Net Loss Population Settlement Patterns and Maintenance of Rural Health Status: A Case Study in Atlantic Canada

Final Report

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Executive Summary

Introduction

This research focuses on social supports as they relate to the maintenance of health in rural Atlantic Canada and the impact population change has and will have on such relationships. Sporadic changes in population patterns are predictable and they reflect the dynamic nature of human populations. While these changes will have an impact on communities of all sizes, rural settlements are affected differently by population change due to factors that already distinguish rural areas from urban ones. In Canada, population loss in rural areas affects the governmental provision of formal services such as education and health care. Changes in formal service provision may fuel further changes in the population, but may also provide the foundation upon which rural residents mobilize other support systems within their communities to ensure that the needs of community residents are met. The composition of social support within communities varies according to the local needs. Different forms of social support have varying levels of success in maintaining or improving the health and well-being of individuals in the community.

There is little Canadian research that considers the impact of population change on health status and health services within rural communities. Much of the research only applies to one or two of these factors and can be linked only tentatively. Moreover, while the use of the rural–urban divide in the literature has substantiated a distinctive rural experience, this conceptualization remains problematic because it does not allow for a comprehensive understanding of variations amongst rural areas. Rural communities have unique pressures and needs with regard to the health and well-being of their inhabitants. For example, rural areas have higher proportions of elderly residents with higher support needs for maintenance of individual health status. Issues of geographic isolation, transportation and a lack of health care providers also affect the availability of formal services in rural areas.

In Atlantic Canada, the proportion of people who reside in rural areas is more than double that of the Canadian rural population and population aging is occurring at an accelerated rate. Atlantic Canada is a relevant locale to research the rural experience and strategies that rural communities use to manage these population changes. Little is known about those strategies that are successful in maintaining or improving the well-being of residents in rural communities and why certain strategies are more successful than others.

Goal and Objectives

The goal of this research is to develop a better understanding of the impact of population change on individual and community health of rural Canadians with a focus on Atlantic Canadians. Specific objectives are:

- To review the literature on health services, health status and social support in the context of rural Canadian communities;

- To analyze patterns of social support among rural Canadians using the 1996 General Social Survey and a single non-representative community case study; and
- To interpret key findings with a view to informing policy directions toward sustainable and healthy rural communities within an Atlantic Canadian context.

In addition to the stated objectives, a comprehensive socio-demographic analysis of rural Atlantic Canada, by province, was undertaken using Statistics Canada secondary data sources. This additional work, not stated in the proposal, provides extensive information on population trends in rural Atlantic Canada, and the key indicators of population change; factors which affect health and well-being of communities and availability of social support.

The objectives of this research were achieved through multiple methods which included quantitative and qualitative analyses. A number of Statistics Canada data sources, the General Social Survey Cycle 11 and a case study of one specific rural community in Atlantic Canada were analyzed to map intersections of three key areas: 1) population change, 2) regionally specific economic, social and demographic factors, and 3) individual helping behaviors and community strategies to maintain health status.

Population Trends in Rural Atlantic Canada

A larger proportion of Atlantic Canadians live in rural areas compared to the national level and the Atlantic Provinces report a higher median age than the Canadian average. Both of these statistics reflect the greying of the rural Atlantic Canadian population. Moreover, the population of Atlantic Canada declined between 1996 and 2001 despite growth at the national level. Natural increase and migration emerge as two key indicators of population change for the Atlantic region. First, immigration is largely responsible for national population growth, but has limited impact in Atlantic Canada, particularly rural Atlantic Canada. Internal migration has more impact; there is an ebb and flow of persons across Canada and amongst Atlantic Canadian provinces. Net migration rates for Rural and Small Town areas in Atlantic Canada are lower than other rural areas in Canada and certain urban centres in Atlantic Canada are attracting more in-migration from rural residents and other provinces, thereby experiencing stronger growth than others. Second, when considering the components of natural increase (birth and death rates) from 1996 through 2000, a direct inverse relationship was found in each Atlantic Province: decreasing birth rates and increasing death rates resulting in an overall decline in natural increase. These statistics support the finding that rural areas in Canada are distinctive from their urban counterparts and within the region; the rural experience is not homogenous.

Helping Relationships of Rural Canadians

Rural Atlantic Canadians are actively engaged in unpaid assistance to others. According to Census data, the proportion of rural Atlantic Canadians providing unpaid housework is slightly less than their national counterparts, but the proportion of rural Atlantic Canadians who provide unpaid care or assistance to seniors is similar. Gender differences

exist in relation to such unpaid work. Greater proportions of women provide such assistance and devote more hours.

According to analysis of the General Social Survey, Cycle 11, rural Canadians' participation in helping relationships reinforces the supportive nature of rural communities. Two key factors distinguish rural Atlantic Canada from non-rural Atlantic Canada and these factors have implications on helping relationships: a greater proportion of rural Atlantic Canadians have lower financial resources and live with at least one other person than rural non-Atlantic Canadians. The availability of others and the inherent limitations that reduced financial resources will have may increase the reliance on and access to informal social support networks.

In terms of helping relationships, gender, age, living context (marital status, living arrangements, presence of children under 15 years and proximity to grocery store) and human capital variables (personal and household income, educational attainment and employment) emerge as defining characteristics across all types of instrumental and expressive forms of assistance. Rural Atlantic Canadians compared to rural non-Atlantic Canadians more commonly engage in both giving and receiving assistance overall, and more specifically, with emotional support. Further, a greater proportion of rural Atlantic Canadians more commonly receive assistance only compared to rural non-Atlantic Canadians.

Helping Relationships of Rural Canadians Due to a Long-Term Health Problem or Physical Limitation

According to an analysis of the General Social Survey, Cycle 11, 14% of rural Canadians provide help to others with long-term health problems or physical limitations, most often with non-household tasks such as grocery shopping or transportation. Within this group, many of those who provide help do so for family and friends. In terms of assistance received by rural Canadians due to long-term health problems or physical limitations, housecleaning is the most common task. Less than one-fifth of rural Canadians receive assistance only and the major source of this assistance is also family and friends.

Population Change and Maintenance of Community Health Status

A case study of the Town of Parrsboro, Nova Scotia, demonstrates that the effects of population loss on health must be understood within the context of broader population changes including population loss, population aging and recent shifts toward seasonal residence. Parrsboro has experienced provincial restructuring in the provision of health services, resulting in declining confidence in health services and a perceived lack of accountability. On the other hand, this restructuring also serves as the impetus for the development and continuation of successful community health initiatives. In the face of these changes, residents have also adopted helping behaviors toward family and friends as temporary, complementary and compensatory services. Volunteerism is seen as an extension of these helping behaviors. The long-term effectiveness of these strategies has yet to be determined and requires further examination. It appears volunteerism is waning

and sufficient resources are currently not available to develop strategies to redress this situation. Additionally, changes in traditional gender roles coupled with current population trends may force rural communities such as Parrsboro to develop new strategies to maintain their health and well-being. They cannot do this without a greater recognition of their needs from federal and provincial levels of government.

Population Change, Social Support and Community Health

This research confirms that social supports as they relate to the maintenance of health in rural communities are affected by population change. The intensity of this effect varies by region as well as within the region. Rural Atlantic Canada is experiencing significant shifts in their demographic composition due to economic processes and social factors. What remains are small towns, villages and countrysides grappling with the realities of an aging population. These shifts affect, and are affected by, the formal provision of key services such as health and education. Changes in formal services through health care restructuring may precipitate population change, but may also provide the foundation upon which rural residents mobilize other support systems such as family and friends to ensure that their needs are met. However, the availability of such support systems may also be affected by such shifts, leaving rural residents at risk of reduced access to informal support to address their increasing health needs. The reliance on rural communities as helping communities and providers of informal supports must begin to fully account for the challenges of maintaining health in rural communities in Atlantic Canada.

Policy Considerations

The results of this multi-method study highlight a number of recommendations that analysts and decision makers at a variety of levels should consider when developing policy that affects rural Canadians and particularly rural Atlantic Canadians. Specifically, it is recommended that:

- ✧ *Policy makers at the federal, provincial and municipal levels of government employ a rural and a regional lens when developing social and economic policy. In this way, policies can both take into account and address the way in which resources are distributed, particularly those resources that influence social supports.*

- ✧ *When allocating funding for health, social and education services that federal and provincial governments take into consideration how populations are constituted and their physical and social environments. In this way, policies of dispersing monies on a per capita basis can be weighted to address the needs of the community.*

- ✧ *Health decision makers view determinants of health with a rural lens. In this way, policies that address the health of the population will better account for the rural contexts, particularly the interplay among the determinants in rural contexts.*

- ✧ *Government-based health, education and social service departments integrate their human resources to serve the needs of the community. In this way, delivery of essential services can be community-centered and community-based rather than system-centered.*

- ✧ *The role and resources of Community Health Boards be expanded to allow decision making that directly influences the short- and long-term community health needs. In this way, the process by which health care policy is developed will be based on community input, enabling provincial health decision-makers to better address issues of accountability and needs for community-level services.*

- ✧ *Local governments of rural communities implement strategies and policies that directly foster the health and well-being of the community.*

- ✧ *Employers, workplaces and community groups be encouraged to enhance the abilities of all individuals to participate in caregiving, and in receiving care. In this way, depictions of those who give and receive care will represent a range of community members.*

- ✧ *Policy directions and community-level strategies be directed to enhancing economic opportunities in rural areas. In this way, opportunities will be created for individuals to become involved in increasing or enhancing their own potential and that of their community.*

- ✧ *Governments at all levels recognize the need for sustainable support to volunteers and that they direct resources to support a sustainable base of voluntary activities. In this way, concerted and tangible support may be available to promote and foster volunteerism in the community to exist along side government provided resources.*

Future Research

This research has advanced an understanding of the rural experience in terms of population change and maintenance of health and well-being. Future research that examines gendered work in rural areas is an important factor in understanding social supports in rural areas. Particularly, research on the gendered division of paid and unpaid work in rural areas will provide policy makers with more in-depth information regarding the changes in social supports in these areas. Why particular strategies are effective for some communities and not others should form the basis of studies regarding best practices in rural areas. Such studies should consider longitudinal methodologies that will allow an assessment of these practices under conditions such as population change. Finally, a comparison of rural communities across the country to determine similarities and differences between and within rural communities would elicit greater understanding of the effectiveness of strategies that communities use to maintain health in the face of population changes and health care restructuring.

Conclusion

More than one million people in Atlantic Canada live in rural areas and these areas are experiencing significant shifts in their demographic composition due to economic processes and social factors. This study has benefited from a multi-method approach to examining the intersections among population change, regionally specific economic, social and demographic factors and individual helping behaviors and community strategies to maintain health and well-being in Atlantic Canada. This research recognizes the value of including the experiences and voices of rural Nova Scotians with analyses of national data sets, allowing for a greater appreciation of the ways in which macro-level policy plays out in the lives of communities and individuals. We strongly urge analysts and decision makers to consider inter- and intra-regional variations and rural and regional lenses when developing social and economic policy. Sweeping assessments of the rural experience mask the intricacies and nuances that prevail throughout rural Canada and specifically rural Atlantic Canada.

Section One
Introduction

1.1 Introduction

Sporadic changes in patterns of a nation's population settlement are expected and they reflect the dynamic nature of human populations. Rural and urban communities are all influenced by a variety of social, economic, and political factors which in turn influence the migration of individuals. The migration of certain subgroups to or from communities due to economic, social or political pressures changes the very nature of a community. While these dynamics have an impact on communities of all sizes, rural settlements are affected differently by population change due to factors that already distinguish rural areas from urban ones. In Canada, the general trend of population change is of "net loss" in rural areas, but "net loss" does not capture the wide range of population changes affecting rural communities. Rural communities tend to have higher unemployment rates and fewer post-secondary educational opportunities, both of which affect income, health and well-being. Those people most typically moving out of rural communities do so to seek educational and/or employment opportunities, while many migrate to rural areas later in life or upon retirement. Both of these trends contribute to the accelerated aging of rural populations compared to urban communities.

In Canada, loss of population in rural areas (in absolute terms) affects the governmental provision of formal services such as education and health care. Changes in formal service provision may fuel further changes in the population, but may also provide the foundation upon which rural residents mobilize other support systems within their communities to ensure that the needs of community residents are met. The forms that social support may take within communities vary according to the local needs and the different forms that social support assumes may have varying levels of success in maintaining or improving the health and well-being of the individuals residing in the community.

In Atlantic Canada, the proportion of people who reside in rural areas is more than double that of the greater Canadian rural population and the aging of its rural population is a well-recognized phenomenon. Thus, the Atlantic region of Canada is a particularly relevant locale in which to conduct research on how rural communities manage these population changes. Little is known about those strategies that are successful in maintaining or improving the well-being of residents in rural communities experiencing these particular population pressures and why certain strategies are more successful than others. The combination of these factors drove this research.

This research uses a multi-method approach to understand the impact of population change on individual and community health of rural Canadians with specific focus on Atlantic Canadians. It investigates, and is informed by, the following questions:

1. How has community health in rural areas been affected by demographic shifts from net gain, or stable population settlement patterns, to net loss population settlement patterns?
2. What impact has health care restructuring had on health services and health status in net loss rural communities?
3. What are the strategies that individuals and communities adopt to maintain health status in rural communities in net loss situations?
4. Which strategies have proven effective for maintaining community health? Why are particular strategies effective for some communities and not effective for others?

1.2 Research Team

This research was conducted from September 2002 to September 2003. The research team was led by investigators Janice Keefe, PhD and Katherine Side, PhD. Other members of the team, also at Mount Saint Vincent University, included (in alphabetical order):

Pamela Fancey, Research Associate, Department of Family Studies & Gerontology
Amy Kate Hemeon, Research Coordinator and Graduate Student, Department of Family Studies & Gerontology
Christine Kennedy, Research Assistant and Graduate Student, Department of Family Studies & Gerontology
Patricia Thille, Research Assistant and Graduate Student, Department of Women's Studies

Both Christine Kennedy and Patricia Thille were recipients of a CIHR Graduate Student Fellowship.

1.3 Goals and Objectives

The overall goal of this research is to develop a better understanding of the impact of population change on individual and community health of rural Canadians with a specific focus on Atlantic Canadians.

Objectives

- To review the literature on health services, health status and social support in the context of rural Canadian communities;
- To analyze patterns of social support among rural Canadians; and
- To interpret key findings with a view to informing policy directions toward sustainable and healthy rural Canadian communities within an Atlantic Canadian context.

1.4 Methodology

The objectives of this research were achieved through multiple methods which included quantitative and qualitative analyses. National and regional data, as well as a case study of one specific rural community in the Atlantic region, were examined to map intersections of three key areas: 1) population change; 2) regionally specific economic, social and demographic factors; and 3) individual and community strategies to maintain health and well-being. Specific methods were:

1. A targeted review of Canadian research (published and unpublished) on the impact of population shifts on health services and health status in rural areas.
2. Analysis of data from the 1996 General Social Survey (GSS) to investigate helping relationships of rural Canadians and among those who give and receive assistance due to long-term health problems or physical limitations.
3. Analysis of data from a qualitative case study of a single Atlantic Canadian community that has experienced a negative population change.

In addition to the stated methodologies above, a macro-level analysis of social and demographic trends in rural Atlantic Canada was conducted using Statistics Canada secondary data sources. This analysis was undertaken to provide the context of rural Atlantic Canada and of population change for the report.

Rural Canadians are the focus of this research. There is little consensus, however, amongst researchers on the definition of "rural". Statistics Canada offers several alternative geographic definitions of "rural" for national level policy analysis in Canada (du Plessis, Beshiri, Bollman & Clemenson, 2002). Because these different definitions generate a different population of "rural" people, certain definitions are more appropriate for certain research questions.

This study draws on a number of Statistics Canada's data sources which contain a rural population. However, as a consequence, rural is not operationalized in a consistent way. Methodological notes are provided to help the reader discern the scope of "rural" in each section. In general, this research has adopted a rural definition that addresses individuals living in communities that are small in size (less than 10,000) and distanced from major centres.

1.5 Organization of Report

Sections Two through Five are subsections within the overall project, each contributing to the overall research objectives of the project. As such, at the beginning of each section information on the objectives and method are provided relevant to the section. Similarly, summary statements are included at the end of the section. Section Six is dedicated to discussing distinctive findings from respective sections and intersections/links across the various sections.

Section Two provides a description of the demographic trends for rural areas of Atlantic Canada and reviews key indicators that shape population change. Section Three reviews the available literature on population loss, rurality and health status. Section Four investigates the nature of helping relationships in rural Canada, with an Atlantic Canadian and non-Atlantic Canadian focus using the 1996 General Social Survey. Section Five presents the results of a community case study which addresses the impact of population change on health status and health services from the perspective of a single community in Atlantic Canada. Section Six discusses the key findings from the respective sections and presents a number of recommendations to inform policy directions and future research questions. Dissemination activities to date and future commitments are listed in Appendix A.

Section Two
Trends in Rural Atlantic Canada

2.1 Introduction

A larger proportion of Atlantic Canadians live in rural areas compared to the national level. Currently rural areas in Atlantic Canada are experiencing a number of key demographic changes. In particular, the population of Atlantic Canada is declining despite growth at the national level. Atlantic Canadian provinces are experiencing escalating death rates and changes in internal migration patterns. Both of these phenomena reflect a greying of the rural population. This outcome may have an impact on the availability of informal and formal supports to assist persons with health or physical limitations.

This section of the report provides a description of the demographic trends for rural areas of Atlantic Canada and examines selected indicators of demographic change. In addition, informal assistance, provided in the form of unpaid work by rural Atlantic Canadians, is also examined to understand gender differences and change over time.

2.2 Methodology

A number of Statistics Canada secondary data sources were used for this analysis. These include published reports/papers such as *Rural and Small Town Canada Analysis Bulletins* and the *Report on the Demographic Situation in Canada*[1] and *Population and Dwelling Counts* from the Statistics Canada (2001m) website. In most cases, data have been extracted from existing sources and reorganized for this presentation. In other cases, some manipulation of data from existing tables was conducted and these findings are presented (e.g., average, total, percentage). In all cases, the source of the data is provided at the bottom of tables and figures.

For Section 2.6 on unpaid work, semi-customized tables were requested from Statistics Canada. These relevant data were not available through existing sources at the rural Atlantic Canadian sub-provincial level.

Because varied secondary sources were used, there are several methodological issues to consider when reviewing this section. These include: definition of rural, time period and geographical comparison.

Definition of "rural"- Statistics Canada utilizes a number of definitions to examine the rural experience. Definitions are selected in accordance with the research question (for a discussion of rural definitions, see du Plessis et al., 2002). Where possible, the Rural and Small Town (RST) definition is used. The Rural and Small Town definition refers to individuals in towns or municipalities outside the commuting zone of larger urban centers (with 10,000 or more population). These individuals may be disaggregated into zones according to the degree of influence of a larger urban center (called census metropolitan

area and census agglomeration influenced zones). However, how rural is operationalized varies across the subsections of Section Two (e.g., gender, age, income). It does not vary within a given topic of discussion. The reader is directed to endnotes for method information.

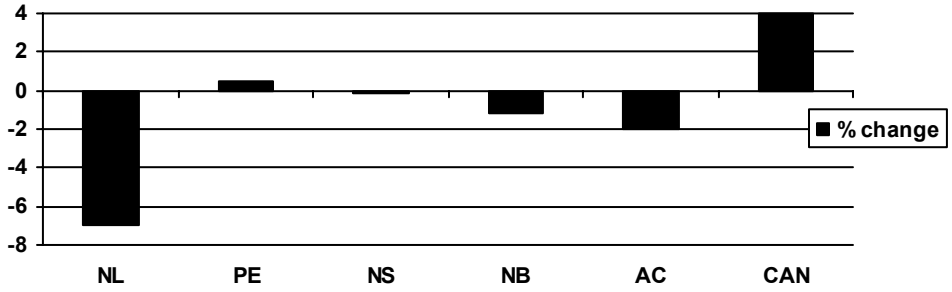
Time period - In most cases, data from the 1996 Census and 2001 Census are presented to demonstrate change over time analysis. In a few cases, annual data (e.g. 1996 to 2000) are presented, rather than Census periods.

Geographical comparison - In all topics discussed, aggregate data at the provincial level for each Atlantic Canada province are presented. Where data permit, regional and national averages are also provided for comparison. When the national average is reported, the inclusion of data from the territories in this average is inconsistent.

2.3 Atlantic Canada Population and Population Change

According to the 2001 Canadian Census, the combined population of the four Atlantic Canadian provinces is 2.28 million which represents 8% of Canada's population. Between 1996 and 2001, the population of Atlantic Canada declined overall by 2% despite a 4% increase in the nation's population (see Figure 2.1 and Table 1 in Appendix B). Newfoundland and New Brunswick report population declines (7% and 1.2% respectively) while Nova Scotia and Prince Edward Island reported minimal variation from the previous Census in 1996.

Figure 2.1: Percent Population Change in Atlantic Canada, by Province, Atlantic Canada and Canada, 1996 and 2001



Source: Statistics Canada. (2002b). *A national overview: Population and dwelling counts, 2001 Census (Catalogue No. 93-360-XPB).* Ottawa: Author.

Figures 2.2-2.6 describe the key indicators responsible for population growth (also see Table 2 in Appendix B). Population growth is best described through natural increase and migration. The rate of population growth within the four Atlantic Canadian provinces has fluctuated between positive and negative gains. Similarly, the rate of population growth at the national level has been variable from 10 per 1000 in 1996 to 8 per 1000 in 1998 to 9 per 1000 in 2000. Within Atlantic Canada, the pattern of population growth in New Brunswick best resembles the national trend. Nova Scotia and Prince Edward Island

experienced a positive gain in 1999 after a few years of a declining rate. Of particular interest is Newfoundland and Labrador, whose rate of population growth has made positive gains from a low of -12.0 per 1000 in 1996 to -7 per 1000 in 2000.

Figures 2.2- 2.6: Population Growth Components in Atlantic Canada and Canada, by Province, 1996 through 2000[2], Rates per Thousand

Figure 2.2: NL

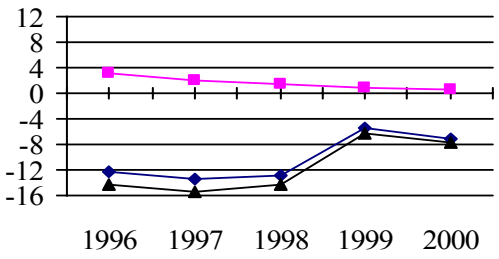


Figure 2.3: PE

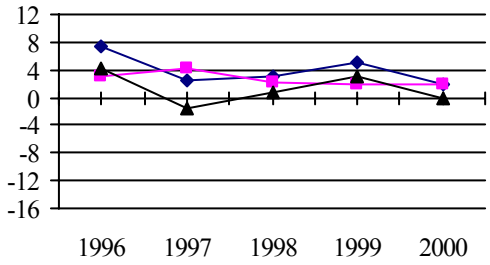


Figure 2.4: NS

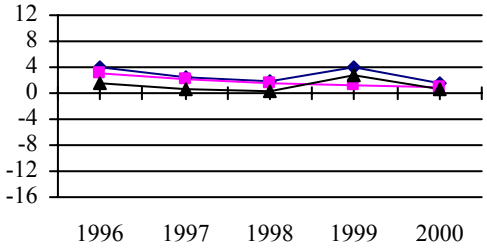


Figure 2.5: NB

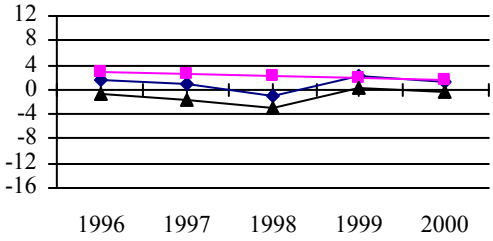
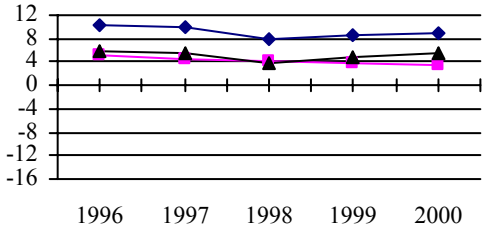
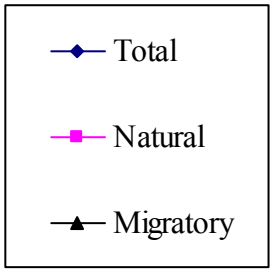


Figure 2.6: CAN





Source: Statistics Canada (2001l). *Report on the demographic situation in Canada 2001*. Ottawa: Author.

To understand what accounts for the fluctuations in rate of population growth during the five year period, rates of natural increase and migration are also presented in Figures 2.2-2.6 (and Table 2 in Appendix B). Overall, the rate of natural increase is relatively low and declining in all provinces in Atlantic Canada (3 per 1000 in 1996 to 1 per 1000 in 2000) and at the national level (5 per 1000 in 1996 to 3 per 1000 in 2000), but remains the main factor in population growth in Atlantic Canada (Statistics Canada, 2001l) (for a

breakdown of components of natural increase by province see section 2.5.2).While no province reports a negative rate of natural increase, Newfoundland and Labrador is approaching zero growth (0.6 per 1000). Migratory rates have varied during the 1996 and 2000 time period but remain low in all four provinces. Prince Edward Island, Nova Scotia and New Brunswick are all at or near a rate of zero per thousand while Newfoundland has seen positive gains in its migratory rate, albeit of a negative status (-14.2 in 1996 to -7.7 in 2000).

2.4 Rural Atlantic Canada Population

A larger proportion of Atlantic Canadians live in rural areas compared to the national level. According to the 2001 Census, 46% of the Atlantic Canadian population live in rural areas, compared to 20% of the nation's population (see Table 2.1).[3] However, both the proportion of Atlantic Canadians overall and the proportion of Canadians living in rural areas reported declining populations between 1996 and 2001.

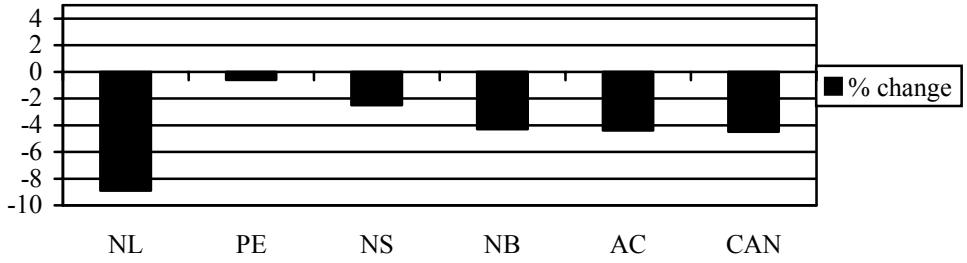
Table 2.1: Total Population of Atlantic Canada and Percent of Rural, by Province, Atlantic Canada and Canada, 1996 and 2001

	1996			2001		
	Total (N)	**Rural (N)**	**%**	**Total (N)**	**Rural (N)**	**%**
NL	551,792	237,973	43.1	512,930	216,734	42.3
PE	134,557	75,097	55.8	135,294	74,619	55.2
NS	909,282	411,424	45.2	908,007	400, 998	44.2
NB	738,133	377,712	51.2	729,498	361,596	49.6
AC	2,333,794	1,102,206	47.2	2,285,729	1,053,947	46.1
CAN	28,846,761	6,385,551	22.1	30,007,094	6,098,883	20.3

Source: Statistics Canada. (1997). *Population counts, for Canada, provinces and territories, and census divisions by urban and rural, 1996 Census- 100% data.* Retrieved June 11, 2003, from http://www.statcan.ca/english/census96/table15e.pdf
Statistics Canada. (2002b). *A national overview: Population and dwelling counts, 2001 census (Catalogue No. 93-360-XPB).* Ottawa: Author.

Specifically, the population of rural Atlantic Canada declined by 4.4% between 1996 and 2001 following the national trend of a 4.5% decline in the rural population (see Figure 2.7 and Table 3 in Appendix B). Individual provinces within Atlantic Canada experienced varying degrees of rural population decline. For example, Newfoundland and Labrador recorded a 8.9% decline in its rural population while Prince Edward Island experienced minimal fluctuation (.6%).

Figure 2.7: Percent Change of Rural Population in Atlantic Canada, by Province, Atlantic Canada and Canada, 1996 and 2001



Overall growth of urban centres in Atlantic Canada was stagnant between 1996 and 2001, unlike the national average of 5.2% growth in Canada's urban centres. However, the extent of population change within the region varied significantly. Some Census Metropolitan Areas (CMA) and/or Census Agglomerations (CA) experienced positive growth, while others experienced population loss (see Table 2.2). All urban centres in Newfoundland, for example, experienced significant population loss with the exception of St. John's, the capital city. While St. John's experienced loss (-0.7%), it was less than that of the province overall. The two urban centers in Prince Edward Island experienced low growth between 1996 and 2001. Halifax reported the strongest growth in Atlantic Canada. It was the only Atlantic Canadian city with population growth (4.7%) greater than the nation's overall population growth of 4%. And despite a 1.2% rate of population decline in New Brunswick, two of its five urban centres - Fredericton and Moncton - reported positive population growth.

Table 2.2: Total Population and Percent Change of Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs), by Province, Atlantic Canada and Canada, 1996 and 2001

	1996(a)[4]	2001	% Change
Newfoundland			
Corner Brook	27,945	25,747	-7.9
Gander	12,021	11,254	-6.4
Grand Falls-Windsor	20,378	18,981	-6.9
Labrador City	10,473	9,638	-8.0
St. John's (CMA)	174,051	172,918	-0.7
Prince Edward Island			
Charlottetown	57,224	58,358	2.0
Summerside	16,001	16,200	1.2
Nova Scotia			
Cape Breton	117,849	109,330	-7.2
Halifax (CMA)	342,966	359,183	4.7
Kentville	25,090	25,172	0.3
New Glasgow	38,055	36,735	-3.5
Truro	44,102	44,276	0.4
New Brunswick			
Bathurst, NB	25,415	23,935	-5.8
Edmundston, NB	22,624	22,173	-2.0
Fredericton, NB	78,950	81,346	3.0
Moncton, NB	113,495	117,727	3.7
Saint John (CMA)	125,705	122,678	-2.4
Atlantic Canada All CMA/CA	1,252,344	1,255,651	0.3
Canada All CMA/CA	22,654,692	23,839,086	5.2

Source: Statistics Canada (2002k). *Population and dwelling counts, for Census metropolitan areas and Census agglomerations, 2001 and 1996 Censuses, 100% data*. Retrieved June 11, 2003 from http://www12.statcan.ca/english/census01/products/standard/popdwell/Table-CMA-PS.cfm.

2.4.1 Rural Atlantic Canadians

2.4.1.1 Sex

The distribution of men and women in the Atlantic Canadian provinces is similar to that of the national average (see Figures 2.8 and 2.9 and Tables 4 and 5 in Appendix B). Approximately 50% are men and 50% are women. This distribution is similar for 1996 and 2001. However, the number of women decreased within Atlantic Canada between 1996 and 2001 (-16,620), while increasing at the national level (+623,510). At the provincial level, the numbers of women decreased between 1996 and 2001 in Newfoundland and Labrador and New Brunswick and increased slightly in Prince Edward Island and Nova Scotia.

Figures 2.8 and 2.9: Percent of Men and Women, by Province, Atlantic Canada and Canada, 1996 and 2001

Figure 2.8: 1996

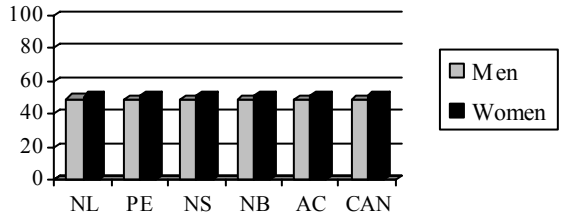
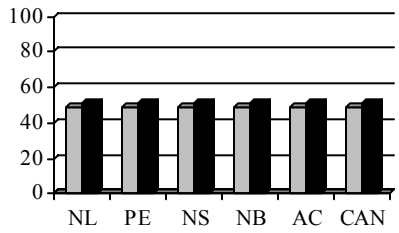


Figure 2.9: 2001



Source: Statistics Canada. (1999). *Age, sex, marital status and common-law status: 1996 Census technical reports (catalogue no. 92-353- XIE)*. Ottawa: Author.
Statistics Canada. (2002). *Profile of the Canadian population by age and sex: Canada ages, 2001 Census analysis series (Catalogue No. 96F0030XIE2001002).* Ottawa, ON: Author

The distribution of men and women in rural areas differs slightly from the total population. In 1996, 51.2% of Rural and Small Town areas in Canada were comprised of men compared to 49.1% in the total population; women comprised 48.8% of Rural and Small Town areas in Canada compared to 50.9% in the total population (du Plessis et al., 2002).

2.4.1.2 Age

The Atlantic Provinces have populations older than the Canadian average. The median age of all four Atlantic Provinces was higher than the median for the country as a whole in 2001. The aging population phenomenon has occurred fairly rapidly in the Atlantic region. For example, only a decade ago, the median age of the four Atlantic Provinces was lower than the median age of the nation (Statistics Canada, 2002a).

Rural areas of Atlantic Canada are not exempt from these trends. The median age of Rural and Small Town areas is higher for all provinces than the national average, except Prince Edward Island (see Table 2.3).[5] Newfoundland and Labrador reported a rapid change of 15.5% in the median age of its rural population between 1996 and 2001.

Table 2.3: Median Age of Rural and Small Town Areas (RST) in Atlantic Canada, by Province and Canada, 1996 and 2001

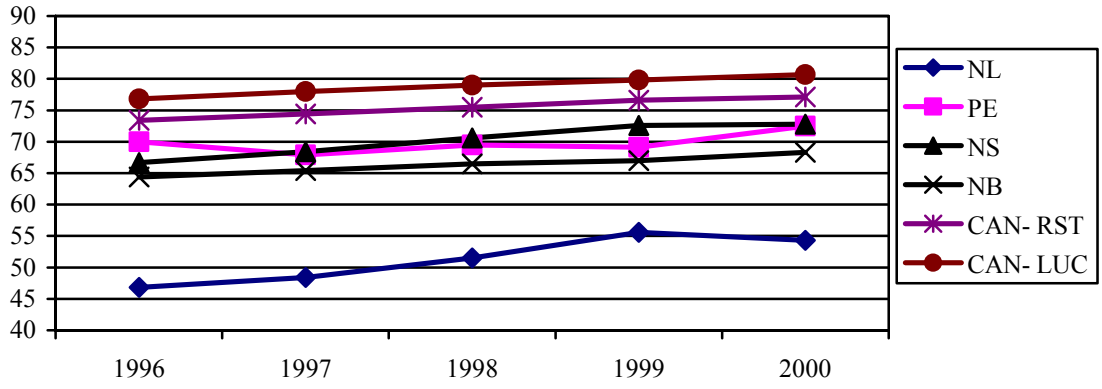
	1996	2001	Difference in age	% Change
NL	34.2	39.5	5.3	15.5
PE	34.5	37.9	3.4	9.9
NS	36.9	40.5	3.6	9.8
NB	35.2	39.1	3.9	11.1
CAN	35.5	39.0	3.5	9.9

Source: Statistics Canada. (2002c). *Profile of the Canadian population by age and sex: Canada ages, 2001 Census analysis series (Catalogue No. 96F0030XIE2001002).* Ottawa: Author.

2.4.1.3 Employment

Between 1996 and 2000, the employment rates increased in the Rural and Small Town areas of the four Atlantic Provinces, but each of these provinces maintained an employment rate below that of the average Rural and Small Town employment rate for Canada as a whole (see Figure 2.10 and Table 6 in Appendix B).[6] Newfoundland reported the lowest employment rate for the review period compared to other Atlantic provinces. However, Newfoundland and Nova Scotia increased their employment rates at a faster pace between 1996 and 2000 than Rural and Small Town areas of Canada as a whole (Rothwell, 2001). Despite such gains, national employment rates in Rural and Small Towns remain lower than their Larger Urban Center (LUC) counterparts (see LUC in Figure 2.10).

Figure 2.10: Employment Rate of Rural and Small Town Areas (RST) in Atlantic Canada, by Province and Canada, 1996 through 2000

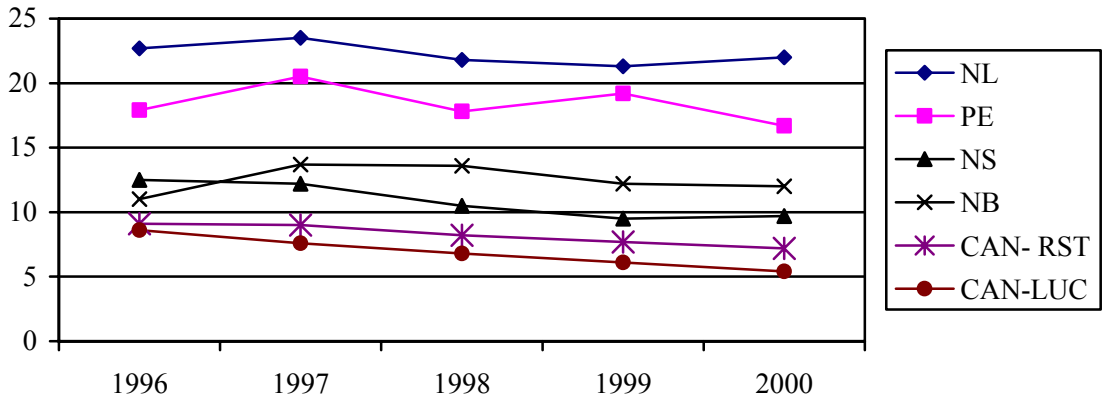


Source: Rothwell, N. (2001). Employment in rural and small town Canada: An update to 2000. *Rural and Small Town Analysis Bulletin (Catalogue no. 21-006-XIE), Ottawa, ON:* Minister of Industry.

Between 1996 and 2000, the Rural and Small Town unemployment rate in each Atlantic province was higher than the Canada Rural and Small Town average unemployment rate (see Figure 2.11 and Table 7 in Appendix B). This was particularly marked in Newfoundland and Prince Edward Island where averages in certain years (i.e., 1997,

1998, 1999 and 2000) more than doubled in comparison to Canadian numbers. While there was variability in the trends in both of these provinces over time, there did appear to be an overall downward trend in unemployment rate. Nova Scotia reported a generally downward trend (12.5% to 9.7%) while New Brunswick's rate fluctuated. Despite gains, national unemployment rates in Rural and Small Towns remain higher than their larger urban center counterparts and the gap between Rural and Small Towns and Larger Urban Centres appears to be increasing (see LUC in Figure 2.11).

Figure 2.11: Unemployment Rate of Rural and Small Town Areas (RST) in Atlantic Canada, by Province and Canada, 1996 through 2000



Source: Rothwell, N. (2001). Employment in rural and small town Canada: An update to 2000. *Rural and Small Town Analysis Bulletin (Catalogue no. 21-006-XIE), Ottawa, ON:* Minister of Industry.

It is important to understand employment patterns by sex because significant differences emerge. For example, a recent study by Curto and Rothwell (2003) found that rural women were less active in the labour market than either rural men or urban women. The employment rate was lower among rural women, and among those who were employed fewer worked full time. Moreover, economic and business conditions in rural areas constrained full-time employment for those working part time and wishing full-time work. Lastly, rural women worked less paid and unpaid overtime than urban women (Curto & Rothwell, 2003).

Analyzing employment rates in rural areas by age and sex demonstrates a further disadvantaged position for young rural women. A study by Rothwell (2001) demonstrated that young men, aged 15 to 24, in both Rural and Small Town areas and Larger Urban Centres (LUC), and young women, aged 15 to 24, in Larger Urban Centres, had similar employment rates. However, young women in Rural and Small Town areas had lower rates, averaging approximately five percentage points below the other reference groups (Rothwell, 2001).

2.4.1.4 Income

The proportion of low income households in rural and urban regions indicates that most Atlantic Provinces have higher rates of low income compared to national averages in both their rural and urban regions (see Tables 2.4 and 2.5).[7, 8] For example, urban centers in Newfoundland and New Brunswick report, on average, higher proportions of low income households (19.7%, 19.0% respectively) compared to Canada's urban average of 17.6%. Likewise, rural regions in Newfoundland, Nova Scotia and New Brunswick report, on average, higher proportions of low income households (21.5%, 17.5%, and 18.2% respectively) compared to Canada's rural average of 15.9%. This trend has been consistent across four census periods.

Table 2.4: Percent of Low Income Households in Rural Regions in Atlantic Canada, by Province and Canada, 1980-1995

	1980	**1985**	**1990**	**1995**	**1980-1995 average**	**Above Canadian rural average**
NL	22.0	24.9	17.1	21.9	21.5	Yes
PE	17.7	15.5	12.9	15.2	15.3	No[9]
NS	17.3	17.7	15.5	19.4	17.5	Yes
NB	19.3	19.1	16.0	18.4	18.2	Yes
CAN	16.2	17.3	13.8	16.3	15.9	

Source: Singh, V. (2002). Rural income disparities in Canada: A comparison across the provinces. *Rural and Small Town Canada Analysis Bulletin,* 3(7). Ottawa, ON: Minister of Industry.

Table 2.5: Percent of Low Income Households in Urban Regions in Atlantic Canada, by Province and Canada, 1980-1995

	1980	**1985**	**1990**	**1995**	**1980-1995 average**	**Above Canadian urban average**
NL	20.1	21.3	16.8	20.7	19.7	Yes
PE [10]	…	…	…	…	…	…
NS	15.5	14.5	14.1	17.7	15.4	No
NB	17.6	20.0	17.3	21.2	19.0	Yes
CAN	15.6	16.8	16.7	21.2	17.6	

Source: Singh, V. (2002). Rural income disparities in Canada: A comparison across the provinces. *Rural and Small Town Canada Analysis Bulletin,* 3(7). Ottawa, ON: Minister of Industry.

2.4.1.5 Education

A recent study by Alasia (2003) reports that the gap in educational attainment between urban and rural regions has persisted across the 1981 to 1996 period.[11] The rural-urban primary education gap closed considerably, but individuals with only primary educational attainment are now more concentrated in rural regions. The rural-urban gap persisted

with respect to post-secondary educational attainment although the level of attainment increased across all region types (e.g., predominantly urban regions, intermediate regions, rural metro-adjacent regions, rural non-metro adjacent regions, and rural northern regions).

2.5 Indicators of Population Change

Section 2.3 examines population change and indicators influencing population growth – natural increase and migration. Here the components of these two indicators are analyzed in more depth to help understand what factors are driving population changes in Atlantic Canada, and particularly in rural areas.

2.5.1 Migration (ie., inter-provincial, intra-provincial, immigration)

2.5.1.1 Immigration

Historically, immigration accounts for little population growth in Atlantic Canada. Most new immigrants to Canada settle in the three main census metropolitan areas - Montreal, Toronto and Vancouver. In 2000, for example, just over 1% of new immigrants settled in Atlantic Canada (see Table 2.6).

Table 2.6: Proportion and Distribution of Canadian Immigrants (all classes) to Atlantic Canada, by Province, Atlantic Canada and Canada, 2000

International immigration	#	%
NL	415	0.2
PE	192	0.1
NS	1601	0.7
NB	758	0.3
AC	2966	1.3
CAN	227,336	100%

Source: Statistics Canada (2001l). *Report on the demographic situation in Canada 2001*. Ottawa: Author.

Moreover, immigration to rural communities is limited. According to Statistics Canada, recent and new immigrants between 1981 and 1996 made up only 2% of the predominantly rural region population compared to immigrants comprising 13% of the predominantly urban region population throughout Canada (Beshiri & Alfred, 2002).

2.5.1.2 Internal Migration

Internal migration accounts for one aspect of population change in Canada between 1996 and 2001. Particularly in Atlantic Canada there was an ebb and flow of persons between provinces across Canada and amongst Atlantic Canadian provinces.

Net migration data for 2000 report losses in all four Atlantic Provinces, indicating that the number of persons leaving these provinces was higher than the number of persons

entering these provinces (see Figures 2.12-2.15). Newfoundland and Labrador, for example, has reported a negative net migration for several years. However, it should be noted that the rate loss has reduced substantially over the years (see Figure 2.12). In 1996, the net migration loss, in numbers per thousands, was -7.9 compared to -4.2 in 2000. New Brunswick and Prince Edward Island also report migratory losses in 2000 but smaller than those experienced by Newfoundland and Labrador. New Brunswick returned to its levels of 1996 after a number of years of fluctuation in net migration. Nova Scotia reported a relatively small net migration loss in 2000.

