value in a thriving rural society. Second, there may be some reason to believe that the allocation of people to places is not the best possible. Third, demography might have a significant impact on productivity or economic efficiency. Fourth, relocation might find some justification on equity grounds.

If one bases policy judgements on a respect for individuals' own evaluation of their circumstances, rather than on paternalistic notions, it is difficult to argue for policy aimed at residential location *per se*. If some people are happy in St. John's or in Ontario, it seems absurd, even hypocritical, for a policy maker in St. John's to prefer that they live in Pleasantview, Notre Dame Bay. There might be an argument for preserving rural life, even if many of the people currently living that life would choose to leave it. Once a community disappears from the map, it is highly unlikely that it will ever be re-established. Some people might derive benefit from the existence of such communities, even if they do not reside there. Perhaps people who have left a community would like to keep alive the option of returning, for them or for their offspring. Others may value the potential to leave urban life in retirement. For these, it is more important that some settlements remain viable, not that all settlements remain viable. There are measurable benefits to a thriving rural society, through tourism. Except for visits home by expatriates, this industry is based on the existence of some rural communities, not all.

If people are free to move, as Newfoundlanders and Labradorians most certainly appear to be, a household makes its residential choice after carefully weighing all its options. It makes the best decision it can, given its resources and information. It is difficult to imagine a government decision-making body that could match people to their desired locations as effectively as people themselves can. But there are reasons to believe that external benefits and costs, which do not enter into family decisions, might be at play. Additional families might convey costs of congestion — noise and traffic are obvious examples — on their neighbours. This type of externality, which is often used to argue that cities are too big, is not a major concern in rural Newfoundland and Labrador. In a world of agglomeration economies, individual families do not reap the entire benefit of their residential decisions. The added commercial potential a household brings is not as important as the mortgage payments in deciding on a new home. Further sources of external benefit include the potential to spread the costs of local public services among more families. The balance of the externality argument for market failure in

residential markets points towards too little concentration in Newfoundland and Labrador, not to too much.

But is it not simply unfair that some members of society are stuck in declining communities, far away from hospitals, with dwindling educational resources and out of reach of cultural amenities? With houses of limited resale value, these people can hardly be expected to move to St. John's or Grand Falls-Windsor. Perhaps the arguments for a policy response to demographic change are based on notions of fairness and equity. Certainly, the rationale for public healthcare, one of the sectors whose fate is often tied with demography, is largely based on equity arguments such as entitlements from citizenship.

Given that many of the highly valued public services (notably healthcare and education) are administered by the Province, the provincial government does have an interest in the demographic structure of the province. The case for economies of scale in the provision of public services has already been made. Moreover, the population serves as an important input into the provision of public services. The provincial government's ability to hire suitable employees is certainly affected by their supply in the province. Ensuring a supply of professionals to rural areas is especially difficult. The challenges are not new. Some four decades ago, Wells (1960, p.6), observed:

It has been found that many trained teachers are loathe to serve in small communities, and this attitude is unconnected with salary scales. When one considers the inconvenience and lack of facilities to be encountered in some of our more isolated outports, it is not entirely unreasonable. Furthermore, doctors practising in isolated areas do so at considerable disadvantage to themselves and their families.... Such factors ... mitigate against the successful provision of educational and social facilities in isolated areas.

The impact of an exodus of skilled workers on the public sector could be grave. Provincial policy makers need to be aware of the need to prevent such an exodus.

## Lessons From Elsewhere

Newfoundland and Labrador is not alone in facing economic troubles and demographic changes. Economies elsewhere have faced and (at least partially) overcome similar challenges. New Brunswick experienced significant economic transformation in 1980s and 1990s. Saskatchewan has experienced ageing and out-migration for decades. The province can look to these regions for guidance.

The foundations of the success of the New Brunswick economy throughout the 1990s were call centres and natural resources (Savoie, 2001). New Brunswick enjoyed a growth in real income and a reduction in unemployment relative to the national average. Call centres flourished in New Brunswick, in part, due to the already intact telecommunications infrastructure and bilingual workforce. The backward linkages were strong. The market for the services of call centres is diffuse, so forward linkages are not particularly important in their location. Given the insights of the New Economic Geography, it is difficult to imagine a better platform for economic growth. Still, people did not flock to New Brunswick in response to the relatively buoyant economy. During 1971-1981, population in New Brunswick grew at roughly three quarters of the national rate of population growth. Population growth in 1991-2001 was less than one tenth of the national rate (Statistics Prince Edward Island, 2002, p.2). Moreover, New Brunswick, like Newfoundland and Labrador, failed to attract even one-half of one per cent of immigrants to Canada in each of 1987 and 1997 (Savoie, 2001, p.129). It takes more than a well-targeted industrial policy, it seems, to raise the population of small, Atlantic Canadian provinces.

Declining rural populations have been experienced by Saskatchewan since the 1950s (ACRE, 2002b). Increasing concentration of commerce and services in larger centres has been evident since the early 1960s. Stabler and Olfert (1996), building on the research of Stabler et. al. (1992), catalogue the loss of rural services in Saskatchewan. They suggest that the evolution of communities resembles the action of a sifter. With few exceptions, communities have tended to move down a hierarchy of trade centres. In 1995, Saskatchewan had less than one-quarter of the complete shopping centres (the third rung on the hierarchy) it had in 1961, but had nearly twice as many minimum convenience centres (the sixth and lowest tier of the hierarchy). The top two rungs of the hierarchy had the same communities, Regina and Saskatoon, for the entire period from 1961 to 1995. The challenge for rural Saskatchewan was a struggle for existence, not a struggle for growth.

The Government of Saskatchewan responded to the decline in rural services by constituting an Action Committee on Rural Economy, ACRE. It was mandated to study rural Saskatchewan and report on the options for rural renewal. Among its reports was a series of community profiles (ACRE 2002a), chronicling efforts at community development. While the details of development differ from community to community, a number of common themes emerge. ACRE (2002a) emphasised that most successful initiatives were truly local, in origin and financing, and tended to be small scale. Often, success was precipitated by partnership between a community and its outlying region. The towns of Eston and Leroy started their renewal with renovations to local recreational facilities (with considerable finance through donations) in an effort to raise community spirit and attract young families. The final report of the Action Committee highlights that rural renewal will be "at least a 20 year project" (ACRE 2002b,

p.33). No quick fixes are advocated. Instead, the recommendations call for a slow process of encouraging local business, instilling new, positive attitudes into residents, and building incomes, jobs, and economic linkages from the ground up. Rural Saskatchewan, it argues, will not be best served by waiting around for governments or outside investors to pump money into it. Lorne Johnson, Mayor, Town of Eston, summarises the sentiment this way: "If a company can move in they can just as easily move out" (ACRE 2002a, p.3).

## A Notable Exception

While most regions are facing drastic erosion of population, the decline is less severe in the St. John's region. In fact, the forces of agglomeration that appear to be pushing people out of much of Newfoundland and Labrador seem to be working to enhance the attractiveness of the Northeastern Avalon. Is this just a movement to the penultimate rung on Copes's hierarchy (cf. Appendix Figure A4), with an exodus to the mainland inevitable? Or is it evidence of an agglomeration able to compete on a world stage? The fact that the capital region experienced a decline in population during the 1990s might lead one to conclude that St. John's, too, might be fighting a losing battle for growth and population. More recent news has been encouraging, though, as output, income and population all increased from 2001 to 2002 (City of St. John's, 2002). Moreover, St. John's occupies the same space in the urban hierarchy of Newfoundland and Labrador that Regina and Saskatoon do in Saskatchewan. The persistent strength of these two Prairie cities provide reason for optimism in the provincial capital. Just as actively encouraging otherwise questionable economic activity in rural areas is a dangerous game, explicit policy preference for businesses locating in St. John's is not recommended. It might not even be necessary. Among other things, increased migration to St. John's would amplify the financing crunch faced by municipalities in the rest of the province.