Figures 2.12-2.15: In- , Out- , and Net Inter-Provincial Migration for Atlantic Canada, by Province, 1996 through 2000, (numbers in thousands)

Figure 2.12: NL

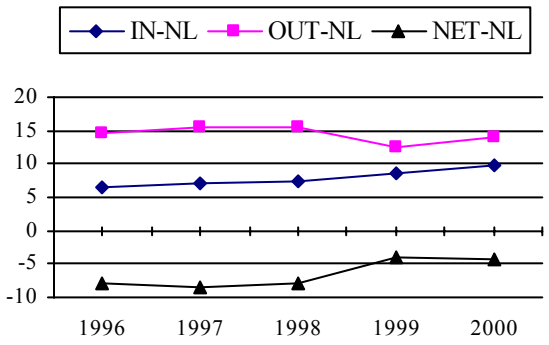


Figure 2.13: PE

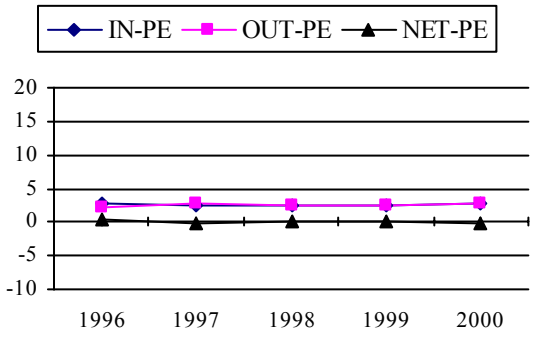


Figure 2.14: NS

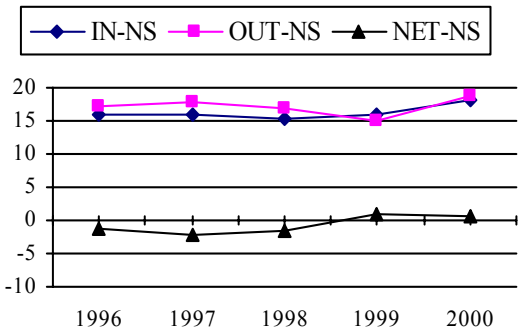
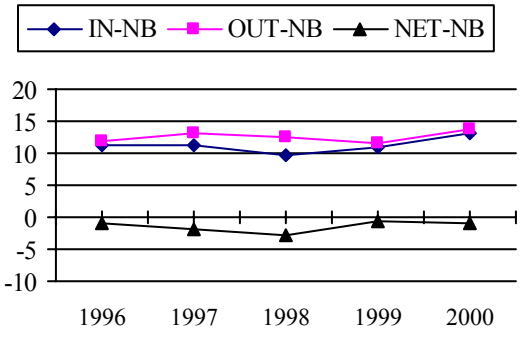


Figure 2.15: NB



Source: Statistics Canada (2001l). *Report on the demographic situation in Canada 2001*. Ottawa: Author.

While Central and Western Canadian provinces are common destinations for Atlantic Canadians who leave their province, inter-provincial mobility amongst the Atlantic Canadian provinces is strong (see Table 2.7). Within Atlantic Canada, non-Nova Scotians

most frequently move to Nova Scotia and Nova Scotians commonly migrate to New Brunswick.

Table 2.7: Inter-Provincial Migration Destinations by Province of Origin, 2000 (According to Revenue Canada tax returns)

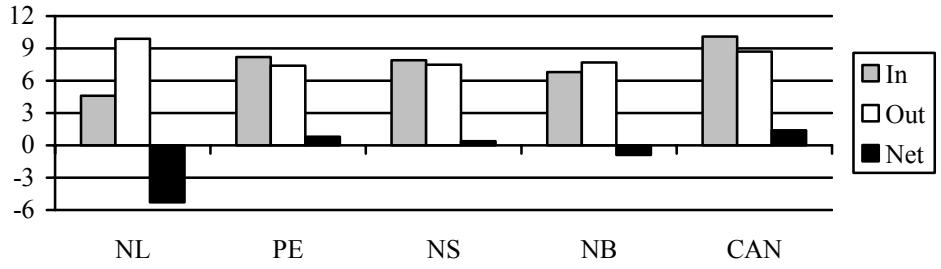
Province of origin	**Most common inter-provincial migration destinations (2000)**		
	1st	**2nd**	**3rd**
NL	Ontario	Alberta	Nova Scotia
PE	Nova Scotia	Ontario	New Brunswick
NS	Ontario	New Brunswick	Alberta
NB	Ontario	Nova Scotia	Quebec

Source: Statistics Canada (2001l). *Report on the demographic situation in Canada 2001.* Ottawa: Author.

2.5.1.3 Rural Focus

With the exception of Newfoundland, the Atlantic Provinces have relatively lower rates of out-migration from its Rural and Small Town areas compared to the national average (see Figure 2.16 and Table 8 in Appendix B). However, none of the Atlantic Canada provinces reports in-migration rates exceeding the national average. Therefore, net migration for Rural and Small Town areas in Atlantic Canada is lower than net migration for Rural and Small Town areas in Canada. Specifically, Newfoundland fared relatively poorly reporting Rural and Small Town population loss through migration (-5.3). Rural and Small Town areas in Prince Edward Island, Nova Scotia and New Brunswick report low overall net migration rates (0.9%, 0.4% and -0.9% respectively), indicating that migration did not have a significant positive or negative effect on their Rural and Small Town populations. The same historical patterns within each province are evident from 1966 onward (Rothwell, Bollman, Tremblay & Marshall, 2002).

Figure 2.16: Percent of Out-Migration from Rural and Small Town (RST) Areas in Atlantic Canada, by Province and Canada, 1991 to 1996



Source: Rothwell, N., Bollman, R., Tremblay, J. & Marshall, J. (2002c). Migration to and from rural and small town Canada. *Rural and Small Town Analysis Bulletin, 3(6).* Ottawa, ON: Minister of Industry.

Median age data of Census Metropolitan Areas in Atlantic Canada support the pattern of intra-provincial migration of persons from rural areas to urban centers (see Tables 2.3 and 2.8). For all three Atlantic Canadian Census Metropolitan Areas, the overall median age of the population is lower than its province's rural and small town median age. As well, the rate of change between 1996 and 2001 of the median age of CMAs is lower than the rate of change for its province's rural and small town median age.

Table 2.8: Median Age of Census Metropolitan Areas (CMA) in Atlantic Canada and Canada, 1996 and 2001

	1996	**2001**	**Difference in age**	**% Change**
St. John's	33.3	36.3	3.0	9.0
Halifax	34.3	36.6	2.3	6.7
Saint John	35.1	37.9	2.8	8.0
Canada All CMAs	35.1	37.0	1.9	5.4

Source: Statistics Canada. (2002l). *Profile of the Canadian population by age and sex: Canada ages, 2001 Census analysis series (Catalogue No. 96F0030XIE2001002).* Ottawa: Author.

2.5.2 Natural Increase

As previously stated in section 2.3, the rate of natural increase is relatively low and declining in provinces in Atlantic Canada (3 per 1000 in 1996 to 1 per 1000 in 2000) and at the national level (5 per 1000 in 1996 to 3 per 1000 in 2000), but remains the main factor in population growth in the region. When examining the components of natural increase - birth rates and death rates - the difference in these rates is relatively low in all provinces in Canada, but is notably low in Atlantic Canada (see Figures 2.17-2.22 and Table 9 in Appendix B). Between 1996 and 2000, there is a direct inverse relationship between each Atlantic province's respective birth rate and death rate. As birth rates decreased, death rates increased resulting in declining natural increase. Nationally, however, birth rates are the key factor contributing to a declining natural increase. Figure 2.17 demonstrates that birth rates decreased from 12.3 in 1996 to 10.1 in 2000, while death rates hovered around 7 per 1000 (7.2 in 1996 and 7.3 in 2000).

Figures 2.17-2.22: Rate of Natural Increase (NI), Birth Rate (BR), Death Rate (DR) in Atlantic Canada, by Province, Ontario and Canada (per thousand), 1996 through 2000

Figure 2.17: CAN

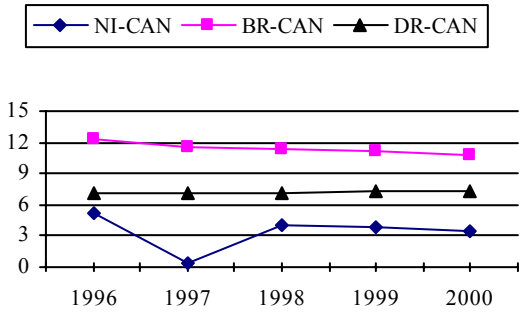


Figure 2.18: NL

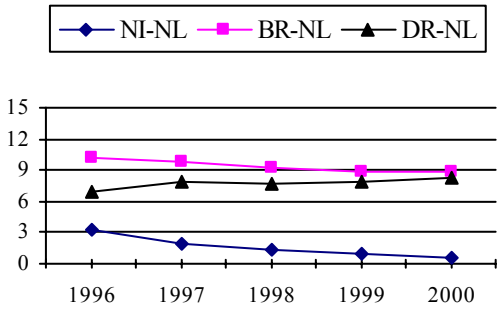


Figure 2.19: NS

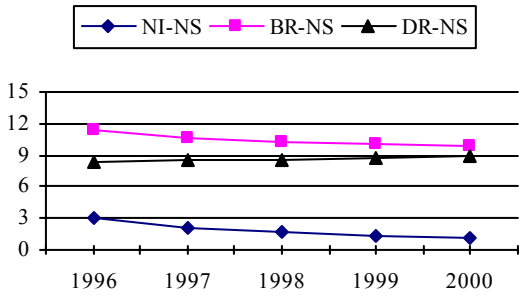


Figure 2.20: PE (rural proxy)

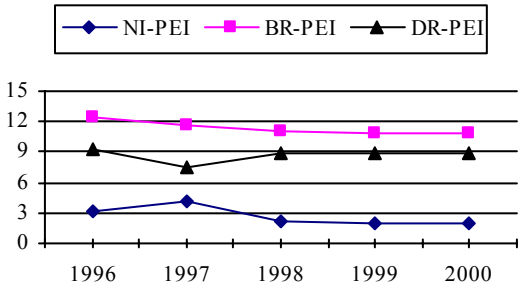


Figure 2.21: NB

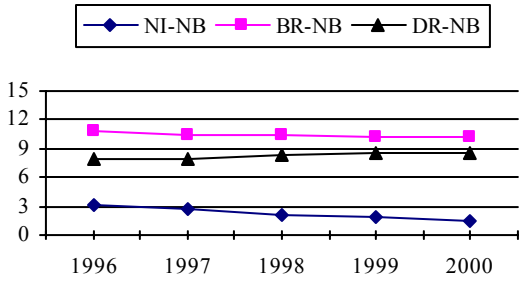
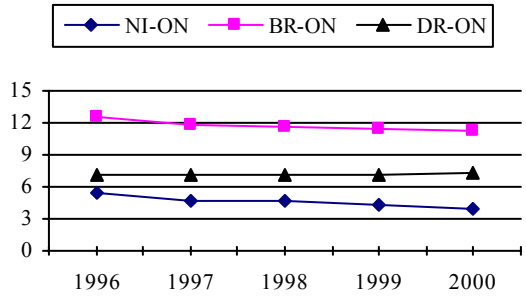


Figure 2.22: ON (urban proxy)



Source: Statistics Canada (2001). *Report on the demographic situation in Canada 2001*. Ottawa: Author.

2.5.2.1 Rural Focus

Specific data are not available to analyze natural increase by rural areas. However, Prince Edward Island may be used as a proxy for a rural Canadian province and Ontario as a proxy for an urban province in Canada to test the hypothesis, generally speaking, that death rates are the key factor driving population change in rural areas. Figures 2.20 and 2.22 (also see Table 9 in Appendix B) demonstrate that while birth rate patterns are similar for these rural and urban proxies, death rates differ. Death rates are two to three percentage points higher in Prince Edward Island (rural) than Ontario (urban), thereby being the key contributing factor in smaller natural increases in rural areas.

2.6 Gender Differences in Helping Behaviors in Rural Atlantic Canada

In the face of population change, individual helping behaviors may be a strategy to support and maintain the health of rural communities. To understand helping behaviors both provincially and in rural Atlantic Canada overall, the 1996 and 2001 Census data for unpaid work were analyzed to identify the extent of helping behaviors at a sub-provincial level. Gender differences within helping behaviors are also reported.

In 2001, 88% of rural Atlantic Canadians performed unpaid housework for others, an increase of 2% from 1996. These proportions, however, are slightly lower than national averages (see Figures 2.23-2.28 and Table 10 in Appendix B). [12]

Figures 2.23-2.28: Percent of Men, Women and Total Rural Canadians 15 Years and Over Who Spend Time Doing Some Unpaid Housework, by Province, Atlantic Canada and Canada, 1996 and 2001

Figure 2.23: NL

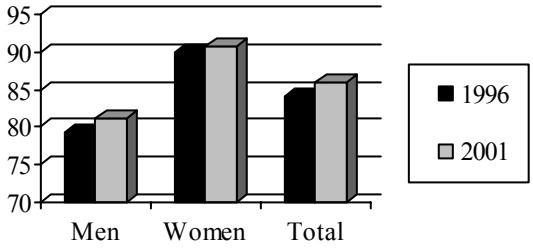


Figure 2.24: PE

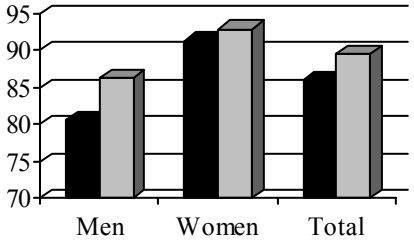


Figure 2.25: NS

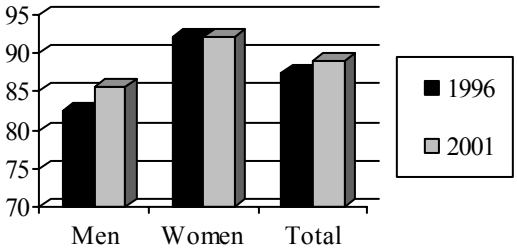


Figure 2.26: NB

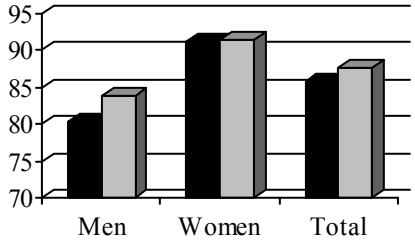


Figure 2.27: CAN

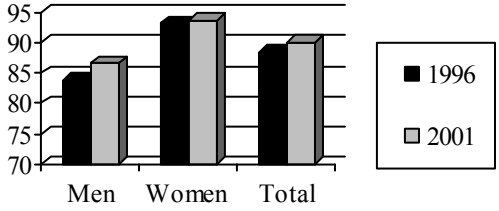
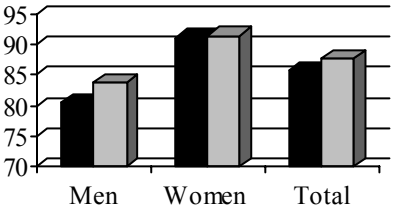


Figure 2.28: AC



At the sub-provincial level, more rural women perform unpaid housework for others than do rural men. In 1996 and 2001, on average, more than 90% of rural Atlantic Canadian women provided unpaid housework compared to 80% and 84% of rural Atlantic Canadian men. This marked gender gap, however, narrowed between 1996 and 2001. For example, 81% of rural men in Prince Edward Island in 1996 provided some assistance compared to 86% of rural PEI men in 2001 while the proportion of rural women changed slightly from 91% to 93%. In Nova Scotia and New Brunswick, the proportion of rural men providing assistance increased four percentage points in each province, while the proportion of rural women remained constant. In Newfoundland and Labrador, where the gender gap is greatest, the gap decreased by 3% for men and 1% for women.

Differences between men and women are intensified by the number of hours spent providing unpaid help (see Table 10 in Appendix B). A greater proportion of men in 1996 and 2001 did five to fifteen hours of unpaid housework per week than did women (31% and 32% compared to 24% and 26%). However, in 1996 women were more than three times more likely to be doing sixty or more hours of unpaid housework per week than were men (11% compared to 3%) and more than twice as likely in 2001 (10% compared to 4%).

In 2001, one fifth of rural Atlantic Canadians provided unpaid care or assistance to seniors, an increase of 1% from 1996 (see Figures 2.29-2.34 and Table 11 in Appendix B). These proportions are on par with national averages. Similar to unpaid housework, women are more likely to provide this type of assistance than men. In 1996 and 2001, on average, more than 20% of rural Atlantic Canadian women provided unpaid care or assistance to seniors compared to 15% in 1996 and 17% in 2001 of rural men. These trends are similar with national rural counterparts. Unlike general unpaid housework, the gender gap between 1996 and 2001 did not narrow for rural men and women in Newfoundland and Labrador, Nova Scotia and New Brunswick. Prince Edward Island, however, is an exception. This province, which experienced a nine percentage point difference in 1996, reported a six percentage point difference in 2001 between men and women. Moreover, in 2001, the proportion of rural men and rural women providing unpaid care or assistance to seniors was the highest in the region and exceeded the national average. Differences between men and women are intensified by the number of hours spent providing unpaid care or assistance. In 2001, almost double the proportion of Canadian women than men provide five to nine (6% compared to 3%) and ten or more hours (4% compared to 2%) of unpaid assistance to seniors (see Table 11 in Appendix B).

Figures 2.29-2.34: Percent of Men, Women and Total Rural Canadians 15 Years and Over Who Spend Time Providing Some Unpaid Care or Assistance to Seniors, by Province, Atlantic Canada and Canada, 1996 and 2001

Figure 2.29: NL

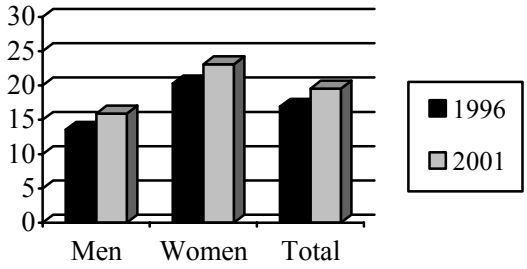


Figure 2.30: PE

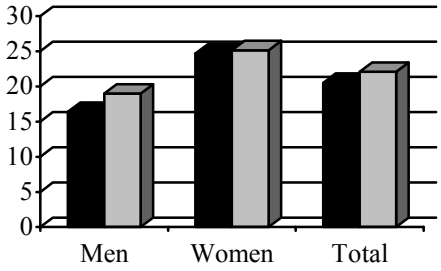


Figure 2.31: NS

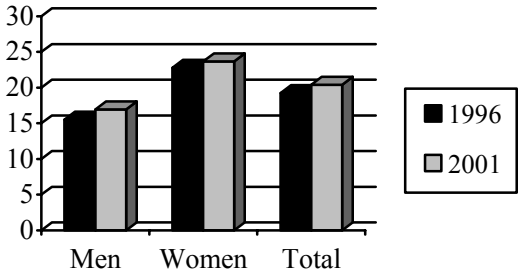


Figure 2.32: NB

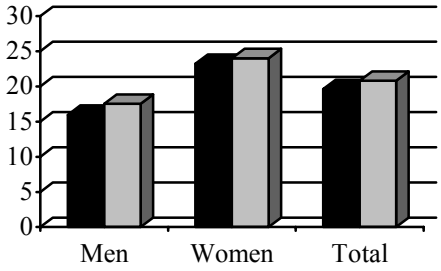


Figure 2.33: CAN

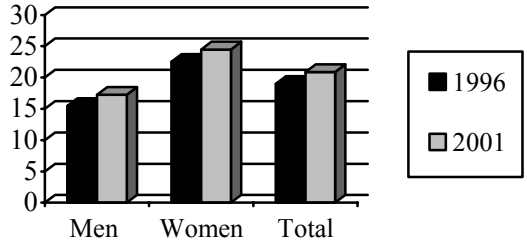
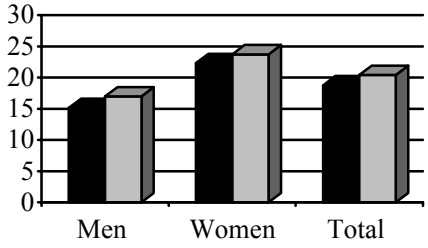


Figure 2.34: AC



The proportions of rural Atlantic Canadian men and women providing unpaid child care are similar to the national picture (see Table 12 in Appendix B). These numbers have not changed from 1996 to 2001. Gender differences do appear when considering the number of hours spent participating in unpaid child care. For example, in 1996 and 2001, women consistently provided a greater proportion of child care than men, particularly when considering those who provide 60 or more hours of unpaid child care (12% compared to 3% in 1996 and 12% compared to 4% in 2001). However, this gender gap appears to be decreasing slightly, with the percentage of men providing 60 or more hours of unpaid child care increasing from 1996 to 2001.

2.7 Summary

Almost half of the Atlantic Canadian population lives in rural areas compared to one-fifth at the national level. The data presented in this section demonstrate that the rural experience in Atlantic Canada differs from rural areas throughout Canada and varies at the sub-provincial level within the region. Rural Atlantic Canadians report higher unemployment rates and higher incidence of low income than their national counterparts. Within the region, Newfoundland and Labrador reports the highest unemployment rate, highest rate of low household income and a negative population growth rate.

A number of population trends are changing the face of rural Atlantic Canada. Specifically, Atlantic Canada is greying at a faster rate than other provinces. While immigration accounted for the majority of the population growth at the national level, immigration has minimal effect in Atlantic Canada. Internal migration and a declining rate of natural increase (declining birth rate and increased death rate) contribute to population change in the Atlantic region. Specifically in rural areas, higher death rates account for a declining rate of natural increase. While it is believed that the rural to urban migratory flow is strong, the movement of rural persons in Atlantic Canada to urban centres is not consistently strong throughout the whole region. Certain urban centers in Atlantic Canada are experiencing strong growth while others are not.

In rural Atlantic Canada, unpaid assistance to others is strong. While the proportion of rural Atlantic Canadians providing unpaid housework is slightly less than their national counterparts, the proportion of rural Atlantic Canadians who provide unpaid care or assistance to seniors is on par. Rural residents in Prince Edward Island report the highest percentage of their population providing care to seniors, compared to regional counterparts. Moreover, gender differences exist in relation to such unpaid work. Throughout rural Atlantic Canada, and rural Canada generally, a greater proportion of women than men provide such assistance and devote more hours to this assistance.

Rural areas in Canada are distinctive from their larger urban centers and even amongst themselves they are not homogeneous. Demographic trends are a concern for rural areas throughout Canada because these trends are central to rural development, services and supports. Particularly in Atlantic Canada where a greater proportion of its population lives in rural areas, compared to the national experience, understanding key demographic features is important. Population shifts in growth or composition of rural Atlantic Canada have far-reaching social, economic and policy implications.

ENDNOTES

[1] Report on the Demographic Situation in Canada 2002 is scheduled to be released in late July 2003.
[2] 1996 are actual; 1997 are final post-censual estimates; 1998-2000 are revised post-censual estimates as of January 1, 2002.
[3] This analysis uses the census rural definition which includes small towns, villages and other populated places with less than 1,000 persons, rural fringe of CMA's and CA's, agricultural lands and remote and wilderness areas.
[4] 1996 data are adjusted to reflect boundary changes when necessary from actual 1996 Census reports.
[5] The Rural and Small Town definition (RST) refers to the population outside the commuting zone of larger urban centers (10,000 or more).
[6] Labour Force Survey data for years 1996 to 2000, core-age working population – 25 to 54 years.
[7] This analysis uses OECD regional types (predominantly urban regions, intermediate regions, predominantly rural regions) and Statistics Canada's regional types (rural metro-adjacent regions, rural non-metro-adjacent regions, and rural northern regions).
[8] Incidence of low income is the proportion or percent of members of economic families or unattached individuals who are living below Statistics Canada measure of low income (LICO). LICO refers to an income threshold below which an economic family is likely to devote a larger share of its income to the necessities of food, shelter and clothing than an average family would. Specifically, the threshold is defined as the income below which a family is likely to spend 20 percentage points more of its income on food, shelter and clothing than an average family. LICOs are established using data from Statistics Canada's Family Expenditure Survey, now known as the Survey of Household Spending. Economic family refers to a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law or adoption.
[9] This finding should be interpreted with caution. Because the rural definition designates all of Prince Edward Island as rural, differences in economic prosperity between Prince Edward Island's CMA and CA urban centers - Charlottetown and Summerside - may be masked.
[10] Figures not appropriate or not applicable, all of Prince Edward Island is designated as a predominantly rural region using the definition applied.
[11] This analysis uses the Census Division (CD) classified into five groups: predominantly urban regions (less than 15% of the population resides in rural communities where a rural community has a population density of less than 150 persons per square kilometer); intermediate regions (15% to 49% of the population lives in a rural community); Rural metro-adjacent regions; rural non-metro-adjacent regions; and rural northern regions.
[12] The Rural and Small Town definition (RST) refers to the population outside the commuting zone of larger urban centers (10,000 or more).

Section Three
Population Change in Rural Communities- Effects on Health Status and Health Services

3.1 Introduction

This study examines the impact of population change on the health of rural Canadians and specifically rural Atlantic Canadians. The following literature review assembles a selection of literature pertinent to how population changes, rurality and health status/services/supports intertwine. It provides a background for exploring how the health of rural communities is affected by population change and how these communities maintain their health status under such circumstances. This literature review describes distinct differences in health status and services between rural and urban populations, in part due to demographic differences between rural and urban populations. Factoring in the effects of population change with demographic factors makes the picture more complex. This literature review demonstrates the need to consider rurality as a possible determinant of health, an idea supported by *Building on Values: The Future of Health Care in Canada* (Romanow, 2002) and Dixon and Welch (2000).

3.2 Methodology

Published studies were obtained through a key word and author search of databases for the period 1996 to 2003 (see Appendix C). Very little research was available that explores the impact of population decline on the health status and services in rural areas in Canada.[1] For this reason, the literature search and review was broadened to include rural/rurality and health services/health status key words (see Appendix C). In addition to database searching, unpublished literature was located primarily via World Wide Web searches with relevant key words, university websites, and on-line databases. Previously published research conducted by the investigators was also included. On the whole, minimal published research was available that focused on Atlantic Canada specifically.

3.3 Conceptual Framework

The concepts of "rural" and "rurality" are used in various ways in the literature. One longstanding debate is whether "rural" is a geographical concept, a location with boundaries on a map, or whether it is a social representation, a community of interest, a culture and way of life (Halfacree, 1993; Shucksmith, 1994, as cited in du Plessis et al., 2002). For the most part, the understanding of the rural experience from the literature is in the context of the rural-urban divide. Therein, the notion of distinctive social and economic conditions of rural communities emerges. For example, seasonal variability and limited employment opportunities in rural areas have an impact on employment rates which in turn influences personal and household income. In rural areas there are marked gender differences in terms of labour force participation and unemployment rates. These differences perpetuate the traditional gender division of labour in both the private and public spheres. Moreover, rural areas that are dependent upon seasonal employment are particularly vulnerable to a migratory population. A community that does not maintain a stable population may have difficulty providing sufficient social and health services, since funding for such amenities are commonly based on population counts. The spatial vastness

of rural areas contributes to distinctive social and economic conditions as well. While some rural communities are small villages and towns with higher concentrations of people, surrounding areas are less densely populated. Access to essential services may be impaired due to lack of transportation options and unfavourable road conditions for individuals living in the countryside and remote areas. Another distinguishing factor of rural communities is age distribution. Small towns and villages with populations between 1,000 and 2,499 persons have a particularly high proportion of elderly residents (Hodge, 1993). This population distribution presents unique challenges in ensuring adequate social and health services. Greying rural communities may also face challenges in terms of the availability of informal supports. As education and employment opportunities in urban centres draw rural youth, normative family-helping in rural areas may be hampered making elderly family members more reliant on formal services. While the rural-urban divide approach has substantiated a distinctive rural experience, this conceptualization remains problematic because it does not allow for a comprehensive understanding of the variation amongst rural areas. The research presented here employs a broad conceptualization of rural that incorporates a geographic definition of size and distance.

The research presented here also uses the World Health Organization's concept of individual health, defined as "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" (WHO, 1978); this definition of health continues to be utilized by the Canadian government (See Health Canada, 2002a, 2003 as examples). According to the definition, the health of an individual is believed to be influenced by social, physical, environmental, political and economic contexts. This approach reduces the emphasis on biological explanations of health and is outlined in the Determinants of Health framework (Health Canada, 2002b; Rosenberg & Wilson, 2000). The determinants of health include: income/social status, social support networks, education, employment/working conditions, social environments, physical environments, personal health practices/coping skills, healthy child development, biology/genetic endowment, health services, gender and culture (Health Canada, 2002b).

The use of the World Health Organization's concept of individual health in conjunction with the use of the Determinants of Health framework broadens of the definition of health to include communities. Ryan-Nicholls, Racher, Gfellner and Annis (2000) focus on developing a common meaning for the concept of community health, recognizing the shift toward an ecological perspective of health. Health and community are, by these authors' constructions, both dynamic and fluid concepts rather than static ones. Communities can be understood as being delineated by spatial or non-spatial boundaries, within which groups of people recognize their common identities. Based on these conceptual meanings, Ryan-Nicholls and colleagues (2000) suggest "*community health* refers to the ability of a community to balance between various barriers to health (unemployment, poverty, lack of fresh produce) and those things that encourage health (medical services, sport facilities, clubs)" (p. 7, emphasis in original text). They also include McMurray's notion of community health in their exploration of terms; the concept of community health relies on reciprocal relationships among people with their environment (McMurray, 1999; as cited in Ryan-Nicholls et al., 2000). The Ministerial Advisory Council on Rural Health (2002) suggests that healthy communities have safe environments, diverse economies, sustainable ecosystems, appropriate health services access and encourage citizen participation. Bruce and Black (2000) consider healthy communities to be those with the ability to control and manage

changes. Community health, a dynamic concept, is influenced by the social and economic conditions affecting the well-being of communities and shaped by social processes such as meaningful citizen participation, intersectoral collaboration and equity (WHO, 1978). For the purposes of this study, community health is conceptualized as both spatial and non-spatial entities with which persons identify based on individual ideas about their membership and affiliation.

3.4 Health Status and Rurality

A number of factors affect the health status of persons in rural areas. These include gendered division of labour, distance to amenities and environmental and working conditions. Pong et al. (2002) identify existing Canadian research that demonstrates differences in the health status of rural Canadians: for example, lower health status as one moves from urban areas to more remote areas of the country, a decreased life expectancy in remote, northern regions and higher rates of long-term disability and chronic illness in rural areas. The Northern Secretariat of the British Columbia Centre of Excellence for Women's Health (n.d.; herein the Northern Secretariat BCCEWH) outline many issues affecting the well-being of rural and remote women, a vulnerable group in rural communities. This document refers to "the frontier spirit", a mythology of the Canadian north, which embraces hardship and independence, glorifying social circumstances that can undermine women's health. Leipert and Reutter (1998) suggest that "…right-wing politics, support for the nuclear family, hard-working individualism yet inter-dependence with others, and self-determination and self-reliance" (p. 577) are the values upon which remote communities were founded. Resilience is presented as a rural community coping strength in a study of the effects of hospital closures in Saskatchewan (Liu, Hader, Brossart, White & Lewis, 2001). Emotional and social barriers can exist for women in these communities, relating to marginalization by the dominant culture and traditional gender ideologies. Economic factors can play a significant role; communities reliant on seasonal employment have higher rates of domestic violence, depression and stress during the unemployment part of the cycle (Northern Secretariat BCCEWH, n.d.; Leipert & Reutter, 1998). Others suggest that rural traditionalism may translate into increased expectations that women in rural areas provide care, further perpetuating women's position in traditional caregiving roles (Keefe, 1999).

St. John, Havens, van Ineveld, and Finlayson (2002) examined rural and urban differences in health status of elderly Manitobans. While rural and urban elders self-rate their health status similarly, "…rural elderly had very slightly higher rates of disability than urban elderly" (p. 92). Rural elderly are more likely to be satisfied with their health compared to their urban cohort (St. John et al., 2002). Mainous and Kohrs (1995) found that rural American elders had poorer functional abilities than their matched urban counterparts but self-rated their health similarly. St. John, Havens, van Ineveld, and Finlayson's (2002) finding, that rural elderly self-report similar levels of health as urban elderly, is in conflict with Eggbeen and Lichter's (1993) American study; St. John and colleagues defend their results, suggesting that their study's control of the confounding variables of education, age, and gender and/or a fundamental difference in the perception of health between rural Canadians and Americans may in part or wholly explain these conflicting results. They raise concerns that "…rural seniors may have lower expectations of health than their urban counterparts" (p. 92) as rural elderly were more likely to be disabled but self-rated their health similarly, and discuss the implications that this could have on evaluations of patient's satisfaction with health care services if self-rated satisfaction of health is relied on heavily. One major limitation of both St. John, Havens, van Ineveld, and Finlayson's (2002) and

Mainous and Kohrs'(1995) analyses is that they rely on physical/functional abilities as the only factor determining one's health, which is a limited use of the Determinants of Health framework.

Liu, Hader, Brossart, White and Lewis' (2001) study of the impact of rural hospital closures following provincial health care restructuring on health status, access to care, and viability of rural communities compared rural communities that never had a hospital, those that still have a hospital, and urban areas, to communities that lost their hospitals through restructuring. Comparison communities were matched by community size, population density, and elderly dependency ratio; all rural communities in the community groupings experienced population loss. Residents in the communities with hospital closures report that the closures did not adversely affect their health, which corresponded to mortality data that demonstrated the strongest improvement in mortality rates in the closure communities. Individuals living in two communities that adapted particularly well to hospital closures perceived that "…strong community leadership, development of widely accepted alternative services, and local support, including [that of] physicians, for doing things differently" (p. 1802) were major factors in their successful transitions following restructuring of health care services.

Family dynamics affect the health of individual members; evidence does exist that rural location itself can influence familial relationships. In their research exploring the impact of distance to treatment facilities on family relationships, Yantzi, Rosenberg, Burke and Harrison (2001) note that families caring for a chronically ill child who had to travel more than 80 kilometres for treatment experienced significant declines in family relationships compared to those families traveling less than 80 kilometres. Specifically, family support, harmony and communication problems were exacerbated in families dealing with distance for treatment; these concepts were measured by the Feetham Family Functioning Survey (FFFS) and the Questionnaire on Resources and Stress (QRS) two weeks prior to and three months following a child's hospitalization. Yantzi and colleagues (2001) suggested that use of these outcome measures were appropriate as they target the subjective impacts of caring for chronically ill children on families.[2]

Joseph and Hollett (1993) provide another example of the effects of place on health. Noting that the incidence of mental illness is higher in rural areas, Joseph and Hollett conclude that mental illness is more prevalent in communities with older populations, higher percentages of widowed people, poorer housing quality, and higher unemployment rates.

3.5 Health Services and Rurality

Access to and utilization of health services is affected by rural geographical location alone. Rosenberg and Hanlon (1996) examined this phenomenon in Canada by measuring utilization rates of general practitioners, specialists, emergency services and hospital admissions across several health service environments. They developed the concept of health services environments utilizing five categories delineated along lines of population density and locally available services. "Moving along the continuum of health service environments, there are fewer general practitioners, specialists, hospital nursing full-time equivalents, and hospital beds, population densities decline and the level of rurality increases" (p. 981). Those at the extreme rural end of the continuum were the least likely to see specialists, to be admitted to hospital, or visit emergency departments, even when age, sex, health, and income status were controlled for. For

instance, in Nova Scotia, the wait list times for mammogram screening are typically longer for rural residents than their urban counterparts (Colman, 2000).

Rosenberg and James (2000) note that medical service utilization is affected by many factors, several of which have little to do with health status. These include availability of hospital beds and physician preferences (for admittance to hospital), new technologies and surgical procedures, policy changes, and societal expectations (where circumstances once assumed to be part of normal aging are now areas requiring medical intervention). The Northern Secretariat BCCEWH (n.d.) adds many more factors to this list. The population base of many rural areas of Canada is considered inadequate, using a costs/benefits analysis to retain services and specialists, but financial, geographical and physical barriers may limit the ability of rural people to access those services and specialists in urban areas. For example, social service policies in British Columbia do not consider travel costs for childbirth as an "unforeseen" medical expense for rural residents, so no compensation is provided for this travel, even though there are no local resources for childbirth. Recruitment and retention of health care professionals is an ongoing problem for many rural areas; related to this are issues of frequent changes in health care workers. If health professionals working in rural areas hold discriminatory attitudes against some residents, there are few alternatives available (Northern Secretariat BCCEWH, n.d.).

Ng, Wilkins, Pole and Adams (1999) found that in 1993, rural and small town Canada had less than half the physicians per 1,000 when compared to urban centres. Average distance to a physician in rural and small town Canada was ten kilometres, compared to less than two kilometres in urban centres. Although these statistics cannot address whether distance to care is a deterrent to accessing services, transportation to services does emerge as a concern in Bruce and Black's (2000) longitudinal study regarding aging in rural and small town Canada. They noted increasing concerns of rural elderly about meeting their medical needs on limited budgets with the current shift to centralization of services. Rosenberg and Moore (1997) found that people over 75 years of age and women access general practitioner services more frequently than other groups. These findings have significant implications for rural Canadians, where there are less than one half the physicians available to serve these communities with, on average, older residents than urban Canada.

In rural areas, formal service availability also affects service use in less direct ways. Blieszner, Roberto and Singh (2001/2) noted that factors such as economic deprivation, geographic isolation, and limited health service infrastructure affect availability of formal services. In their comprehensive study, several key differences emerge among rural elders who rely either on formal only, informal only, or a combination of informal and formal supports to meet their needs. "The elders who depended only on family caregivers had the least education, were least likely to live alone, and were most likely to be married" (p. 111). This group were also the "…least likely to endorse use of community services and most likely to hold expectations for family care of older members" (p. 111). Those reliant solely on formal support services were most likely to live alone, to have higher educational attainment, and to self-assess their quality of life and health status positively. They were the least likely to endorse familial responsibility. The services this group receive generally relate to environmental maintenance, not assistance for personal care. Those who relied on both informal and formal support systems have the highest proportion of negatively assessed health and tended to have more chronic health problems. Like the formal

service users, they tended to live alone and were the least likely to be married. In rural environments where formal service availability is limited and declining due to restructuring of health care services, subgroups within the population needing support may be affected disproportionately. Blieszner, Roberto and Singh (2001/2) did not try to infer causality from this cross-sectional study between attitudes towards formal services and actual utilization. Some rural New Zealand elders in Keeling's (2001) study clearly stated their resistance to relying on family for informal support, equating this with dependency. Keeling suggests that these beliefs may be a way that elders cope with the reality of significant geographical distance from their children.

Chalmers and Joseph (1998) also write of rural elderly in New Zealand, exploring the expressions of "otherness" and "difference" used by elders aging in their rural communities. They contextualize their analysis by outlining the national perspectives on the welfare state over the lifespan of the current day elders in their study. The present day elderly in New Zealand live most of their lives working within a system that promises universal pension and health care for all: "…a 'cradle-to-grave' social welfare environment…" (p. 158). These now elderly people contributed to national pension schemes throughout their working lives, but their access to these same benefits has eroded. One elder said, "The Government is not sticking to its promises of any sort – they tell you one thing and do another" (p. 162). As personal support networks have declined, so has the quantity and quality of state supports for these rural New Zealand elders. Chalmers and Joseph (1998) argue that the perspectives of the elderly residing in rural communities must be understood in this light. The observations of Liu, Hader, Brossart, White and Lewis (2001) uncovered a similar vein of resentment regarding hospital closures and other withdrawal of government support; while the community members acknowledge that the closure of the local hospital had not adversely affected their health, they continue to resent how the decision to do so was made.

The literature notes that barriers to health services in rural areas can be compounded by attitudes or stigmas about diseases and concerns regarding confidentiality. Morgan, Semchuk, Stewart and D'Arcy (2002) examine the barriers to formal service use by rural families caring for relatives with dementia. Both dementia and mental illness diagnoses are stigmatized; these stigmas were found to have both direct and indirect impacts on family use of formal services, including those designed to support the caregivers. Even though family members were aware that home care workers know that people with dementia often behave in inappropriate manners, they were hesitant to accept formal home care support. Interactions with the home care worker in situations outside of formal service (e.g., through religious communities) compounded this effect, and spurred a sense of both a lack of privacy and concerns regarding confidentiality. The participants in this study also raised issues regarding the diagnostic abilities of general practitioners in rural areas, and relate these concerns to the negative effects of delays in diagnosis on treatment and caregiving stress and strain. Roberts and Falk (n.d.) raise some of these same issues in their study of rural Manitoba: they cite both stigma and community attitudes/biases as problematic in accessing services. These authors add that the personal attitudes of health providers can also create barriers to accessing care or health information. Referrals for abortion in rural communities illustrate this point: some women interviewed in Roberts and Falk's (n.d.) study expressed concern that pro-life beliefs held by physicians led to refusal to refer women for abortions. This is particularly problematic in rural areas where another physician may not be available.

In addition to formal health services, family and friends also contribute informal health services in the community. In some cases, the provision of informal services is a reflection of changes in access to formal services as a result of provincial health care restructuring. Yet, as seen in Section Two, much of the informal care in rural areas is provided by women. Governmental withdrawal of formal support services and the shifting of hospital-based to community-based services rely on the "… [patriarchal] societal expectations stemming from the casting of women into the traditional 'nurturer' role" (Hallman & Joseph, 1999, p. 400). Hallman and Joseph (1999) also write that the contributions of familial caregivers and willingness to travel to provide informal support to elders are gendered. "Women demonstrate greater engagement with caregiving and more extensive commitments to travel in order to provide assistance. This 'distance-defying' behaviour translates into the use of residential relocation as a means of modifying time-space in order to improve caregiving provision" (p. 398). The same authors suggest that the notion of the middle-aged as the "sandwich" generation (that is, caregiving to two different generations simultaneously) holds some validity if a gender lens is applied to the analysis. They suggest that women are likely to be "sandwiched", while "…men seem to be more able to 'draw a line in the sand' when it comes to these additional demands on their personal and family time" (p. 406).

3.6 Health, Social Support Needs and Rurality

Age has an obvious effect on health and social support needs, especially when combined with living arrangements (Glasgow, 2000; Chen & Wilkins, 1998; Hays, 2002). Glasgow (2000) compared patterns of caregiving for rural versus urban American elders, and notes that non-metropolitan elderly were "…more likely to live alone …than were their metropolitan counterparts" (p. 5). Hays (2002) did an extensive literature review on the effects of living arrangements on health status in later life. She combined the evidence that older women are more likely to live alone than older men, due to a longer life span, with supporting evidence that living alone is associated with a higher degree of unmet needs. Hays (2002) noted that living alone is correlated with more reliance on formal care systems, while informal care reliance is best predicted by marital status and gender. Hays' (2002) analysis of the available literature did not discuss the effects of geographic location, population density or dynamics on health status.

The effect of age on formal support needs is tempered by proximity to kin. Keefe's (1999) analysis of the 1996 General Social Survey identified different predictors of the amount of assistance received by persons 65 years and over. Among rural elderly, age and number of children were predictors of the number of tasks with which one received assistance, noting that family support may be a mitigating factor in the amount of help elderly persons received in rural areas. Blieszner, Roberto and Singh (2001/2) integrated service use and avoidance theory with well-being and attitudinal variables among older rural American adults to develop key predictors for formal service use; they noted that rural elders were more likely to use formal services if they had completed higher education levels, had less familial contact and expressed a preference for formal supports.

Socio-economic status and education levels also affect the prevalence of health/social support needs. Chen and Wilkins (1998) looked at prevalence of needs, unmet needs and sources of support by social and economic characteristics. Prevalence of need for assistance with both instrumental and basic activities of daily living was greatest among those with lower socio-

economic status, with less than high school education, and to a lesser extent, among those who live alone. Unmet needs for assistance were greatest among those who live alone and senior women. Married women had higher unmet needs than married men. While this study did not consider rural-urban differences, the social and economic conditions that emerge typify rural areas.

Gender is an important determinant of health in relation to support needs. While socio-economic status, poverty, living arrangements, and geographic location affect health needs, certain subpopulations, disproportionately aggregated in rural areas, seem to have more challenges when accessing supports to meet their needs. Blakley and Jaffe (1999) combined a rural-urban analysis with socio-economic and gender analyses to argue that women in rural areas are particularly vulnerable. Ongoing socio-economic inequality is noted in Canada between women and men in addition to inequalities noted between rural and urban areas. In addition, dominant cultural understandings of gender roles place women in situations where they are often expected to absorb the repercussions of the shift to home-based care. Women, whether married or not, are more likely to report unmet needs (Chen & Wilkins, 1998); women have higher prevalence rates of impairments and poverty (Leipert & Reutter, 1998); those with lower socio-economic status have poorer health and more support needs (Roberts and Falk, n.d.; Hays, 2002). Women in rural areas are more likely than their urban counterparts to have fewer socio-economic resources and higher rates of poverty, and older women are more likely to live alone (Roberts & Falk, n.d.; Northern Secretariat of the British Columbia Centre of Excellence for Women's Health, n.d.; Leipert & Reutter, 1998).