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## Conclusions

From a global (or even national) point of view, outward migration from Newfoundland and Labrador can be viewed as a natural response to more promising economic opportunities elsewhere. Those who move do so with a view to increasing their well-being and in so doing reduce the labour surplus in the province, and perhaps contribute to efficiency-enhancing agglomerations on the mainland. This caricature of the migration process ignores important equity issues. Women tend to not gain as much as men from moving to a new province, if at all. Those who remain tend to be the older and the poorer members of society. Of those who return, many do so because they could not find employment on the mainland. While economic growth and the creation of new opportunities in Newfoundland and Labrador will undoubtedly attenuate population decline, the New Brunswick experience suggests that the effect is likely to be modest. Given the emphasis on local initiatives and steady, sustainable development in recent economic policy, it is difficult to imagine an impending boom in population. In the medium term, population ageing and the loss of rural population is inevitable.

Economic forces appear to be at play in stimulating outward migration and in influencing the choice of recipient provinces. Yet, they do not tell the entire story. Newfoundland and Labrador has not emptied in response to decades of relative economic disadvantage, nor is it likely to empty in the foreseeable future. Many families choose to stay in Newfoundland and Labrador when they (or at least some members of the family) could have better job prospects elsewhere. This attachment to place and culture is not irrational. If families were forcibly removed from their homes, the resulting loss of this sense of place would be a real cost to them, and needs to be weighed against any gains due to agglomeration or reduced costs of public services. While it is perhaps unduly optimistic to predict a great boom in the provincial economy and a surge of inward migration, it is equally pessimistic — and perhaps simplistic — to argue that (rural) Newfoundland and Labrador is unviable.

There are two strands of argument pointing toward policies that might reverse recent trends in demographic structure. One is that enhanced economic opportunities in Newfoundland and Labrador would tend to slow outward migration. Population stability, in essence, is a sign of economic stability. Conversely, population structure influences economic growth. But population policy is a very coarse instrument for development policy. Even if a government could entice families to move to designated areas, how would it keep them there or entice them to move yet again as policy objectives change? Other arguments are based on equity. Is it fair for Newfoundland and Labrador to bear a disproportionate share of the increase in healthcare costs brought on by national ageing? It is destined to do just that if it continues to age more rapidly than the rest of Canada. Why should rural communities experience a decline in the quality of their hospitals, schools and local services? They will if populations and tax bases fall below levels needed to sustain local infrastructure, and if the thresholds for supporting local services cannot be lowered. They will continue to do so if qualified medical and educational professionals cannot be retained or replaced. Is it equitable that young Newfoundlanders and Labradorians must start their careers and families far away from their parents and extended families? They will continue to do so unless job opportunities are to be found close to home.

In view of the evidence summarised here, the following recommendations to the Royal Commission are advanced. They are directed primarily at the Government of Newfoundland and Labrador. This is based on a view that the sectors of public responsibility most affected by demographic change are areas of provincial jurisdiction. Moreover, the connections between community development and population structure suggest that provincial and sub-provincial decision makers are likely to be the agents of change in demographic characteristics. An important caveat to these recommendations is that their scope does not extend to coastal Labrador, which has a unique demographic profile.