3.7 Population Change and Implications for Health and Social Supports

Keeling (2001) outlined contextual factors contributing to elders' social networks in rural New Zealand that have relevance to Canada; out-migration of youth and working age adults due to employment and educational needs creates a disproportionate aggregation of the elderly in rural areas. Living in a rural, aging community implies an older support network, with attrition due to deaths of peers and out-migration (Keeling, 2001).

Bryant and Joseph (2001) describe population trends affecting rural Canada, emphasizing the effects of population aging and migration on rural areas. Rural communities typically have a higher proportion of people over 65 years of age; some elderly move to rural communities near expanding metropolitan regions upon retirement, while those communities in remote or hinterland areas have a higher concentration of persons over 65 years primarily due to out-migration of youth and farm-to-town migration. Bryant and Joseph (2001) acknowledge that population migration and aging in rural areas are "…related to the restructuring of economic activity (e.g. corporate restructuring, technological change) and services (e.g. health care), changing household values (e.g. living standards, family size), and expansion of metropolitan employment opportunities…" (p. 4). Population size is typically the primary distinguishing factor of rurality, and affects service availability and choice; however, urban proximity affects the convenience and availability of specialized services as well. Joseph and Martin-Matthews (1993) note that a rural community's experience of aging is shaped by three contextual factors: population size, urban proximity and local migration trends. Migration affects rural communities in different manners; some communities have aging populations primarily due to out-migration of younger inhabitants, while other communities attract older persons upon retirement (Joseph &

Martin-Matthews, 1993). Both articles suggest that these broad geographic factors affect communities and regions differently, a conclusion that has implications for social policies.

Population dynamics are frequently discussed in terms of "push" and "pull" factors. Wenger (2001) offered an overview of this concept and related push and pull factors to intergenerational relationships in rural areas. Push factors can be conceptualized as changes that trigger a re-evaluation of the satisfactory or unsatisfactory nature of current living conditions; these are events that compel a person to leave. Factors such as a sudden change in health status and lack of access to formal or informal health services may act as push factors for elderly to leave rural areas (Wenger, 2001). Pull factors relate to the attributes of a potential destination. Desire to live closer to family members, often children, may pull an elder to a new place of residence (Hays, 2002; Joseph & Hallman, 1996). Everitt and Gfellner (1996) explored elderly migration in a rural region of Manitoba. They distinguish between the migration of the "young-old", related to pull factors following retirement, and the "middle- and old-old", usually due to push factors fuelled by health or social support needs. Push and pull factors may be imposed, coercive, or voluntary; use of this framework to delineate among rural elders creates a more complex view of their migration. Everitt and Gfellner (1996) suggest that the decisions made by the elderly to move to or from rural areas may not be as crisis oriented as previously thought, where a health or financial crisis pre-empts the move. They found that many elderly people chose to move prior to experiencing a decline in health, anticipating the need for different or additional services in the future.

Blakley and Jaffe (1999) express their concern that women expected to take on caregiving duties are, on average, older and poorer with their own health problems due to the disproportionate number of elderly in rural areas. In addition, youth who remain in rural areas have a greater likelihood of providing care due to the higher proportion of elderly in rural areas. These expectations, informed in part by the concept of "idyllic" rural communities, develop within a changing rural context where the formal supports available are declining and population changes reduce available informal social resources (Blakley & Jaffe, 1999).

3.8 Population Change and Implications for Policy

Rural and urban are not dichotomous entities, and not all rural communities are the same; this acknowledgement that rural communities are quite diverse presses researchers and policy makers to consider rural communities in local and broader contexts (Romanow, 2002). Hodge (1993) discussed the role of local governments in Canada in supporting the aging rural population and explored the difficulty of creating supportive environments for health in rural places. Supportive environments for healthy aging include a variety of formal and informal supports, taking into account such factors as health care services, housing, transportation, and access to basic amenities and goods within the community. Municipal governments often have limited financial resources and no mandated role to address many of these health-fostering factors. Hodge (1993) concluded that both issues of material substance (such as housing and transportation) and issues of process (such as adequate provincial funding and reduced complexity/increased flexibility in provincial social programs) require attention in order to create supportive environments for healthy aging.

Rural population changes, driven by a multitude of factors, combined with social policy that often lacks a rural analysis, create vulnerable populations in rural communities (Romanow, 2002). Both the Northern Secretariat BCCEWH (n.d.) and the Ministerial Advisory Council on Rural Health (2002) suggest that a two-tiered health care system exists in Canada along rural-urban lines. "If there is two-tiered medicine in Canada, it's not rich and poor, it's urban and rural" (Health Canada, 1999; quoted in Ministerial Advisory Council on Rural Health, 2002). Health inequality is fuelled by more than just health service availability; this is precisely what the Determinants of Health framework assumes. However, some unique characteristics of rurality affecting the well-being of individuals and communities are not well conceptualized within the present framework utilized by Health Canada.

Understanding the importance of the rural experience from the perspective of the caregiver and the care receiver is important in the development of government policy (Keefe, 1999). In her analysis of rural-urban caregiving differences in the Canadian population, Keefe (1999) identified the importance of considering regional differences when interpreting policy. Her findings confirmed the integral effect of region in understanding caregiving relationships and the importance of policies that take this into account (Keefe, 1997). The need for less rigid, more ecologically-responsive social policy is illustrated by Campbell, Bruhm and Lilley (1998) who explored the support needs of selected female caregivers in rural Nova Scotia. The women in this study vocalize concerns with the inflexibility of health care system and social policies, ignoring the unique challenges of rural locations. For example, respite allocations for caregivers are four to eight hours per week. Living in rural/small town Canada often means traveling to nearby urban centres for amenities and goods. The travel time alone can consume this weekly respite allocation.

Blakley and Jaffe (1999) expressed concern about policy shifts toward home-based care in Saskatchewan, arguing that health policy is based on incorrect assumptions about rural environments. They highlight these assumptions: (1) rural families have strong intergenerational ties, with extended families living in close proximity; (2) rural families are believed to be propertied, financially stable, living in homogeneous communities; (3) rural communities are considered to be idyllic; and (4) rural communities are close-knit. They suggest that these assumptions allow governments to overlook the lack of basic amenities, services and supports and to ignore issues of isolation, geographic dispersal and rural depopulation, all of which decrease the available social supports and resources in rural communities. The implications of policy assumptions about rural areas are critical: if one argues that Canadian governmental social policy assumes freedom of choice and mobility, then the effects of living in a rural area are the compromise people make. This perspective ignores the fact that many people do not have much or any choice as to where they live (Rosenberg & Hanlon, 1996).

Given the distinctiveness of rural communities outlined in the literature, Dixon and Welch's (2000) suggestion that place of residence be considered within the context of the Determinants of Health framework must be considered. In their work, Dixon and Welch (2002) summarize the effects of rurality on the health status of Australians, describing the rural-urban differential in health status measures (such as ischemic heart disease), socio-economic status, the health of indigenous peoples (who disproportionately reside in rural areas), environmental, cultural and geographic access to services and psychosocial factors. This study, coupled with Pong's (2002)

discussion of health status in rural Canadians, provides evidence for this approach. If this approach is taken, the inherent recognition of the distinctiveness of rural communities will lead to more effective health and social policy.

3.9 Gaps and Limitations

Little Canadian research has been published to date that considers the impacts of population change within rural communities on health status and health services. Much of the research reviewed only applies to one or two of these factors, and can be tied together only tentatively. The available literature demonstrates that a disproportionate number of elderly persons live in rural areas in Canada. Inhabiting rural places creates some additional health stress in communities with aggregates of vulnerable people. This stress relates to many layers of rural life: individual factors, health services availability, socio-cultural expectations, social policy and welfare state restructuring. It is important to consider, however, the diversity of rural communities themselves, as Rosenberg and Hanlon (1996) did in their conceptualization of five different health service environments along a continuum. Not all rural places (by the definition of population less than 10,000 inhabitants) are the same; this makes generalization of results across rural communities difficult.

Much of the available literature relies on a conceptualization of health that reflects the absence of disease and/or disability, and looks at community health as the aggregate of the health status of individuals. This conceptual incongruence with the World Health Organization's definition of health occurs because of the difficulties in measuring the social and emotional aspects of well-being. Some of this literature does engage with a Determinants of Health framework, but develops some determinants to a lesser extent than others. Gender, one of the determinants of health, often refers to "women" as opposed to both women and men in the literature reviewed. Even when a Determinants of Health framework is applied, some determinants are not included without offering a rationale for their omission.

These limitations and gaps in the available research about how population changes, health status, services and supports and rurality reflect measurement difficulties, conceptual debate, and an overall lack of attention given to distinct rural issues. Pong, Pitblado and Irvine (2002) outlined concerns about the general lack of health indicators that can be used to describe community health in rural Canada and clarified both concepts and challenges to developing indicators. Their continued research in this area will be of value to future research on community health in rural areas.

3.10 Summary

According to the literature, rural communities have unique pressures and needs with regard to the health and well-being of their inhabitants, who are, on average, older, poorer, have less formal education and higher unemployment rates. Not all rural communities face the same pressures or have similar demographics due to different push/pull migration factors, but certain generalizations can be made.

Rural areas have higher proportions of elderly residents with higher support needs for maintenance of individual health status. Health care restructuring, with loss of some health

services, combined with lack of affordable transportation options, creates difficulty for some rural residents to meet their needs through formal systems. Other issues, specific to rural communities, add to the challenges for some people: lack of choice in health providers, concerns with confidentiality, and community attitudes can all deter an individual from accessing formal health services in rural areas.

There appear to be gender-specific stressors for rural residents that may be exacerbated by traditional gender roles in rural communities. Little of the available research considers how rural men's health is affected by gender ideology, but concerns about the effect of rurality on women have come to light. Some of the typical features of rural areas, such as seasonal employment and high unemployment rates, contribute to domestic violence and depression in these communities, disproportionately affecting women's health.

At a community level, the selective out-migration of younger rural community members and in-migration of retirees influences the availability of informal social supports. Those providing care to others tend to be older and in poorer health themselves. Those younger adults who remain in the community have a greater likelihood of providing informal care due to the higher proportion of elderly in rural areas.

The research reviewed in this section supports the guiding principles of Dixon and Welch's (2000) conclusion that rurality should be considered a determinant of health. However, in light of unique contextual factors in rural areas that affect health, positively and negatively, perhaps the determinants of health would be better viewed through a rural lens. Provincial governments create much of the social policy affecting rural communities; if policy lacks a rural-urban analysis, governments risk implementing policy that disadvantages rural communities that are already more vulnerable due to aging populations, lack of infrastructure and social services and generally poorer economic conditions. The Canadian Rural Partnership (2002) dialogue series regarding quality of life and Romanow (2002) both acknowledge that federal and provincial governments need to stop thinking that solutions will work equally well in rural areas and design social policy that is responsive to, rather than overlooks the needs of rural communities.

ENDNOTES

[1] The intention of this literature review was to examine Canadian research on the effects of population decline on health status and services in rural communities, but research from outside Canada was considered for inclusion. Research on these topics from developing countries was excluded due to concerns about transference to the Canadian context.

[2] The FFFS assesses household tasks, child care, marital relations, interactions with family and friends, community involvement and emotional support sources/amount. On this survey, respondents rate their current level and their ideal level for each of these dimensions, and discrepancies signify poorer function. The QRS is a multi-dimensional tool measuring the impact of caring for a chronically ill family member on caregivers and families; for the purposes of Yantzi and colleagues' study, six of the QRS factors were considered: personal burden for respondent, preference for institutional care, lack of personal reward, limits on familial opportunities, terminal illness, stress and life span care.

Section Four
Helping Relationships of Rural Canadians

4.1 Introduction

Understanding patterns of helping relationships in rural communities is important, particularly in light of population trends which leave many rural communities with a higher than average older population. Because of this changing rural landscape, one's ability to access necessary informal and formal supports may be affected.

The extent that rural Canadians engage in helping relationships, and in what context, is the focus of this section. The 1996 General Social Survey (GSS) is used to investigate the use of formal and informal supports by rural Canadians, in particular, those who give and receive assistance due to long-term health problems or physical limitations. These analyses address the extent to which rural Canadians give and receive both instrumental and expressive forms of assistance, in addition to addressing the relationships among support availability, health status, and other descriptive variables. The results of this analysis will facilitate an understanding between sources of support and the health of rural populations.

Specifically, the four objectives of this section are:

- To describe the helping relationships of rural Canadians in six key areas of assistance;
- To provide a comparative analysis of the differences in helping relationships of individuals residing in rural Atlantic Canada and rural non-Atlantic Canada;
- To identify factors associated with helping patterns of specific types of assistance; and
- To examine the nature of helping relationships among rural Canadians who give and/or receive assistance due to long-term health problems or physical limitations.

This section first examines general helping activities by all rural Canadians with respect to key areas of assistance – child care, household activities of daily living, non-household activities of daily living, personal care, checking up and emotional support. Following that is an examination of the helping relationships of rural Canadians who give or receive assistance because of long-term health problems or physical limitations.

4.2 Methodology

4.2.1 Survey Design

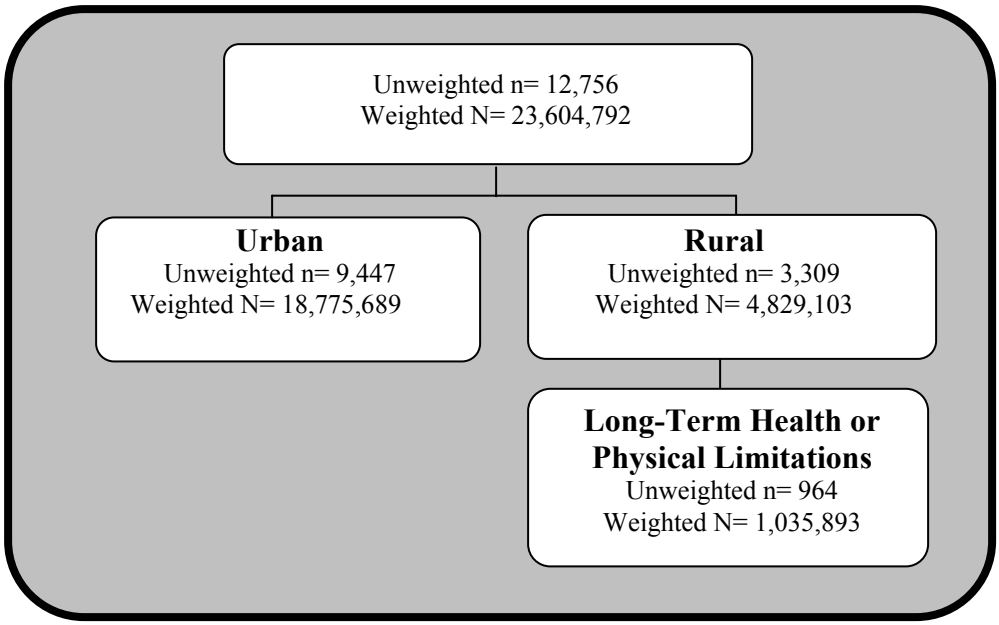
The data for this study are from the Statistics Canada's 1996 General Social Survey, Cycle 11: Social and Community Support. The objectives of this national survey were to learn about the types of assistance Canadians provide or receive and to understand the dynamic interplay between an individual's social network and help received and provided (Statistics Canada, 1998). Data were collected by telephone survey from individuals between February and December 1996 with an 85.3% response rate. The sample of households was stratified on the basis of geographic area and was selected utilizing random digit dialing techniques (RDD). The survey instrument

was comprised of two parts, one to collect basic demographic information and the second to gather specific information on helping patterns. A Computer Assisted Telephone Interviewing system (CATI), and Computer-Assisted Survey Execution System software (CASES) were used to administer the survey. The sample consists of 12,756 Canadians aged 15 and over living in private dwellings in the ten provinces.

Because of an interest in the social support needs of older Canadians, the survey design includes an over-sampling of the 65 and older population. Throughout this section, with the exception of the health status variable, the data are weighted to provide a representative analysis.

A sample of respondents who were rural residents in 1996 was extracted from the GSS file (Weighted N= 4,829,103; unweighted n= 3,309) (see Figure 4.1).[1] The variable available in the 1996 General Social Survey data file to measure geography uses the Census Rural definition. This definition includes all individuals living in the rural fringes of Census Metropolitan Areas (CMA) and Census Agglomerations (CA) as well as individuals living in rural areas outside of CMAs and CAs. In other words, the definition includes the population living outside an urban area (i.e. places with populations of 1,000 or more) or outside places with population densities of 400 or more people per square kilometre. For this research, all respondents from Prince Edward Island (unweighted n= 301) were coded as rural.[2] When weighted to the Canadian population, this rural sample represents 20% of the Canadian population. From the rural sample, a second sub-sample (Weighted N= 1,035,893; unweighted n= 964) was extracted to represent the rural respondents who gave and/or received assistance due to long-term health problems or physical limitations.[3] When weighted to the Canadian population, this sample comprised almost one quarter (21%) of the rural population.

Figure 4.1: 1996 General Social Survey, Unweighted and Weighted Sample Sizes



4.2.2 Measures

The extent and type of helping relationships Canadians engage in may be characterized by a number of factors. Proximity to supports such as children and/or formal services, employment and/or child care commitments and resources such as personal health, income and a partner may all influence the need for help and one's ability to help another. The General Social Survey provides a number of socio-demographic variables relevant to this research. To ease in the interpretation of findings, these independent variables are presented by four clusters – individual level, living context, human capital and region.

4.2.2.1 Independent Variables

A description of the cluster and how the variables were operationalized follows.

Individual Level

Sex, age and the health index comprise the individual level cluster of variables. These variables are at the individual level and provide a demographic description of the sample. These variables were operationalized as follows: *Sex* (men, women) and *Age* (15-29, 30-49, 50-64, 65-79, 80 and over). The *Health Utility Index* is an eight-attribute health status classification system. The attributes are: vision, hearing, speech, mobility, dexterity, cognition, emotion, and pain and discomfort (Boyle, Furlong, Feeny, Torrence and Hatcher, 1995). The composite score ranges from a value of 0 to 1, with the higher number indicating better health status.

Living Context

Marital status, living arrangements, presence of household children under 15, and proximity to grocery or convenience store comprise the living context cluster of variables. This cluster provides the household context in terms of available social supports and the potential presence of dependents. Proximity to a grocery or convenience store was used as a measure of degree of rurality and the likelihood of one's access to formal supports. These variables were operationalized as follows: *Marital Status* (married/common-law, non-married, including separated/divorced, widow(er), and single); *Living Arrangements* (live alone, live with other(s)); *Presence of Household Children Under 15* (no household children or child(ren)); and *Proximity to Grocery or Convenience Store* (in the same building or neighbourhood, in the surrounding area).

Human Capital

Household income, personal income, employment status, and educational attainment comprise the human capital cluster of variables. This cluster includes indicators of social status and an indication of resources available to them. Human capital variables are ones which an individual attains or holds and are believed to influence the community in which one lives. The variables were operationalized as: *Personal Income* (none to less than $15,000, $15,000 or greater); *Household Income* (none to less than $30,000, $30,000 or greater); *Education* (less than high

school, graduated from high school, at least some post-secondary); and *Employment Status* (not employed, employed part time, employed full time).

Region

One geographical variable comprises this cluster. This variable was operationalized using province of residence as follows: *Region* (Atlantic Canada [includes Newfoundland and Labrador, Nova Scotia, New Brunswick, Prince Edward Island], Non-Atlantic Canada [includes Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia]).

4.2.2.2 Helping Relationship Variables

Types of Assistance

To measure the type and nature of helping relationships in rural Canada, variables for six tasks were derived. These six tasks include four instrumental tasks and two expressive tasks. The four instrumental tasks are: 1) *Child Care* (includes providing assistance with child care duties); 2) *Household Instrumental Activities of Daily Living* (includes meal preparation/clean-up, house cleaning/laundry/sewing, house maintenance/outside work); 3) *Non-Household Instrumental Activities of Daily Living* (includes shopping for groceries or other necessities, providing transportation, doing someone's banking or bill paying), and 4) *Personal Care*[4] (includes providing assistance with such tasks as bathing, toileting, care of toenails/fingernails, brushing teeth, shampooing and hair care, and dressing). The two expressive tasks are: 1) *Checking Up On Anyone* (to make sure they were okay by visiting or telephoning them); and 2) *Emotional Support.* In addition to these six tasks, a composite variable was derived. *Overall Instrumental and Expressive Helping Relationships* comprises individuals who give and/or receive assistance with at least one of the six tasks above.

For each of the seven derived variables, there are four possible values to portray patterns of helping relationships. These are: both give and receive, give only, receive only, and neither give nor receive. "Not Applicable" responses were recoded as "No".

The second portion of this section examines the helping relationships of individuals who give and/or receive assistance due to long-term health problems or physical limitations. A different series of questions from the survey were drawn upon for this analysis. As such, eight specific tasks grouped within *Household Instrumental Activities of Daily Living* and *Non-Household Activities of Daily Living* categories (see above) are able to be examined. The type of tasks available include: *Child Care, Meal Preparation/Clean-Up, House Cleaning, House Maintenance/Outside Work, Shopping for Groceries/Other Necessities, Transportation, Banking/Bill Paying,* and *Personal Care.* It excludes the expressive tasks of *Checking Up on Anyone,* and *Emotional Support* because data are unavailable for this sub-population on whether they received such assistance.

Amount of Assistance

For individuals who give and/or receive assistance due to long-term health problems or physical limitations, two variables were derived to measure amount of assistance. These were operationalized as follows: *Amount of Assistance Given* (value of 1 to 8) was constructed from derived variables available in the GSS dataset, namely counter variables indicating the number of people under the age of 65, number of people over the age of 65, number of people deceased and number of organizations with whom respondent provided assistance with each of the eight tasks. Responses of one or greater were counted as Yes. *Amount of Assistance Received* (value of 1 to 8) was constructed from derived variables available in the GSS dataset, namely whether or not at least one person helped respondent with each of the eight tasks. Yes responses were counted. There are 61 respondents (unweighted) who both give and receive assistance on at least one of the eight tasks. These individuals are added to those who receive assistance *and* to those who give assistance.

Source of Assistance

For individuals who give and/or receive assistance due to long-term health problems or physical limitations, variables to examine the source of such assistance received and given are available in the GSS dataset. These variables were derived from questions in the survey regarding who gave assistance and by whom was the assistance received. The two variables used have four response categories – no help received/given, only informal help received/given, only formal help received/given, and both formal and informal help received/given.

Informal Help is defined as the performance/receipt of help by family and/or friends, without pay, that assists in maintaining or enhancing independent living. *Formal Help* is defined as the performance/receipt of help by a paid employee/worker or through a government or non-governmental organization. A *Mix of Informal and Formal Help* indicates that help received/given was in both formal and informal contexts. For consistency purposes, only help received/given with tasks are analyzed. Information on source of assistance measuring help received for emotional support is not available.

4.2.3 Analysis

Analyses on two rural populations from the GSS dataset were undertaken. The first involved the total rural Canadian population (Weighted N= 4,829,103; unweighted n= 3,309). The second was limited to individuals who provided or received assistance due to long-term health problems or physical limitations (Weighted N= 1,035,893; unweighted n= 964).

1. Total Rural Population (Weighted N= 4,829,103; unweighted n= 3,309)

Three stages of analysis were undertaken to examine the helping relationships of rural Canadians in terms of what tasks with which they give help, receive help, both give and receive help, or neither give nor receive help.

All analysis was conducted on weighted data. The first stage examined the frequency distribution of the dependent variables – types of assistance. The second stage was to conduct Chi-Square

tests and Analysis of Variance (ANOVA) to examine socio-demographic variables in relation to the patterns of helping for each of the six types of assistance. The significance of the bivariate relationships was verified utilizing the Chi Square Goodness of Fit test (χ^2). The level of association was measured utilizing either the Phi coefficient (range -1.00 to +1.00) for 2X2 cross-tabulations or Cramer's V (range (0.00 to +1.00) for non-2X2 tables. These measures of association were used because they control for sensitivity to large sample sizes and thus enable comparisons regarding the strength of the pairs of discrete variables within each table (Bohrnstedt & Knoke, 1994). However, these measures are only descriptive in nature and cannot be used in any meaningful way other than to indicate that the larger the value, the stronger the measure of the magnitude of association between the variables. For the purposes of this report, Phi or Cramer's V values of less than 0.10 are weak, 0.10 to 0.30 are moderate, and higher than 0.30 are strong. Any value greater than 0.10 is considered a distinctive relationship for this analysis.

The third stage of the analysis involved binomial logistic regression. This procedure identifies key variables for those who give assistance and those who receive assistance. Six models were created for analysis, one for three types of assistance (household IADL, non-household IADL and emotional support). The reference category was no activity. An adjusted weight was used which divides the weight for each respondent by the average weight for the sample. Potential variables were examined using correlation analysis. Marital status was excluded from the model due to multicollinearity with living arrangements and presence of household children. Personal income and household income were excluded from the model due to a high number of missing cases and collinearity issues. The independent variables added to the model are: sex, age, living arrangements, presence of household children less than 15 years, education attainment and region. The health status variable was a continuous variable and added to the model as a covariate. Categorical variables were recoded such that the group of interest was the lower value.

2. Rural Population who Give/Receive due to Long-term Health Problems or Physical Limitations (Weighted N= 1,035,893; unweighted n= 964)

Two stages of analysis were undertaken to examine the helping relationships of rural Canadians who give and/or receive due to long-term health problems or physical limitations for eight types of assistance (instrumental tasks only). These tasks include: child care, meal preparation, house cleaning, house maintenance, grocery shopping, transportation, banking/bill paying, and personal care.

All analysis was conducted on weighted data. The first stage examined the frequency distribution of the dependent variables– types of assistance. The second stage was to conduct Chi-Square tests, one-way Analysis of Variance and T-Tests to examine select socio-demographic variables in relation to the eight types of assistance given or received and the amount of assistance given or received. Univariate and bivariate analysis were also undertaken to examine the source of assistance given/received. Of those who either gave or received help due to long-term health problems or physical limitations, select socio-demographic variables were examined in relation to Informal Only and Formal Only groups. The category that captures individuals who received/gave assistance in both informal and formal contexts was not included in this analysis as it is defined on a person level basis and is not specific to any activity (Statistics Canada, 1998). The significance of the bivariate relationships was verified utilizing the Chi Square Goodness of

Fit test (χ^2). The level of association was measured utilizing either the Phi coefficient (range -1.00 to +1.00) for 2X2 cross-tabulations or Cramer's V (range (0.00 to +1.00) for non-2X2 tables.

4.2.4 Methodological Challenges

The objectives of the 1996 General Social Survey were to learn about the types of assistance Canadians provided or received and to understand the dynamic interplay between an individual's social network and help received and/or provided. To this end, the survey was designed to capture detailed information on each of the following activities: child care, meal preparation/clean-up, house cleaning, laundry and sewing, household maintenance and outside work, shopping for groceries, transportation, banking/bill paying, personal care including bathing, toileting, care of toenails/fingernails, brushing teeth, shampooing and hair care, and emotional support. This detailed information, however, is limited to those Canadians who gave and/or received assistance due to long-term health problems or physical limitations. The same specificity/understanding of helping relationships is not available for the total population.

One challenge with the use of this dataset and its contribution to understanding helping relationships is the time frame in which assistance was given and/or received. Respondents were asked if "During the past 12 months they provided/gave assistance with [each respective task]." Based on this wording, a comprehensive picture of the extent to which assistance was given and/or received during this time frame is not able to be obtained; for example, how often the assistance was given and/or received, whether this assistance was ongoing or sporadic during the 12 month period or if it was given and/or received only once.

Although these data examine the helping relationships of rural Canadians, another challenge with using this dataset is its inability to differentiate whether the assistance given and/or received by a rural Canadian is to or from someone in a rural area. In other words, there is no means of identifying if the helping relationship being examined is with another individual residing in a rural area. As a result, the findings are limited to discussions of helping relationships *of* rural Canadians rather than helping relationships *in* rural Canada.

Finally, the small sample size of rural Atlantic Canada limits the analysis of helping relationships amongst the different provinces in Atlantic Canada. Such analysis would strengthen the understanding of the heterogeneity amongst rural communities within Atlantic Canada.

4.3 Description of Rural Canadians

Table 4.1 presents a number of socio-demographic characteristics depicting a profile of rural Canadians. This profile provides context for the analysis of patterns of helping relationships by the six types of assistance found in section 4.5. In rural Canada, men and women are equally distributed. Fourteen percent are over the age of 65. The mean health status score of rural Canadians is 0.87. In rural Canada, larger proportions have a partner through both marriage or common-law relationships than not (67% compared to 33%) and the vast majority live with someone else (91%). However, less than one-third have a household child under the age of 15 (30%). With respect to human capital variables, the majority of rural Canadians have personal income greater than $15,000 (60%) and household income greater than $30,000 (67%). Less than half have attained at least some post-secondary education (45%). While more than two-thirds are employed, 53% work full time (more than 30 or more hours). With respect to regional distribution, 20% of rural Canadians live in Atlantic Canada while 80% live in rural areas in Central and Western Canada.

Table 4.1: Profile of Rural Canadians (General Social Survey, 1996).

	%	N
Individual Level		
Sex		
Men	50	2,404,751
Women	50	2,424,352
Age		
15 to 29	25	1,188,602
30 to 49	44	2,100,062
50 to 64	18	862,170
65 to 79	11	547,145
80 and over	3	131,125
Health Status	Mean (sample data) 0.87	
Living Context		
Marital Status		
Married/Common-law	67	3,220,791
Non-married	33	1,593,911
Living Arrangements		
Alone	9	445,113
With other(s)	91	4,383,991
Presence of Children <15		
No children	70	3,385,823
Child(ren)	30	1,443,281
Proximity to Grocery Store		
Same neighbourhood	83	3,914,655
Surrounding area	17	830,161
*Note: may not total 100% due to rounding		

Table 4.1(continued): Profile of Rural Canadians (General Social Survey, 1996).

	%	N
Human Capital		
Personal Income[5]		
Less than $15,000	40	1,311,633
$15,000 or greater	60	1,993,401
Household Income[6]		
Less than $30,000	34	1,092,867
$30,000 or greater	67	2,173,394
Education Level		
Less than high school	37	1,755,598
Graduated high school	18	849,764
At least some post-secondary	45	2,123,292
Employment		
Not employed	34	1,602,892
Employed part time	14	636,575
Employed full time	53	2,488,265
Region		
Atlantic Canada	20	978,215
Non-Atlantic Canada	80	3,850,889
*Note: may not total 100% due to rounding		

Because this research is focused on understanding the helping relationship experience of rural Atlantic Canadians, Section 4.4 provides analysis by region. To facilitate interpretation of the regional analysis, characteristics of rural Canadians are presented next and are examined by rural Atlantic Canada and rural non-Atlantic Canada criteria.

4.4 Description of Rural Canadians – Regional Comparison

Twenty percent of rural Canadians live in Atlantic Canada. Table 4.2 presents a number of socio-demographic characteristics depicting a profile of rural Atlantic Canadians and rural non-Atlantic Canadians. As noted in 4.3, the regional comparison found in this section provides the context for the analysis found in Section 4.5. Overall, the profile of rural Atlantic Canadians does not differ greatly from their rural counterparts in other parts of the country. Similar distributions emerge for individual level variables such as sex, age and health status as well as living context variables such as marital status, living arrangements and the presence of household children under 15 years. Only slight differences exist between rural Atlantic Canadians and rural non-Atlantic Canadians with respect to access to grocery stores. Eighty percent of rural Atlantic Canadians are proximate to a grocery store compared to 83% of non-Atlantic Canadians.

Table 4.2: Profile of Rural Canadians by Region (General Social Survey, 1996).

	Atlantic Canada		Non-Atlantic Canada	
	%	N	%	N
Individual Level				
Sex				
Men	51	500,810	49	1,903,942
Women	49	477,405	51	1,946,947
Age				
15 to 29	27	266,975	24	921,628
30 to 49	42	410,134	44	1,689,928
50 to 64	17	163,633	18	698,536
65 to 79	11	107,465	11	439,680
80 and over	3	30,008	3	101,117
Health Status Mean (sample data)	0.86		0.87	
Living Context				
Marital Status				
Married/common-law	65	632,974	67	2,587,816
Non-married	35	345,035	33	1,248,876
Living Arrangements				
Alone	8	74,491	10	370,622
With other(s)	92	903,724	90	3,480,267
Presence of Children <15				
No children	71	695,129	70	2,690,694
Child(ren)	29	283,086	30	1,160,195
Proximity to Grocery Store				
Same neighbourhood	80	775,987	83	3,138,667
Surrounding area	20	195,926	17	634,235
*Note: may not total 100% due to rounding				

However, differences do emerge for human capital variables. For example, a greater proportion of rural Atlantic Canadians compared to non-Atlantic Canadians have lower personal (49% compared to 44%) and household incomes (42% compared to 32%). Similarly, a smaller proportion of Atlantic Canadians compared to non-Atlantic Canadians have completed their high school education (14% compared to 19%). Finally, a greater proportion of rural Atlantic Canadians are either not employed or employed full time compared to rural non-Atlantic Canadians who are more apt to work on a part-time basis (14% compared to 10%).

4.2 (continued): Profile of Rural Canadians by Region (General Social Survey, 1996).

	Atlantic Canada		Non-Atlantic Canada	
	%	N	%	N
Human Capital				
Personal Income[7]				
Less than $15,000	49	347,592	44	1,271,201
$15,000 or greater	51	356,691	56	1,636,710
Household Income[8]				
Less than $30,000	42	249,576	32	853,947
$30,000 or greater	58	349,229	68	1,824,165
Education Level				
Less than high school	39	379,069	37	1,376,529
Graduated high school	14	140,049	19	709,715
At least some post-secondary	46	445,598	45	1,677,694
Employment				
Not employed	36	341,792	33	1,261,100
Employed part time	10	96,682	14	539,893
Employed full time	54	523,442	52	1,964,823
*Note: may not total 100% due to rounding				

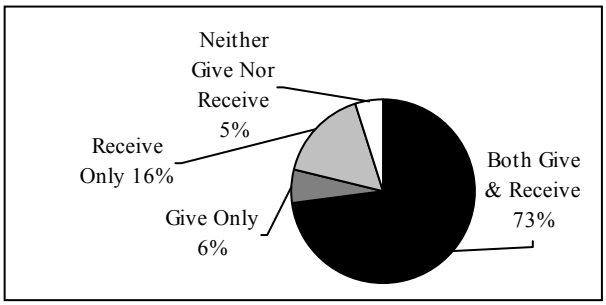
4.5 Helping Relationships of Rural Canadians

The nature of helping relationships of rural Canadians varies by task as described in Sections 4.3 and 4.4 and includes individuals that only give assistance, only receive assistance, both give and receive assistance or neither give nor receive assistance. This section examines the pattern of helping relationships by six types of assistance. These are: child care, household IADL, non-household IADL, personal care, checking up on anyone, and emotional support. For each type of assistance, the distribution of the helping relationship patterns is presented followed by an examination of each pattern by select descriptive variables. Tables which contain supporting data for the bivariate analysis are found in Appendix D. These results are presented by four clusters of variables. They include: *Individual Level* (sex, age, and health status), *Living Context* (living arrangements and marital status), *Human Capital* (income, employment, and education), and finally, *Region* (comparisons between Atlantic Canada and non-Atlantic Canada). Furthermore, binomial logistical regression analyses were conducted on three areas of assistance, and findings from these analyses will be included as a means of identifying key factors associated with the helping activity.

4.5.1 Overall Instrumental and Expressive Tasks

Figure 4.2: Patterns of Helping Relationships- Overall Instrumental and Expressive Tasks (General Social Survey, 1996).

The majority of rural Canadians (73%) both give and receive assistance in at least one of the six areas (see Figure 4.2). Few individuals neither give nor receive assistance.



Individual Level

Both giving and receiving assistance is more common among women than men (78% compared to 67%), however receiving assistance only is more common among men than women (21% compared to 12%) (see Table 1 in Appendix D). Age is also a distinguishing variable in patterns of helping relationships. The proportion of rural Canadians involved in giving and receiving help declines as the age group rises. The opposite trend exists for those who receive assistance only, in that the proportion receiving assistance increases as the age group rises. Significant differences in health status occur among patterns of helping relationships for rural Canadians. For those who receive assistance only, the average health status score is significantly lower (0.80) than for all other groups.

Living Context

Both giving and receiving assistance is more common among rural Canadians who are married or in common-law relationships than those who are not (75% compared to 68%) (see Table 1 in Appendix D). Likewise, this finding applies to rural Canadians who live with others than who live alone (75% compared to 48%). In households with children under the age of 15 compared to those with no young children, both giving and receiving of assistance is more prevalent (82% compared to 69%).

Human Capital

Both giving and receiving assistance is more common among rural Canadians with household incomes of $30,000 or greater than less than $30,000 (79% compared to 68%). Moreover, receiving assistance only was more prevalent among households with lower incomes (13% compared to 20%). Part-time or full-time employment is associated with both giving and receiving assistance (PT-8%; FT- 11%), whereas a greater proportion of non-employed persons than employed persons receive assistance only.

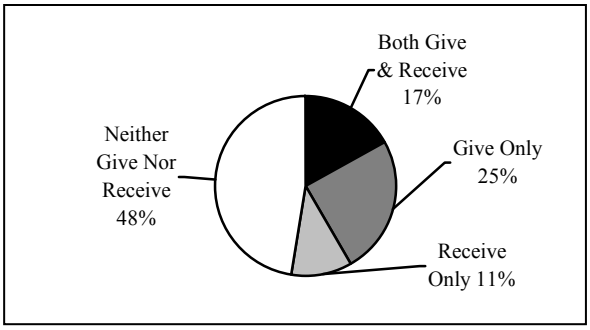
Region

Both giving and receiving assistance is more common among rural Atlantic Canadians than their non-Atlantic Canadian rural counterparts (80% compared to 71%).

4.5.2 Child Care

Figure 4.3: Patterns of Helping Relationships- Child Care (General Social Survey, 1996).

Almost half of rural Canadians (48%) neither give nor receive assistance with child care. More either both give and receive or give only than receive only (see Figure 4.3).



Individual Level

Giving assistance only is more common among women than men (29% compared to 20%), whereas neither giving nor receiving assistance is more common among men than women (54% compared to 42%) (see Table 2 in Appendix D). Age is also associated with helping relationships. Twenty-eight percent of persons aged 30-49 years old both give and receive assistance with child care, compared to 1% of 50-64 and 65-79 year olds. An inverse relationship exists for rural Canadians who neither give nor receive. Rural Canadians who neither give nor receive assistance also report, on average, significantly lower health status compared to all other groups (0.84 compared to 0.93, 0.89 and 0.91).

Living Context

Both giving and receiving assistance is more common among those who are married or common-law than those who are non-married (21% compared to 9%). Neither giving nor receiving assistance with child care is more common among those who live alone than those who live with at least one other person (83% compared to 67%). The presence of young children in the household is associated with helping relationships. Half of rural Canadians with children in the household both give and receive assistance with child care, whereas 63% of persons without household children neither give nor receive assistance.

Human Capital

Both personal income and household income are associated with child care helping patterns. Of those whose personal income is less than $15,000, 30% give assistance only compared to 21% of those whose personal income is $15,000 or greater. Similarly, of those whose household income is less than $30,000, 7% receive assistance only compared to 14% of households with income greater than $30,000. In terms of employment, a larger proportion of non-employed persons compared to employed persons (full time or part time) neither give nor receive assistance with children (59% compared to 32% and 44%).

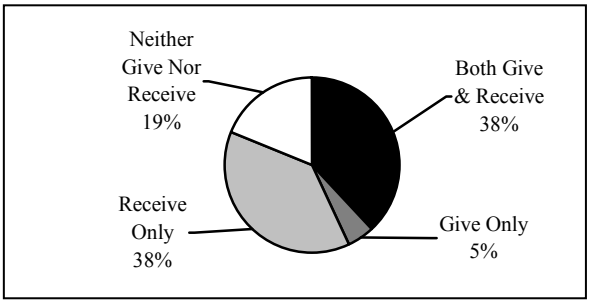
Region

There are no notable differences between Atlantic Canada and non-Atlantic Canada regarding helping patterns for child care.

4.5.3 Household Instrumental Activities of Daily Living

Figure 4.4: Patterns of Helping Relationships- Household Instrumental Activities of Daily Living (IADL) (General Social Survey, 1996).

More than three-quarters of rural Canadians (81%) engage in helping relationships for household instrumental activities of daily living such as meal preparation/cleanup and house maintenance/outside work (see Figure 4.4). In particular, equal proportions of rural Canadians (38%) both give and receive assistance as receive only.



Individual Level

Receiving assistance only with household IADL is more common among men than women (43% compared to 33%) (see Table 3 in Appendix D). The proportion of persons who both give and receive assistance decreases with increasing age, while the opposite is true of those who receive only. Rural Canadians who receive assistance only have, on average, lower health status scores than other groups (0.83 compared to 0.90, 0.91 and 0.88).

Living Context

There is a strong association between living arrangements and assistance with IADL tasks, as a significantly larger proportion of individuals who live with others both give and receive assistance compared to those who live alone (41% compared to 6%). Conversely, 61% who live alone, compared to 13% who live with others, neither give nor receive assistance. Receiving assistance only is more common among those who are married/common-law receive assistance only than those who are non-married (42% compared to 29%). However, there is no association between presence of children and helping patterns of household IADL.

Human Capital

Both giving and receiving assistance with household IADL is more common among rural Canadians with higher household incomes ($30,000 or greater) than those whose income is less than $30,000 (42% compared to 32%). Likewise employment and education status are associated with assistance with household IADL. Overall, more than 40% who are employed either full time or part time engage in both giving and receiving assistance. Similarly, 45% with at least some post-secondary education compared with one-third with lower levels of education engage in helping relationships.

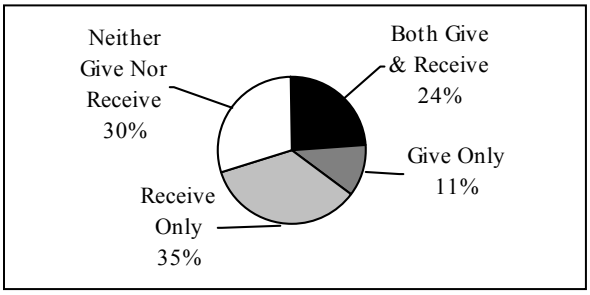
Region

More than double the proportion of non-Atlantic Canadians neither give nor receive assistance with household IADL than their Atlantic Canadian counterparts (21% compared to 10%). However, when helping does occur, Atlantic Canadians are more involved in receiving than their counterparts (43% compared to 37%).

4.5.4 Non-Household Instrumental Activities of Daily Living

Figure 4.5: Patterns of Helping Relationships- Non-Household Instrumental Activities of Daily Living (General Social Survey, 1996).

More than two-thirds of rural Canadians (70%) engage in helping relationships for non-household IADL such as providing transportation or shopping for groceries. In particular, just over one third receive assistance only (see Figure 4.5).



Individual Level

Giving assistance only is more common among women than men (15% compared to 8%) and men more commonly represent those receiving assistance only (38% compared to 32%). No gender differences emerge for those who both give and receive or are not involved at all (see Table 4 in Appendix D). The proportion of persons who both give and receive assistance decreases with advancing age, whereas the largest proportion of those who receive only are the youngest and the oldest groups (45% and 57% respectively). In relation to health status, people who receive assistance only have the lowest score (0.82) while there is virtually no distinction among the other three groups (0.90, 0.90 and 0.88).

Living Context

Both giving and receiving assistance is more common among those who live with others than those who live alone (26% compared to 2%). However, of persons who neither give nor receive, 65% live alone compared to 26% who live with others. Both giving and receiving assistance is more common among married/common-law persons than those who are non-married (27% compared to 18%). There is no association between presence of children and non-household IADL helping.

Human Capital

Of those rural Canadians with lower household incomes (less than $30,000), a smaller proportion both give and receive (19% compared to 29%) and a larger proportion neither give nor receive compared to higher income households (35% compared to 26%). Employment and education are both associated with helping patterns. Overall, 28% of those employed either part time or full time engage in both giving and receiving assistance compared to 17% of those not employed. As educational attainment increases, so does the proportion of persons engaged in giving and receiving assistance.