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## Recommendations

- 1. Active intervention in population settlement, for example, the resettlement of communities, is not encouraged. Past experience with resettlement policy suggests that even if suitable sites for nascent agglomerations can be identified, moving people to such growth centres is difficult. Interfering with private residential choice violates principles of freedom of choice. Moreover, a post-policy distribution of population is likely to be unstable if people are free to move again. Government assistance to initiatives proposed by communities themselves is more likely to be effective.
- 2. Access to public services requires that all aspects of public infrastructure be located in regional service centres, with well-maintained road connections from smaller communities. The peninsular structure of settlement and transportation links that has developed in Newfoundland and Labrador suggests this model of service provision. Due to concerns about bussing, schools might be more decentralised.
- 3. Measures to ensure the maintenance of municipal services should be reviewed. Possible innovations include creating an insurance fund to cover unforeseen, large demands on municipal budgets (for example, major cleaning of water supplies), or more sharing of facilities and equipment by nearby councils.
- 4. Municipal governments should identify initiatives that would help retain young adults, for example the upgrading of recreational facilities. Evidence from Saskatchewan indicates that community donations and fundraising can be used, where necessary, to complement municipal outlays.
- 5. The Government of Newfoundland and Labrador should clarify its commitment to community-based development so as not to confuse it with wasteful industrial subsidies. History has shown that attempts to foster economic growth by subsidising industries with few natural linkages to Newfoundland and Labrador are unlikely to succeed. Nor are explicit attempts to locate economic activities in rural areas with few natural linkages recommended. Community-based development, where successful, is a slow process of finding and exploiting local advantages. It might not even result in population increases. Community-based development should not be the decentralisation of a few industries with the hope that agglomerations might form around them.
- 6. The human capital lost through out-migration must be replaced by increases in the skills of those who remain. Adult education and re-training of older workers are to be encouraged. Given the likely affects of rural population decline on schools, the potential of distance education and on-line resources should be examined. This course of action is not costless, but it is one that all of the competing theories of economic activity surveyed in this report point toward. No matter what the underlying economic forces, an economy with more resources, in particular more human resources, fares better.
- 7. The province should seek to retain a higher proportion of its high school graduates who seek post secondary education. Likewise, it should try to attract students from other provinces. Scholarships, bursaries and a general reduction in the cost of post-secondary education in the province would help to achieve this goal. In addition,

- Memorial University should publicise its areas of strength more widely. Again, this recommendation is costly. Given the relative infrequency with which out-of-province students return home after study, keeping students at home might be easier than attracting recently educated young professionals from elsewhere.
- 8. Every effort must be made to economise on the costs of healthcare. In concert with the other provinces, an examination of the costs of pharmaceuticals and the appropriate mix of medical professionals should be carried out.
- 9. Any attempt to attract skilled workers to Newfoundland and Labrador should be made with the knowledge that migration decisions are family decisions. It is much easier to attract families when all members benefit from the move. Thus, the race to attract professionals will be won by regions with a diversified set of professional opportunities (so that both spouses might find employment) and adequate recreational and educational facilities. The establishment of regional service centres (cf. recommendation 2) would provide a basis for this strategy.

### **Endnotes**

- <sup>1.</sup> According to Leacy (1983), the 1951 Census of Canada recorded a population of 361,416. The Economics and Statistics Branch (2002a) reports a provincial population of 580,195 in 1993, and a population of 521,200 in 2001.
- <sup>2</sup> Migration from Newfoundland to the mainland was prevalent before Confederation, too. Indeed, Reid (1980, p. 40) reports that out-migration from Newfoundland represented 40 per cent of the natural increase from 1900-35, and about 25 per cent of the natural increase in 1945-76. In both time periods, this represents about five per cent of the population.
- <sup>3.</sup> This feature of net migration was noticed by Copes (1972) for the period from Confederation until the early 1970s, and is also evident in more recent years. Particularly large rates of net out-migration from Newfoundland and Labrador were observed in the early and late 1970s, and the mid-to-late 1980s.
- <sup>4</sup> Copes (1972) was among the most vocal of proponents of encouraging a shift away from the inshore fishery, even to the point of encouraging net migration from Newfoundland and Labrador.
- <sup>5</sup> Reid (1980, p.21) compares the urbanisation rate of various urban systems in 1976 and finds that the St. John's urban system, comprising most of the island of Newfoundland, was comparable to the Regina-Saskatoon urban system, and roughly 40 per cent less urbanised than Iceland at the time.
- <sup>6.</sup> A summary of the operation of various programmes is found in Copes (1972, pp.101-113).
- 7. An anonymous referee offered this suggestion, for which the author is grateful.
- 8. The complete list of recommendations is found in Economic Council of Canada (1980, pp. 161-163).
- 9. Aside from Chapters 10 and 11 dealing with Community and Regional Development and Small Enterprises, respectively of the report, which contained a total of 29 recommendations, 12 further recommendations made special mention of rural or isolated areas. None of the other 201 recommendations made special mention of urbanised areas, except in reference to a localised resource or opportunity.
- <sup>10.</sup> These dependency ratios are the author's own calculations, based on information published by the Economics and Statistics Branch (2002b).
- <sup>11</sup> The population of Pleasantview is approximately 76 (Point Leamington Academy, 2001).
- <sup>12.</sup> Out of 411 reclassifications of communities at some point in their study, only 33 were from a category with lower services to one with higher services (Stabler and Olfert, 1996, p.17).

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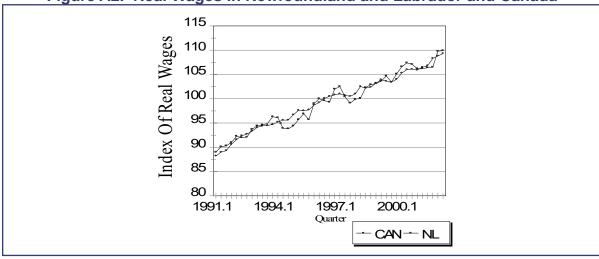
## **Appendix**

Figure A1. Recent Migrants In Canada

Province or Territory	% of 2001 residents who lived elsewhere in Canada in 1996	% of 2001 residents who lived outside Canada in 1996
Newfoundland and Labrador	3.3	0.5
Prince Edward Island	6.3	0.9
Nova Scotia	6.2	1.1
New Brunswick	4.8	0.6
Quebec	0.9	2.0
Ontario	2.3	4.9
Manitoba	4.1	2.0
Saskatchewan	4.7	1.0
Alberta	8.8	2.9
British Columbia	4.1	5.4
Yukon Territory	14.0	1.6
Northwest Territories	16.8	1.5
Nunavut	10.8	0.5

Source: Statistics Canada, Census of Canada 2001.

Figure A2. Real Wages in Newfoundland and Labrador and Canada



Source: Statistics Canada, CANSIM II, Table 281-0039

Figure A3. An Upstream-Downstream Production Process

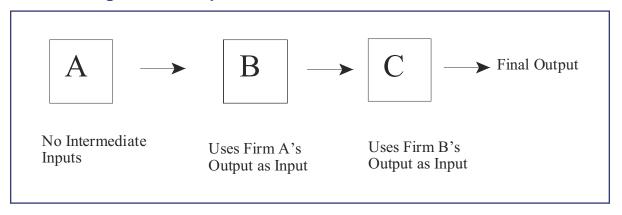
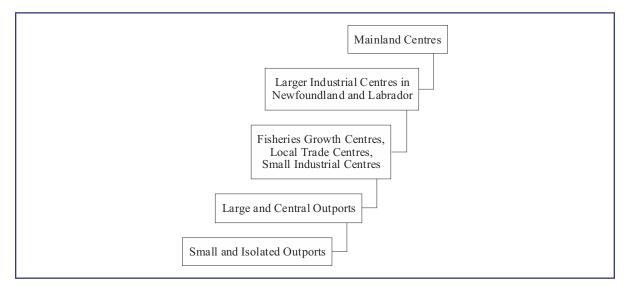


Figure A4. Copes's Hierarchy of Settlements



Based on Copes (1972, p. 114)