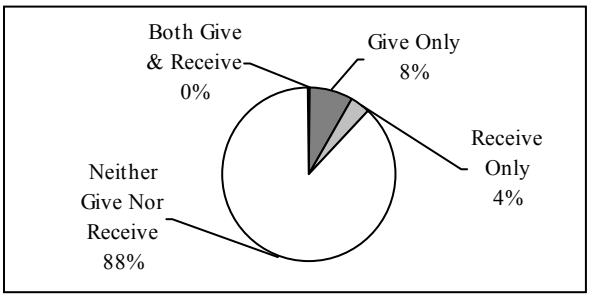
Region

There are no notable differences between Atlantic Canadians and non-Atlantic Canadians regarding helping patterns for non-household IADL.

4.5.5 Personal Care

Figure 4.6: Patterns of Helping Relationships- Personal Care (General Social Survey, 1996).

The majority of rural Canadians (88%) are not involved in helping relationships for personal care such as bathing, toileting and dressing (see Figure 4.6). Less than one-tenth give only and less than one-fifth receive only.



Individual Level
Gender, age and health status are associated with helping patterns for personal care (see Table 5 in Appendix D). Overall, women more commonly give assistance only than men (11% compared to 4%) and the proportion of rural Canadians who receive assistance only increases as they age. Similarly, the health status score of those who receive assistance only, on average, is lower than the other groups (0.65 compared to 0.76, 0.90 and 0.88).

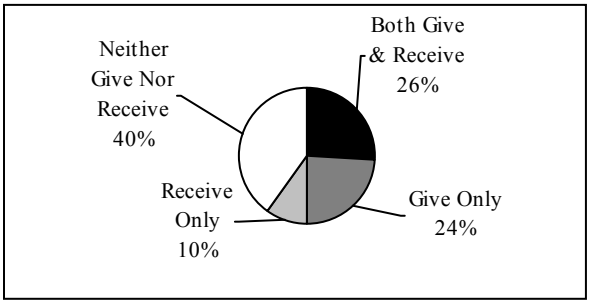
Living Context
There are no notable differences amongst the helping relationships of rural Canadians when considering marital status, living arrangements, the presence of young children or proximity to grocery store.

Human Capital
Employment and education are associated with helping relationships of personal care. Twelve percent of those employed part time give assistance only compared to 8% of full-time employed persons and 6% of non-employed persons.

Region
There are no notable differences between Atlantic Canadians and non-Atlantic Canadians regarding helping patterns for personal care.

4.5.6 Checking Up On Someone

Figure 4.7: Patterns of Helping Relationships- Checking Up on Anyone (General Social Survey, 1996).



More than half of rural Canadians (60%) engage in helping relationships for checking up on someone (see Figure 4.7). Around one-quarter both give and receive (26%) or give only (24%).

Individual Level

Both giving and receiving assistance with checking up on someone is more common among women than men (34% compared to 19%) (see Table 6 in Appendix D). Checking up is associated with increasing age and health status. More than four times the proportion of persons in the 80 and over age group receive assistance only compared to age groups 50 or younger. Similarly, persons with lower health status scores receive assistance only compared to other groups (0.78 compared to 0.86, 0.90 and 0.88).

Living Context

Receiving assistance only is more common among those who are not married than those who are married as well as those who live alone compared to those who live with others (14% compared to 7%; 12% compared to 8%). Likewise, receiving assistance only is more common among those households with no young children than those with young children.

Human Capital

Household income is associated with checking up on another. In terms of giving assistance only, 29% of those with household incomes $30,000 or greater check up on others compared to 19% of those with lower household incomes. Conversely, persons with less than $30,000 household income receive assistance only with this task (15% compared to 6%). Further receiving assistance only is more common among those not employed, compared to those employed, and among those with lower education compared to higher levels (16% compared to 5% and 10%; 15% compared to 5% and 61%).

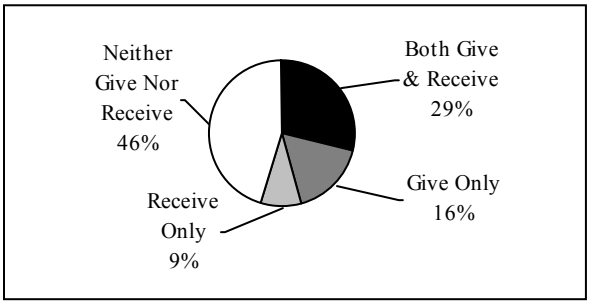
Region

There are no notable differences between Atlantic Canadians and non-Atlantic Canadians regarding helping patterns for checking up on others.

4.5.7 Emotional Support

Figure 4.8: Patterns of Helping Relationships- Emotional Support (General Social Survey, 1996).

More than half of rural Canadians (54%) engage in helping relationships for emotional support (see Figure 4.8). Less than one-tenth receive such support only.



Individual Level

Both giving and receiving assistance with emotional support is more common among women than men (37% compared to 22%) (see Table 7 in Appendix D). More than half of rural men neither give nor receive emotional support compared to 38% of women. Emotional support is associated with age and health status. A greater proportion of younger and older age groups receive assistance only with emotional support. Similarly, persons with lower health status scores receive this type of assistance only compared to other helping groups (0.77 compared to 0.88, 0.88 and 0.87).

Living Context

Giving emotional support only is more common among those married than those not married (19% compared to 9%). While no differences emerge by whether rural Canadians live alone or with others, larger proportions of those with young children both give and receive emotional support.

Human Capital

There are no notable differences in helping patterns in terms of either household or personal income. In terms of employment, the most noteworthy difference is with those who both give and receive. Overall, 22% of unemployed persons both give and receive emotional support compared to 40% and 32% who are employed part time and full time respectively. Finally, both giving and receiving assistance is more common among those with at least some post secondary education (39%) than less than high school education (21%). Furthermore, 56% of those with less than high school neither give nor receive emotional support compared to 35% of those with at least some post secondary education.

Region

Both giving and receiving assistance with emotional support is more common among Atlantic Canadians than non-Atlantic Canadians (40% compared to 27%). Conversely, almost half (48%) of non-Atlantic Canadians compared to 37% of Atlantic Canadians do not engage in such support.

4.5.8 Summary of Trends in Helping Relationships

Almost all rural Canadians engage in helping relationships. However, the nature of these helping relationships differs depending on the area of assistance. For example, of those persons who both give and receive assistance, a greater proportion do so in household IADL (38%) and emotional support (29%), but in terms of those who give assistance only, the greatest proportion do so in the areas of checking up on another (24%), and child care (25%). Furthermore, of persons who receive assistance only, more do so with household IADL (38%) and non-household IADL (35%). Finally, more persons neither give nor receive in the areas of personal care (88%), child care (48%) and expressive tasks such as emotional support (46%) and checking up on one another (40%).

These patterns of helping relationships of rural Canadians are influenced by key variables. Individual level variables such as gender and age, as well as living context variables such as living with others, emerge as defining characteristics across all six types of assistance. Human capital variables such as income, education and employment also emerge as defining characteristics. Differences between rural persons in Atlantic Canada and non-Atlantic Canada are not as strong as differences demonstrated by other variables. Specifically, helping relationship patterns vary by region for overall helping, household IADL and emotional support. Interestingly, both giving and receiving assistance overall and with emotional support is more common among rural Atlantic Canadians than non-Atlantic Canadians. However, the key difference by region for household IADL is related to receiving assistance only. A greater proportion of rural Atlantic Canadians receive assistance only compared to rural non-Atlantic Canadians. There is no difference in the age distribution or average health status scores between these two groups of rural Canadians.

Giving assistance only is largely characterized by women, regardless of the task. Receiving assistance only is largely characterized by men for all tasks except personal care. Persons aged 80 and over consistently represent the greatest proportion of those who receive assistance only, with the exception of child care. Furthermore, with the exception of personal care, persons aged 49 and under (15 to 49) consistently represented the greatest proportion of those who both give and receive assistance. These patterns of helping relationships are consistent with the realities of the gender division of labour and the function of aging. This is in reference to the individuals' increased likelihood of giving assistance if they are women, as it is a socially constructed norm for women to be the primary providers of domestic tasks. Furthermore, older individuals are expected to receive additional assistance than their younger counterparts, either because their health is failing or because of deterioration in their social network. The Health Utility Index is indicative of helping relationships in that larger proportions of persons with high scores give assistance only, whereas larger proportions of persons with low scores receive assistance only. It would be reasonable to suggest that this pattern of assistance is simply a function of an individual's physical ability to give assistance or the result of a physical inability and a consequent need for assistance.

Neither giving nor receiving assistance with all tasks except personal care and emotional support is characterized by non-married rural Canadians. Strongly related to non-married, individuals who live alone represent a larger proportion of those who neither give nor receive in many areas.

One notable exception to this is in relation to the task of checking up on anyone, as the largest proportion of those living alone both give and receive assistance with this task. These exchanges of checking-up on someone to ensure safety may represent strategies for individuals that enable them to continue to live alone. When the presence of a child in the household under the age of 15 is a factor, those with children represent smaller proportions of those who receive only or neither give nor receive. Thus, both giving and receiving assistance as well as give assistance only is more common by persons with young children in their home.

Both education and income have a potentially important role to play in terms of patterns of helping relationships as a larger proportion of persons with higher levels of education and higher income levels give assistance only. However, the opposite is true of those persons who have lower levels of education and lower income levels, in that they represent a larger proportion of those who receive assistance only rather than give assistance only. Individuals who have a higher level of education are likely more knowledgeable about available social supports and have greater financial resources. Consequently, they may be better equipped to give assistance in comparison to those who may not have the same knowledge base or financial resources. Finally, those persons who are employed, either on a full time or a part time basis, represent a greater proportion of those who both give and receive assistance in comparison to those who are unemployed. This may be because that they do so in their paid employment position, or because those who are employed, be it part time or full time, are able to give more assistance than those who are unemployed. This could be the result of the increased likelihood that unemployed persons may be in greater need of assistance, be it a result of physical disability or simply a function of aging.

This analysis demonstrates that rural Canadians participate in helping relationships. These findings reinforce the notion of a supportive infrastructure throughout rural communities. However, factors such as sex, age, presence of others and income, influence the nature of such relationships and these factors are susceptible to demographic change. In particular, the traditional gender division appears to be strong in rural Canada with respect to caring work. Whether this labour supply is a female spouse/partner, daughter or daughter-in-law or neighbour/friend is unclear from this analysis. However, with the greying of rural Canada, the availability of this female labour supply is likely to be called upon. The next section of the report will advance these results by using multivariate analysis to control for independent variables. The outcome will be a better understanding the key differences between those who give assistance and those who receive it.

4.6 Factors Associated with Helping Relations for Selected Types of Assistance

The previous section highlights the patterns of helping relationships of rural Canadians and examines these patterns by key demographic variables. Using binominal logistic regression, these independent variables are further examined in relation to two groups of rural Canadians who engage in helping activity - those rural Canadians who give assistance to others *and* those who receive assistance from others. The reference group for each model contains the rural Canadians who do not engage in helping activity for that task. The three tasks examined are – household IADL, non-household IADL and emotional support.

4.6.1 Household Instrumental Activities of Daily Living

When controlling for all variables in the model, the presence of immediate others emerges as a key factor in understanding those who engage in giving assistance with household IADL compared to those who do not engage in helping activity at all (see Table 4.3 and Table 8 in Appendix D). For example, compared to those who live with others, those who live alone are eight times more likely to give assistance with household IADL than not engage in helping activity at all. Similarly, those who are not married are twice as likely as those married to give such assistance. Other factors associated with giving assistance with household IADL include age and region. Compared to older rural Canadians, those in younger age groups are less likely to give assistance with household IADL. And those in non-Atlantic Canada are twice as likely as their rural counterparts in Atlantic Canada to engage in giving assistance than no helping behaviour at all.

Table 4.3: Summary of Significant Regression Variables for Household Instrumental Activities of Daily Living (General Social Survey, 1996)

Independent Variables	Give vs. No Give	Receive vs. No Receive
Sex		**Significant**
Age	**Significant**	**Significant**
Health Status		
Marital Status	**Significant**	**Significant**
Living Arrangements	**Significant**	**Significant**
Presence of Children <15	**Significant**	**Significant**
Education Level	**Significant**	
Employment		
Region	**Significant**	**Significant**

Similar factors emerge when examining the group of individuals who receive assistance with household IADL compared to those who do not engage in helping activity at all. For example, compared to those who live with others, those who live alone are more than nine times more likely to receive assistance than not to engage in helping activity at all. Similarly, those who are not married are twice as likely as those married to receive such assistance. Age, sex and region are also associated. Compared to older rural Canadians, those in younger age groups are less likely to receive assistance with household IADL. Men are half as likely as women to receive such assistance than they are to engage in no helping activity at all. Finally, whether rural

Canadians engage in receiving assistance with household IADL varies by where they live. Those in non-Atlantic Canada are twice as likely as their rural counterparts in Atlantic Canada to engage in receiving assistance than they are to engage in no helping behaviours at all.

4.6.2 Non-Household Instrumental Activities of Daily Living

When controlling for all variables in the model, the presence of immediate others emerges as a key factor to understanding those who engage in giving assistance with non-household IADL compared to those who do not engage in helping activity at all (see Table 4.4 and Table 9 in Appendix D). For example, compared to those live with others, rural Canadians who live alone are four times more likely to give assistance with non-household IADL than they are to engage in no helping activity at all. Age is also a factor. Compared to older rural Canadians, those in younger age groups are less likely to give assistance with non-household IADL.

Table 4.4: Summary of Significant Regression Variables for Non-Household Instrumental Activities of Daily Living (General Social Survey, 1996)

Independent Variables	**Give vs. No Give**	**Receive vs. No Receive**
Sex		
Age	**Significant**	**Significant**
Health Status		
Marital Status		**Significant**
Living Arrangements	**Significant**	**Significant**
Presence of Children <15		
Education Level	**Significant**	
Employment		
Region		

Similar factors emerge when examining the group of individuals who receive assistance with non- household IADL compared to those who do not engage in helping activity for non-household tasks at all. For example, compared to those who live with others, those who live alone are more than nine times more likely to receive such assistance from others than they are not to engage in helping activity at all. Marital status, age and health status are also factors. Compared to those who are married, those who are not married are half as likely to receive such assistance than they are to engage in no helping activity at all. Compared to older rural Canadians, those in younger age groups are less likely to give assistance with non-household IADL. And, comparing those with higher health status scores to rural Canadians with lower health status scores, the latter are more than half as likely to receive assistance with non-household IADL than they are to engage in no helping activity at all. Similar to the bivariate analysis, no difference emerges for region.

4.6.3 Emotional Support

When controlling for all variables in the model, sex, age, health, education level and region emerge as key factors in understanding those who engage in giving emotional support to others compared to those who do not engage in giving emotional support (see Table 4.5 and Table 10 in Appendix D). For example, compared to women, rural men are twice as likely to give emotional support than engage in no helping activity at all. Age, health, education and region are also factors. Compared to older rural Canadians, those in 30-49 and 50-64 age ranges are less likely to give emotional support. For those of the 65-79 age group, the likelihood that they will do so increases. Compared to those with higher health status scores, rural Canadians with lower health status scores are less likely to give emotional support than engage in no helping at all. Compared to those with less than high school and at least some post-secondary education, those who have graduated from high school are two and half times more likely to give assistance than engage in no helping activity at all. Finally, whether rural Canadians engage in giving emotional support varies by where they live. Those in non-Atlantic Canada are almost twice as likely as their rural counterparts in Atlantic Canada to engage in giving emotional support than no helping behavior associated with emotional support.

Table 4.5: Summary of Significant Regression Variables for Emotional Support (General Social Survey, 1996)

Independent Variables	**Give vs. No Give**	**Receive vs. No Receive**
Sex	**Significant**	**Significant**
Age	**Significant**	**Significant**
Health Status	**Significant**	**Significant**
Marital Status		
Living Arrangements		
Presence of Children <15		
Education Level	**Significant**	**Significant**
Employment		**Significant**
Region	**Significant**	**Significant**

Similar factors emerge when examining the group of rural Canadians who receive emotional support. Compared to women, rural men are twice as likely to receive emotional support as to engage in no helping activity at all. Those in younger age groups are less likely than older rural Canadians to receive emotional support. And rural Canadians with lower health status scores are less likely to receive emotional support than to engage in no helping at all. Compared to those with less than high school and at least some post secondary education, those who have graduated from high school are more than two times more likely to receive assistance than to engage in no helping activity at all. In addition, employment is associated with receipt of emotional support. Compared to those who work part time or not at all, those who work full time are one and half more times as likely to receive emotional support than to engage in no helping activity at all. Finally, whether rural Canadians engage in giving emotional support varies by where they live. Those in non-Atlantic Canada are almost twice as likely as their rural counterparts in Atlantic Canada to engage in receiving emotional support than no helping behaviour at all (see Table 10 in Appendix D).

4.6.4 Summary of Factors Associated with Selected Types of Assistance

The binominal logistic regression demonstrates that a number of independent variables are significantly associated with whether rural Canadians engage in helping activity, specifically giving assistance to others or receiving assistance from others with selected tasks. Similar to the results of the bivariate analysis, the multivariate analysis confirms that age, gender, health, living arrangements and marital status are key factors that distinguish the likelihood of rural Canadians engaging in helping activity.[10] The composition of rural households, gender and age distributions and health status are key demographic descriptors that are subject to pending trends. As such, demographic trends will have an impact on the exchange of social support in the future, both the nature of these helping relationships and availability. The projected aging population throughout rural Canada has and will change the profile of its constituents and consequently the availability of individuals who engage in helping relations. Moreover, this analysis demonstrates distinctive differences for rural Atlantic Canada in comparison to rural areas in other parts of the country. While controlling for other variables, region emerges as a factor for household IADL and emotional support, but not non-household IADL. The profile of Atlantic Canada suggests that a greater proportion of people live with others than other parts of rural Canada and as such helping activity for household IADL and emotional support would be facilitated by these living arrangements. However, the aging of the population is accelerated in Atlantic Canada and is already changing the face of its communities. Consequently, pending demographic changes may have an even greater impact on social support in rural Atlantic Canada.

4.7 Helping Relationships of Rural Canadians Due to Long-Term Health Problems or Physical Limitations

This section focuses on rural Canadians who give and receive instrumental forms of assistance due to long-term health problems or physical limitations.[9] While Section 4.5 focused on the helping activity of rural Canadians, this section investigates the specific tasks, amount, and source of helping relationships in rural Canada, a level of detail not available for the overall rural population.

The sub-sample of the rural population who engage in helping relationships because of long-term health problems or physical limitations consists of 1,035,893 (unweighted n= 964), or 21% of the rural Canadian population. Analyses of two distinct samples of rural Canadians are included: first, those rural Canadians who give (Weighted N= 730,618; unweighted n= 418) or both give and receive (Weighted N= 41,250; unweighted n= 61) due to long-term health problems or physical limitations; second, those rural Canadians who receive (Weighted N= 264,025; unweighted n= 485) or both give and receive (Weighted N= 41,250; unweighted n= 61) due to long-term health problems or physical limitations.

4.7.1 Assistance Given Due to Long-Term Health Problems or Physical Limitations

Fourteen percent of rural Canadians give assistance or both give and receive assistance because of long-term health problems or physical limitations (Weighted N= 771,868; unweighted n= 479). This section provides a description of the type of assistance, the amount of assistance given, and the context in which informal or formal help is given to others.

4.7.1.1 Description of Rural Canadians Who Give

More than two-thirds (67%) of rural Canadians who give assistance due to long-term health problems or physical limitations are women (see Table 4.6). Only 8% are over the age of sixty-five years. Three quarters have a partner through marriage or common-law, but only one third have a child under the age of fifteen living with them. More than three-quarters (83%) live close to amenities. The majority (61%) have attained post-secondary education and two-thirds are employed. More than half (53%) are employed full time.

Table 4.6: Characteristics of Rural Canadians Who Give Assistance Due to Long-Term Health Problems or Physical Limitations, (General Social Survey, 1996).

	%	N= 771,867
Individual Level		
Sex		
Men	33	253,553
Women	67	518,314
Age		
15 to 29	14	110,305
30 to 49	55	426,199
50 to 64	23	177,179
65 to 79	7	53,259
80 and over	1	4,924
Health Status Mean (sample data)		0.88
Living Context		
Marital Status		
Married/common-law	75	575,108
Non-married	26	196,759
Living Arrangements		
Alone	8	57,799
With other(s)	93	714,068
Presence of Children <15		
No children	66	510,935
Child(ren)	34	260,932
Proximity to Grocery Store		
Same neighbourhood	83	635,330
Surrounding area	17	131,929
*Note: may not total 100% due to rounding		

Table 4.6 (continued): Characteristics of Rural Canadians Who Give Assistance Due to Long-Term Health Problems or Physical Limitations, (General Social Survey, 1996).

	%	N=771,867
Human Capital		
Personal Income[11]		
Less than $15,000	47	279,906
$15,000 or greater	54	327,482
Household Income [12]		
Less than $30,000	32	174,319
$30,000 or greater	68	327,482
Education Level		
Less than high school	26	196,857
Graduated high school	14	103,453
At least some post- secondary	61	463,560
Employment		
Not employed	33	245,926
Employed part time	15	111,279
Employed full time	53	398,374
Region		
Atlantic Canada	28	219,477
Non-Atlantic Canada	72	552,390
*Note: may not total 100% due to rounding		

4.7.1.2 Type of Assistance Given

Individuals who give assistance to others with long-term health problems or physical limitations help with a variety of tasks. These instrumental tasks include: child care, meal preparation/clean-up, house cleaning/laundry/sewing, house maintenance/outside work, shopping for groceries /other necessities, transportation, banking/bill paying, and personal care. More than one third of rural Canadians (see Figure 4.9) assist persons with long-term health problems and physical limitations with grocery shopping (40%), transportation (39%), meal preparation (37%) and personal care (36%). A small proportion of rural Canadians assist with house cleaning, banking/bill paying and house maintenance. Only 2% assist with child care.

Figure 4.9: Types of Assistance Given Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

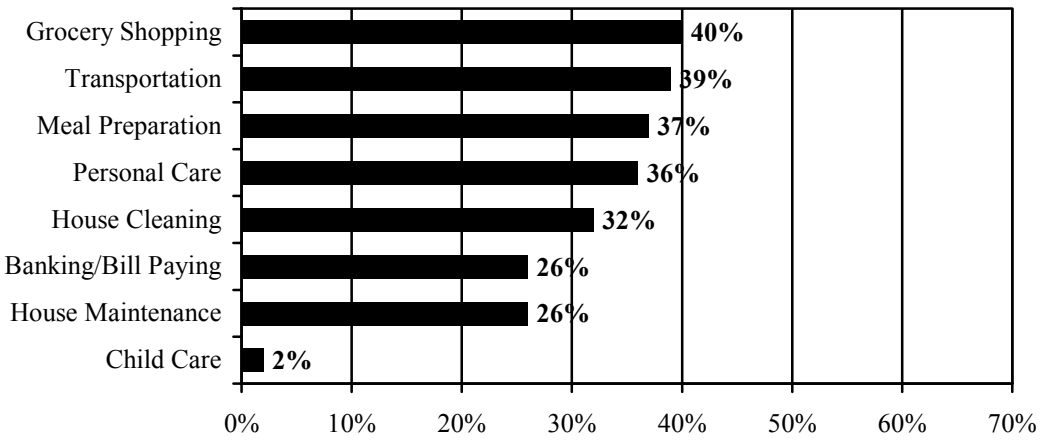
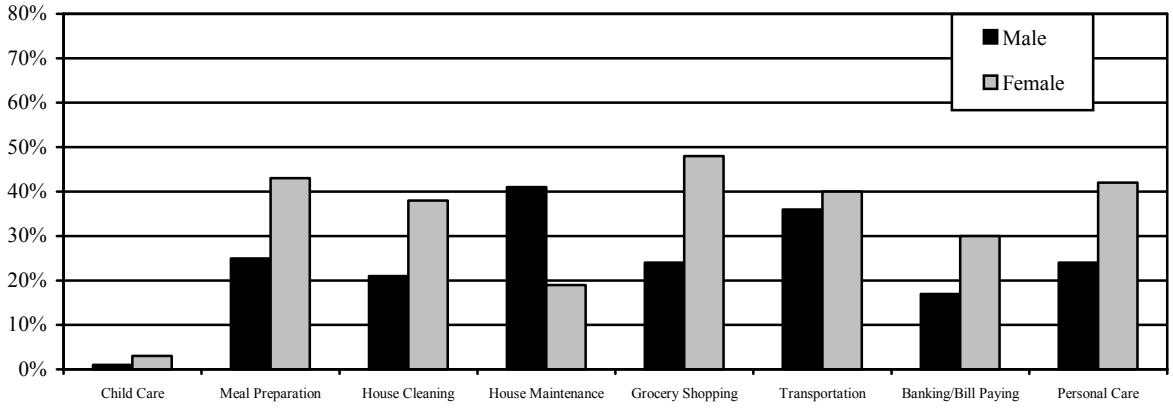
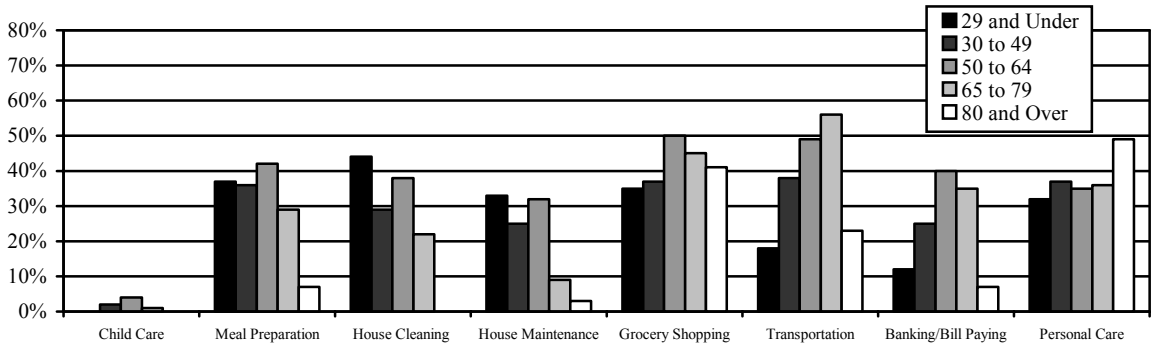


Figure 4.10: Types of Assistance Given Due to Long-Term Health Problems or Physical Limitations by Sex (General Social Survey, 1996).



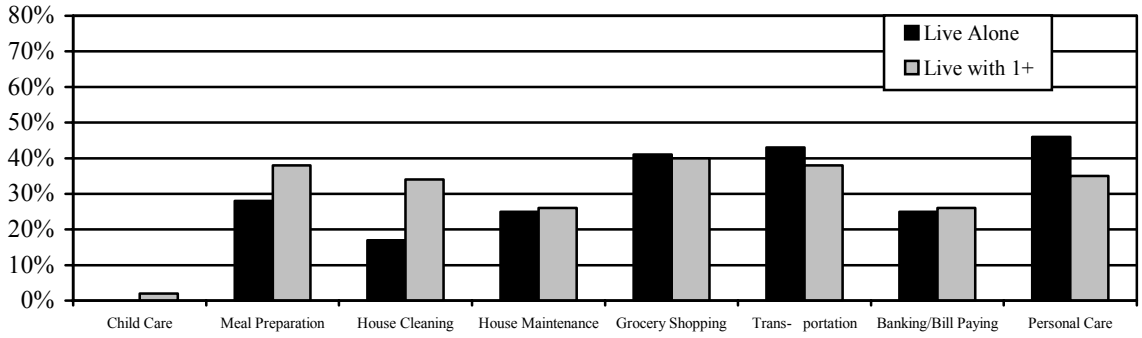
Assistance with specific tasks varies by sex of rural Canadians (see Figure 4.10 and Table 11 in Appendix D). For example, a greater proportion of men compared to women help others with house/maintenance (41% compared to 19%), whereas, a greater proportion of women help others with meal preparation (43% compared to 25%), housecleaning (38% compared to 21%), grocery shopping (48% compared to 24%) and personal care (42% compared to 23%).

Figure 4.11: Types of Assistance Given Due to Long-Term Health Problems or Physical Limitations by Age (General Social Survey, 1996).



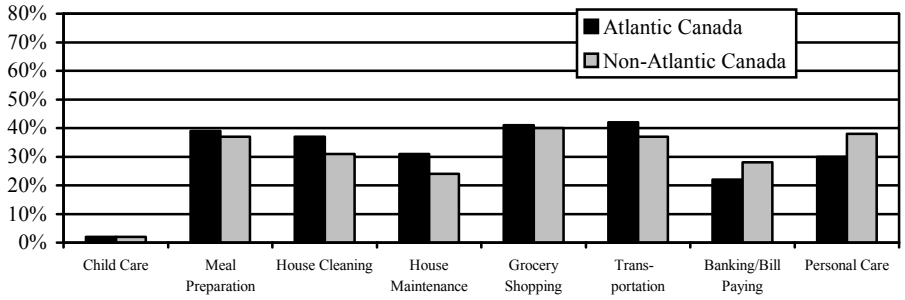
Assistance with specific tasks varies by age of rural Canadians (see Figure 4.11 and Table 12 in Appendix D). For example, greater proportions of young and middle aged persons compared to those 65 and over provide assistance with housecleaning and house maintenance, whereas a greater proportion of those in the 50-64 and 65-79 age groups provide assistance with grocery shopping and transportation and bill paying.

Figure 4.12: Types of Assistance Given Due to Long-Term Health Problems or Physical Limitations by Living Arrangements (General Social Survey, 1996).



Assistance with specific tasks does not vary by whether the respondent lives alone or with others (see Figure 4.12 and Table 13 in Appendix D). Specifically, no difference emerges for house maintenance, grocery shopping, transportation or baking/bill paying. While twice as many respondents who live with others assist with house cleaning compared to live alone, the association is weak. Such a difference is largely attributed to the lack of variance on the living arrangements variable.

Figure 4.13: Types of Assistance Given Due to Long-Term Health Problems or Physical Limitations by Region (General Social Survey, 1996).



Assistance with specific tasks does not vary by whether respondents live in rural Atlantic Canada or not (see Figure 4.13 and Table 14 in Appendix D). While a greater proportion of rural Canadians living in Atlantic Canada compared to non-Atlantic Canada give assistance with house maintenance (31% compared to 24%) and conversely a greater proportion of non-Atlantic Canadians than Atlantic Canadians give assistance with banking/bill paying (28% compared to 21%) and personal care (38% compared to 30%), the association is weak.

4.7.1.3 Amount of Assistance Given

Almost half of rural Canadians (45%) provide assistance with one task (see Figure 4.14). When examining the amount of assistance by means of selected demographic variables, some differences emerge (see Table 4.7). For example, women on average provide assistance with more tasks than men (2.6 compared to 1.9). The 50 to 64 age group provide assistance with 2.9 tasks while all younger groups, on average, assist with 2 tasks. The 80+ age group, on average, assists with the least number (1.3) of tasks and does not assist with any more than 2 tasks out of the 8. Those rural Canadians with no young household children, on average, give assistance with 2.5 tasks compared to 2.1 tasks where young children are present.

Figure 4.14: Amount of Assistance Given Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

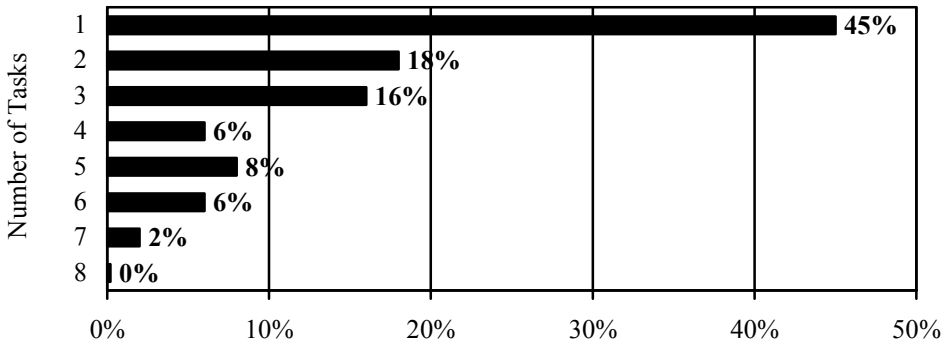
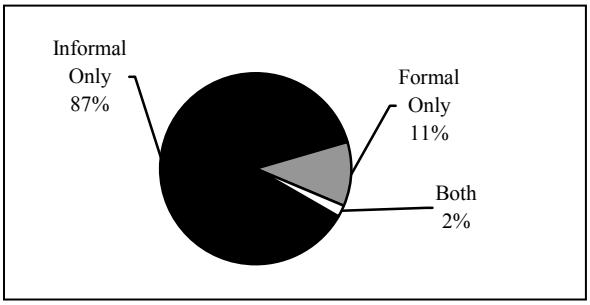


Table 4.7: Amount of Assistance Given by Demographic Variables Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

Variable	Value	Mean Score	Significance
Sex			
	Men	1.89	F= 34377.30****
	Women	2.63	
Age			
	15 to 29	2.10	
	30 to 49	2.28	F= 6087.35****
	50 to 64	2.89	
	65 to 79	2.22	
	80 and over	1.29	
Living Arrangements			
	Live alone	2.25	F= 407.68****
	With other(s)	2.40	
Presence of Children Under 15			
	No children	2.50	F= 7753.73****
	Child(ren)	2.15	
Region			
	Atlantic Canada	2.43	F= 201.92****
	Non-Atlantic Canada	2.37	
****p<0.0001			

4.7.1.4 Source of Assistance Given

Figure 4.15: Sources of Assistance Given Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).



In addition to understanding what type of tasks, the number of tasks and who is more likely to assist with them, the GSS data set provides information on the context in which the respondent gave assistance. For example, the majority of assistance given by rural Canadians due to long-term health problems or physical limitations (87%) was in an informal capacity (see Figure 4.15). Only 11% of rural Canadians gave assistance in a formal capacity through an organization. The remaining 2% gave assistance to another in a twelve month time period in both formal and informal capacities.

Table 4.8: Sources of Assistance for Individuals Who Give Assistance Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

	Informal N=673,704		**Formal N=81,375**		**Statistics**
	%	**N**	**%**	**N**	**χ^2 '000**
Individual Level					
Sex					χ^2 = 4.44****
Men	93	230,038	7	18,329	Phi= 0.08
Women	88	443,666	12	63,046	(weak)
Age					χ^2 = 14.58****
15 to 29	81	88,716	19	21,366	Cramer's V=
30 to 49	89	371,325	11	46,933	0.139
50 to 64	94	161,001	6	4,822	(moderate)
65 to 79	94	47,985	6	3,103	
80 and Over	97	4,678	3	151	
Living Context					
Marital Status					χ^2 = 9.61****
Married/common-law	91	512,028	9	48,910	Phi= 0.11
Non-married	83	161,676	17	32,465	(moderate)
Living arrangements					χ^2 = 0.82****
Live alone	93	52,191	7	4,035	Phi= 0.03
With other(s)	89	621,512	11	77,340	(weak)
Presence of Children <15					χ^2 = 0.71****
No children	89	437,680	12	56,699	Phi= -0.03
Child(ren)	91	236,024	10	24,676	(weak)
Proximity to Grocery Store					χ^2 = 0.01****
Same neighbourhood	89	552,139	11	67,457	Phi= 0.00
Surrounding area	89	116,957	11	13,917	(weak)
****p < .0001					

When examining characteristics of respondents in relation to the context in which they provided assistance, several differences emerge (see Table 4.8).[13] In particular, whether rural Canadians assist others formally or informally is influenced by age, marital status, educational attainment and employment. Those who give assistance on an informal basis, as a family member or friend, are more likely to be older, married, have lower education levels and be employed full time or not at all.

Data indicate that women and younger persons are those who give formal assistance, be it through an agency or paid directly by the recipient. Those with a higher level of education also represent a larger proportion of formal givers. Furthermore, persons employed on a part-time basis represent a greater proportion of those who give formally, possibly reflecting the part-time nature of much of the work in this area. Thus, there are distinct differences between those individuals who give assistance either informally or formally due to long-term health problems or physical limitations.

Table 4.8(continued): Sources of Assistance for Individuals Who Give Assistance Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

	Informal (N=673,704)		**Formal (N=81,375)**		**Statistics**
	%	**N**	**%**	**N**	**χ^2 '000**
Human Capital					
Personal Income					χ^2 = 0.32****
Less than $15,000	88	240,405	12	32,669	Phi= -0.02 (weak)
$15,000 or greater	87	274,706	14	42,915	
Household Income					χ^2 = 0.12****
Less than $30,000	86	142,836	14	23,939	Phi= 0.02 (weak)
$30,000 or greater	87	316,691	13	48,329	
Education Level					χ^2 = 46.62****
Less than high school	99	189,735	1	1,945	Cramer's V= 0.25
Graduated high school	98	101,576	2	1,781	(moderate)
At least some post secondary	83	374,396	17	77,649	
Employment					χ^2 = 63.46
Not employed	98	234,581	2	5,363	Cramer's V= 0.29
Employed part time	68	70,683	32	32,628	(moderate)
Employed full time	89	352,152	11	43,383	
Region					
Atlantic Canada	89	191,671	11	24,274	χ^2 = 0.07
Non-Atlantic Canada	89	482,033	11	57,101	Phi= -0 .01 (weak)
****p < .0001					

4.7.1.5 Summary of Assistance Given

Fourteen percent of rural Canadians provide help to others because of long-term health problems or physical limitations. Non-household tasks such as grocery shopping and transportation are the most common, followed next by household tasks such as meal preparation and personal care. Sex and age of the respondent are key to understanding both the type and amount of assistance given. No differences emerge for whether rural Canadians live in Atlantic Canada or not.

While less than one fifth of the rural population provides assistance to others because of long-term health problems or physical limitations, the majority do so in an informal capacity as family members or friends. Rural informal caregivers can be characterized as older and married, with lower levels of education and not employed; whereas rural formal caregivers may be characterized as women, younger and single with some post secondary education and part-time employment.

4.7.2 Assistance Received Due to a Long-Term Health or Physical Limitations

Sixteen percent of rural Canadians receive assistance with tasks due to long-term health problems or physical limitations (weighted N= 305,275, unweighted n= 546). This section provides a description of the type of assistance received, the amount of assistance received, the characteristics of those who receive help from others and the extent to which such help is received whether formally or informally.

4.7.2.1 Description of Rural Canadians Who Receive

An equal proportion of rural men and rural women receive assistance due to long-term health problems or physical limitations. However, more than half of those who do (57%) are 65 years and older and are married (57%). Almost all (95%) have no children less than fifteen years of age. Two thirds (67%) have less than high school education and only 10% are employed, either on full-time or part time basis. Slightly more than one-third of those who receive assistance have personal household income above $15,000 or household income above $30,000.

Table 4.9: Characteristics of Rural Canadians Who Receive Assistance Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

	%	N= 305,275
Individual Level		
Sex		
Men	49	150,428
Women	51	154,848
Age		
15 to 29	11	34,208
30 to 49	16	48,777
50 to 64	15	47,132
65 to 79	35	106,941
80 and over	22	68,217
Health Status Mean (sample data)		0.68
Living Context		
Marital Status		
Married/common-law	57	174,889
Non-married	43	130,386
Living Arrangements		
Alone	22	67,108
With other(s)	78	238,168
Presence of Children <15		
No children	95	289,643
Child(ren)	5	15,632
Proximity to Grocery Store		
Same neighbourhood	77	231,570
Surrounding area	23	67,503
Note: may not total 100% due to rounding	****$p < .0001$	

Table 4.9 (continued): Selected Characteristics of All Rural Respondents Who Receive Assistance Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

	%	N= 305,275
Human Capital		
Personal Income[14]		
Less than $15,000	66	132,427
$15,000 or greater	34	67,867
Household Income[15]		
Less than $30,000	64	122,353
$30,000 or greater	36	69,604
Education Level		
Less than high school	67	188,102
Graduated high school	11	30,760
At least some post-secondary	22	63,314
Employment		
Not employed	90	268,871
Employed part time	8	25,692
Employed full time	2	4,754
Region		
Atlantic Canada	33	100,512
Non-Atlantic Canada	67	204,763
*Note: may not total 100% due to rounding	****p < .0001	

4.7.2.2 Type of Assistance Received

Individuals who receive assistance due to long-term health problems or physical limitations will do so with a variety of tasks. These instrumental activities include: child care, meal preparation/clean-up, house cleaning/laundry/sewing, house maintenance/outside work, shopping for groceries/other necessities, transportation, banking/bill paying, and personal care. Almost two-thirds of rural Canadians (see Figure 4.16) receive assistance with house cleaning. Almost half receive help with grocery shopping (46%), transportation (45%), meal preparation (44%) and house maintenance (43%). Only 5% receive help with child care.

Figure 4.16: Types of Assistance Received Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

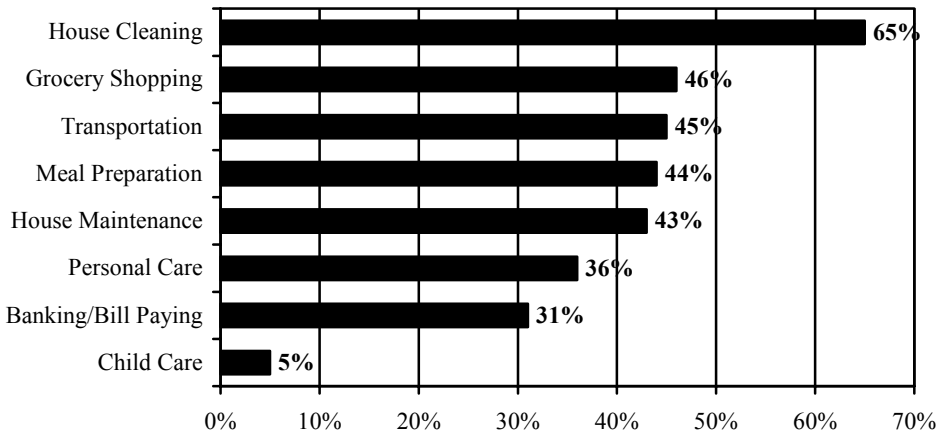
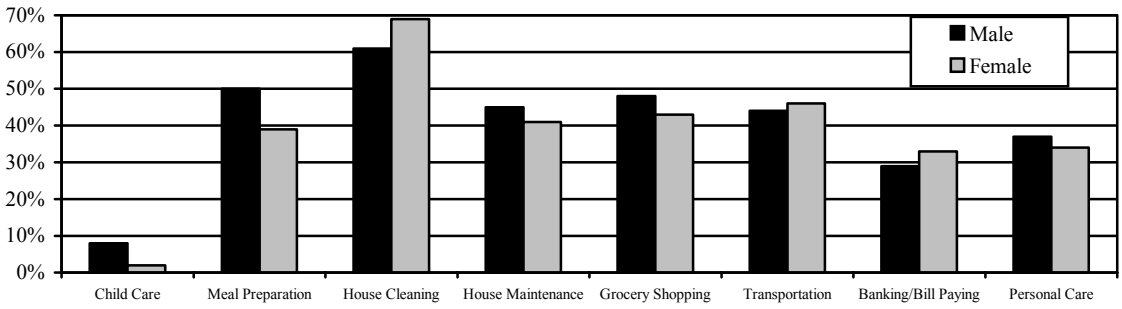
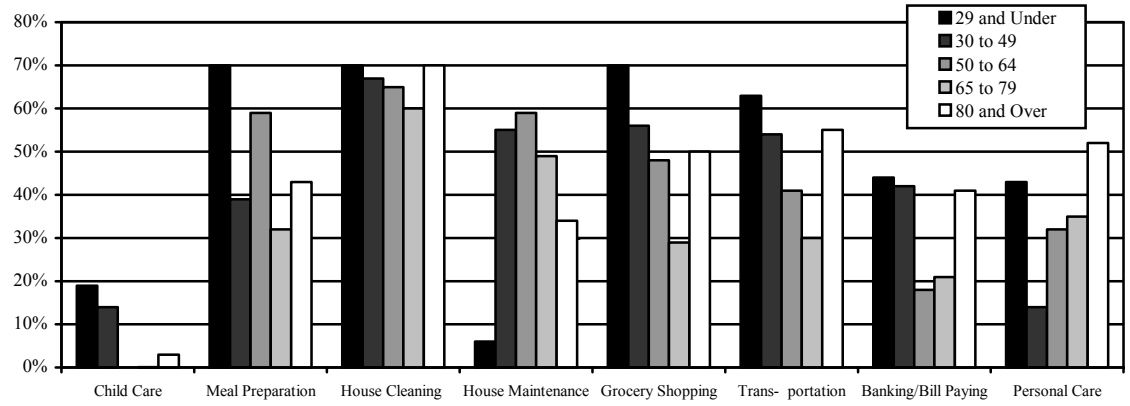


Figure 4.17: Types of Assistance Received Due to Long-Term Health Problems or Physical Limitations by Sex (General Social Survey, 1996).



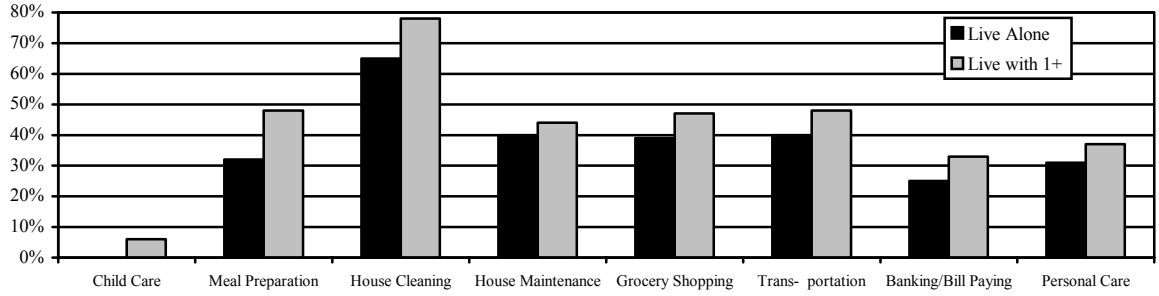
Assistance received with specific tasks varies by sex (see Figure 4.17 and Table 15 in Appendix D). For example, men more commonly receive assistance with child care than women (8% compared to 2%). Similarly, men more commonly receive assistance with meal preparation than women (50% compared to 39%).

Figure 4.18: Types of Assistance Received Due to Long-Term Health Problems or Physical Limitations by Age (General Social Survey, 1996).



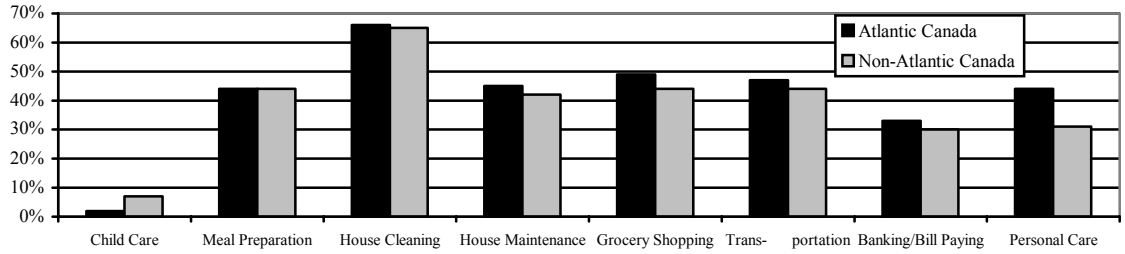
Assistance received with specific tasks varies by age (see Figure 4.18 and Table 16 in Appendix D). With the exception of house cleaning, there is a moderate association between each task and age. For example, rural Canadians in younger age categories more commonly receive assistance with child care than those in older age categories. Otherwise, the pattern of association differs by task. For meal preparation, grocery shopping and transportation, younger adults more commonly receive assistance (70%, 70% and 63%); with a lower proportion in middle age groups and then increasing proportion for the 80+ age category.

Figure 4.19: Types of Assistance Received Due to Long-Term Health Problems or Physical Limitations by Living Arrangements (General Social Survey, 1996).



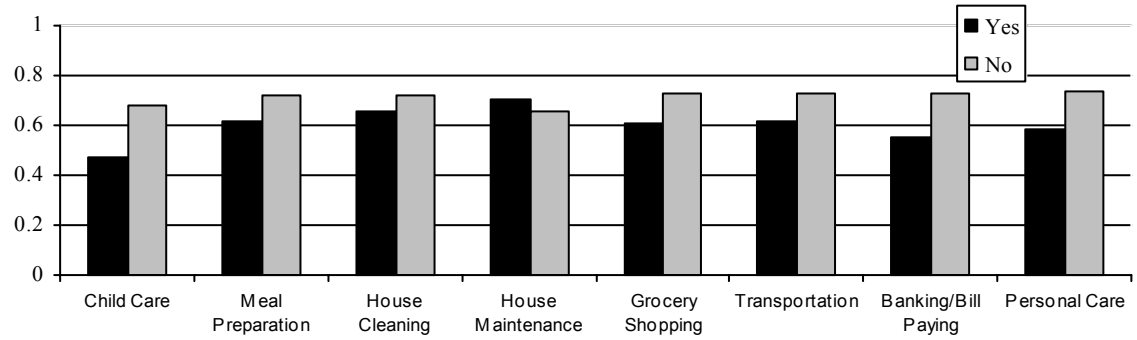
Assistance received with specific tasks varies by living arrangements (see Figure 4.19 and Table 17 in Appendix D). Specifically, rural Canadians who live with others, compared to those who live alone, more commonly receive assistance with child care (6% compared to 0%) and meal preparation (48% compared to 32%).

Figure 4.20: Types of Assistance Received Due to Long-Term Health Problems or Physical Limitations by Region, (General Social Survey 1996).



Assistance received with specific tasks varies by whether the respondent lives in rural Atlantic Canada or not (see Figure 4.20 and Table 18 in Appendix D). For example, rural Canadians in non-Atlantic Canada than those in rural Atlantic Canada more commonly receive assistance with child care (7% compared to 2%). Conversely, rural Atlantic Canadians compared to non-Atlantic Canadians more commonly receive assistance with personal care (44% compared to 31%).

Figure 4.21: Types of Assistance Received Due to Long-Term Health Problems or Physical Limitations by Mean Health Score (General Social Survey, 1996).[16]



Assistance with specific tasks varies by respondent's health status (see Figure 4.21 and Table 19 in Appendix D).With the exception of house maintenance, those receiving assistance on average reported lower health status scores.

4.7.2.3 Amount of Assistance Received

Almost one third of rural Canadians (31%) received assistance with one task (see Figure 4.22) while nearly half (48%) received assistance with one or two tasks. When examining the amount of assistance by select demographic variables, some differences emerge (see Table 4.10). The youngest age group (15-29) on average receives assistance with a higher number of tasks than other age groups (3.8); the middle age and young senior age groups receive the least. There is a negative moderate association between health status score and the number of tasks: the lower the health status score, the higher the number of tasks. Households with no young children result in a higher number of tasks with which assistance was provided.

Figure 4.22: Amount of Assistance Received Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

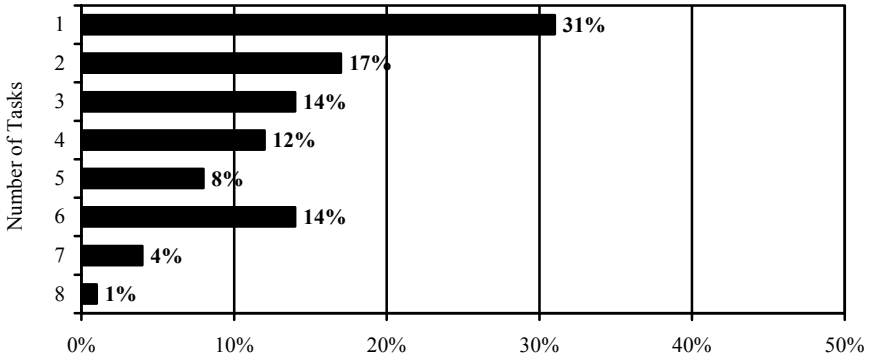
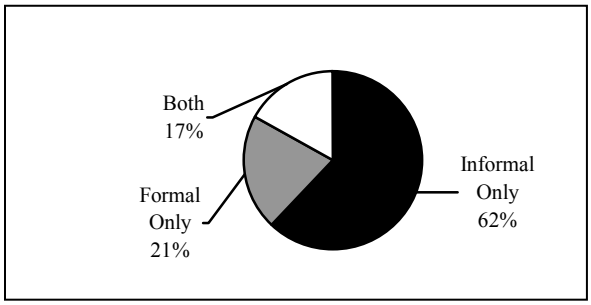


Table 4.10: Amount of Assistance Received by Demographic Variables Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

Variable	Value	Mean Score	Significance
Sex			
	Men	3.19	F= 425.89****
	Women	3.05	
Age			
	15 to 29	3.85	
	30 to 49	3.41	F= 4388.84****
	50 to 64	3.20	
	65 to 79	2.54	
	80 and over	3.40	
Health Status Index	Correlation (Pearson)	-.51 Sig at the 0.01 level	
Living Arrangements			
	Live alone	2.65	F= 4903.19****
	With other(s)	3.25	
Presence of Children Under 15			
	No children	3.14	F= 632.38
	Child(ren)	2.73	
Region			
	Atlantic Canada	3.27	F= 947.67
	Non-Atlantic Canada	3.04	
**** p< 0.0001			

4.7.2.4 Source of Assistance Received

Figure 4.23: Sources of Assistance Received Assistance Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).



In addition to understanding what type of tasks and who is more likely to receive such assistance, the GSS data set provides information on the context in which the respondent received assistance. For example, almost two thirds of assistance received by rural Canadians due to long-term health problems or physical limitations was from family and friends (see Figure 4.23). Almost one quarter who received assistance did so through an organization. When examining characteristics of respondents in relation to the context in which they gave assistance, several differences emerge (see Table 4.11).[17]

Whether rural Canadians receive assistance from others informally or formally is influenced by sex, age, living arrangements, educational attainment and employment status. For example, men are more likely than women to receive assistance from family and friends. Younger rural Canadians who live with others and those with lower educational attainment are more likely to receive assistance from family and friends. Finally, those employed full time or not at all are more likely to receive informal assistance.

Table 4.11: Sources of Assistance for Individuals Who Receive Assistance Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

	Informal N= 187,106		**Formal N= 64,055**		**Statistics χ^2 '000**
	%	**N**	**%**	**N**	
Individual Level					
Sex					$\chi^2 = 8.58$****
Men	83	102,513	17	21,516	Phi= 0.18
Women	67	84,593	34	42,539	(moderate)
Age					$\chi^2 = 34.80$****
15 to 29	97	33,214	3	994	Cramer's V=
30 to 49	88	39,442	12	5,163	0.37 (strong)
50 to 64	88	37,255	12	5,170	
65 to 79	56	48,219	44	37,838	
80 and Over	66	28,977	34	14,890	
Living Context					
Marital Status					$\chi^2 = 0.16$****
Married/Common-law	59	109,758	25	35,747	Phi= 0.02
Non-Married	73	77,348	27	28,309	(weak)
Living arrangements					$\chi^2 = 10.31$****
Live alone	56	27,067	44	20,979	Phi= -0.20
With other(s)	79	160,040	21	43,077	(moderate)
Presence of Children <15					$\chi^2 = 1.73$****
No children	74	176,057	26	62,899	Phi= -0.08
Child(ren)	91	11,049	10	1,156	(weak)
Proximity to Grocery Store					$\chi^2 = 1.28$****
Same neighbourhood	74	143,749	27	51,850	Phi= -0.07
Surrounding area	81	40,942	19	9,456	(weak)

Table 4.11 (continued): Sources of Assistance for Individuals Who Receive Assistance Due to Long-Term Health Problems or Physical Limitations (General Social Survey, 1996).

	Informal N= 187,106		**Formal N= 64,055**		**Statistics χ^2 '000**
	%	**N**	**%**	**N**	
Human Capital					
Personal Income					χ^2 = 0.26****
Less than $15,000	81	81,179	20	19,664	Phi= 0.04 (weak)
Greater than $15,000	78	49,332	22	13,685	
Household Income					χ^2 = 0.002****
Less than $30,000	77	74,689	23	21,930	Phi= 0.04 (weak)
Greater than $30,000	80	50,539	20	12,376	
Education Level					χ^2 = 6.67****
Less than high school	79	122,630	21	31,939	Phi= 0.17
Graduated high school	70	18,285	30	7,938	(moderate)
At least some post-secondary	62	32,762	38	20,246	
Employment					χ^2 = 11.16****
Not employed	75	164,306	25	54,584	Phi= 0.21
Employed part time	13	611	87	4,143	(moderate)
Employed full time	86	20,289	15	3,430	
Region					
Atlantic Canada	70	53,161	30	22,665	χ^2 = 1.10****
Non-Atlantic Canada	76	133,945	24	41,391	Phi= -0.07 (weak)
*Note: may not total 100% due to rounding		****p < .0001			

In addition to understanding the context of receipt of assistance by selected demographic variables, Table 4.12 presents the results when considering the types of tasks according to region. With the exception of house cleaning, there are significant differences in the sources of assistance received by Atlantic Canadians due to long-term health problems or physical limitations. Similarly, with the exception of house cleaning and personal care, significant differences emerge for non-Atlantic Canadians.

The proportions of those Atlantic Canadians and non-Atlantic Canadians who receive assistance from informal sources – family and friends – due to long-term health problems or physical limitations are similar for the tasks examined. For example, more than 60% of Atlantic Canadians and non-Atlantic Canadians receive assistance from family and friends with house cleaning. Similarly, more than half of rural Canadians in both regions receive informal assistance with meal preparation, grocery shopping and transportation, while 44% of Atlantic Canadians and 45% of non-Atlantic Canadians do so with house maintenance.

Patterns are not as similar between the regions for receipt of assistance with tasks from formal sources. For example, rural Atlantic Canadians more commonly receive assistance from formal sources (24% do with meal preparation, 22% with grocery shopping, 20% with transportation and

11% with banking/bill paying compared to 7%, 9%, 9% and 4% respectively for non-Atlantic Canadians). Moreover, more than half (51%) of rural Atlantic Canadians receive assistance from formal sources with personal care, compared to only 27% of non-Atlantic Canadians.

Table 4.12: Sources of Assistance for Individuals Who Receive Assistance Due to Long-Term Health Problems or Physical Limitations by Region (General Social Survey, 1996).

Atlantic Canada					
Task	**Informal**		**Formal**		**Statistics**
	%	**N**	**%**	**N**	
Meal Preparation	51	27,005	24	5,410	$\chi^2 = 4.71$**** Phi= -0.25 (moderate)
House Cleaning	62	33,129	58	13,114	$\chi^2 = 0.13$**** Phi= -0.04 (weak)
Home Maintenance	44	23,158	27	6,018	$\chi^2 = 1.94$**** Phi= -0.16 (moderate)
Shopping for Groceries	57	30,415	22	4,920	$\chi^2 = 8.10$**** Phi= -0.31 (strong)
Transportation	55	29,187	20	4,471	$\chi^2 = 0.07$**** Phi= -0.33 (strong)
Banking/Bill Paying	38	20,275	11	2,486	$\chi^2 = 5.59$**** Phi= -0.27 (moderate)
Personal Care	34	18,162	51	11,511	$\chi^2 = 1.82$**** Phi= 0.16 (moderate)
****p < .0001					

Table 4.12 (continued): Sources of Assistance for Individuals Who Receive Assistance Due to Long-Term Health Problems or Physical Limitations by Region (General Social Survey, 1996).

Non-Atlantic Canada					
Task	**Informal**		**Formal**		**Statistics**
	%	**N**	**%**	**N**	
Meal Preparation	53	69,942	7	2,911	$\chi^2 = 26.86$**** Phi= -0.39 (strong)
House Cleaning	61	81,482	66	27,368	$\chi^2 = 0.33$**** Phi= 0.04 (weak)
Home Maintenance	45	59,319	30	12,538	$\chi^2 = 2.65$**** Phi= -0.12 (moderate)
Shopping for Groceries	51	66,775	9	3,739	$\chi^2 = 22.43$**** Phi= -0.36 (strong)
Transportation	51	67,321	9	3,721	$\chi^2 = 22.88$**** Phi= -0.36 (strong)
Banking/Bill Paying	34	44,760	4	1,517	$\chi^2 = 14.54$**** Phi= -0.29 (moderate)
Personal Care	26	33,793	27	10,989	$\chi^2 = 0.01$**** Phi= 0.01 (weak)
****p < .0001					

4.7.2.5 Summary of Assistance Received

Sixteen percent of rural Canadians receive help from others because of long-term health problems or physical limitations. These individuals appear to be older and married. House cleaning is the most common type of task with which assistance was received. Sex, age, living arrangements and region distinguish what type of task one receives help with; the exception is house cleaning

which is only distinguished by health score. Age and health status influence the amount of assistance rural Canadians receive. While less than one fifth of rural Canadians receive help due to long-term health problems or physical limitations, the majority receive such help from family and friends. Rural care recipients of informal help can be characterized as young men, living with others and with lower levels of education. In addition, those not employed or employed on a full-time basis are more likely to receive help from family and friends. Moreover, patterns are similar between the regions for those who receive assistance from informal sources. However, differences exist between the regions when examining the type of tasks people receive assistance with from formal sources. For specific tasks the proportion of rural Atlantic Canadians receiving formal assistance is twice to three times greater than their rural counterparts.

4.8 Summary

Analysis of these national data advances an understanding of the patterns of helping relationships among rural Canadians. Rural Canadians more commonly receive instrumental and expressive forms of assistance than give assistance (16% compared to 14%). And those who receive assistance due to health or physical limitations do so with a higher number of other tasks than those who give assistance. Housecleaning, grocery shopping, transportation and meal preparation are the common forms of assistance with which rural Canadians give and receive assistance. A greying of rural Canada is likely at play as individual level variables such as sex, age, living arrangements and health status characterize those rural Canadians engaged in such helping activity. Moreover, the majority of helping by rural Canadians, both giving and receiving, is done in the context of family and friends. However, a greater proportion of rural Canadians give assistance informally than receive from informal sources such as family and friends.

This analysis also highlights regional distinctiveness in terms of helping activity. A greater proportion of Atlantic Canadians live with others than non-Atlantic Canadians and Atlantic Canadians do not have the same level of income as non-Atlantic Canadians. Because of these unique circumstances, Atlantic Canadians may have increased access to social support networks than their non-Atlantic Canadian counterparts and may be required more so to draw on these sources. However, what also differs by region is the type of tasks with which rural Canadians receive assistance. A greater proportion of rural Atlantic Canadians receive formal assistance with meal preparation, grocery shopping, transportation and personal care. This finding may be due to the escalated aging of Atlantic Canada which is driving higher care needs or the fact that two home care programs in the region include light housekeeping in their range of services. Moreover, another contributing factor may be the underground economy at work in rural Atlantic Canada where payment for service is given to friends and family members when needed assistance is unavailable through formal organizations.

ENDNOTES

[1] Respondent level data only were extracted. This analysis does not include roster level data.
[2] In the GSS file, Prince Edward Island (PE) was not given an urban-rural indicator because of the small sample size. Rather than excluding PE respondents from the analysis, they were recoded to be RURAL.
[3] The 964 includes those who gave assistance and those who received assistance.
[4] Personal Care includes only those individuals who give and/or receive assistance due to long-term health problems or physical limitations, but is still included in the analysis of all respondents.
[5] 31.6% (N= 1,524,069) Missing
[6] 32.4% (N= 1,562,843) Missing
[7] 31.6% (N= 1,524,069) Missing
[8] 32.4% (N= 1,562,843) Missing
[9] Expressive forms of assistance are not included in this description of the sample, however, additional detail is available for this sample in terms of the number of and kinds of instrumental tasks given and/or received. Long-term health problems or physical limitations as a result of temporary difficult times or normative helping because of the way tasks are shared in the household or otherwise were not included in this profile of helping relationships.
[10] Some of the findings contradict existing research which examines people who either give or receive help because of need. Noteworthy that the sample used in this section is of the total rural Canadian population regardless of age or need.
[11]21% (N= 164,479) are missing
[12]29% (N= 224,463) are missing.
[13]For the purposes of further analysis, the mixed category has been removed as it does not provide the ability to differentiate between the types of tasks that were being given either informally or formally. Mix of informal and formal is defined on a person level basis and is not specific to any activity (Statistics Canada, 1998).
[14] 34% (N= 104,981) are missing
[15]37% (N= 1,133,318) are missing
[16]This analysis is based on unweighted sample data.
[17]For the purposes of further analysis, the mixed category has been removed as it does not provide the ability to differentiate between the types of tasks that were being given either informally or formally. Mix of informal and formal is defined on a person level basis and is not specific to any activity (Statistics Canada, 1998).

Section Five
Case Study: Population Change and the Maintenance of Community Health Status
Parrsboro, Nova Scotia

5.1 Introduction

Rural communities are influenced by a variety of social, economic and political factors which have an impact on population change, health and the provision of both formal and informal social supports. These factors vary not only by the rural-urban differential, but also by the region and context of the rural communities themselves. The previous sections of this report have identified components of population change in Atlantic Canada as well as patterns of formal and informal supports within this region. Section Five presents primary level data from a qualitative case study analysis of a single community in Atlantic Canada experiencing population loss. The selection of this community, the research methodology and methods and profiles of the participants and the community are outlined here. Key findings are discussed in relation to the effects of population loss on community health, the effects of health care restructuring on health services and health status, community strategies for maintaining health, and the effectiveness of community strategies for maintaining health.

5.2 Selection of Community

A single community was selected as a non-representative case study to examine population loss and the maintenance of community health status. Statistics Canada 2001 Census Community Profiles data were examined to identify rural communities in Nova Scotia, comprised of less than 10,000 individuals, experiencing population loss and population aging (Statistics Canada, 2001m). Rural Census Sub-Divisions in Nova Scotia that had more than one community within its boundaries were eliminated because of possible problems associated with obtaining community-level data.

Four communities were identified as potential community case studies. [1] Each of these four communities had a moderate population loss, 5% to 6.9% between 1996 and 2001 Census years, compared to a 4% gain nationally (Statistics Canada, 2001m). In each community, the percentage of residents over age 65 as a percentage of the total population was 17% or greater; this is higher than the national average of 13% (Statistics Canada, 2001i, 2001m). A key consideration in the selection of the community case study was the presence of researchers from other universities

Figure 5.1: Parrsboro Town Sign

in the community and community involvement in ongoing research. Other considerations included the availability of community-level data, travel time and distance, access to amenities such as overnight accommodations, and existing community contacts.

The Town of Parrsboro, located on the Bay of Fundy in Cumberland County, Nova Scotia, was selected as the site for the community case study (see Appendix E for map of the Town of Parrsboro). In addition to moderate population loss and an aging population, the Town of Parrsboro has faced the effects of health care restructuring, including the closure of its local hospital. A preliminary examination of community-wide activities suggested that the community had responded proactively to this closure.

5.3 Methodology

Qualitative research methodology utilized focus group and individual, semi-structured interview methods to investigate four research questions:

1. What are the effects of population loss on community health in rural areas?

2. What is the impact of health care restructuring on health services and health status in rural communities with population loss?

3. What strategies do individuals and communities adopt to maintain health in rural communities experiencing population loss?

4. Which strategies are effective for maintaining community health? And, why are some strategies effective for some communities and not for others?

This research received approval from the Mount Saint Vincent University Research Ethics Board and adhered to *The Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans*. Written, informed consent was obtained from all research participants (see Appendices F and G). Written, informed consent was also obtained for the use of all photographs that included individuals (see Appendix H). Participants were able to withdraw from the research at any time, although none did. Additionally, participants were assured of confidentiality in all phases of the research, including the reporting of research findings.

5.3.1 Data Collection

One of the investigators made initial contact in December 2002 with a previously known member of the Parrsboro community. As a result of this contact, a face-to-face meeting was arranged in Parrsboro in January 2003 with selected community members, all of whom were active in community-based organizations. Support in principle for the research was obtained from these selected community members, who also provided guidance to the investigators on the town's prior history with research studies and expectations regarding the dissemination of research findings to the community. Subsequent to this meeting, the Parrsboro Town Council provided support in principle for the research at its meeting in January 2003 (see Appendix I). Parrsboro Town Council also encouraged members of the community to support the research.

Triangulation of qualitative research methods included focus group meetings with community organizations, semi-structured interviews with individual community members, including former town residents, and individual interviews with key informants, individuals who by virtue of their professions in the health and education sectors were well informed about restructuring and change. Notices about the research were also posted in high traffic locations in Parrsboro, although these notices garnered no direct response (see Appendix J).

Members of five community organizations were invited, through organizational leaders, to participate in focus groups; four organizations met with members of the research team between February 2003 and May 2003. These four organizations included The Parrsboro and Area Board of Trade, The 689 Handley Page Air Cadet Squadron, The Parrsboro Over Sixties Club and The Parrsboro and Area Community Food Bank Society. Efforts were made to include a range of community organizations, including those that specifically targeted youth and seniors. A fifth group, the SPAR Community Health Board, was unable to meet with researchers before the end of the data collection phase; however, a presentation that included some reporting of preliminary findings was made to this group in June 2003.

Focus group discussions, intended to gather community-level data about population change and the implications of population change on health services and individual and community health status, were guided by a semi-structured interview schedule that was made available in advance of the meetings (see Appendices K and L). [2] In addition to written, informed consent, focus group participants also completed two separate surveys, one related to the collection of demographic information and the other, a survey of individual health status that was modeled loosely after 1996 General Social Survey questions that measure general health and well-being (see Appendices M and N). Focus groups lasted up to two hours and were integrated with, or immediately followed, a scheduled organization meeting. In two instances, these were luncheon meetings; in the other two instances, these were evening meetings. Focus groups were facilitated by at least one investigator, with the exception of a single focus group that was facilitated by the Research Associate. In all but one focus group, at least one Graduate Research Assistant was on hand to record detailed interview notes. All members of the research team who were present at focus group discussions also recorded fieldnotes, including personal observations and impressions. Focus group discussions were audio-recorded and transcribed in full.

In addition to focus groups, personal, semi-structured interviews were conducted with 10 individuals between March 2003 and May 2003. In total, 11 individuals were approached to complete personal interviews; one individual declined an interview. A pre-tested, semi-structured interview schedule asked detailed questions about four specific areas: social networks and relations; helping behaviors; existing community-based services; and individual health needs and concerns, in addition to topics identified by the interview participants (see Appendices O and P).

Interview participants were recruited through a snowball method; one interview participant also participated in a focus group. Two interviews were conducted with individuals who had left the community. A slightly revised interview schedule was used with these two individuals. Interviews were scheduled according to mutually convenient times and lasted between 20 and 60 minutes. Written informed consent was obtained and interview participants completed both demographic and health status surveys. The majority of the interviews, nine of 10, were

telephone interviews, although these were often with individuals whom members of the research team had met face-to-face during prior visits to the community. In the case of telephone interviews, consent forms and demographic and health status surveys were sent by facsimile or were mailed to participants for completion and return. Individual interviews were audio-taped and transcribed in full. One participant requested a copy of the transcript and was given an opportunity to make changes; no changes were made. In addition to recording notes during the interview, fieldnotes were recorded after each interview.

Interviews were also sought out with selected key informants, those individuals who were able, by virtue of their professions, to provide a more complete picture of health and education restructuring and changes in health services in Parrsboro and the surrounding area. Six semi-structured key informant interviews were conducted. All of these interviews were conducted face-to-face by the two research investigators, between April 2003 and May 2003 (see Appendix Q for the interview schedule). Key informants provided written, informed consent and completed only the demographic survey. Interview schedules were provided in advance of interviews, which were audio-recorded and transcribed in full. Interview notes were recorded during the interview and fieldnotes were recorded after each interview.

Also, some individuals were contacted for assistance with specific information. These conversations, recorded as personal communication, did not involve written consent nor the completion of surveys. They did not follow a pre-determined interview schedule and were not tape-recorded, although in some cases, fieldnotes were recorded afterward.

In addition to the collection of these data, a community profile of the Town of Parrsboro was undertaken to provide a more complete context for the collection and analysis of data. Over a period of six months, historical, demographic and socio-economic information, as well as information about changes to health services in the community, was compiled from government sources, published reports, personal communication, community newspapers and Internet sources. This was an iterative process and the collection of information for the purposes of completing the community profile was facilitated by the collection of data in the community.

5.3.2 Data Analysis

Transcription from all phases of the data collection was completed by May 2003, at which time all audio tapes were destroyed to comply with *The Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans*. All identifying information, including names, was removed from transcripts before they were coded.

Data were analyzed using the qualitative software program, QSR NUD*IST 6 (Non-Numerical Unstructured Data, Indexing Searching and Theorizing). All focus group and interview transcripts and all fieldnotes were coded thematically; identified themes are referred to as nodes in QSR NUD*IST 6. Coding trees were developed using nodes identified by the researchers. A separate coding tree for key informant transcripts reflected the different types of information provided by this group of participants. Preliminary and secondary levels of coding were completed by two Graduate Research Assistants. Upon completion of coding, all data were analyzed by node and in relation to each of the four research questions identified above. Key findings are organized by these four research questions.

5.3.3 Methodological Challenges

There were some challenges and limitations for analysis in the collection of data. For instance, unanticipated problems with recording equipment during one focus group necessitated a heavy reliance on interview notes and fieldnotes to fill in poor recording quality. Three of the four focus groups were convened at the conclusion of organizational meetings, some of which were concerned with this research specifically. This situation may have resulted in fatigue among some focus group participants. Initially, focus group discussions focused heavily on health services; the focus group schedule was subsequently modified to encompass broader understandings of health and the determinants of health and to elicit discussion about strategies, beyond health services, that addressed community health. Additionally, a focus group convened with youth had a large number of participants and participation from individual participants may have been limited.

Providing interview schedules in advance, in order to prepare informative responses, had both advantages and disadvantages. On the one hand, it allowed participants to fully consider their responses and to provide additional context that may not have been included otherwise; on the other hand, advance preparation may have resulted in more guarded or careful responses. The fact that most of the individual interviews with community members were conducted over the telephone, although often with individuals that the researchers had previously met face-to-face, limited opportunities to read body language, facial expressions and other forms of non verbal communication in interview situations.

Finally, assurances of confidentiality presented a significant challenge for this research.[3] In the case of focus groups, the fact that participants were already known to each other may have facilitated discussion; however, it may also have forced some participants to be more reticent in their responses. In some individual interviews and key informant interviews, participants shared extraordinary stories about individuals and groups of individuals helping others in the community, as well as poignant individual examples of exclusion; however, the fact that the individuals could be readily identified because of the uniqueness of these circumstances prevented their inclusion here.

5.3.4 Profile of Participants

In total, 61 individuals in the community were contacted; 45 of these individuals in four focus groups, 10 in individual interviews and six in key informant interviews. Demographic data was collected for 52 individuals.[4]

Table 5.1: Parrsboro Participant Profile

	All Respondents (n=52)	**Air Cadet Focus Group Excluded (n=35)**
Sex		
Men	37%	30%
Women	63%	70%
Age		
14 to 19	35%	3%
20 to 39	12%	17%
40 to 64	31%	46%
65 and over	23%	34%
Marital Status		
Married/Common-law	48%	71%
Single/widowed/divorced	52%	29%
Education		
High school or less	54%	31%
Some/completed trade/ college	13%	20%
Some/completed university	33%	49%
Birth Place		
Cumberland County	48%	49%
In Nova Scotia	23%	17%
Outside Nova Scotia	28%	34%
Don't Know	2%	-
Residency		
Less than 5 years	14%	23%
6 to15 years	42%	29%
15 or more years	42%	47%
Residency Continuous		
Yes	76%	67%
No	24%	33%
Living Arrangements		
Live alone	8%	11%
With others	92%	89%

Most participants were women, over the age of 40 and married (see Table 5.1). The typical participant was born in Parrsboro, has resided there continuously, and has completed some post-secondary education. She is likely to be employed on a part-time basis, with an annual personal income between $20,000 and $39,999. Health status was reported to be very good, with no limitations due to a long-term health problem or condition. Although this describes the most

typical participant, it is not intended to be an exact profile of any one individual with whom we spoke nor representative of all participants.

Overall, more than half of the case study participants were women. Excluding the demographic data for the youth focus group, 80% of all participants were over age 40 and 34% were over age 65. Nearly three-quarters of the participants were married. Almost half (49%) of participants had some university education or had completed university, while 31% of participants noted their highest level of education attained to be high school or less. Three quarters of participants (76%) had resided in the Parrsboro area continuously and nearly half had been born in Cumberland County.

Table 5.1(continued): Parrsboro Participant Profile

	All Respondents (n=52)	**Air Cadet Focus Group Excluded (n=35)**
Employed		
Yes	56%	54%
No	44%	46%
Employment Status[5]		
Full-time	22%	33%
Part-time	37%	44%
Seasonal	41%	22%
Employment Insurance		
Yes	10%	11%
No	90%	89%
Canada Pension Plan		
Yes	33%	49%
No	67%	51%
Pension (private)		
Yes	25%	37%
No	75%	63%

Again, excluding youth who are typically employed on a part-time basis and/or seasonally, a little more than half (54%) of participants were in paid employment. Only one-third of our participants were employed full time, the remainder were employed part time or seasonally. Participants were not asked, however, whether or not they had chosen or preferred employment on a part-time or seasonal basis.

Anecdotal information suggested that there were a substantial number of retirees and seniors in Parrsboro. This is supported by evidence that almost half (49%) of these households had derived income during the preceding twelve months from the Canada Pension Plan/Quebec Pension Plan. Additionally, 37% of households derived income during this same period from other pension plans.

Personal incomes were calculated by excluding two groups of participants: the youth, whose personal incomes were expected to be relatively low based on their full-time participation in education; and the relatively small number of key informants whose personal incomes were

higher than average. The majority of participants reported household incomes between $10,000 and $39,000 (see Table 5.2). As a group, men in this case study were more likely than women to report higher personal incomes: 33% of men reported personal incomes over $40,000, in comparison with only 18% of women who reported personal incomes over this amount.

Table 5.2: Parrsboro Participant Profile: Personal Income of Men and Women

	All Respondents (n=46)[6]		**Excluding KIs and Air Cadet FG (n=28)**	
	M	F	M	F
Less than $10,000	11	8	2	4
$10,000 to $19,999	1	6	1	6
$20,000 to $39,999	3	6	3	6
$40,000 or more	4	7	3	3
Total	19	27	9	19

When excluding the Key Informants only, most participants (77%) reported no limitations due to long-term health problems or health conditions; the majority (84%) of participants reported good health (see Table 5.3).Yet, just over half of all participants noted that their lives were very stressful (9%) or somewhat stressful (42%).[7] Over half (60%) of all participants reported that they had control over most decisions.

Table 5.3: Parrsboro Participant Profile: General Health and Well-Being Measures

	All Respondents, No KI (n=47)	**Air Cadet FG Excluded (n=30)**
Lost Job		
Yes	4%	7%
No	96%	93%
Ill Family Member		
Yes	37%	30%
No	63%	70%
Death in Family		
Yes	15%	10%
No	85%	90%
Death of Friend		
Yes	20%	17%
No	80%	83%
Health Status		
Excellent	24%	20%
Very good	36%	40%
Good	24%	23%
Fair	11%	10%
Poor	4%	7%
Stress		
Very stressful	9%	3%
Somewhat stressful	42%	45%
Not very stressful	36%	31%
Not at all stressful	13%	21%
Decision Control		
Few or some decisions	14%	15%
Most decisions	60%	56%
All decisions	26%	30%
Long-term Health Limitation		
Yes	23%	29%
No	77%	71%

5.4 Profile of the Community

5.4.1 The Settlement of Parrsboro

Figure 5.2: View to Partridge Island

The Town of Parrsboro, with a current population of 1,529, is located in Cumberland County, in the north west area of the province of Nova Scotia (Statistics Canada, 2001e). It is situated on the Minas Basin in the Bay of Fundy and small towns and villages populate the shorelines adjacent to the community. The nearest large town is Amherst, 55 kilometres north of Parrsboro while Truro, 95 kilometres south east and Halifax, 105 kilometres beyond Truro, are other proximate Nova Scotia urban centres. Sackville, New Brunswick is approximately 64 kilometers north west of Parrsboro (see Appendix R).

Once the home of the indigenous Mi'kmaq, Parrsboro is named for Governor John Parr, the 12th Governor of Nova Scotia, 1786-1791 (Brown, 2002; Byers, 1982). Incorporated as the Town of Parrsborough in 1786, the Parrsborough Township was part of King's County until 1840 when an Act to divide and annex pieces of the Parrsborough Township to the counties of Cumberland and Colchester was passed in the Nova Scotia Legislature (Brown, 2002; Eaton, 1972). The area from west of the Huntington River to Five Islands, including Parrsborough, was annexed to Cumberland County; the remaining area was annexed to Colchester County. In 1889, the spelling of Parrsborough was changed to the current spelling (Brown, 2002).

5.4.2 A Changing Population

Since the late 1800s, the Town of Parrsboro's population has been consistently less than 10,000 individuals. Over the last five decades, there has been a gradual decline in this population.

Table 5.4: Population, Town of Parrsboro, Nova Scotia, by Decade, 1881-2001

Year	Population	% Change from Previous Decade
2001	1529	-6.4
1991	1634	-9.2
1981	1799	-0.4
1971	1807	-1.5
1961[8]	1834	-74.3
1951	7138	-0.4
1941	7170	12.8
1931	6355	8.4
1921	5861	2.6
1911	5713	10.3
1901	5178	7.6
1891	4813	--

Source: Brown, L. (2002). *Historical Cumberland County south: Land of promise*. Halifax: Nimbus.
Statistics Canada (2001m). *Welcome to the 2001 community profiles*. Retrieved July 9, 2003 from http://www12.statcan.ca/english/profil01/PlaceSearchForm1.cfm

The provincial population declined 0.1% between 1996 and 2001(Statistics Canada, 2001m) (see Table 5.5). The population of Cumberland County declined by 3.5% between the 1996 Census and the 2001 Census (Statistics Canada, 2001e). The population of Parrsboro also declined between 1996 and 2001 Census years, falling from 1,617 to 1,529 individuals, a change of 5.4% (Statistics Canada, 2001f). Population loss along the Parrsboro shore, the shoreline adjacent to the town, has occurred at a greater rate, 8.4% (Statistics Canada, 2001g).

Table 5.5: Population Statistics, Town of Parrsboro, Parrsboro Shore, Cumberland County and Nova Scotia, 1996 and 2001

	Parrsboro Population 1996	**Parrsboro Population 2001**	**% Change (1996-2001)**
Parrsboro	1,617	1,529	-5.4
Parrsboro Shore (Cumberland Subd. A)	2,699	2,471	-8.4
Cumberland County	33,804	32,605	-3.5
Nova Scotia	909,282	908,007	-0.1

Source: Statistics Canada (2001m). *2001 Census Community Profiles, Population Statistics for Parrsboro (Town), Nova Scotia*. Retrieved May 28, 2003 from http://www12.statcan.ca/english/profil01/PlaceSearchForm1.cfm

Despite this decline in population, there is some evidence of continuity of residence in Parrsboro; 64% of residents reported living at the same address for the previous five years (Statistics Canada, 2001f); 87% of residents reported living at the same address where they lived at one year previously (Statistics Canada, 2001f). Eleven percent lived elsewhere in Nova Scotia in the previous year. This mobility status pattern is similar to that at the provincial level (Statistics Canada, 2001f). Although statistical information is not available regarding seasonal residence, anecdotal evidence suggests that seasonal residence increases during the summer months.

There has been a steady decline in the number of youth, 15 to 24 years, and in the working age population, 25 to 54 years, as demonstrated in Table 5.6.

Table 5.6: Age Categories by Men and Women, Town of Parrsboro, 1996 and 2001, Percent Change

	1996			2001			% Change		
Age	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**
Total	1615	755	855	1530	710	820	-5.3	-6.0	-4.1
<15	275	150	125	270	140	125	-1.8	-6.7	0
15-24	185	95	90	160	90	70	-13.5	-5.3	-22.2
25-54	605	305	305	555	275	280	-8.3	-9.8	-8.2
55-64	190	85	105	195	85	110	2.6	0	4.8
65+	365	135	235	355	135	220	-2.7	0	-6.4
65-74	190	80	110	170	80	90	-10.5	0	-18.2
75+	175	55	125	185	55	130	5.7	0	4

Source: Statistics Canada (2001f). *2001 Census Community Profiles, Population Statistics for Parrsboro (Town), Nova Scotia.* Retrieved May 28, 2003 from http://www12.statcan.ca/english/profil01/Details/details1pop.cfm?SEARCH=BEGINS&PSGC=12&SGC=1211002&A=&LANG=E&Province=12&PlaceName=Parrsboro&CSDNAME=Parrsboro&CMA=&SEARCH=BEGINS&DataType=1&TypeNameE=Town&ID=2621
Statistics Canada. (1996). *1996 Census Community Profiles, Population Statistics for Parrsboro (Town), Nova Scotia*. Retrieved May 28, 2003 from http://www12.statcan.ca/english/profil/Details/details1pop.cfm?SEARCH=BEGINS&PSGC=12&SGC=1211002&A=&LANG=E&Province=All&PlaceName=Parrsboro&CSDNAME=Parrsboro&CMA=0&SEARCH=BEGINS&DataType=1&TypeNameE=Town&ID=2404

The median age of the population is increasing in Parrsboro. The 2001 median age was 44 years, an increase from the 1996 median of 42 years (Statistics Canada, 1996; 2001f). This is greater than the provincial median age, which is also increasing, from 36.4 years in 1996 to 38.8 years in 2001 (Statistics Canada, 1996; 2001f). This has even greater relevance given that the median age of Nova Scotia is the highest in the country, a figure shared with Quebec.

5.4.3 Making a Living in Parrsboro

The settlement and subsequent expansion of Parrsboro was likely due to its geographic position on the Minas Basin, its maritime capabilities and its wealth in lumber and coal (Centennial Book Committee, 1988). Employment was traditionally centred in primary and tertiary industries. Coal mining and shipbuilding have long histories in Cumberland County; however these industries no longer employ workers in Cumberland County (Human Resources Development Canada, 2003b; 2003j; herein HRDC). Coal mining in nearby Springhill assisted in establishing Parrsboro as an economic centre. A railway extension from Springhill to Parrsboro, built in the 1870s (Brown, 2002; Byers, 1982), allowed for the transportation of coal through Parrsboro until 1958 (Brown, 2002). With the closure of the Springhill coal mines in 1970 (Brown, 1990), county wide employment in mining was curtailed. In the early 20th century, area companies also transported lumber from Parrsboro by both water and rail (Brown, 2002; Parrsboro Shore Historical Society, 1977). Brown (2002) notes that area shipyards produced up to one quarter of all schooners built in Nova Scotia between 1870 and 1920, with an increase in shipbuilding during World War I; neither Cumberland County nor Parrsboro are currently involved in shipbuilding.

Commercial fishing in Cumberland County currently employs 230 individuals (HRDC 2003d). The industry is traditionally seasonal in nature, and employment tends to be in full-time, part-

year positions (HRDC, 2003d). Today, the logging industry employs approximately 150 people in Cumberland County on a full-time basis, although many of these are part-year positions (HRDC, 2003h). C. E. Harrison and Sons Ltd., a logging operator and retailer, maintains a lumberyard in the community of Halfway River. The Scott sawmill, once located in the town of Parrsboro, closed in 1992. At the time of its closure, Scott had 31 employees, the majority of them men (Kyte, 2003, personal communication). The Agricultural Industry is a significant employer in Cumberland County, currently employing 605 individuals (HRDC, 2003a).[9] The Fruit and Vegetable Industries employs 275 people in Cumberland County, accounting for 46% of all provincial employees in this industry (HRDC, 2003f)[10]. Three quarters of the 30 million pounds of provincial blueberry production is in Cumberland County, making it one of the largest blueberry growing regions in Canada (The Canadian Institute for Research on Regional Development, 1997). Employment in the Fruit and Vegetable Industry centres on this crop and is likely to be on a part-year basis. During peak season, Oxford Frozen Foods, a supplier of frozen wild blueberries employs approximately 450 people at their plant in Oxford and operates a seasonal plant in Parrsboro (Atlantic Canadian Opportunities Agency, 1998).

2001 Census data for the Town of Parrsboro records two, large employment-based industries to be Trades, Transport and Equipment Operators and Related Occupations, and Sales and Service Occupations (Statistics Canada, 2001b). Parrsboro Metal Fabricators, the local manufacturer of Kerr Heating Products, is the largest employer within the town limits of Parrsboro, producing water-heating boilers and warm air furnaces, as well as a range of oil, wood and gas heating equipment (Kerr Heating Products, 1999). The fabricated structural metal products industry employs approximately 30 people in Cumberland County, the majority of whom are employed on a full-time basis (HRDC, 2003c).

Sales and service occupations are primarily in government services and tourism. The Springhill Institution, a federal medium security correctional facility, employs approximately 300 to 350 individuals on a full-time, full-year basis (Canadian Institute for Research on Regional Development, 1997). Other employers in Parrsboro and the surrounding area include the Health and Social Service Industry and the Educational Service Industry.

Figure 5.3:
Ottawa House By-The-Sea Museum

Across Nova Scotia, tourism accounted for $1.22 billion in 2001 (Nova Scotia Department of Tourism and Culture, 2001). Tourism initiatives in Cumberland County are also coordinated with neighbouring counties. Two provincially designated tourist trails cut across Cumberland County, but neither tourist trail is enclosed within the boundaries of Cumberland County (The Canadian Institute for Research on Regional Development, 1997). Until 1941, a passenger ferry service, primarily for the purposes of tourism, operated between Wolfville and Kingsport in the Annapolis Valley of Nova Scotia and the Town of Parrsboro (Brown, 2002). Although the passenger ferry system no longer operates, tourism and tourism related industries remain prominent and in 2001, accounted for $27.3 million in overall revenue in Cumberland County (Nova Scotia Department of Tourism

and Culture, 2001). In 2001, approximately 700 jobs, half of these full-time jobs, were in tourism in Cumberland County (Nova Scotia Department of Tourism and Culture, 2001). The Hotels, Motels and Tourist Courts Industry in Cumberland County employs approximately 70 people in full-time, full-year positions. The Food Services Industry in Cumberland County employs approximately 485 people in full-time, part-year positions (HRDC, 2003e).

A concerted effort has been invested in developing tourist attractions in the Parrsboro area. The Fundy Geological Museum, located in Parrsboro, highlights geological formations and fossil remains, including 220 million year old dinosaur remains first located in the area in 1984 (Brown, 2002). The Ships Company Theatre has presented seasonal, theatrical performances since 1986, with an emphasis on Atlantic Canadian content and playwrights (Parrsboro, Nova Scotia: Culture and Genealogy, n.d., a). The Ottawa House By-The-Sea Museum, open seasonally, is the former summer home of Sir Charles Tupper, a founding father of Confederation. Since 1981, The Ottawa House By-The-Sea Museum has been operated by the Parrsboro Shore Historical Society (Clarke, 2000).

2001 Census data show the average, full-time, full-year earnings for individuals in the town of Parrsboro to be $26,870. The average income for all persons with earnings in Parrsboro is $14,519 (Statistics Canada, 2001b). One third of the total number of individuals with earnings from paid employment report working in full-year, full-time employment (Statistics Canada, 2001b).

Monthly Labour Market Indicator Statistics in January 2003, for the Northern Economic Region record an official unemployment rate of 9.2%. This is lower than the provincial average of 9.3% for the same month (HRDC, 2003i). Yet, 2001 Census data for the town of Parrsboro show an official unemployment rate of 17.2%, based on reporting the week prior to Census day. This rate is significantly higher than the official provincial average of 10.9% for the same period (Statistics Canada, 2001b). These unemployment figures may not fully reflect the seasonal nature of employment. They are also limited in that official rates of employment do not include individuals who have given up seeking employment. Human Resources Development Canada (2001) Labour Market Review employment data for Northern Nova Scotia show growth in part-time employment as a percentage of full-time employment.

5.4.4 Health Care and Health Services

In the last decade, Parrsboro and surrounding area have experienced significant changes in the planning, management and delivery of health services, specifically hospital services. Many of these changes are a result of larger shifts toward health care regionalization, referring to the devolution of health care services from the province to sub-provincial levels, such as health regions (Canadian Centre for Analysis of Regionalization and Health, 2003c; herein CCARH).

The 1972 report, *Health Care for Nova Scotia: A New Direction for the 70s* first introduced the idea of Regional Health Boards in Nova Scotia (Minister's Task Force on Regionalized Health Care in Nova Scotia: Final Report and Recommendations, 1999). Since that time, three subsequent provincial reports have recommended regionalization as a primary strategy for the delivery of health care. These reports include the *Nova Scotia Royal Commission on Health Care* (1989), and two Nova Scotia Department of Health reports, *Health Strategy for the Nineties:*

Managing Better (1990) and *Nova Scotia Blueprint for Health System Reform* (1994). The 1990 report outlines specific factors in the determination of regions and their boundaries, including population size of communities (>80,000 individuals) and population distribution, traditional referral and utilization patterns, regional, economic and sociological identity, common health interests and existing boundaries. The 1994 report suggests a reformed provincial health care structure that includes the formation of four Regional Health Boards, a provincial Programs Advisory Committee and a network of Community Health Boards. Despite the fact that the earliest recommendation for regionalization was made in1972, the first legislation that addressed Regional Health Boards in Nova Scotia was *Bill 95: An Act to Establish Regional Health Boards,* which was tabled and passed in 1994 by the Nova Scotia Legislature.

In 1996, the provincial Department of Health established four Regional Health Boards. Northern, Eastern, Western and Central Health Boards were to be responsible for managing and delivering hospital-based services and mental health services (Ministers Task Force on Regionalization, 1999). Cumberland County, including Parrsboro, was located within the Northern Health Region. The boundaries for the Northern Health Region encompassed Cumberland, Colchester, Pictou and East Hants counties.

In 1999, the Nova Scotia government outlined its intent to replace the four Regional Health Boards with nine District Health Authorities. The intention was to allow for better integration of services and to foster community ownership (CCARH, 2003b). In 2001, the four Regional Health Boards were replaced with nine District Health Authorities responsible for health services governance, including planning, managing, delivering, monitoring and evaluating services (CCARH, 2003a). The Cumberland District Health Authority, District Health Authority Five (DHA 5), covers the geographical area of Cumberland County (CCARH, 2003a). This Health Authority has the smallest population base, 32,605 individuals, and the largest geographical area (4271.28km sq.) of the nine District Health Authorities (Statistics Canada, 2001e).

Following the passing of *Bill 95*, a 1995 Nova Scotia Department of Health document titled *From Blueprint to Building,* identified the establishment of Community Health Boards as a priority. Community Health Boards were mandated to submit community health plans to the District Health Authority, which would be integrated into an overall, provincial health plan (CCARH, 2003a). *The Health Authorities Act*, including legislation for the establishment of Community Health Boards was passed in the Nova Scotia Legislature in March 2000 (Nova Scotia Department of Health, 2003a). [11] Community Health Boards operated without a clear definition of their roles and responsibilities between 1995 and 2000.

Concurrent with health regionalization, some rural hospitals in Nova Scotia were closed; others were converted into related facilities, such as community care facilities.[12] The Parrsboro Hospital was, with assistance from the provincial government, converted into the current facility, The South Cumberland Community Care Centre. This facility has sixteen Level II long-term care beds, two of which are designated palliative/restorative. Some emergency and limited diagnostic services, including X-ray, ECG and laboratory services are available, as are some visiting services, such as foot care clinics (Parrsboro, Nova Scotia- Education and Medical**,** n.d., b). However, these services were reduced in the spring of 2003 as a result of a physician shortage in Parrsboro (Parrsboro ER, 2003).

The community of Parrsboro worked proactively in addressing changes to health services and in addressing area health concerns. Community members formed The Healthy Parrsboro and Area Committee (HPAC) in 1994, with project assistance from the primary health care fund and the Health Promotion Volunteer Fund. Among the goals of HPAC were to recognize and address the needs of Parrsboro and surrounding area (Fuller, Personal Communication, 2003). Established to address a range of community needs, HPAC operated with a sub-committee structure that targeted the needs of seniors and youth. In 1994, HPAC members undertook a health needs assessment survey, targeting community members, including those involved with the administration and delivery of health care services (HPAC, 1997).

The Southampton, Parrsboro, Advocate and Regions Community Health Board (SPAR) was established in June 1997, covering the area from Five Islands to Chignecto Bay along the coastline, and reaching inland to Southampton (Community Health Planning and Evaluation Working Group, 1998; SPAR Community Health Board, 1999). In 1999, the SPAR Community Health Board developed a Community Health Plan to identify health issues in its catchment area (SPAR, 1999). Based on the needs assessment previously prepared by the HPAC, and on community discussions, SPAR identified the following health concerns: a perceived lack of health services, such as home care and a declining number of physicians; transportation issues, including poor road conditions and lack of public transportation; a high level of unemployment; and, environmental issues, such as agricultural pesticide use and sewage disposal (SPAR Community Health Board, 1999). Currently, SPAR is preparing a Community Health Plan for submission to the Department of Health, to be released in 2003.

Figure 5.4: Parrsboro, Nova Scotia

Mortality rates provide a partial glimpse of individual health status in Parrsboro and the surrounding area. The mortality rate for the Cumberland District Health Authority is 622.65 deaths per 100,000 persons, ranked the fourth lowest among the nine District Health Authorities and lower than the provincial mortality rate of 635.51 deaths per 100,000 persons (Nova Scotia Department of Health, 2003b). The most frequently cited causes of death in District Health Authority Five, including all of Cumberland County, are malignant growths, heart disease and respiratory diseases (Nova Scotia Department of Health, 2003b). Cancer Care Nova Scotia concurs; incidence rates of cancer in the Cumberland Health Authority are the second highest in the province for women and the third highest for men (Saint-Jacques, MacIntyre, Dewar & Johnston, 2002). These statistics must, however, be considered in their economic and social contexts as determinants of individual and community health.

5.4.5 Resources and Amenities

The Town of Parrsboro is governed by an elected mayor, four elected town councillors, and a Town Council, although federal and provincial governments also play a role in the development of the policies affecting municipal government. A parallel structure, the Parrsboro Youth Town

Council, addresses issues specific to Parrsboro youth and is supervised by one of the elected Town Councillors. Municipal jurisdiction includes the physical infrastructure of the town, including roads within municipal limits, sidewalks, wharfs, and water and sewer systems. Police protection is provided by a detachment of The Royal Canadian Mounted Police (Parrsboro, Nova Scotia – Natural Resources and Town Services**,** n.d., d).

The town of Parrsboro has a Regional Elementary School and a Regional High School. Both schools have a 25 kilometre catchment area within county boundaries. Schools in some adjacent communities, however, have closed. For instance, The Nova Scotia Department of Education announced the closure of the Five Islands School in 2002, this decision a result of declining enrollment up to Grade Two (Von Kintzel, 2003). Enrolment in the Chignecto Central School Board has declined by over 2,000 between 28,140 students in 1996/1997 and 26,131 students in 2000/2001, consistent with the overall population decline and changing age characteristics illustrated in Tables 5.2 and 5.3 above (Nova Scotia Department of Education, 2002). More than half (57% between the ages of 25 and 64 years) have completed some post-secondary education, although only 8% have completed the level of bachelor degree or higher (Statistics Canada 2001c).

The Cumberland Campus of the Nova Scotia Community College is located in Springhill, approximately 42 kilometers from Parrsboro. This is the only post-secondary educational training institution in Cumberland County. There are 225 full-time and 700 part-time students enrolled at the Cumberland Campus, Nova Scotia Community College (Nova Scotia Community College, 2001).

Ferry and rail services no longer connect Parrsboro with other parts of the province; a system of public bus transportation is also no longer available (Brown, 2002; Byers, 1982). Access to and from the community is by private transportation, on a two lane, provincially graded, trunk highway.

Public Internet access is available in Parrsboro through two Community Access Program (C@P) sites funded by Industry Canada; high speed Internet connections are, as yet, unavailable to residents and businesses in Parrsboro.

There is a wide range of activities in Parrsboro and surrounding area. Many of these activities are sustained by the volunteerism of community members, such as the Healthy Parrsboro and Area Committee, the South Cumberland Community Care Centre Recreation Committee and the Volunteer Fire Department, to name a few (see Appendix S). The physical environment also facilitates a number of outdoor activities as well, including hiking, cycling, golf and all terrain vehicle access trails (Parrsboro, Nova Scotia – Housing and Recreation, n.d., c). Various service organizations take an active role in organizing community-wide activities and events. Additionally, there are five Christian churches in Parrsboro: the Pentecostal Tabernacle, St. Brigid's Roman Catholic Church, St. George's Anglican Church, Trinity United Church and the United Baptist Church (Parrsboro, Nova Scotia – Volunteers-the Heart of our Community, n.d., e). St. George's Anglican Church has existed in the community since 1789 (Parrsboro Shore Historical Society, 1977).

5.4.6 Summary of Community Profile

Parrsboro has maintained its status as a small, rural Nova Scotian town; however, there has been a significant decline in the overall population of the town over the past five decades. In particular, there has been a decline in youth, ages 15 to 24 years, and the working age population, ages 25 to 54 years, residing in the town. At the same time, there has been an increase in the median age of the population and in the number of individuals over the age of 75. The decline in the working age population has coincided, over time, with decreased opportunities for full-year, year-round employment, particularly in primary and tertiary industries. While limited employment opportunities exist in these industries, opportunities for employment are shifting toward the Fruit and Vegetable Industry and Tourism and Tourism Related Industry that tend to operate seasonally. Population declines are also reflected in elementary and secondary school enrolments, while opportunities for post-secondary education remain limited.

The community of Parrsboro has worked to address individual and community health needs. In addition to the formation of HPAC and participation in the SPAR Community Health Board, community members continue to identify and respond to local health concerns and needs. Service and community-based organizations have mobilized a range of community-wide activities with the intention of improving individual and community health and well-being. Many of these activities, however, are dependent upon individual community members who are themselves aging (Gottlieb, 2002), and on the voluntary labour of service organizations. Gradual population decline and population aging present challenges for the long-term maintenance of a healthy community.

5.5 Analysis of Key Findings

In focus groups and face-to-face individual interviews with selected community members, some of whom worked directly in health and education sectors, residents of Parrsboro and the surrounding area shared their views, perceptions and experiences of population change, health care restructuring, health services and community efforts to maintain health status. Analyses of these issues reveal their complexity in the context of rural life and in the everyday experiences of rural residents.

5.5.1 Effects of Population Loss on Community Health

Figure 5.5: Bandstand, Parrsboro, Nova Scotia

While there is evidence to support population losses in Nova Scotia and in the Parrsboro area between the 1996 and 2001 Census (Statistics Canada, 2001e; 2001f), residents' perceptions about population loss vary. While some participants in this research believe that population loss in the town of Parrsboro presents a significant hurdle for the community, they are also cognizant of the varying ways in which populations change, of which population loss is only one aspect. Significant population change in Parrsboro includes population loss, population aging and the shift toward a retirement community and seasonal residence.

Seeking employment and educational opportunities elsewhere and the death of elderly residents are commonly cited reasons for population loss in Parrsboro. Population loss is also noted amongst children and youth and is evident by the declining school age population.

Some effects of a declining population include diminishing community services, such as health services and a loss of community expertise, both of which have possible detrimental effects for community morale. Changes to services, including health care services, may be viewed as resulting from population loss alone, although services are altered and/or are rendered unavailable for a range of reasons. The former Parrsboro Hospital, now converted to the South Cumberland Community Care Centre is lamented as a loss by this town resident,

> *Instead of having [the South Cumberland Community] Care Centre, we should actually have a hospital in the community. I know it's a lot to ask because of [the] population, but it's terrible that people have to go out of town [for medical treatment]*.

Population loss affecting adjacent communities also affects the provision of services in the area.

> *Five Islands is going to be a ghost town, because everyone's going to be dead*.
>
> *[In Five Islands] the Post Office is gone, and the school should be closing before too long. If you look…each house along the road and you see that within, I would say ten years, half of them are going to be empty. Half the community is empty now and the other part will be empty.*
>
> *And one of the Lower Five Islands churches closed this year, at the beginning of the year and now the Five Islands church is not well attended, so you know, that's a concern…*
>
> *And, Advocate would be another example of where the declining population makes the population [in the area] decline. You know, one feeds the other.*

There is a perception that as the town population is decreasing, participation in community-wide activities is also decreasing and individual and community expertise stand to be lost. A focus group participant uses the example of the volunteer fire department to argue this point,

> *Why you just, basically what you're running on is the idea that the Fire Department would be big enough, you wouldn't lose them all at once. But when you get into…more specialty-type jobs, then it's a smaller group that does it; therefore, you have more of an opportunity to lose that expertise.*

Similarly, a member of the Parrsboro Historical Society suggests that, *"…[I]f we don't encourage more younger people to come in, in the next say ten years, I don't know that you'll have a [Parrsboro] Historical Society anymore. Not the way it is now."*

The loss of resources and expertise may have detrimental effects on community morale, evident already in the response of one focus group participant who, in response to questions about

population loss in Parrsboro, characterized the area as *"…going downhill fast. And there are people working hard, but they can't seem to get anywhere."*

Alternatively, conditions of population loss, limited service provision and threats to individual and community expertise can also act as catalysts to bolster involvement in community activities and can foster a supportive environment that facilitates individual and community health and well-being.

Effects of population aging are not straightforward. While the town is described as *"a retirement community"* the transition toward a retirement community appears to be a gradual and unintentional one.

> *People come here to retire [because] it's where they grew up. They move away and do their jobs and then they come back to retire, which increases the elderly population. You know, there are very few of us who are young that lives here.*

This unintentional move toward a retirement age community offers some benefits. A focus group member suggests,

> *…[T]he community is being enriched by having both the older people who've always been there and other people who've moved in from other places who never had a connection there, but just love it…*

A key informant concurs with this idea,

> *…[S]ome of them [former residents] return to retire. They go on and live their lives and that's what's very nice about this community too, is that you have a lot of worldly people. They…although you'll always have pockets in every group of people who never left the area, there does seem to be quite a large number of those who have gone on, lived their lives, have come back for early retirement or late retirement and, and bring all of those resources and life experiences back with them, and which also makes it a very resourceful community.*

The seasonal nature of residence in Parrsboro enriches the community. Yet, at the same time, the stark contrast between the busy summer and the slower winter has possible detrimental psychological consequences for some residents.

> *…[O]ur population probably doubles, if it triples [during the summer], so if you have the theatre taking place, so we have people coming to that and then we have all the people that have moved out of the area coming back to their cottages. You know, people are golfing and they're staying in their cottages, and it's lovely. The place booms. Come November, everybody starts hibernating because everybody's gone. Economically, everything closes down. Restaurants close down. I think there's probably one restaurant that remains open after Christmas and that's there. Everything else is closed – oh, and the tavern [remains open]. So you know, then there's not very much and people are, you know, businesses are struggling to get through the winter in the hopes that summer will*

come and then we'll you know, start doing very well. [It is] very difficult psychologically, you know. It's a struggle. It's a struggle.

In contrast to those returning to Parrsboro upon retirement, young people pursuing post-secondary education opportunities typically leave the town. Middle-age leavers, often with children, are typically seeking employment opportunities, supporting the view that *"…there's not enough people moving in that have young kids."*

Despite consistent claims that the community lacks a sufficient number of families with young children, there are concerted efforts by some community-based organizations to promote and maintain activities for children and youth, a strategy that may also help to address declining community morale. A key informant suggests,

> *I think to me a healthy community is like anywhere. You have to have a starting point, and your starting point is your youth. So if you have programming for the babies, and then, you know, for the pre-teens or the elementary school kids and then you continue supporting them and educating them, then they feel more optimistic and they feel brighter and they feel that they have some hope. But, if you don't provide those pieces and you continuously take away, then you are sabotaging the future, because our future is our youth.*

Some residents of Parrsboro feel that the population changes do not present extraordinary challenges for individual and community health and well-being and that the situation in Parrsboro is comparable to other rural towns. *"So, I think on the whole, it's not bad you know. I think we're comparable to other rural areas that has an elderly population."*

Figure 5.6: Main Street, Parrsboro, Nova Scotia

Key informants in this research, individuals whose first-hand involvement in politics, health and education in the community typically differs from town residents, share similar mixed views about the effects of population change on the community. One key informant suggests the effects of population changes on community health are unexceptional.

> *Well, I don't think we're worse off than any other small areas, as far as health. I don't think that we have any burning issues. It's a very elderly population and it ages as we go, so far from the fact [or] we're going to have more chronic illness and you know, more elderly people and the conditions that come with elderly people.*

Another key informant, while noting the effects of population change as complex, suggests that these changes can negatively affect individual well-being and could be a contributing factor in decisions to leave rural communities.

Population loss, while an important constituent of community health and well-being, is only one dimension of population change in Parrsboro and occurs concurrently with other population changes. The cumulative effects of population change, including population loss over time, may eventually shift concerns and priorities as they relate to community health and well-being. While there is concern, expressed to varying degrees, about the declining number of year-round residents, some of whom are elderly, these concerns appear to be at present offset by two factors. The first factor is the view of returning retirees as renewing community life with new interests and new energy; the second factor is seasonal residence and summer tourism that dramatically change the atmosphere of the town during the summer months and transform Parrsboro into a vibrant and dynamic place.

5.5.2 Effects of Health Care Restructuring on Health Services and Health Status

Figure 5.7: South Cumberland Community Care Centre, Parrsboro, Nova Scotia

Health care restructuring happens on many different levels, often simultaneously, and for a variety of reasons. Reasons for restructuring may or may not be transparent. Health care restructuring is often viewed as externally imposed. Health care and health services are also restructured from within communities in response to internal pressures, such as changes in the situation of community-based health care practitioners, changing community needs and population changes. Restructured health-related services may also change in their frequency and/or location of their provision. They may assume other forms or they may be eliminated altogether. All of these forms of change are present in Parrsboro. The Parrsboro community hospital, built in 1972, closed two decades later. The provincial government closed the existing facility and assisted in its conversion to the present South Cumberland Community Care Centre that provides nursing home beds and a small number of palliative care and respite beds. This centre retains some diagnostic and emergency services; other health services, such as optometry and psychiatric services, are offered in the community only on a visiting and often a wait-listed basis. However, during the data collection process, the emergency room hours of operation were reduced as a result of a physician shortage in the community (Parrsboro ER, 2003).

In Parrsboro, restructuring the provision of health services by the province leads, on the one hand, to a declining confidence in health services and a perceived lack of accountability. On the other hand, it serves as the impetus for community-generated health initiatives, presenting a picture of Parrsboro as a resilient community able to adapt capably to change. Parrsboro takes justifiable pride in its ability to adapt to change and to support existing health services and facilities; however, there is also uncertainty about its continued ability to maintain health services and health status at present levels in the face of continuing health care restructuring and population change, including population loss.

A lack of confidence among town residents in response to restructured health services is almost palpable. One focus group participant questions the existence of a system altogether, *"And if you*

look at the health care system in the province overall, which I would argue there is no system, to be honest with you." This same man notes a lack of accountability in health services,

> *And like for instance, you go to the health board, the [Community] Health Board will say, 'oh well, we'll check with the [District Health] Authority.' You go to the Authority and they'll either say, 'well, that's really something you should bring up with your Health Board,' or they'll say, 'well, they'll pass it up the line to the health department.' No one really answers to anything.*

Health care restructuring and processes of centralization are criticized for changes to services, as well as the processes through which these changes are made. For instance, the announcement by the Deputy Minister of Health to close the former hospital is felt by some residents not only as the loss of an institution, but also as the loss of community ownership; The Ladies' (Hospital) Auxiliary subsequently collapsed.

Health care restructuring is also interrogated for the ways that it is perceived to shift costs from the province onto communities and individuals. This perception of shifting costs is voiced by one focus group participant,

> *What makes it cost effective is that the province no longer has to pay for it. Somebody has to pay for it, but not the province. [Let me] give you an example. One of the arguments [about] closing down the hospital here, [is that] it's more cost effective to have the hospital in Amherst. So, what was really cost effective was the province managed to find a way, not purposefully because I don't even give them that much credit, but they found…a system in actual fact, what they did was shift the cost.*

A frequently-cited example in relation to the shift of costs onto individuals is the cost for travel, specifically travel related to ambulance services. While it is not clear that ambulance services are in demand or are even used frequently by Parrsboro residents, the fact that there is a cost to individuals for this service displeases some residents. Their displeasure is without doubt heightened by the fact that there is no system of public transportation available, by concerns about the poor condition of rural roads, and by the relative geographic isolation of the town. One focus group participant suggests that, *"In a lot of cases, or some cases, some people [who may need an ambulance] won't call an ambulance. They'll ask a family member to take them somewhere or something, because of the tremendous cost."*

A woman whose husband has had more than one heart attack presumes that some of the responsibility for transfer rests with her, and says that in the event of another heart attack, she can drive him to the closest hospital in Amherst, *"but I can't do CPR while I'm driving."* Travel is problematic for accessing an array of health services, as noted by this key informant,

> *After six o'clock you can't get any meds [medication]…You have to drive to Amherst. So you know, on the weekends, they're only open for so many hours and you know, or lunch break and then the summer break and so forth…It makes it very difficult.*

It is also the case, however, that the limited availability of amenities and services and the necessity of travel are problematic for other rural and remote communities, and that Parrsboro is not unique in this regard.

While a committee established for the purposes of recruiting physicians to Parrsboro has successfully recruited two physicians under the Family Practice Opportunities programme, physician stability in the town remains a concern for some residents. An elderly town resident recounts some of the difficulties that she faced in locating a physician upon returning to the community after living elsewhere,

> *I asked if they had anyone who could take me on and they said 'no, they didn't have a doctor that I could use,' and they suggested that if I was sick that I could go to Amherst, which is almost three quarters of an hour away for any medical care. I'm a widow, I live alone….So, someone said, 'call the Department of Health' and ask them what I should do…so [she] did establish a doctor for me. And when I called back they were all gung ho about helping me… it seemed quite a drastic resort to have [to go through] to establish a doctor when you have major health problems.*

The provincial funding formula, a cornerstone of health restructuring and centralization, is viewed as inadequate in its ability to account for the particular circumstances of this community, and for other rural communities, such as geographical remoteness, the lack of public transportation, and circumstances of population aging.

> *Which is one of the reasons why our argument, we need, you can't use this [assumption that] well, for every 1,500 people you need a doctor or whatever it is. You can't use that, and because it's much lower. The ratio has to be much lower simply because of the aging population. In fact, we'd like to see them cut that in half [be]cause the opinion of the [Physician] Recruiting Committee is what we need here is four doctors.*

Not all individuals with whom we spoke are dissatisfied with health services in Parrsboro; some are satisfied with the health services that they receive. It is possible that their health care needs are currently being met. It is also possible that some residents adjust their expectations to accommodate the health services that they are likely to receive. One woman states,

> *So, I'm really not upset with our health care system that we're getting out here in the country. Some people are, and I don't know why they are. Maybe they think they should be getting it 'bang bang bang,' but I realize you are going to have to wait for appointments and you're going to have to wait for this and you're going to have to wait for that. It doesn't matter whether you're here, or where you are.*

Similarly, another woman suggests,

> *On the health side of things, you know, I'm relatively happy with our little community [Care Centre] here. We have doctors now. I have, you know, a family doctor, a GP [General Practitioner] here in town and I also go to a [specialist physician] outside of town… as well.*

In addressing the concerns of Parrsboro residents about health care restructuring and its effect on health services, one individual is careful to characterize the situation as one where *"the perception becomes worse than the reality."* Parrsboro is notable for its efforts to address their reality through community-wide health initiatives that may help to maintain community health status. Community members in Parrsboro have responded to health care restructuring by undertaking, almost entirely in a voluntary capacity, initiatives that assume a proactive role in addressing health needs and concerns. One obvious example of this initiative is the formation of the Healthy Parrsboro and Area Committee (HPAC). This local committee supports health promotion initiatives, such as helping to make visiting health and social services available in the community, and it sponsors community-wide events, such as Family Fun Day and dances.

While these specific initiatives are recognized as valuable contributions to community health, their limitation as project-based, voluntary initiatives is also acknowledged. Although HPAC once operated an office in Parrsboro with a paid staff coordinator and maintained an active roster of volunteers and a sub-committee structure, funding from the Health Promotion Volunteer Fund and from a primary health care fund have not been renewed. The office has closed, some of the sub-committees appear relatively inactive and the number of volunteers and initiatives appear to be on the decline.

It is important to recognize that in the face of health care restructuring and centralization, population change and concerns about both of these, there is still tremendous confidence in Parrsboro as a resilient community that can adapt and flourish in the face of change. One key informant confidently characterizes Parrsboro as *"a resilient community that adapts well to change."* This sense of community resilience is more apparent among key informants, whose mostly professional positions offer them a unique, and often first-hand view of health service restructuring, its intention and long-term projections, than is apparent among most community residents.

Key informants, by virtue of their professions, are positioned to see the efforts to maintain health services beyond the community level. A key informant highlights some of the contributions that the Community Health Board (CHB) model makes to community health,

> *Each year we're allotted sort of a small grant that we can get community groups to apply for and we can help with different things. That has worked well. Because of the result, we have been able to get our Red Cross equipment program up and going again. We have been able to help the youth with a skate [board] park. You know, we've helped the Search and Rescue team out in {a neighbouring coastal community} with their training, so we have an Emergency Response Team. So, we have done, you know, small contributions to sort of help out, and those were monetary.*

This same individual also acknowledges some limitations of this model and changes to health services in the community, *"It's not very much, but yet we're helping and those things have been successful and we've managed some good projects. But, as far as influencing…the trend in health, no."*

> *One of the changes that I think was not helpful was to take the public health community nurses out of the community. When Public Health made its changes, and specialized school nurses and these nurses and those nurses, it took away the generalist who knew the community and who knew who is helping who*.

Yet another key informant points to the centralization of visiting health care services as problematic,

> *Scheduling is done out of Halifax…which happened recently, probably going back, oh six months at the most, and that has been an adjustment. It's very difficult to realize the geography of the area when you're not from the area, so trying to schedule someone for let's say, for Advocate or Parrsboro, and then try[ing] to schedule them for Amherst, you don't realize that it might take 45 minutes, or longer, depending on weather conditions to get from one spot or the other. So, it's a bit of a struggle.*

Decisions, such as the one to close the community hospital, are viewed by some key informants in a more positive light and as providing opportunities for the community.

> *So what we are gaining from having people being able to live here as opposed to going somewhere else [for health services] is far greater than what we are losing. And the government put in a fair bit of money for us to do physical renovations, the Board put up money itself that it had, but the government threw in a lot of money for physical plant changes and all that kind of stuff. And we ended up with a bigger budget, more staff.*

There is no consensus, however, among key informants about the necessity of a hospital facility in the community. Contrary to the position stated above, another key informant suggests, *"I would like to see a hospital being established. I feel with adequate numbers of physicians, three of four serving the community that we can certainly support a…full[y] bona fide hospital."*

Unlike many of those with whom we spoke in focus groups and personal interview settings, key informants are more likely to place the onus of responsibility for maintaining health status on individual community members. The following suggestion is made,

> *I think the community needs to speak and they need to be encouraged to do it themselves, and empowered by whatever that is - financial, education, people - whatever. I think that's what brings well-being. If you have good self esteem and a good work ethic, you're gonna make the community work.*

Another key informant identifies that what is needed is *"…leadership, leadership, leadership…to be able to have people who will step up to the plate and show leadership. That's critical."*

At the same time, reservations about the ability of those individuals involved to represent a full range of community experiences may reflect population changes in Parrsboro. This key informant explains,

The unfortunate thing with the Community Health Board is that a lot of people are retired or older, so you don't have the whole spectrum of youth and the middle aged and so forth, because most of the activities with the Community Health Board occur during the day, so any seminars, any meetings, any involvement happens during the day, so for a working person, obviously you can't attend because you're working. So historically, our Community [Health] Board has consisted of retired people who are interested, who would like to see a change, or who are interested in knowing what's there for them and how to, sort of, make sure that they will be looked after. So the whole idea of community health…you don't get a very good cross section of the population.

Perceptions of the effects of health care restructuring on health services and health status depends on the health services one requires and where one is positioned in relation to processes of restructuring. Some community members express a lack of confidence in health services and concern about a lack of accountability in health care restructuring. This lack of confidence can have further detrimental effects on community health and can contribute to population loss. For instance, people are less likely to remain in areas, or relocate to areas, where health services are understood as limited.

Community-generated health initiatives in Parrsboro are an unanticipated positive outcome of health care restructuring, and can counter negative perceptions of health service restructuring. Community resilience, in the face of health care restructuring and the declining population, remains a point of pride. Highlighted by key informants, resilience is still highly dependent on the efforts and good will of individual community members.

A key consideration for the maintenance of health status in Parrsboro, in light of health service restructuring, is the sustainability of community-generated health initiatives. Its reliance on voluntary labour must be considered in relation to patterns of population change and population loss.

5.5.3 Community Strategies for Maintaining Health

In Parrsboro and the surrounding area, a wide range of strategies is employed to maintain the health status of individuals and of the community generally. Not all of these are explicitly recognized as strategies for health maintenance. Some, such as the participation of individual community members in the activities of HPAC, are obvious. Others, such as helping behaviours toward family and friends, are less obvious and may be overlooked as explicit strategies for health maintenance, apparent only when they come under duress.

Strategies include helping behaviours involving assistance with instrumental and emotional forms of support exhibited toward family, friends and neighbours. Ideas that helping behaviours are consistent with life in small, rural communities help to foster a community mindset about the necessity of a shared responsibility. This sense of shared responsibility is evident in expectations of reciprocity and the view about volunteerism as an integral part of small, rural community life. Voluntary labour makes it possible to shape conceptualizations of health broadly, to provide a range of activities and health choices to various community constituents, such as youth, and to complement existing services. Voluntary labour also facilitates the replacement of existing

services with unpaid labour, leaving the community in the position of demanding essential services for individual and community health and well-being.

Responsibility for health is conceptualized as both an individual and a collective responsibility, although the message that all individuals are responsible for determining their own health status and for making individual, responsible health choices seems to be the prevailing message. One man, responding to a question about the health status of the community, demonstrates his familiarity with the model of individual responsibility,

> *…[T]here are a number of people in our community who are in poor health, but I think a lot, it is diet related and exercise related. But I'm not convinced that they've ever been told properly about what you can do to help prepare proper meals and how inexpensively you can…prepare a decent meal that's healthy; and so they tend to rely on what they've always relied on – deep fried foods and chips and stuff, and it's just not very good.*

The model of individual responsibility is also the subject of criticism for its assumption that all individuals are equally able to exercise healthy choices. A smoking cessation program initiated by the Department of Health and recently offered in the Parrsboro area is identified as a program that places both the responsibility and the costs of health and well-being on the individual. An area resident questions the approach, and its use of resources.

> *They [the provincial Department of Health] want to implement this program to help you quit smoking. It was going to cost you $125. If you went through the program, whether you quit smoking or you didn't quit smoking, he was going to take $25 off of it, so it was going to cost you $100 and then they have the aides to help you quit smoking, which you would have to buy, and they ranged anywhere from $10 to $60. I said, 'now that's all great, now who's going to pay for this?'...They're telling you that you shouldn't smoke, they're driving the cigarettes up sky high so they're trying to keep you from smoking; but still, if you smoked for 50 years, it's pretty hard to quit.*

This individual responsibility model of health, both embraced and rejected, coexists alongside expectations of collective responsibility for ensuring health. The following description of collective responsibility, provided by an elderly Parrsboro resident, exemplifies not only the salience of a mythical past, but it also exemplifies ways in which expectations of collective responsibility implicitly shape and are shaped by gender roles and expectations.

> *You know, years ago, when a neighbour was sick you went out and we cared for that neighbour. And it didn't cost you a cent. And there was many a family, like the mother would go. They'd call for the mother to go and take care of that neighbour and she'd have a family and she would leave that family with her husband or the older girl or whatever and they would, the neighbours would take turns, not only one [person] to care for the sick.*

The model of helping behaviour that is offered here is recognized as characterizing the past; yet, it also informs the present community mindset, a common script about expectations of individuals in small rural towns to assist family, friends and neighbours in need, and the idea that,

"…[E]veryone watches out for each other" and *"If you do need help, there's always someone you can call to help you. And there's, there is a lot of support here if anyone does really need it."*

This common script is bolstered by assumptions about the strength of familial and extra-familial networks, such as friends, in small, rural communities and the assumed close proximity of these relations. The persistence of gender expectations also bolsters this common script, as do situations in which other forms of assistance are unavailable or less readily available.

Examples of helping behaviours toward individual family members, friends and neighbours are plentiful in conversations with community members in focus groups and personal interviews. Sometimes help is provided occasionally; other times it is provided regularly; sometimes help is voluntary; other times it is regarded, particularly in relation to familial relations, as obligatory. It is usually without the expectation of payment, although it can be reciprocated, as either balanced or unbalanced, with other forms of assistance.

One woman provides her elderly parents with both regular and occasional forms of help. She regularly keeps an eye of their health, visits with them and provides them with emotional support. During the illness of one parent, she provided additional help.

> *I made meals, cleaned [their] house, put up Christmas decorations, took them down because it was all around the Christmas time period…So, normally, you know, apart from that my parents were pretty independent and they were inclined to take care of themselves, but my mother is fine now.*

She provides occasional help to an elderly neighbour as well. *"[W]e'll go over and give her a hand with her yard work, or you know, shoveling out the snow."* Her help is presented as a reciprocal exchange.

> *And otherwise, you know, just [in terms] of general support to my parents for any number of things that they may need, and they're reciprocal. It's a reciprocal arrangement, so they're always helpful to take [my] kids and so on, and that's required as well.*

Expectations of reciprocity help to present a picture of individuals in small rural towns as mutually cooperative. The fact that these exchanges are not expected to be monetary transactions reinforces the view of a community that takes care if its own. This man describes his own experience with these exchanges,

> *I was mowing the grass and one of the neighbours drove by and saw me and knew I had {an illness}, and he said 'you can't do this' and came and finished cutting the grass. And, then came back every week and helped me cut the grass…And also wouldn't take anything monetary in return…Often people don't want monetary thanks.*

The ability of the community to pull together in situations of adversity also reinforces the community script about the community as one that takes care of its own. Reported in local newspapers and publicly recounted for the purposes of fund raising, a couple of these situations are described by a participant,

> *Well, there was a house fire actually, oh gosh, I guess it was about a year ago in {a neighbouring community} and a woman lost her house and they've raised, the community has raised a considerable amount of money to help rebuild her home for her. There's also a woman…who has cancer and they've been raising funds for, to help for {her treatment}. So yeah, things like that occur frequently in the area. They'll have dances or whatever to raise money to help someone with medical expenses that they can't afford…So, it was really nice to see in that [these] instances that people went together and helped.*

This support, a source of community pride, can also mask the services required in the community. Expectations of reciprocity, even if unspoken, may prevent the ability of those with limited resources, and without an ability to reciprocate, from accepting help that they need (Side, 1999). The common script about a community that helps to take care of its own may intensify pressures for those who cannot afford to help. Limited access to resources such as time and money and a stoic independence, still highly valued in the rural communities, may serve as additional barriers to giving and receiving assistance. For example, those with young families, some of whom commute outside of the community to paid work, are recognized by one participant as having less time to help.

> *…[T]hey can't have the interest in going out and doing a lot of things in their community, because I mean, by the time they get home, they have their families to care for and I mean, you know,…things have got so much higher, so much more complicated that there isn't the time. There's not the time.*

Seeking out help in the context of a small community also can be, as this woman warns, disadvantageous,

> *That's one disadvantage of living in a small town. You have to be a bit careful with who[m] you trust with your details, otherwise you'll be the 'theme of the week' the following week. So anyway, I mean, my friends have been great, but it requires a bit of prudence when you move into a small town to figure who's who and who's connected to who and all that stuff.*

The expectation of regular help may be regarded by some as burdensome. *"Sometimes it's too convenient…Well, you tend to get, you tend to do a lot of things you would prefer not to have done. You know, Saturday afternoons often get spent doing yard work for {relatives}."*

One man expresses his reluctance to ask for help, *"I try to be independent. I'm just stubborn I guess. I don't look for help [from others]."*

Assumptions about the strength of familial and extra-familial networks in small, rural communities, the persistence of gender expectations and the fact that other forms of assistance are unavailable or are less readily available affect population changes in various ways. They can draw individuals back to communities. The extent to which they can also precipitate leaving the communities may be unexpressed, as it runs counter to the community mindset about small, rural areas, including Parrsboro, as mutually supportive places. The relatively small population of the community, while disadvantageous in the provision of some services, can also facilitate regular contact and assistance among community members.

And I guess it's the same sort of thing in a small community. You're aware [of] probably more, different socio-economic challenges that people face…But in a community [of this size] you're a little more aware of what's happening.

There are, however, also tensions among some community members and an attitude that one resident qualifies as a *"don't get too close"* message.

I know that's my opinion and I know it's actually quite a few peoples' opinion that come into the community, that you know, they sort of form their little cliques and they don't really, they won't out and out tell you to bug off, but you can feel that it's you know, sort of a little clique.

You'll hear people say, 'oh, it's so great.' You know, there's some new people moving in, they bought this house and everybody's so excited about the new people moving in, but they don't go out of your way to make them feel welcome. You know, they're very friendly with you on a casual level. You know, it's almost like there's still a wall there.

The community mindset that sets up a model of the community as mutually supportive can be particularly disappointing when it is not evident. It is this reality that can subvert the community script about helping behaviours. It can subtly discourage helping behaviours in favour of a model of individual independence, in which individuals are regarded as responsible for their own individual health and well-being.

Volunteerism plays a crucial role in the projection of the community of Parrsboro as a mutually supportive environment, and may be a public extension of the helping role. A wide range of community facilities and events are wholly operated by volunteers, from the operation and maintenance of the artificial ice rink, to community-wide holiday events, such as the Spookarama, a free Halloween event for youth, and a sit down community dinner at Christmas time, to the Parrsboro and Area Community Food Bank Society, Emergency First Responders and HPAC. Volunteers and voluntary organizations work proactively to identify and address community issues and needs, and work collectively to address these needs. Their efforts employ an understanding of health that extends beyond health service provision to encompass confidence in the community and community morale. A generally high level of community confidence and morale may have the positive effects of solidifying helping relations among community members. They may also boost the seasonal tourist industry by depicting the community as a desirable, lively and engaging destination bringing in some new community members, albeit in limited numbers, evident by a new housing estate currently under construction on the outskirts of the town. The efforts of volunteers and voluntary organizations support a wide range of activities and services in Parrsboro and the surrounding area.

Figure 5.8: Skateboard Park, Parrsboro, Nova Scotia

The number of participants alone does not appear to drive the wide range of community-based activities available; instead, there seems to be an unstated philosophy that activities will attract participants. Participants noted a wide range of activities available in the town.[13] Facilities include a public library and a recently built skateboard park, initiated by town youth. An artificial ice rink is operated and maintained by one of the local service clubs. Various facilities, including the Legion, the Fire Hall and the Parrsboro District Secondary School open their doors for community participation in recreational activities. A private fitness facility has recently opened; there is also a private golf course and tennis court. The natural environment offers extensive opportunities for walking, hiking, camping and geological exploration, and is noted by many individuals to be one of the area's greatest attributes. The community's expansive conceptualization of health and well-being, one that encompasses this broad range of activities and opportunities, serves to strengthen existing voluntary services and state provision of services, and provides an important realm of support for community members.

Community norms dictate crediting this range of activities to community groups and to the community at large, rather than to the efforts of specific individuals, as suggested by this key informant,

> *And I would say, certainly in our area there is a tendency not to be personalized service…that it's generally the organization [that] takes the, gets the credit…I think that has a lot to do with people feeling good about [organizing activities and events], it just contributes to the public good.*

There are also efforts to be attentive to and address the needs of particular community constituents, such as youth who are a source of community pride. A participant in one of the focus groups points to this direction in community programming as an intentional one.

> *Well, that's right, and you know, like you said, if the kids aren't happy in town, that's when they cause trouble and that's when you get problems, and which just exacerbates because if the kids aren't happy and they're causing problems, then the adults aren't going to be happy and that causes problems and it snowballs. So, it's important to find out what the kids want.*
>
> *I think it makes them better citizens to know the town cares enough about them to give them a place to go where they can have a good time, where they're not destroying property and they're not getting into bad habits and things. I think that's wonderful.*

There are some community programs for pre-school children. One Parrsboro resident recalls,

> *…[W]hen I had young children…HPAC had some programs going on like, Moms and Tots and things like and I think they still do that, so there's support for a little preschool, preschool moms. And we have a preschool in Parrsboro which is really advantageous….It's called Parrsboro Head Start and it is housed in our elementary school, which is fabulous because the little four year olds that are going off to primary school in the following year [are] already used to the school, going in and out of the building and so on, and it's been great.*

Additionally, a program funded by Human Resources Development Canada, through the Job Creation Partnership Program and acting in partnership with Public Health Services, offers visiting parent support services in the community. A more concerted focus, however, is on healthy activities for pre-teens and teenagers in Parrsboro.

A noticeable gap emerges between what community members suggest are ample opportunities for town youth, and what the youth themselves repeatedly classify as *"not enough to do*." The mother of an adolescent, comparing life in Parrsboro to life in a larger city, says that Parrsboro's small size offers her daughter more extensive opportunities for participation in activities, particularly school sports teams. Two other adults reiterate this idea. *"[The] advantage here is that you can participate in five or six different sports."*

> *I often use the example that if you lived in {other locations}, you would not have the activities, the range of activities, is [not] what you have right here in Parrsboro. And, I think because of that, it means that you get maybe a little better civic participation from the youth.*

Youth, on the other hand, do not always recognize efforts to promote their community involvement and consistently describe the town as having too few activities or opportunities for them. Possible explanations for this gap include the boredom of youth, the preparation of an explanatory framework that justifies leaving the community in future, or both.

Two specific youth-related initiatives in the town stand out for their proactive approach in preparing youth for healthy futures. One is the voluntary work of the Parrsboro and Area Drug Awareness Committee. The other is the efforts made at the secondary school, particularly in relation to the rite of graduation. A key informant and member of the Parrsboro and Area Drug Awareness Committee describes their proactive approach toward healthy futures.

> *I'm on the Parrsboro and Area Drug Awareness Committee; often what we'll do is every year we send kids to camp as a summer activity….It's not a [drug] user issue – this person had a propensity to be a user of drugs – it's more of, our attitude is to educate them young, but as well, start to educate them on what's out there. Whether it's to go to a church camp, whether it's to go to a camp on computers because they think they might have an interest in it, a science camp, or whatever in an effort to help them see that. When they're younger, we'll send them out to community camps,…sports, soccer and tennis, or there's often a Girl Power Camp in town.*

This specific initiative encourages youth to develop and widen their interests. High school graduation and its associated prom night are a community-wide recognition and public celebration of the achievements of youth. A key informant describes these events in Parrsboro,

> *Everybody in the community shows up to watch the kids come in their dresses and their tuxedos. It is huge! And the bugs can be, well, they're wicked, and [the community is] still there in the finest of form to watch the kids enter. And the kids enter. They make a grand production of it... The grade twelves are the last to enter, everybody gathers outside of the*

school. Some of them will sneak in to look at the gym first, but most of them gather outside, wait for the grade twelves to enter, whether they get themselves a red carpet that year, or a pebble walkway, or whatever. Some of them come in fire trucks or great big tractors or they will get special cars with chauffeurs, whatever. It's an event. And then as they file in and go in for the first dance, and they will often in the latter years, we now have the grade twelve teachers announcing the couples as they walk into the gym, and then so the whole community goes into the gym to watch that festivity and the first dance.

This event and its connection to the health of youth in the community are described this way,

And the other big event…is graduation night, which is two nights later, usually two or three nights later. And a huge number of the community come out to observe it and want to be a part of it. When bursaries are given the community is incredibly generous with bursaries, and when those bursaries are given, a representative from that organization comes to present, and that's an honour you know. That's not something they take lightly; it's very important. If it's the President of the Legion that year, [the President is] usually dressed in uniform. It's really, I don't think it happens in [other communities]…it's special. So, that's very much a healthy, if you're talking about mental health, that's part of the mental health of the community.

While the town maintains a concerted focus on activities for youth, there are also some parental concerns about the accessibility and costs associated with particular activities and their seasonal nature. One mother offers ice hockey as an example.

I know for myself, I can't afford to get my kids into [ice] hockey. It's just too expensive…That's a lot of money, so even that's a select group [that can afford it] and there again, it's only open four months of the year.

Similar to the efforts to be attentive to and address the needs of the youth, there are also efforts to direct both helping behaviors and community-level strategies to the needs of the elderly in the community. Parrsboro has a significant percent of its population over the age of 65 and recognizes the need to support this segment of the population. One woman describes the importance of seniors in Parrsboro. *"If it wasn't for senior citizens, this place would be gone, disappeared off the map, period."*

Although these efforts vary, a number of initiatives stand out as concerted efforts that address the needs of the elderly in the population. This is particularly evident through strategies that address issues surrounding transportation. *"I think a lot of seniors have transportation problems, that they need people to pick them up, or assistance in and out of buildings or whatever."*

Some of these individual-level strategies surround informal helping behaviors, many of which are grounded in the concept that rural communities are helping communities that "take care of their own."

My husband and I, we've done a lot of transporting people and we still continue to do this as long as we can…

> *And we're right next door, we'll go over and do whatever we can and the same with [her] mom, if she's not able to get in touch with [her], she knows that she can call us and we'll be there. But I think that happens throughout the community that people know that there are others that they can call. And I think that's an important part of community life when you get into rural areas.*

The community of Parrsboro itself has also developed community-level strategies that assist and enhance the community as a whole as well as the lives of the older persons in the community. One of these strategies, snow removal, is noted by this participant.

> *[W]e, like if you noticed, we purposely clear all of the snow off our streets because again, another one of those things. It costs you money, but it's not one of those things, that in actual fact it's, just is a positive aspect of the town.*

Although this participant notes that snow removal enhances the town as a whole it can also be seen as a strategy that Parrsboro has developed that also enhances the lives of its older residents, allowing them to access the amenities that are important to the daily lives of individuals, providing them with the opportunity to "age in place".

Community organizations have also developed efforts which serve to enhance the lives of the older persons in the community. Specific examples can be seen in the efforts of the Lions Club, the Healthy Parrsboro and Area Committee and Community Links. In some cases, these formal organizations provide the older residents of the community with a way to increase their social network. *"I think there's a lot of seniors in this area and I think we just hang on and begin to meet everyone and begin to do other things, you know that we want. Social things."*

The Lions Club has found a way to support the social networks of older residents of Parrsboro by providing them with a meeting place free of charge.

> *We made a contact with the Lions Club, HPAC did that [so] we could hold things here for nothing and that included the youth or anything under HPAC so that's how come [the senior's group] have it here, for which we're very grateful.*

A larger population base can facilitate volunteerism; at the same time, it can also make it less necessary. There are at least two possible limitations to Parrsboro's heavy reliance on volunteerism. The first limitation is that use of voluntary labour, while maintaining health status and making the community a healthier place to live, can mask the need for services by taking the place of needed services. The second limitation is that volunteerism can be regarded as suppressing opportunities for full-time employment. The voluntary work that sustains small communities exacts expectations of *"heroic civic citizenship"* from community members that may be unparalleled elsewhere. One community member refers to the situation of volunteers in Parrsboro as "*chronic volunteers."* Another notes the necessity of volunteerism for community survival. *"We've had a lot of happy times here, but what I've learned in order to survive, we have to be fighters and we have to be volunteers."*

Third sector or voluntary organizations are often in the position of offering essential community services, in spite of their voluntary labour force and scarce resources. They provide a range of services out of concern for the well-being of the community; yet, the provision of services can lead to perceptions that no additional assistance is necessary.

There are genuine concerns about the types of services that are expected to be operated by volunteers, some of whom receive training and some of whom receive none. The turnover of volunteers results in the loss of resources, expertise and community history. The likelihood of providing the service in perpetuity without expectations of further assistance is likely to discourage new initiatives. This focus group participant explains,

> *…[I]f you're going to start it, you have to have the ability to stick with it. You can't start something and walk away because there is often no one there to take it over. This could deter people from starting things because they may not have the desire or the ability to do so over the long-term.*

For example, food baskets, once provided charitably by Parrsboro churches at Christmas time, have been reorganized under the auspices of the Parrsboro and District Area Community Food Bank Society. This organization now offers regular support and assistance for up to 32 families each month. The Food Bank Society, comprised entirely of volunteers, ironically relies heavily on the voluntary efforts and contributions of additional community groups to keep its shelves stocked. While the Food Bank Society's overall role in food security may not differ from that in urban centres, its location in a small town limits possibilities for anonymity among users, an issue that may or may not be problematic. Further examples of services provided voluntarily include the work of members of the Parrsboro Town Economic and Development Committee who undertake short and long-term planning to enhance the economic stability of the area. Local volunteers operate the Emergency First Response Team and the Fire Department in the adjacent community of Five Islands.

> *...[T]he Fire Department has a hard time with the first response because they have to come up with the money to train volunteers, and that what, like $200 [or] $300 to train one person. And the only money that like for instance, Five Islands gets, it's a little bit of the tax basis, [a] very small percentage of the tax base which basically covers the heating and maintenance of the Fire Hall. That's all. So, they rely on bingos and any other way they can raise money. But First Responders are very important to [the] area which is 15 to 20 miles away from Parrsboro.*

Volunteers in these positions may be undermining full-time employment, an important consideration in an area of the province with too few stable, year-round employment opportunities. This view is expressed by two participants.

> *… [I]t comes right back to the government and the government is now using volunteers to do everything rather than hire people.*

> *… [Be] cause what it would appear to be now, whether it was or not – who knows. But what it appears is, because I'm volunteering, you're taking away somebody's job.*

Two participants also suggest that their availability for community-level volunteerism fluctuates with their employment status, supporting the possibility of a connection between the two. Those who are active volunteers recognize the limitations of voluntary labour, without sufficient supports, as a sustainable long-term strategy to maintain health and well-being. Additional supports are noted as important.

> *But you know, it's things like that that after a certain time, the people should just say 'well, gee whiz, I can't keep doing this just on my own.' Somewhere along the way there's got to be a government that's going to support me in what I'm doing as a volunteer. And if you don't have that and you don't start having other services that are connected, that's where you're going to start losing it [services].*

> *Actually, when you think about it, when you ask the question about public health and your sense of well-being within the community, which is strongly supported by volunteerism,… it can't be fully supported by volunteerism. All [of] the various things we've talked about here in the last hour, but, that's where you need the government services that support the volunteer. Well, because it should really be the volunteer supporting the government services.*

Despite these possible limitations, volunteers derive a sense of personal satisfaction about their own abilities and about their abilities of their community from their work. A woman talks about its positive significance in this way,

> *This is my little world here in Parrsboro, but I do feel that, you know, my talents are adding to those talents of many other people who are working in this area to…make the town a good place to live. So, that's very satisfying.*

Despite the initiatives of a local voluntary committee to promote tourism and individual participation on the Cumberland Regional Economic Development Association, Parrsboro's voluntary labour force struggles to meet what many participants determine to be their most pressing health needs, jobs and education. Education, employment and working conditions and income are recognized by Health Canada's Population Health branch as significant determinants of health (2002b). One resident recognizes the interconnectedness of these health determinants, *"Jobs and education are two things the community needs. They go hand in hand; one helps the other.*" The challenge of finding sufficient employment is also acknowledged by these participants, "*There's not many job openings and so these are pretty much the big challenges here."* and *"There are very few employment opportunities in the immediate area."*

The limited availability of full-time, year-round employment opportunities is not a recent development. It has, however, been heightened in the last decade by the loss of some 31 full-time jobs, the result of the closure of the Scott sawmill that operated in Parrsboro until 1992 (Kyte, 2003).

The lack of full-year, stable employment and educational opportunities may also have implications for population stability. A male focus group participant notes challenges for youth in particular,

We're losing our young people and why not? How can you afford housing if you're a man and you have a family here? There's no reason for them to stay. I didn't stay, [to someone else in the focus group], you didn't stay.

A lack of opportunities for employment and life-long learning can have a cumulative, detrimental effect on health and well-being in Parrsboro.

I think really the whole undercurrent [to community health] is the need for economics. From that you can build and you can expand in other areas because right now, we have a need of a greater health system here and we don't have it because there's not enough people. If you had industry of some kind, instead of them all around, say Halifax or something, put some of them here. Some of the governmental ones or something and stimulate the economy and give people jobs.

Most people in Parrsboro now, live hand to mouth, so there's no extra income for them. And that makes the community suffer, where they are literally hand to mouth, week to week, and it does not make [for] ambition in a town, and tends to make [people] despondent…about their community.

Figure 5.9: Parrsboro, Nova Scotia

While some Parrsboro and area residents commute to jobs in larger towns like Springhill and Amherst, the condition of the roads between Parrsboro and area communities make commuting a difficult alternative, and may contribute to further population loss.

… [A]nd then what happens is the roads are so bad between here and Amherst that any young person who works in Amherst will probably find an apartment in Amherst and come home on weekends, or one weekend a month or something like that, but they'll actually move. And to some extent, I would say that's because of the roads.

So there are jobs that people go out of town, but one of the difficulties is that you pound the heck out of your vehicle driving back and forth, and eventually they're going to say, well, I think roads have a great deal to do with the economy of a small town.

Decisions to leave the town for employment and educations reasons, particularly for young people, are not always regarded as voluntary decisions. *"I do see a tendency for them [youth] really wanting to stay here, but as you say, I mean, it's not a decision they're making on their own. It's sort of forced on them."*

Recognizing that the area's primary resources, logging, fishing and mining, and that the nature of tertiary industry, ship building and the saw mill, have dramatically changed, an often-heard suggestion is support for the development of light industry. Residents generally favour the

presence of a stable employer in the town, an employer paying livable wages and not requiring daily travel outside of the town.

> *What the place really needs is some kind of industry brought here so that we can stimulate the economy and give our young people jobs; a lot of them you know, are not university graduates.*
>
> *It's not a booming town. It doesn't attract many people, like to live. It attracts a lot of tourists but not for people to settle down. It's not a place to settle down because there's very limited work, like for jobs.*

An example of one rural community that has benefited from such an initiative is provided by this focus group participant.

> *There's a little place in…Lacocquetier in New Brunswick, or in Quebec rather, and it's a beautiful small village type place like this and the government has put Bombardier and there it's a very wealthy community because of it. They make trains for all over the world, the coaches you know. We could have something like that here to inspire the merchants to increase their stock, to give the young people jobs, to stimulate the economy for new homes.*

It is also the case, however, that regular travel outside of the town for the purpose of employment offers an important advantage of promoting economic relationships among local communities.

A further suggestion is to support the entrepreneurial initiatives of residents. A former resident of Parrsboro, who has left the town for employment-related reasons, suggests that more support be forthcoming for local business initiatives. This person identifies the efforts of one particular individual, someone who has already established a successful business in town, as someone who could be better supported in business endeavours. *"There are potential employment opportunities. These ideas need some money."*

Some town residents continue to work in seasonal jobs, including temporary and seasonal jobs in the blueberry industry. Opportunities for youth employment are also limited. One youth suggested, *"Everybody picks blueberries."* Similarly, a participant suggests about the industry, *"There's summertime employment, but they employ quite a few people."* These jobs also require that residents leave the town to travel to the communities of Halfway River, or to Oxford, on company-provided transportation.

Educational opportunities are also limited in Parrsboro and the surrounding area. One key informant classifies the elementary and secondary schools as *"small, rural and poor."* They have a combined population of approximately 450 to 500 students. Students residing in the neighbouring community of Five Islands and living over the Cumberland/Colchester county border must take a school bus to Truro, even though schools in Parrsboro are closer; this route is described by one key informant as *"the longest [school] bus ride in Canada."*

The complement of teachers at both schools is shrinking, a factor that a key informant attributes to the application of the provincial funding formula in the face of population loss, *"Oh, the cuts [are] really bad, 1.75 teachers [positions cut] here, which means a lot of shuffling."* With a smaller complement of teachers, the provincial curriculum has to be addressed in creative ways. For example, at the secondary school level, course offerings are rotated, grade levels are combined and volunteers in the community help to offer extra curricular activities. Parental perception is one of educational decline,

> *The school system here is sort of a victim, for lack of a better word, of the provincial funding formula for schools and we've seen a kind of denigration, I guess you could say, of the quality of schooling in the schools…We used to have a band program in our schools and lost that about three years ago. And that doesn't sound like a big deal when you live in the city, I guess, because you can go over to the conservatory and take a few lessons or whatever. But, here, there's so few integrated extra curricular activities at the school other than sports.*

There are also concerns about post-secondary educational opportunities. Students continuing in post-secondary education often have to leave town to do so. Some focus group participants remark that the Nova Scotia Community College, Cumberland Campus, in the nearby town of Springhill is a choice for some students.

> *…[W]e do have a community college in Springhill, which is you know, our closest town and students will travel from Parrsboro to Springhill; it's not very far, 30 to 45 minutes…and sometimes they'll car pool or whatever.*

A key informant, however, suggests that the proximity of this campus in a town with which many secondary school students are already familiar, the lack of public transportation between Parrsboro and Springhill, and the idea of living at home while attending post-secondary education, serve to make this location an unattractive option. Most students attending university must leave the community, as only Mount Allison University, in Sackville, New Brunswick, approximately 65 kilometers away, is regarded as a commutable distance. *"Of course, Mount Allison's close as well, and we have students who've traveled actually. Perhaps because they can't afford the [cost of] being in residence, but they've traveled back and forth."*

Leaving the community serves to push town youth, at least in the short-term, away from the community. It is also not clear that adults who live in the community also have adequate access to educational opportunities. An elderly town resident demonstrates willingness for life-long learning opportunities. *"Supposing it's making cat's cradles out of string. I don't ever want to live long enough that I can't learn."* Despite her sentiment, opportunities for life-long learning in the town are quite limited. *"We used to have a lot of night schooling here, but it died out, you know, upgrading plus…whatever you want to do, GED [General Education Equivalency]. I don't think it's on the go now."*

A post-secondary diploma in business, previously offered at the high school in Parrsboro is discontinued. A focus group participant confirms, *"Oh, it [further educational opportunity] was a huge deal probably seven or eight years ago, it's been cut way back, hasn't it?"* Continuing

education courses at the Cumberland Campus of the Nova Scotia Community College in Springhill require transportation.

Opportunities for employment and education are unlikely to emerge solely from the already stretched resources of community organizations and volunteers. The lack of stable employment, one that has persisted in the community over time, leads to perceptions about the viability of the town and its declining population.

Key informants similarly depict the community as one that is able to respond to change creatively. This is consistent with the conceptualization of the community as a resilient one by key informants. A collaborative, rather than oppositional approach to change in the community is apparent in their remarks,

> *Another thing that put Parrsboro on the map with the health people was that it was one of the only communities where there was not a big uproar fighting the change [from a hospital to a care facility]. {People} understood that the role needed to change, that we would get a much better service for the community if we took this opportunity to do what was good and meet the needs, as opposed to fighting it.*
>
> *My opinion…is to be consistent, do what you can, don't be negative and show people what you can do.*
>
> *See what the community needs and help them achieve it.*

This positive outlook, however, is contrasted by this somber prediction by an individual,

> *If the right things don't happen, it [Parrsboro] will fade away. There aren't a lot of opportunities for young people. What you're left with is the 'underachievers' and when that happens the community ages faster than it normally would and it suffers.*

It also contrasts with the opinions of some focus group participants who suggest that services must be demanded, presumably from various levels of government. *"I think that we as a people have to be known like Cape Bretoners are."* When she is asked what this means, she replies, *"Holler and holler louder!"* And someone else concurs with her, *"Push. We need to make, we need to have groups like these people to begin so that we can begin to make statements of whatever to whoever that we…That turns the wheel."*

5.5.4 Effectiveness of Community Strategies for Maintaining Health

Perhaps because individual and community strategies to maintain health are frequently undertaken by individuals and organizations whose contributions are voluntary, it is not apparent that evaluative processes, formal and informal and internal or external, are in place.

A key informant briefly describes one evaluative process.

The Department of Health is coming on {day} to do a review of what we need and what we don't need, because they base it on population and how many people there [are in] a catchment area and how many people a physician should be able to care for. So, we're trying to say this is the amount of people that don't have a doctor in Parrsboro, and the physicians will substantiate {their situation}.

Outside of this example, no other evaluative processes are explicitly identified by participants and it is not clear how regularly evaluative processes to assess community strategies to maintain health status occur. The ability of evaluative processes to account for broad conceptualizations of community health and locally specific circumstances is also unclear, as is the extent of cooperation in undertaking evaluative processes between community-based organizations and organizational and governmental bodies external to the community.

There is support, although it is not unanimous, for a wide range of community activities regarded as contributing to community health. The fact that this support is not unanimous may be because it is easier to see what is missing than to identify what already exists and is taken for granted. Some participants regard the range of initiatives undertaken in the community to be a key factor in making Parrsboro a vibrant and dynamic place. Many community members and organizations derive a sense of pride and confidence in their efforts and accomplishments. A former resident reflects on community pride, *"There really are people in the town who do care about it. It's not their life's work and they don't have the training, but they care."*

The positive effects of this pride and confidence are evident in a number of ways. They are evident in the return of former community members to the town and in the arrival of new community members. They are evident in the maintenance of public amenities such as the Community Care Centre, and in the continued operation of businesses and amenities in the town although, some participants, too, regard these to be limited. Confidence in the community is evident in the recent expansion of a community grocery store and in a newly opened, private fitness facility.

It does appear that voluntary efforts of some community members and organizations are diminishing at this particular point in time. Involvement in HPAC, for example, appears to be on the decline. As one volunteer suggests, voluntary efforts by individuals and the community cannot be regarded as an adequate replacement for government provided and assisted services. There are pressing needs for employment and educational opportunities, both of which are likely to continue to effect perceived and actual population changes. Their effects on population change and on community health, and ways that these are facilitated by infrastructure improvement such as improvement to roadways, cannot be ignored in continued efforts to maintain a healthy community. As well, the natural environment of this rural community is one factor consistently identified by participants as instrumental in maintaining individual and community health and well-being. Future employment initiatives could maintain health if undertaken in ways that are balanced with environmental preservation. Despite population change, including population loss in the town of Parrsboro and the surrounding area, community members continue in their stalwart efforts to ensure community health and well-being.

The full effects of population loss, as one aspect of larger population change on individual and community health, become more complex when population loss is situated in its relevant context.

In the case of Parrsboro, seasonal variation in the resident population, population aging, ongoing health care restructuring, expectations of helping behaviours among community members, and volunteerism, create a complex and multifaceted picture of the relationship between population loss and the maintenance of rural health status. This complex relationship is worthy of further consideration and of further consideration in comparison to other rural communities in Nova Scotia, and beyond.

5.5.5 Summary of Key Findings

These findings use a non-representative, qualitative analysis of a single rural community in Atlantic Canada to examine the effects of population change on individual and community health.

It finds that the effects of population loss on health must be understood in the context of broader population change, including population loss, population aging and shifts toward a retirement community and seasonal residence. Some effects of population change on health include diminishing community services, including health services, a loss of community expertise and a detrimental impact on community morale.

While the necessity of health care restructuring is not agreed upon among community members, its effects, in this case study, are a decreased community confidence in health services and a perceived lack of accountability for decision making. An additional, unanticipated effect of health care restructuring is an array of community initiatives for maintaining health, largely through the voluntary labour of individuals and community organizations.

One strategy to address population change and health care restructuring is the adoption of helping behaviours, including instrumental and emotional support, toward family, friends and neighbours. Helping behaviours are mobilized as temporary, complementary and compensatory services and are bolstered by perceptions of rural communities as places where community members look out for one another and by the persistence of gendered expectations. Another strategy, volunteerism by individuals and community organizations, may be a public extension of this helping behaviour. An array of community activities is offered, primarily by volunteers. In the case of Parrsboro, community activities are specifically targeted to youth in an effort to maintain their involvement in the town. Community voluntary initiatives, however, are less successful in addressing employment and educational opportunities as key determinants of health.

The effectiveness of community strategies for maintaining health, particularly in the long-term, has yet to be determined. Evaluative processes are sorely lacking. While a sense of community pride may be derived from voluntary activities and may positively contribute to health status, it is a concern that volunteerism appears to be waning, and it is not clear what additional strategies, if any, will take the place of volunteerism.

The long-term implications of population change, health care restructuring and their effects on individual and community health require further, critical examination. Section Six addresses the conceptual areas of rurality and population loss; rurality, community health and health services; and rurality and social supports, in the context of the existing literature and data from this research.

ENDNOTES

[1] These communities included Shelburne, St. Mary's, Annapolis Royal and Parrsboro, all in Nova Scotia.
[2] A modified focus group interview schedule was used in a focus group meeting with The 689 Handley Page Air Cadet Squadron. Due to the age of participants, this focus group schedule was modified to include specific questions about intended future residence in Parrsboro.
[3] In the use of direct quotations by community members, stylized parentheses { } have been used to indicate where identifying information has been altered to protect the confidentiality of participants.
[4] One interview participant also participated in a focus group, and one individual participated in two, separate focus groups. Additionally, demographic information is incomplete for one focus group, three personal interviews and one key informant. Unless indicated, n = 52.
[5] For employment status, both full-time and part-time employment are assumed to be full-year.
[6] Information on sex was missing from one respondent.
[7] The majority of participants responded that they had not experienced these situations in the previous 12 months: changed jobs 98%; lost job 96%; ill family member 63%; injured or ill friend 89%; change in household 91%; death in family 85%; death of friend 80%; and personal illness or injury 91%.
[8] We have not accounted for this change in population; one possibility is a change in town boundaries.
[9] Human Resources and Development industry codes are used here.
[10] The Fruit and Vegetable Industry (SIC: 103) in Nova Scotia includes the canned and preserved fruit and vegetable industry and the frozen fruit and vegetable industry. Field crop farms and fruit and other vegetable farms are not included in this industry classification.
[11] Given existing legislation, Community Health Boards are not governing bodies (Province of Nova Scotia, 2003, 45). They have a mandate to identify local needs, develop and coordinate health related initiatives and to work toward improving community wide health.
[12] These hospitals included: Highland View Regional Hospital, Amherst; North Cumberland Memorial Hospital, Pugwash; All Saints Springhill Hospital, Springhill; Bayview Memorial Health Centre, Advocate; and the South Cumberland Community Care Centre, Parrsboro.
[13] While not an exhaustive list, these activities are noted by participants: Parrsboro Head Start; Moms and Tots; Beavers, Boy Scouts and Brownies; Winter Carnival; Family Fun Days; Spookarama; baseball, karate, gymnastics, mountain biking, skate boarding, figure skating and minor hockey; Air Cadets; Youth Town Council; church groups for adults and for youth; church suppers; a Christmas supper; Parrsboro Town Band; Parrsboro Historical Society; Parrsboro and Area Drug Awareness Committee; theatre; bingo (offered six evenings a week); darts; activities associated with two museums and a heritage site; Seniors Walking Club; two additional seniors groups; a community-wide Old Home Week and a community radio station operating during Old Home Week. In addition to these activities, a number of service clubs operate in the community including a Board of Trade, Lions Club and Legion Hall.

Section Six
Summary and Implications

6.1 Introduction

This research is based on the notion that rural communities are important, both in terms of the population of rural Canada, but also because of the social and economic contributions that rural communities make to Canadian society. It confirms that social supports, as they relate to the maintenance of health in rural communities, are affected by population change, particularly in Atlantic Canada, and that population change is expected and ongoing. This is largely a result of the differential impact of the factors that drive population change on communities. For example, population change is affected by and also affects factors including economic processes (i.e., access to employment, rates of employment, employment bases), social factors (i.e., proximity of kin and other supportive relations, household composition), and demographic characteristics (i.e., gender, age distribution). The factors that affect population change also vary according to region.

This section is a synopsis of previous sections, highlighting key findings and discussing implications for practice, policy and future research. Recommendations are presented throughout the discussions.

6.2 Policy Considerations

Rural Canada is Not Homogeneous

More than six million people live in rural Canada and of these approximately one million live in rural Atlantic Canada. The nature and contexts of these rural areas throughout Canada are diverse. They include large and small towns, villages, adjacent communities and communities dispersed throughout the countryside. Some rural communities are proximate to urban centers while others are in more remote areas.

Analysis of the 1996 and 2001 Census indicate a decline in both the number and proportion of persons living in rural areas in Atlantic Canada and rural areas across the country. This trend is partially a result of migration to urban centres, particularly by youth and new immigrants. What remains in rural areas is an older population either by virtue of aging in place or of persons relocating for retirement. Population data also indicate that rural Atlantic Canada is greying faster than other parts of the country. As a result, this decline and other population trends support the notion that the experience of population change in rural Atlantic Canada is distinctive from the national experience.

In addition to inter-regional rural differences, there is diversity in terms of population change within the region. Newfoundland and Labrador appear to have different outcomes of population change than do other parts of the region. In Newfoundland and Labrador the rate of population growth continues to be negative, although the rate of population loss has improved from 1996-

2001.While the proportion of rural residents throughout Atlantic Canada is declining, Newfoundland and Labrador report the greatest decline (8.9%) and a rapid increase in its median age. Also, Newfoundland and Labrador report the smallest percentage of rural residents per total population when compared to other Atlantic Canadian Provinces and the largest land mass in Atlantic Canada, creating unique challenges for health service delivery. Compounding the effects of this largely dispersed aging rural population are lower employment rates and lower household incomes in Newfoundland and Labrador compared to its regional counterparts that may affect access to formal services. This is supported by the trend with respect to unpaid work. Newfoundland and Labrador women report performing higher amounts of unpaid assistance to seniors than the national average. Another regional difference exists with respect to Prince Edward Island, which has seen significant growth between 1996 and 2001 in the amount of unpaid work when compared to growth at the national level. This may be due to the increasing need of rural residents or to changes in formal service delivery.

Within the Atlantic region, migratory patterns also take different shape. For example, non-Nova Scotians typically move to Nova Scotia and Nova Scotians typically migrate to New Brunswick. Two notable trends that inform these migration patterns are relocation for employment or educational purposes, and seasonal migration rather than permanent migration.

In view of this heterogeneity throughout rural Canada and within rural Atlantic Canada, the tendency of national and provincial policy makers to accept the national or overall average for the rural experience should be challenged. Analysis of aggregate national data masks important differential impacts resulting from inter- and intra-regional differences.

- ✧ *It is recommended that policy makers at the federal, provincial and municipal levels of government employ a rural and a regional lens when developing social and economic policy. In this way, policies can both take into account and address the way in which resources are distributed, particularly those resources that influence social supports.*

Account for Local and Regional Needs

The current population-based approach used by the federal government to fund health, education and social services does not take into account the context or distinctiveness of provinces and of individual communities therein; conditions that drive the needs of local communities. Provincial funding formulas that are based on population counts disproportionately disadvantage rural communities. Examples of areas where rural communities are disadvantaged include funding for transportation and allocating health services such as medical doctors. Based on population calculations, these funding formulas may lead to the closure of rural hospitals and schools and necessitate travel outside the community for services over poor road conditions. This is particularly evident in the Town of Parrsboro where the accumulation of factors that have an impact on rurality, such as geographical remoteness, a lack of public transportation and the poor condition of roadways, limits access to potentially necessary services in neighbouring towns. Additionally, travel for services outside of the community in the face of these factors is likely to be difficult for an aging population. In Nova Scotia, the current approach to allocating doctors fails to account for the needs of an aged rural population and the potential for increased frailty in rural areas as a result of a disproportionate older population. As a result, not only are the needs of

the individuals residing in rural areas not considered by population-based formulas, but neither are the impacts of these formulas on the needs of the community.

- ✧ *It is recommended that when allocating funding for health, social and education services that federal and provincial governments take into consideration how populations are constituted and their physical and social environments. In this way, policies of dispersing monies on a per capita basis can be weighted to address the needs of the community.*

Rural Health is Not Uni-dimensional

The Determinants of Health framework encompasses a number of factors examined in this research. Several are significant to the understanding of individual helping behaviours and overall community health. For example, gender, education, employment and income are all associated with individual helping behaviors and availability/access to social supports. These factors are volatile to population change. A case in point is the Town of Parrsboro which has experienced population change in line with that of the region. In this small town, there is evidence that employment has been affected by and affects population change. In turn, other aspects of life are affected, including proximity of kin and access to amenities such as educational and health services. Dixon and Welch (2000) have called for the consideration of place, and in turn, rurality, within the context of the determinants of health framework. In light of the contextual factors in rural areas that affect health, positively and negatively, perhaps the determinants of health would be better viewed through a rural lens. Thus, findings from this research support Dixon and Welch. Income/social status, education and gender are embedded within the determinants of health framework and as such play an important part in the development and implementation of economic and social policies.

- ✧ *It is recommended that health decision makers view determinants of health with a rural lens. In this way, policies that address the health of the population will better account for the rural contexts, particularly the interplay among the determinants in rural contexts.*

Integrate Human Resources for More Efficient Service Delivery

In Nova Scotia, decisions related to the delivery of health care services have resulted in the regionalization/centralization of some services thereby requiring rural residents to access services outside their community. While there may be fiscal savings to this approach, such restructuring affects the day-to-day realities of rural residents. For example, in communities with no system of public transportation, such as Parrsboro, the centralization of health services (including hospital services) in towns such as Amherst, over an hour away, serves to disadvantage segments of the population that may already be disadvantaged. Those who are elderly, in poor health and/or with a long-term disability, and living in poverty are less able to access essential health services, as well as sources of health education. In addition, the regionalization of home support workers may appear to be effective in scheduling human resources; however, the centralization of this scheduling fails to adequately consider the travel time that is necessary between scheduled appointments. There are currently a number of health professionals who are regularly in the community but who are funded through different departments. A case in point is “community nurses” who work within the region in multiple

settings - schools, long-term care facilities or hospitals. As a result, such nurses are required to travel to work in a number of communities and need to become familiar with various community contexts. This current approach lends itself to duplication and lack of attention on the community as the unit of focus. A nurse who worked in multiple settings within one community would gain a comprehensive understanding of the community's health challenges and needs.

- ✧ *It is recommended that government-based health, education and social service departments integrate their human resources to serve the needs of the community. In this way, delivery of essential services can be community-centered and community-based rather than system-centered.*

Reaffirming Locus of Control

The current structure of Nova Scotia's health system allows for the formation of Community Health Boards. The role of these voluntary Boards is to assess the health needs of the local community and dispense community-level grants for project based activities. This structure is important because theoretically it allows for the locus of control to be at the community level, by those who best know their community's needs. However, in the case of the SPAR Community Health Board, whose jurisdiction includes Parrsboro, the case study results demonstrate that while the Board may be equipped to assess the health needs of the local community, it lacks the decision making ability and resources necessary to meet health needs. Moreover, the community-level grants that are afforded to the CHB for disbursement, while helpful, are limiting in their ability to support the notion of long-term sustainability of the community. This research clearly demonstrates the challenges of population change on community volunteerism. While community-level funding encourages community organizations and groups to be innovative and develop fresh ideas, it also limits the extent to which the initiatives can be sustained. It may encourage short-term projects at the expense of long-term projects. Improving and maintaining community health is a long-term endeavor. Community-based initiatives should be funded in ways that support those currently underway to which community members are already making substantial commitments and contributions as well as new and innovative initiatives.

The downloading of responsibilities for maintaining health, from government-provided services to rural communities and individuals in those communities, by means of health care restructuring erodes confidence in a supportive, healthy environment (Chalmers & Joseph, 1998). Shifting responsibilities foster an environment characterized as having a lack of accountability; there is ample evidence to suggest that an environment of ineffective communication between levels and lines of accountability for decisions/policies exists for some community members.

- ✧ *It is recommended that the role and resources of Community Health Boards be expanded to allow decision making that directly influences the short- and long-term community health needs. In this way, the process by which health care policy is developed will be based on community input, enabling provincial health decision-makers to better address issues of accountability and needs for community-level services.*

Local government is important for fostering community health and well-being. For example, aware of population change, the Town of Parrsboro has made a concerted effort to implement

strategies that contribute to the well-being of all community members. In the winter months, the Town of Parrsboro has implemented a local policy of complete snow removal from the streets of the town. In effect, this snow removal increases access of the town shops and services for all community members, particularly seniors and supports the likelihood of aging in place. A similar strategy to support community participation relates to the Healthy Parrsboro and Area Committee. This community group was granted access to the administrative resources of the Town Hall to support their mandate of meeting the needs of all the persons in the community.

✧ *It is recommended that local governments of rural communities implement strategies and policies that directly foster the health and well-being of the community.*

Increase Individual Capacity

The forms that social supports take within communities vary by local conditions. These forms of social support have varying levels of success in maintaining or improving the health and well-being of the individuals residing in the community. In Parrsboro, there is evidence of individual-level support among family members and among neighbors. Individual-level support occurs on the basis on proximity and familiarity, features of rural small towns. These findings are consistent with Keefe's (1999) finding that the effect of age on formal support needs of the older rural residents was tempered by proximity to kin. Among rural elderly, age and number of children were predictors of the number of tasks with which one received assistance. Family supports may also be mitigating factors in the amount of help elderly persons receive in rural areas.

In addition to living arrangements and proximity to kin, findings from Section Two and Section Four highlight the significance of gender and age in social supports. These findings support others who have reported a relationship between age and health and social support, especially when combined with living arrangements (Glasgow, 2000; Chen & Wilkins, 1998; Hays, 2002). Gender differences emerge as significant in patterns of helping behaviors. Analysis of rural Canadians from the 1996 General Social Survey suggest that informal help is largely provided by women; when men participate in unpaid assistance they typically provide tasks such as home maintenance and financial management. In rural Canada, the role of men in some informal caregiving roles appears to be changing, according to analysis of the 1996 and 2001 Census. An increasing proportion of rural men are reportedly contributing to household work and senior care. While these findings may broaden the pool of persons available to engage in assistance, both the amount of hours and the nature of such assistance emulates traditional gendered divisions of unpaid labour. This finding is of particular importance to senior care where perhaps the greatest need currently is and will be forthcoming. In particular, an older population may have increased needs which, in turn, may require assistance with more tasks and higher levels of care, including personal care. An increasing reliance on family members - men and women - to perform informal help will have implications for the paid labour force. Workplaces in rural areas should be cognizant of the need of employees to balance paid and unpaid work responsibilities and recognize that employee support to do so contributes to the health of the community.

✧ *It is recommended that employers, workplaces and community groups be encouraged to enhance the abilities of all individuals to participate in caregiving, and in receiving care.*

In this way, depictions of those who give and receive care will represent a range of community members.

Increase Community Capacity

This research demonstrates that economic development is key to population change and to building and/or eroding community capacity. The current exodus of youth from rural areas is due in part to insufficient educational and employment opportunities in rural communities. Data from the Town of Parrsboro demonstrate that population change is affected by and affects economic processes and social conditions. This community has experienced the loss of major industry and with this, its population base to support a full range of health and social services.

The ability of rural communities to increase their sustainability depends in part on employment opportunities and services that address the needs of rural communities. By providing opportunities in these areas, rural communities retain the human capacity needed to become supportive environments, in terms of formal services and informal support. As a result, the health of the community is increased and rural communities are better able to be supportive of each other. Social and economic policies have an impact on the provision of and availability of social supports in rural areas, particularly for rural Atlantic Canada. Policy outcomes that directly influence education and employment opportunities are those that may have an impact on the health and financial well-being of rural areas. Findings from the 1996 General Social Survey demonstrate that education and income were linked to the provision and availability of individuals to participate in helping behaviors. Previous research suggests that helping behaviours, often expected to be reciprocal, may be less available to those without the means to reciprocate (Side, 1997). As these human capital variables are so closely linked to helping behaviors, the impact of policies in these areas at the macro-level can potentially affect the lives of helping behaviors and social support of rural Canadians.

One strategy for retaining youthful cohorts at the community level could be the attachment of a residency requirement to local scholarships provided to students for training in the services that are identified as needed. For example, if teachers are needed in the community, local organizations or businesses could offer scholarships to students who are interested in the field and place a stipulation on acceptance of the scholarships requiring that the recipient return to the community to work for a specified number of years. This would enable a labour supply for needed services and retain youth who have some understanding of the community.

- ✧ *It is recommended that policy directions and community-level strategies be directed to enhancing economic opportunities in rural areas. In this way, opportunities will be created for individuals to become involved in increasing or enhancing their own potential and that of their community.*

This research suggests that community-level support, perhaps driven by the closure of the hospital and by virtue of the community's demographics, has occurred as a result of declining formal services. In this way, such informal support takes the form of compensatory services. The capabilities of volunteers should be recognized, as should their limitations; volunteers and voluntary efforts cannot be expected to replace necessary health services. Community resiliency is dependent on the efforts and good will of individual community members. Specific strategies

to address community health and well-being, among them individual helping behaviours and community volunteerism, serve to buttress claims about the uniqueness of rural communities as places where people care for one another. Alternatively, support in rural communities may also make the restoration of health services appear less urgent. Reliance on rural communities as helping communities and providers of informal supports must begin to fully account for the challenges of maintaining health in rural communities in Atlantic Canada. The strategies that are implemented in rural communities in response to the effect of macro-level policy cannot be regarded as a substitute for formal social supports.

In the face of aging communities, voluntary labour resources are at risk as the ability of individuals to engage in helping behaviours and to assume the essential role of the community volunteer will be hampered by health and physical limitations. Data from the 1996 General Social Survey demonstrate that rural Canadians who are in poor health with long-term health problems or physical limitations, more common among an aging population, are slightly less likely to provide assistance than they to receive assistance.

Community volunteerism often requires access to resources. For example, the centralization of decision making, as in the case of District Health Boards and the Cumberland Regional Economic Development Association, necessitates resources for participation. Those without money to travel and/or without private transportation are less likely to participate. Furthermore, there appears to be insufficient opportunity for training, supporting and evaluating volunteers and their voluntary efforts.

Enhanced support is required to recognize the efforts, time and expertise of community-based volunteers. While the Town of Parrsboro until now has sustained an active volunteer base and a wide range of community activities that contribute to the well-being of the community, there is evidence that this voluntary base is eroding. HPAC, for instance, operates without an active sub-committee structure. HPAC's current involvement in community life is due mainly to the efforts of fewer individuals and the financial resources once available to the organization are no longer available. Although an aging population provides a considerable amount of community expertise, reliance on this population is not a viable long-term strategy. A more reliable long-term strategy involves enhancing support for community volunteers, including remuneration for expenses (e.g. travel) and access to resources (e.g. equipment, honoraria, physical space and training in the areas of evaluation and assessment).

- ✧ *It is recommended that governments at all levels recognize the need for sustainable support to volunteers and that they direct resources to support a sustainable base of voluntary activities. In this way, concerted and tangible support may be available to promote and foster volunteerism in the community to exist along side government-provided resources.*

6.3 Conclusion

More than one million people in Atlantic Canada live in rural areas and these areas are experiencing significant shifts in their demographic composition due to economic processes and social factors. This study offers a multi-method approach to examining the intersections among

population change, regionally specific economic, social and demographic factors and individual helping behaviors and community strategies to maintain health status in Atlantic Canada. This research recognizes the value of including the experiences and voices of rural Nova Scotians with analyses of national data sets allowing for a greater appreciation of the ways in which macro-level policy plays out in the lives of communities and individuals.

We strongly urge analysts and decision makers to consider inter- and intra-regional variations and rural and regional lenses when developing social and economic policy. Sweeping assessments of the rural experience mask the intricacies and nuances that prevail throughout rural Canada and specifically in rural Atlantic Canada.

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Appendices

Appendix A: Dissemination Activities

Dissemination activities for this project have included scientific presentations, community presentations and workshop participation. What follows is a list of the dissemination activities to data as well as future commitments of the Investigators.

Keefe, J., Side, K. & Fancey, P. (2003). Maintenance of Rural Health Status: An Examination of Social Supports and Health in Atlantic Canada. *Paper presented at the Fifth International Symposium, Future of Rural Peoples: Rural Economy, Healthy People, Environment, Rural Communities. October 19-23, 2003. Saskatoon, Saskatchewan.*

In addition to the scientific presentation above, a number of presentations were made to the community during the life of the project. These include:

Keefe, J. & Side, K. (2003). Parrsboro Lions, April 16, 2003.

Keefe, J. & Side, K. (2003). Rural Communities and Support to Seniors: Adjusting Health Services to meet future needs. Presentation to the Cumberland County Foundation, April 24, 2003. Parrsboro, N.S.

Keefe, J. & Side, K. (2003). Net Loss Population Settlement Patterns & Maintenance of Rural Health Status: A Case Study in Atlantic Canada. Presented to the SPAR Community Health Board, June 25, 2003. Parrsboro, N.S.

Final presentation to Parrsboro residents, Fall, 2003.

A number of other venues provided opportunities for project dissemination. These are:

Defining 'Rural' and 'Rurality' for Health and Health Service Research Workshop, Halifax, Nova Scotia, October 23 2002.

Invitational Investigator Workshop, Ottawa, April 11, 2003.

International Conference on Rural Human Services, Halifax, Nova Scotia, May 29-30, 2003.

Gerontology Association of Nova Scotia, Halifax, Nova Scotia, May 30, 2003.

Helping Relationships in Rural Canada

Investigators: Janice Keefe, Ph.D., Dept. of Family Studies and Gerontology and Katherine Side, Ph.D., Dept. of Women's Studies
Research Team: Christine Kennedy, Pamela Fancey, Kate Hemeon, Patty Thille
Mount Saint Vincent University, Halifax, Nova Scotia

Objective

To identify the extent to which rural Canadians give and receive instrumental and expressive forms of assistance.

Methodology

- Secondary Analysis of General Social Survey, 1996
- Sub-sample of persons residing in rural Canada (N= 3,309) representing 4,829,103 rural Canadians (weighted data)
- Created six helping relationship variables from a series of questions.
- Univariate analysis examining the six types of assistance were conducted.
- Bivariate analysis examining overall helping by select demographic variables utilizing Cramer's V as a measure of association.

Sample

Female - 50%	Live Alone - 13%
Atlantic Canada - 20%	Age 65+ - 14%
Married - 67%	Employed full/part-time - 65%

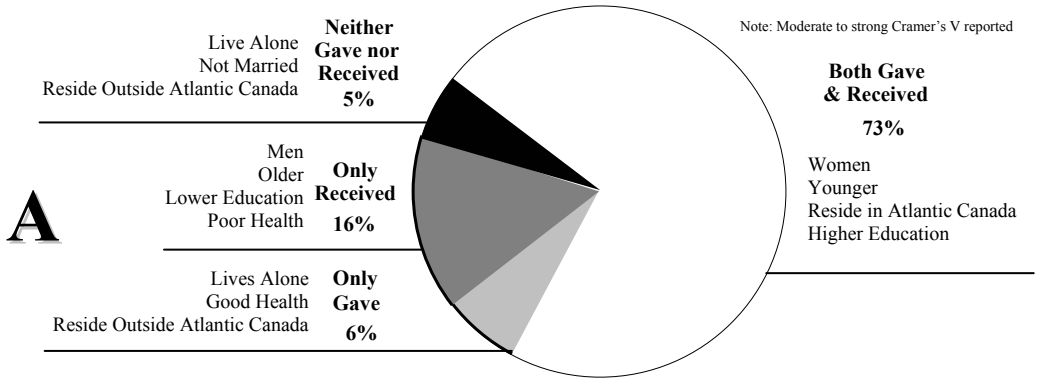
Type of Assistance

- Child Care
- Household Instrumental Activities of Daily Living (IADL, includes meal preparation, housecleaning, laundry or outside work)
- Non-Household Instrumental Activities of Daily Living (IADL, includes shopping, transportation, or banking/bill paying)
- Personal Care
- Checked Up On Another
- Emotional Support

A. Overall Helping Relationships

Gave and/or received assistance in the past twelve months in one of the six areas.

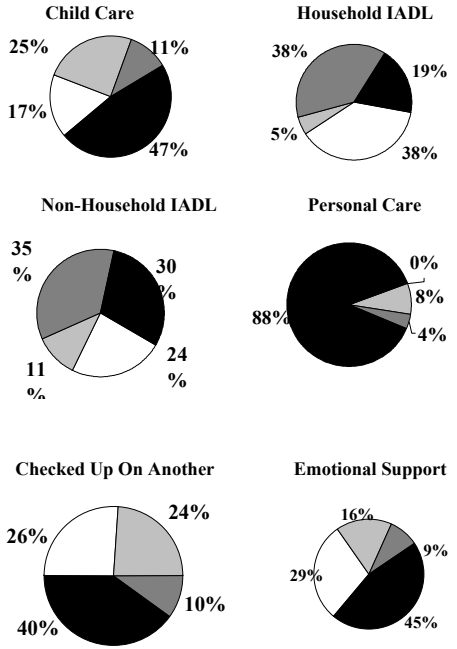
Both Gave & Received: ***Only Received:***
Only Gave: ***Neither:***



Note: Moderate to strong Cramer's V reported

A. Overall Helping Relationships in Rural Canada

B. Helping Relationships by Type of Assistance



B. Helping Relationships by Type of Assistance

- Three-quarters both gave and received assistance in at least one of the six areas indicating that the majority of rural Canadians engaged in helping relationships.
- Helping relationships differed by gender, age, marital status, region, living arrangements, education & health status.

Among rural Canadians who gave and received assistance, household instrumental activities of daily living was the most frequent type of assistance.

Among rural Canadians who only gave assistance, child care and checked up on another were the most frequent types of assistance given.

Part of a larger project entitled "Net Loss Population Settlement Patterns & Maintenance of Rural Health Status: A Case Study in Atlantic Canada" funded by the Canadian Institutes of Health Research

Appendix B: Section Two- Data Tables

Table B.1: Percent Population Change in Atlantic Canada, by Province, Atlantic Canada and Canada, 1996 and 2001

	2001	1996	Change (N)	% Change
NL	512,930	551,792	-38, 862	-7.0
PE	135, 294	134, 557	+737	+0.5
NS	908,007	909,282	-1, 275	-0.1
NB	729, 498	738,133	- 8,635	-1.2
AC	2,285,729	2,333,744	-48,015	-2.0
CAN	30,007,094	28,846,761	1,160,333	+4.0

Source: Statistics Canada. (2002b). *A national overview: Population and dwelling counts, 2001 Census (Catalogue No. 93-360-XPB).* Ottawa: Author.

Table B.2: Population Growth Components in Atlantic Canada and Canada, by Province, 1996 through 2000, Rates per Thousand

	1996	1997	1998	1999	2000
Newfoundland and Labrador					
Total	-12.24	-13.31	-12.93	-5.41	-7.11
Natural	3.24	1.98	1.40	0.96	0.56
Migratory	-14.18	-15.3	-14.33	-6.37	-7.67
Prince Edward Island					
Total	7.36	2.43	3.01	5.06	1.82
Natural	3.13	4.1	2.17	2.01	1.91
Migratory	4.26	-1.68	0.85	3.05	-0.09
Nova Scotia					
Total	3.95	2.57	1.82	4	1.62
Natural	3.03	2.04	1.63	1.35	1.06
Migratory	1.69	0.53	0.19	2.65	0.56
New Brunswick					
Total	1.58	0.92	-1.01	2.16	1.27
Natural	3.03	2.62	2.1	1.82	1.55
Migratory	-0.85	-1.7	-3.11	0.35	-0.28
Canada					
Total	10.42	9.79	7.98	8.64	9.01
Natural	5.17	4.44	4.11	3.79	3.55
Migratory	5.76	5.36	3.87	4.85	5.46

Source: Statistics Canada (2001l). *Report on the demographic situation in Canada 2001.* Ottawa: Author

Table B.3: Percent Change of Rural Population in Atlantic Canada, by Province, Atlantic Canada and Canada, 1996 and 2001

	2001	1996	Change (N)	% Change
NL	216,734	237,973	-21,239	-8.9
PE	74,619	75,097	-478	-0.6
NS	400,998	411,424	-10,426	-2.5
NB	361,596	377,712	-16,116	-4.3
AC	1,053,947	1,102,206	-48,259	-4.4
CAN	6,098,883	6,385,551	-286,668	-4.5

Source: Statistics Canada. (2002). *Population counts, for Canada, provinces and territories, and census divisions by urban and rural, 2001 Census - 100% data.* Retrieved July 21, 2003 from http://www12.statcan.ca/english/census01/products/standard/popdwell/Table-UR-D.cfm?PR=10
Statistics Canada. (1997). *A national overview: Population and dwelling counts (data products: 1996 Census of Population, catalogue 93-357-XPB*). Ottawa: Author

Table B.4: Percent of Men and Women, by Province, Atlantic Canada and Canada, 1996

	Population	Men		Women	
		N	%	N	%
NL	551,790	272,575	49.4	279,215	50.6
PE	134,555	66,060	49.1	68,495	50.9
NS	909,285	442,350	48.6	466,930	51.4
NB	738,130	362,935	49.2	375,200	50.8
AC	2,333,760	1,143,920	49.0	1189840	51.0
CAN	28,846,760	14,170,025	49.1	14,676,735	50.9

Source: Statistics Canada. (1999). *Age, sex, marital status and common-law status: 1996 Census technical reports (catalogue no. 92-353- XIE).* Ottawa: Author.

Table B.5: Percent of Men and Women, by Province, Atlantic Canada and Canada, 2001

	Population	Men		Women	
		N	%	N	%
NL	512,930	250,960	48.9	261,970	51.1
PE	135,294	65,750	48.6	69,540	51.4
NS	908,007	439,090	48.4	468,920	51.6
NB	729,498	356,705	48.9	372,790	51.1
AC	2,285,729	1,112,505	48.7	1,173,220	51.3
CAN	30,007,094	14,706,850	49.0	15,300,245	51.0

Source: Statistics Canada. (2002). *Profile of the Canadian population by age and sex: Canada ages, 2001 Census analysis series (Catalogue No. 96F0030XIE2001002).* Ottawa, ON: Author

Table B.6: Employment Rate of Rural and Small Town Areas (RST) in Atlantic Canada, by Province and Canada, 1996 through 2000

	Region	1996	1997	1998	1999	2000
NF	RST	46.8	48.4	51.5	55.6	54.3
PE	RST	70.0	67.9	69.5	69.1	72.5
NS	RST	66.7	68.4	70.6	72.6	72.8
NB	RST	64.4	65.4	66.5	67.0	68.3
Canada	RST	73.4	74.4	75.5	76.6	77.1
Canada	LUC	76.8	78.0	79.0	79.8	80.7

Source: Rothwell, N. (2001). Employment in rural and small town Canada: An update to 2000. *Rural and Small Town Analysis Bulletin (Catalogue no. 21-006-XIE), Ottawa, ON:* Minister of Industry.

Table B.7: Unemployment Rate of Rural and Small Town Areas (RST) in Atlantic Canada, by Province and Canada, 1996 through 2000

	Region	1996	1997	1998	1999	2000
NF	RST	22.7	23.5	21.8	21.3	22.0
PE	RST	17.9	20.5	17.8	19.2	16.7
NS	RST	12.5	12.2	10.5	9.5	9.7
NB	RST	11.0	13.7	13.6	12.2	12.0
Canada	RST	9.1	9.0	8.2	7.7	7.2
Canada	LUC	8.6	7.6	6.8	6.1	5.4

Source: Rothwell, N. (2001). Employment in rural and small town Canada: An update to 2000. *Rural and Small Town Analysis Bulletin (Catalogue no. 21-006-XIE), Ottawa, ON:* Minister of Industry.

Table B.8: Percent of Out-Migration from Rural and Small Town (RST) Areas in Atlantic Canada, by Province and Canada, between 1991 and 1996

	In-Migration	Out-Migration	Net Migration
NL	4.6	9.9	-5.3
PE	8.3	7.4	0.9
NS	7.9	7.5	0.4
NB	6.8	7.7	-0.9
Canada	10.1	8.7	1.4

Source: Rothwell, N., Bollman, R., Tremblay, J. & Marshall, J. (2002c). Migration to and from rural and small town Canada. *Rural and Small Town Analysis Bulletin, 3(6).* Ottawa, ON: Minister of Industry.

Table B.9: Rate of Natural Increase (NI), Birth Rate (BR), Death Rate (DR) in Atlantic Canada, by Province, Ontario and Canada (per thousand), 1996 through 2000

	1996	**1997**	**1998**	**1999**	**2000**
Newfoundland and Labrador					
NI	3.24	1.98	1.4	0.96	0.56
BR	10.25	9.78	9.14	8.94	8.8
DR	7	7.8	7.74	7.97	8.24
Prince Edward Island (rural proxy)					
NI	3.13	4.1	2.17	2.01	1.91
BR	12.45	11.64	10.97	10.88	10.85
DR	9.32	7.53	8.81	8.87	8.94
Nova Scotia					
NI	3.03	2.04	1.63	1.35	1.06
BR	11.35	10.65	10.24	10.08	9.93
DR	8.32	8.61	8.61	8.73	8.87
New Brunswick					
NI	3.03	2.62	2.1	1.82	1.55
BR	10.86	10.51	10.46	10.31	10.2
DR	7.83	7.88	8.36	8.5	8.64
Ontario (urban proxy)					
NI	5.49	4.76	4.61	4.28	3.95
BR	12.62	11.84	11.66	11.44	11.24
DR	7.13	7.08	7.05	7.16	7.29
Canada					
NI	5.17	4.44	4.11	3.79	3.55
BR	12.34	11.63	11.33	11.07	10.8
DR	7.18	7.2	7.21	7.28	7.25

Source: Statistics Canada (2001l). *Report on the demographic situation in Canada 2001*. Ottawa: Author.

Table B.10: Percent of Men, Women and Total Rural Canadians 15 Years and Over, Hours Spent Providing Unpaid Housework, by Province, Atlantic Canada and Canada, 1996 and 2001

	1996 Rural Population			2001 Rural Population		
	Men	**Women**	**Total**	**Men**	**Women**	**Total**
Newfoundland and Labrador						
None	22	10	16	19	9	14
Less than 5 hours	18	9	13	18	10	14
5 to 14 hours	27	19	23	27	20	24
15 to 29 hours	17	21	19	19	23	21
30 to 59 hours	11	24	17	11	22	17
60 or more hours	5	18	12	6	16	11
Prince Edward Island						
None	19	9	14	14	7	10
Less than 5 hours	25	11	18	24	13	18
5 to 14 hours	30	21	26	33	25	29
15 to 29 hours	16	26	21	18	27	22
30 to 59 hours	7	23	15	9	20	15
60 or more hours	2	10	6	3	8	6
Nova Scotia						
None	18	8	13	14	8	11
Less than 5 hours	24	11	17	23	12	18
5 to 14 hours	31	22	27	32	24	28
15 to 29 hours	17	24	21	19	25	22
30 to 59 hours	8	23	16	9	20	15
60 or more hours	3	12	7	3	10	7
New Brunswick						
None	20	9	14	16	9	12
Less than 5 hours	24	12	18	23	13	18
5 to 14 hours	30	23	26	31	26	28
15 to 29 hours	16	24	20	18	25	22
30 to 59 hours	8	21	14	9	19	14
60 or more hours	3	11	7	3	9	6
Atlantic Canada						
None	20	9	14	16	9	12
Less than 5 hours	22	11	16	22	12	17
5 to 14 hours	29	21	25	30	24	27
15 to 29 hours	16	23	20	18	24	21
30 to 59 hours	9	22	16	9	20	15
60 or more hours	3	13	8	4	11	8

Table B.10 (continued): Percent of Men, Women and Total Rural Canadians 15 Years and Over, Hours Spent Providing Unpaid Housework, by Province, Atlantic Canada and Canada, 1996 and 2001

	1996 Rural Population			2001 Rural Population		
	Men	**Women**	**Total**	**Men**	**Women**	**Total**
Canada						
None	16	7	12	13	6	10
Less than 5 hours	25	11	18	25	13	19
5 to 14 hours	31	24	27	32	26	29
15 to 29 hours	16	25	20	18	25	22
30 to 59 hours	8	22	15	9	20	14
60 or more hours	3	11	7	4	10	7

Table B.11: Percent of Men, Women and Total Rural Canadians 15 Years and Over, Hours Spent Providing Unpaid Care or Assistance to Seniors, by Province, Atlantic Canada and Canada, 1996 and 2001

	1996 Rural Population			2001 Rural Population		
	Men	**Women**	**Total**	**Men**	**Women**	**Total**
Newfoundland and Labrador						
None	86	80	83	84	77	80
Some	14	20	17	16	23	20
Less than 5 hours	8	10	9	9	11	10
5 to 9 hours	3	5	4	4	6	5
10 or more hours	3	5	4	3	6	5
Prince Edward Island						
None	84	75	79	81	75	78
Some	16	25	21	19	25	22
Less than 5 hours	11	14	13	13	15	14
5 to 9 hours	3	6	5	4	6	5
10 or more hours	2	5	3	2	4	3
Nova Scotia						
None	84	77	81	83	76	80
Some	16	2	19	17	24	20
Less than 5 hours	10	12	11	11	13	12
5 to 9 hours	3	5	4	4	6	5
10 or more hours	2	5	4	3	5	4
New Brunswick						
None	84	77	80	82	76	79
Some	16	23	20	18	24	21
Less than 5 hours	11	14	12	12	14	13
5 to 9 hours	3	5	4	4	6	5
10 or more hours	2	4	3	2	5	3

Table B.11 (continued): Percent of Men, Women and Total Rural Canadians 15 Years and Over, Hours Spent Providing Unpaid Care or Assistance to Seniors, by Province, Atlantic Canada and Canada, 1996 and 2001

	1996 Rural Population			2001 Rural Population		
	Men	**Women**	**Total**	**Men**	**Women**	**Total**
Atlantic Canada						
None	85	78	81	83	76	80
Some	15	22	19	17	24	20
Less than 5 hours	10	12	11	11	13	12
5 to 9 hours	3	5	4	4	6	5
10 or more hours	2	5	4	3	5	4
Canada						
None	85	77	81	83	76	79
Some	15	23	19	17	24	21
Less than 5 hours	11	14	12	12	15	13
5 to 9 hours	3	5	4	3	6	5
10 or more hours	2	4	3	2	4	3

Table B.12: Percent of Men, Women and Total Rural Canadians 15 Years and Over, Hours Spent Looking After Children, Without Pay, by Province, Atlantic Canada and Canada, 1996 and 2001

	1996 Rural Population			2001 Rural Population		
	Men	**Women**	**Total**	**Men**	**Women**	**Total**
Newfoundland and Labrador						
None	67	54	60	68	57	62
Some	33	46	41	32	43	38
Less than 5 hours	8	7	8	8	7	8
5 to 14 hours	10	9	10	9	9	9
15 to 29 hours	6	7	7	6	7	6
30 to 59 hours	4	7	5	4	6	5
60 or more hours	5	15	10	6	14	10
Prince Edward Island						
None	66	54	60	64	56	60
Some	34	46	40	36	44	40
Less than 5 hours	10	9	10	10	8	9
5 to 14 hours	11	10	11	10	8	9
15 to 29 hours	6	7	7	6	7	7
30 to 59 hours	3	8	6	5	8	6
60 or more hours	4	12	8	5	12	9

Table B.12 (continued): Percent of Men, Women and Total Rural Canadians 15 Years and Over, Hours Spent Looking After Children, Without Pay, by Province, Atlantic Canada and Canada, 1996 and 2001

	1996 Rural Population			2001 Rural Population		
	Men	**Women**	**Total**	**Men**	**Women**	**Total**
Nova Scotia						
None	68	58	62	67	59	63
Some	32	42	38	33	41	37
Less than 5 hours	10	8	9	10	8	9
5 to 14 hours	10	9	10	10	9	9
15 to 29 hours	6	7	6	6	7	6
30 to 59 hours	3	7	5	3	6	5
60 or more hours	3	12	8	4	12	8
New Brunswick						
None	66	55	60	66	57	61
Some	34	45	40	34	43	39
Less than 5 hours	11	9	10	10	9	9
5 to 14 hours	10	10	10	10	9	10
15 to 29 hours	6	7	7	6	7	7
30 to 59 hours	4	7	5	4	7	5
60 or more hours	4	12	8	4	11	7
Atlantic Canada						
None	67	56	61	67	57	62
Some	33	44	39	33	43	38
Less than 5 hours	10	8	9	9	8	9
5 to 14 hours	10	9	10	10	9	9
15 to 29 hours	6	7	7	6	7	7
30 to 59 hours	4	7	5	4	6	5
60 or more hours	4	13	8	5	12	8
Canada						
None	64	55	59	65	56	60
Some	36	45	41	35	44	4
Less than 5 hours	11	9	10	11	9	10
5 to 14 hours	11	10	11	10	9	10
15 to 29 hours	6	7	7	6	7	7
30 to 59 hours	4	7	5	4	7	5
60 or more hours	3	12	8	4	12	8

Appendix C: Literature Review- Key Word Searches and Database Searches

Database Searches (1996-2003):

Academic Search Elite
Ageline
Canadian Periodicals
CBCA Fulltext Reference
CINAHL
ERIC
PubMed
PAIS
PsycINFO
Social Services Abstracts
Sociological Abstracts
Web of Science

Keyword Search:
1996-2003 (complete up to March 2003):

caregiving and urban
caregiving and (urban and rural)
rural and urban caregiv* and old age
caregiving and rural
caregiving and elderly and rural
caregiv* and elderly
caregiv* and older adults
caregiv* and aged
caregiv* and paid work
caregiv* and work and elder care
caregiv* and employment and elder care
caregivers* and urban
caregiver* and (urban and rural)
caregivers and elders (urban and rural)
(caregivers and urban) or rural and elderly
caregivers and rural communities
kinship and elderly
kinship and elder care
kinship and community
kinship and rural setting
kinship and Canada and (rural and urban)
community and family
community and rural and elderly
community and (urban and urban) and elder care
community and caregiving and elders (urban or rural)
rural (urban) and caregiving
rural and employment
demographics and rural
demographics and community and rural
(urban and rural) differences
residential and caregiving
residential and community and care*
caregiv* and aged and (rural or urban)
care* and (urban and rural)
care and rural and elderly
care* and elderly
care* and older adults
care* and aged and women
care* and women
caregiver and elder care
caregivers and characteristics
caregivers and profile
caregivers and Canada

residential and caregiver*
home care and caregiver*
home care services and rural
home care services and rural and elderly
formal care and elder care and rural
formal services and elder care and rural
service accessibility and rural
family care and elder and rural
family care and (rural and urban)
informal support and women and elderly
informal support and elder care
informal support and community (urban and rural)
women and rural and employment and aged
social support and community
social support and service use
social support and rural and elderly
Canada and population loss and health
Canada and out-migration and health
Canada and out-migration and rural
Canada and migration and rural health
Canada and health services and differences
Canada and health services and rural
Canada and health services and community health
Canada and health services and out-migration
Canada and health status and out-migration
Canada and caregiv* and out-migration
Canada and elder care and out-migration
Canada and aged and out-migration
Canada and elderly and out-migration
Canada and older adult and out-migration
Canada and women and out-migration
Health and older adult and out-migration
Health and elderly and out-migration
Health and aged and out-migration
Health and women and out-migration
Community health and older adult and caregiv*
Community health and elderly and caregiv*
Community health and aged and caregiv*
Community health and women and caregiv*
Rural community and women and caregiv*
Rural community and elderly and caregiv*
Rural community and older adult and caregiv*
Rural community and aged and caregiv*
Rural community and women and health status
Rural community and women and informal care
Rural community and women and formal care
Rural community and women and home care

Rural community and elder* and health status
Rural community and elder* and informal care
Rural community and elder* and formal care
Rural community and elder* and home care
Rural community and women and continuing care
Rural community and women and long term care
Rural community and elder* and continuing care
Rural community and elder* and long term care
Canada and rurality and health status
Canada and rurality and health service
Rurality and gender difference and health service
Rurality and gender difference and health status
Geographic mobility and Canada and health
Canada and gender difference and rural health
Canada and population dynamics and health

Search by key authors (first and/or last name)

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Appendix D: Section Four- Data Tables

Table D.1: Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Overall Instrumental and Expressive (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Individual Level						
Sex						χ^2 = 96.00****
Men	2,402,084	67	5	21	6	Cramer's V= 0.14
Women	2,418,877	78	7	12	4	(moderate)
Age						
15 to 29	1,188,603	81	2	13	3	χ^2 = 449.88****
30 to 49	2,098,227	78	6	11	5	Cramer's V =
50 to 64	859,150	64	12	18	7	0.18 (moderate)
65 to 79	545,812	53	8	32	7	
80 and over	129,171	35	1	59	6	
Health Status Mean (sample data)	2, 985	0.88[b]	0.89 [b]	0.80[a]	0.89 [b]	F= 53.47 **** Scheffe Test [&]
Living Context						
Marital Status						χ^2 = 52.52****
Married/Common-law	3,217,627	75	6	16	4	Cramer's V= 0.11
Non-Married	1,588,932	68	6	18	8	(moderate)
Living Arrangements						χ^2 = 252.46****
Alone	440,610	48	14	20	18	Cramer's V= 0.23
With other(s)	4,380,351	75	5	16	4	(moderate)
Presence of Children <15						χ^2 = 104.96****
No Children	3,379,075	69	6	19	7	Cramer's V= 0.15
Child(ren)	1,441,885	82	6	11	2	(moderate)
Proximity to Grocery Store						χ^2 = 25.66****
Same neighbourhood	3,912,154	71	6	17	5	Cramer's V= 0.07
Surrounding area	828,637	80	5	12	3	(weak)

Note: may not total 100% due to rounding **** p<.0001
&- a is significantly different from b

Table D.1(continued): Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Overall Instrumental and Expressive (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Human Capital						
Personal Income						$\chi^2 = 10.05$****
Less than $15,000	1,617,514	76	5	16	3	Cramer's V= 0.05
$15,000 or greater	1,992,355	77	6	13	4	(weak)
Household Income						$\chi^2 = 52.50$****
Less than $30,000	1,101,674	68	7	20	5	Cramer's V= 0.13
$30,000 or greater	2,172,919	79	5	13	3	(moderate)
Education Level						$\chi^2 = 205.72$****
Less than high school	1,754,992	64	5	25	6	Cramer's V= 0.15
Graduated high school	849,455	74	6	16	4	(moderate)
At least some post-secondary	2,120,180	81	7	8	4	
Employment						$\chi^2 = 267.27$****
Not employed	1,601,249	60	8	27	5	Cramer's V= 0.17
Employed part time	635,181	84	6	8	2	(moderate)
Employed full time	2,487,350	78	5	11	6	
Region						
Atlantic Canada	976,600	80	3	16	1	$\chi^2 = 61.47$****
Non-Atlantic Canada	3,844,362	71	7	17	6	Cramer's V= 0.11
						(moderate)

*Note: may not total 100% due to rounding **** p<.0001
&- a is significantly different from b

Table D.2: Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Child Care (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Individual Level						
Sex						$\chi^2 = 88.28$****
Men	2,404,256	14	20	12	54	Cramer's V= 0.14
Women	2,423,732	19	29	10	42	(moderate)
Age						$\chi^2 = 977.46$****
29 and under	1,188,601	17	31	12	40	Cramer's V= 0.26
30 to 49	2,100,062	28	21	17	34	(moderate)
50 to 64	862,169	1	30	2	67	
65 to 79	546,706	1	21	1	77	
80 and over	130,449	0	5	3	92	
Health Status Mean (sample data)	2,988	0.93[bd]	0.89[bc]	0.91[b]	0.84[a]	F= 52.62 **** Scheffe Test [&]
Living Context						
Marital Status						$\chi^2 = 202.06$****
Married/Common-law	3,220,482	21	23	13	43	Cramer's V= 0.21
Non-Married	1,593,104	9	28	6	57	(moderate)
Living Arrangements						$\chi^2 = 277.13$****
Alone	444,306	0	17	0	83	Cramer's V= 0.24
With other(s)	4,383,681	19	25	12	44	(moderate)
Presence of Children <15						$\chi^2 = 2732.24$****
No children	3,384,708	3	31	3	63	Cramer's V= 0.75
Child(ren)	1,443,281	49	9	30	12	(strong)
Proximity to Grocery Store						$\chi^2 = 28.69$****
Same neighbourhood	3,914,345	16	25	12	47	Cramer's V= 0.08
Surrounding area	830,030	21	25	6	48	(weak)

Note: may not total 100% due to rounding **** p<.0001
&- a is significantly different from b; c is significantly different from d

Table D.2 (continued): Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Child Care (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Human Capital						
Personal Income						$\chi^2 = 46.77$****
Less than $15,000	1,618,792	16	30	9	45	Cramer's V= 0.11
$15,000 or greater	1,993,271	21	21	13	45	(moderate)
Household Income						$\chi^2 = 42.09$****
Less than $30,000	1,103,392	16	26	7	51	Cramer's V= 0.11
$30,000 or greater	2,173,393	20	24	14	43	(moderate)
Education Level						$\chi^2 = 166.96$****
Less than high school	1,755,468	11	24	8	57	Cramer's V= 0.13
Graduated high school	849,455	17	22	15	46	(moderate)
At least some post-secondary	2,123,292	22	27	12	40	
Employment						$\chi^2 = 206.14$****
Not employed	1,602,527	11	22	9	59	Cramer's V= 0.15
Employed part time	636,576	22	36	10	32	(moderate)
Employed full time	2,488,266	20	24	13	44	
Region						
Atlantic Canada	977,459	20	25	12	43	$\chi^2 = 13.68$****
Non-Atlantic Canada	3,850,529	16	24	11	49	Cramer's V= 0.05 (weak)

*Note: may not total 100% due to rounding ****p < .0001
&- a is significantly different from b; c is significantly different from d

Table D.3: Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Household Instrumental Activities of Daily Living (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Individual Level						
Sex						χ^2 = 92.33****
Men	2,404,565	38	3	43	17	Cramer's V = 0.14
Women	2,423,731	39	8	33	21	(moderate)
Age						χ^2 = 357.45****
15 to 29	1,188,602	54	4	31	11	Cramer's V= 0.16
30 to 49	2,100,062	40	6	35	19	(moderate)
50 to 64	862,170	28	6	41	25	
65 to 79	547,015	19	5	53	24	
80 and over	130,449	7	2	72	19	
Health Status Mean (sample data)	2,988	0.90 [bd]	0.91 [b]	0.83 [a]	0.88 [bc]	F= 43.50**** Scheffe Test[&]
Living Context						
Marital Status						χ^2 = 128.65****
Married/Common-law	3,220,790	38	6	42	15	Cramer's V= 0.16
Non-Married	1,593,103	39	5	29	26	(moderate)
Living Arrangements						χ^2 = 635.68****
Alone	444,307	6	10	24	61	Cramer's V= 0.36
With other(s)	4,383,991	41	5	39	15	(strong)
Presence of Children <15						χ^2 = 27.48****
No children	3,385,016	37	5	39	20	Cramer's V= 0.08
Child(ren)	1,443,281	40	7	36	16	(weak)
Proximity to Grocery Store						χ^2 = 14.81****
Same neighbourhood	3,914,655	37	5	39	19	Cramer's V= 0.06
Surrounding area	830,031	44	6	35	16	(weak)

Note: may not total 100% due to rounding ****p < .0001
&- a is significantly different from b; c is significantly different from d

Table D.3 (continued): Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Household Instrumental Activities of Daily Living (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Human Capital						
Personal Income						$\chi^2 = 16.44$****
Less than $15,000	1,618,792	42	7	36	15	Cramer's V= 0.07
$15,000 or greater	1,993,269	40	5	38	17	(weak)
Household Income						$\chi^2 = 80.77$****
Less than $30,000	1,103,392	32	9	36	23	Cramer's V= 0.16
$30,000 or greater	2,173,393	42	5	39	14	(moderate)
Education						$\chi^2 = 109.79$****
Less than high school	1,755,468	33	4	43	20	Cramer's V= 0.16
Graduated high school	849,763	34	5	44	18	(moderate)
At least some post-secondary	2,123,292	45	7	31	17	
Employment						$\chi^2 = 108.83$****
Not employed	1,602,836	29	6	44	21	Cramer's V= 0.11
Employed part time	636,575	50	6	30	15	(moderate)
Employed full time	2,488,266	41	5	37	17	
Region						
Atlantic Canada	977,767	41	6	43	10	$\chi^2 = 59.42$****
Non-Atlantic Canada	3,850,528	37	5	37	21	Cramer's V= 0.11 (moderate)

*Note: may not total 100% due to rounding ****p < .0001
&- a is significantly different from b; c is significantly different from d

Table D.4: Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Non-Household Instrumental Activities of Daily Living (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Individual Level						
Sex						$\chi^2 = 68.25$****
Men	2,404,565	24	8	38	30	Cramer's V= 0.12
Women	2,423,731	24	15	32	30	(moderate)
Age						
15 to 29	1,188,603	28	8	45	19	$\chi^2 = 261.33$****
30 to 49	2,100,062	26	14	28	32	Cramer's V= 0.13
50 to 64	862,169	24	12	32	33	(moderate)
65 to 79	547,013	13	8	39	40	
80 and over	130,449	5	4	57	33	
Health Status Mean (sample data)	2,985	0.90[b]	0.90 [b]	0.82[a]	0.88 [b]	F= 41.51**** Scheffe test [&]
Living Context						
Marital Status						$\chi^2 = 51.40$****
Married/Common-law	3,220,791	27	11	35	28	Cramer's V= 0.10
Non-Married	1,593,104	18	13	36	34	(moderate)
Living Arrangements						$\chi^2 = 361.19$****
Alone	444,307	2	16	17	65	Cramer's V= 0.27
With other(s)	4,383,990	26	11	37	26	(moderate)
Presence of Children <15						$\chi^2 = 30.63$****
No children	3,385,016	22	10	37	30	Cramer's V= 0.08
Child(ren)	1,443,281	28	13	30	29	(weak)
Proximity to Grocery Store						$\chi^2 = 26.81$
Same neighbourhood	3,914,655	23	11	36	30	Cramer's V= 0.08
Surrounding area	830,031	30	14	31	26	(weak)

*Note: may not total 100% due to rounding ****$p < .0001$

&- a is significantly different from b

Table D.4 (continued): Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Non-Household Instrumental Activities of Daily Living (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Human Capital						
Personal Income						$\chi^2 = 43.94$****
Less than $15,000	1,618,792	24	11	41	25	Cramer's V= 0.11
$15,000 or greater	1,993,270	29	11	30	30	(moderate)
Household Income						$\chi^2 = 50.38$****
Less than $30,000	1,103,392	19	12	33	35	Cramer's V= 0.12
$30,000 or greater	2,173,393	29	11	34	26	(moderate)
Education Level						$\chi^2 = 227.60$****
Less than high school	1,755,468	18	8	45	30	Cramer's V= 0.15
Graduated high school	849,764	23	8	37	32	(moderate)
At least some post-secondary	2,123,292	30	15	26	29	
Employment						$\chi^2 = 115.35$****
Not employed	1,602,836	17	10	41	32	Cramer's V= 0.11
Employed part time	636,575	28	13	38	21	(moderate)
Employed full time	2,488,266	28	12	30	30	
Region						
Atlantic Canada	977,768	21	15	39	25	$\chi^2 = 36.22$****
Non-Atlantic Canada	3,850,528	25	10	34	31	Cramer's V= 0.09 (weak)

*Note: may not total 100% due to rounding ****p < .0001
&- a is significantly different from b

Table D.5: Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Personal Care (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Individual Level						
Sex						$\chi^2 = 93.28$****
Men	2,404,328	0	4	4	92	Cramer's V= 0.14
Women	2,423,732	1	11	5	84	(moderate)
Age						$\chi^2 = 362.07$****
29 and under	1,188,603	0	7	3	90	Cramer's V = 0.16
30 to 49	2,100,061	0	10	2	87	(moderate)
50 to 64	862,169	0	8	3	89	
65 to 79	546,778	1	4	10	86	
80 and over	130,449	1	1	32	66	
Health Status Mean (sample data)	2,988	0.76[a]	0.90[bd]	0.65[c]	.88 [b d]	F= 203.50**** Scheffe test [&]
Living Context						
Marital Status						$\chi^2 = 6.98$****
Married/Common-law	3,220,792	0	8	4	88	Cramer's V= 0.04
Non-Married	1,592,868	0	8	5	87	(weak)
Living Arrangements						$\chi^2 = 31.76$****
Alone	444,069	0	7	9	84	Cramer's V= 0.08
With other(s)	4,383,990	0	8	4	88	(weak)
Presence of Children <15						$\chi^2 = 13.77$****
No children	3,384,779	0	8	5	87	Cramer's V= 0.05
Child(ren)	1,443,281	0	9	3	88	(weak)
Proximity to Grocery Store						$\chi^2 = 8.02$****
Same neighbourhood	3,914,653	0	8	5	87	Cramer's V= 0.04
Surrounding area	830,030	0	6	4	90	(weak)

*Note: may not total 100% due to rounding ****$p < .0001$

&- a is significantly different from b; c is significantly difference from d

Table D.5 (continued): Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Personal Care (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Human Capital						
Personal Income						$\chi^2 = 2.96$****
Less than $15,000	1,618,792	1	9	4	86	Cramer's V= 0.03
$15,000 or greater	1,993,270	0	8	4	88	(weak)
Household Income						$\chi^2 = 23.09$****
Less than $30,000	1,103,392	1	6	5	88	Cramer's V= 0.08
$30,000 or greater	2,173,393	0	10	4	86	(weak)
Education Level						$\chi^2 = 110.01$****
Less than high school	1,755,468	0	5	5	89	Cramer's V= 0.11
Graduated high school	849,765	0	3	3	94	(moderate)
At least some post-secondary	2,123,292	1	12	4	84	
Employment						$\chi^2 = 127.33$***
Not employed	1,602,836	0	6	9	86	Cramer's V= 0.12
Employed part time	636,575	1	12	2	85	(moderate)
Employed full time	2,488,265	0	8	2	90	
Region						
Atlantic Canada	977,530	1	9	7	84	$\chi^2 = 29.40$****
Non-Atlantic Canada	3,850,528	0	8	4	89	Cramer's V= 0.08 (weak)

*Note: may not total 100% due to rounding ****$p < .0001$

&- a is significantly different from b; c is significantly difference from d

Table D.6: Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Checking Up On Anyone (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Individual Level						
Sex						$\chi^2 = 206.17$****
Men	2,392,506	19	22	11	49	Cramer's V= 0.21
Women	2,413,074	34	26	9	32	(moderate)
Age						$\chi^2 = 396.73$****
29 and under	1,188,602	31	15	9	45	Cramer's V =
30 to 49	2,083,743	29	28	6	37	0.17 (moderate)
50 to 64	859,149	16	34	9	41	
65 to 79	544,859	21	18	20	40	
80 and over	129,227	17	5	39	40	
Health Status Mean (sample data)	2,983	0.86[bd]	0.90[bc]	0.78[ad]	0.88[bd]	F= 60.61**** Scheffe test [&]
Living Context						
Marital Status						$\chi^2 = 132.1$****
Married/Common-law	3,201,749	25	29	7	39	Cramer's V= 0.17
Non-Married	1,589,430	29	16	14	41	(moderate)
Living Arrangements						$\chi^2 = 102.24$****
Alone	441,106	34	17	21	29	Cramer's V= 0.15
With other(s)	4,364,476	25	25	8	41	(moderate)
Presence of Children <15						$\chi^2 = 126.45$****
No Children	3,363,694	24	22	12	42	Cramer's V= 0.16
Child(ren)	1,441,887	32	30	4	35	(moderate)
Proximity to Grocery Store						$\chi^2 = 19.91$****
Same neighbourhood	3,897,758	26	24	9	41	Cramer's V= 0.07
Surrounding area	827,594	26	28	12	34	(weak)

*Note: may not total 100% due to rounding ****$p < .0001$

&- a is significantly different from b; c is significantly different from d

Table D.6 (continued): Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Checking Up On Anyone (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Human Capital						
Personal Income						$\chi^2 = 55.68$****
Less than $15,000	1,617,514	29	22	13	36	Cramer's V= 0.12
$15,000 or greater	1,978,346	27	28	7	39	(moderate)
Household Income						$\chi^2 = 101.60$****
Less than $30,000	1,101,641	32	19	15	35	Cramer's V= 0.18
$30,000 or greater	2,157,902	27	29	6	38	(moderate)
Education Level						$\chi^2 = 240.34$****
Less than high school	1,739,502	20	19	15	47	Cramer's V= 0.16
Graduated high school	849,455	25	28	5	42	(moderate)
At least some post-secondary	2,120,233	33	28	6	33	
Employment						$\chi^2 = 147.75$****
Not employed	1,599,878	23	20	16	42	Cramer's V= 0.13
Employed part time	635,181	30	23	10	37	(moderate)
Employed full time	2,473,341	28	28	5	39	
Region						
Atlantic Canada	976,623	29	29	9	33	$\chi^2 = 29.10$****
Non-Atlantic Canada	3,828,958	25	23	10	42	Cramer's V= 0.08
						(weak)

*Note: may not total 100% due to rounding ****$p < .0001$

&- a is significantly different from b; c is significantly different from d

Table D.7: Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Emotional Support (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Individual Level						
Sex						$\chi^2 = 154.32$****
Men	2,400,565	22	15	10	53	Cramer's V= 0.18
Women	2,419,704	37	17	9	38	(moderate)
Age						$\chi^2 = 378.09$****
29 and under	1,188,602	41	7	12	40	Cramer's V = 0.16
30 to 49	2,099,622	32	19	8	40	(moderate)
50 to 64	858,148	20	22	6	52	
65 to 79	543,770	13	15	11	62	
80 and over	130,126	8	5	24	62	
Health Status Mean (sample data)	2,983	0.88[b]	0.88[b]	0.77[a]	0.87[b]	F= 44.91**** Scheffe Test &
Living Context						
Marital Status						$\chi^2 = 107.08$****
Married/Common-law	3,217,258	27	19	8	46	Cramer's V= 0.15
Non-Married	1,588,609	34	9	12	45	(moderate)
Living Arrangements						$\chi^2 = 9.53$****
Alone	440,665	24	15	11	51	Cramer's V= 0.04
With other(s)	4,379,603	30	16	9	45	(weak)
Presence of Children <15						$\chi^2 = 58.46$****
No Children	3,376,988	27	15	10	48	Cramer's V= 0.11
Child(ren)	1,443,281	35	19	8	39	(moderate)
Proximity to Grocery Store						$\chi^2 = 32.37$****
Same neighbourhood	3,910,776	28	16	9	47	Cramer's V= 0.08
Surrounding area	829,083	37	17	10	37	(weak)

Note: may not total 100% due to rounding ****p < .0001
&- a is significantly different from b

Table D.7 (continued): Patterns of Helping Relationships by Individual Level, Living Context, Human Capital and Region Variables - Emotional Support, (General Social Survey, 1996).

	N	Give & Receive (%)	Only Give (%)	Only Receive (%)	Neither (%)	Statistics χ^2 '000
Human Capital						
Personal Income						$\chi^2 = 27.59$****
Less than $15,000	1,618,791	34	14	11	41	Cramer's V= 0.09
$15,000 or greater	1,990,884	31	18	7	44	(moderate)
Household Income						$\chi^2 = 11.16$****
Less than $30,000	1,102,951	31	15	9	45	Cramer's V= 0.06
$30,000 or greater	2,172,351	33	19	9	40	(weak)
Education Level						$\chi^2 = 258.07$****
Less than high school	1,754,424	21	12	11	56	Cramer's V = 0.17
Graduated high school	849,455	25	18	7	50	(moderate)
At least some post-secondary	2,120,380	39	19	8	35	
Employment						$\chi^2 = 112.15$****
Not employed	1,599,980	22	17	12	49	Cramer's V= 0.11
Employed part time	636,575	40	13	11	36	(moderate)
Employed full time	2,486,350	32	16	7	45	
Region						
Atlantic Canada	975,459	40	13	10	37	$\chi^2 = 66.53$****
Non-Atlantic Canada	3,844,811	27	17	9	48	Cramer's V= 0.12 (moderate)

*Note: may not total 100% due to rounding ****$\underline{p} < .0001$
&- a is significantly different from b

Table D.8: Coefficients of Binonimal Logistic Regression of Indicators of Helping Relationships of Household IADL for Those Who Give Assistance and Those Who Receive Assistance (General Social Survey, 1996).

	Give vs. No Exp(B)-Odds Ratio	**Confidence Interval of 95%**		**Receive vs. No Exp(B)-Odds Ratio**	**Confidence Interval of 95%**
Sex					
Men	0.82	0.63-1.07		**0.68**	0.53-0.87
Women®	1.00			1.00	
Age					
15 to 29	**0.35**	0.23-0.53		**0.37**	0.25-0.55
30 to 49	**0.21**	0.13-0.34		**0.25**	0.16-0.39
50 to 64	**0.19**	0.11-0.35		**0.42**	0.25-0.73
65 to 79	**0.16**	0.42-0.59		1.69	0.65-3.99
80 and over®	1.00			1.00	
Health Status	1.96	0.71-5.38		0.74	0.29-1.87
Marital Status					
Married/common-law®	1.00			1.00	
Non-married	**1.88**	1.29-2.72		**2.08**	1.47-2.96
Living Arrangements					
Alone	**7.98**	4.83-13.16		**9.42**	5.97-14.85
With other(s)®	1.00			1.00	
Presence of Children <15					
No Children	**0.68**	0.48-0.95		**0.69**	0.50-0.95
Child(ren)®	1.00			1.00	
Education Level					
Less than high school	0.90	0.61-1.30		1.01	0.72-1.42
Graduated high school	**1.41**	1.05-1.91		1.11	0.84-1.48
At least some post-secondary®	1.00			1.00	
Employment					
Not employed®	1.00			1.00	
Employed part time	0.95	0.68-1.33		0.93	0.67-1.28
Employed full time	1.21	0.81-1.81		1.03	0.71-1.50
Region					
Atlantic Canada®	1.00			1.00	
Non-Atlantic Canada	**1.91**	1.32-2.75		**2.26**	1.59-3.19
Bold signifies statistical significance p< 0.05					

Table D.9: Coefficients of Binonimal Logistic Regression of Indicators of Helping Relationships of Non-Household IADL for Those Who Give Assistance and Those Who Receive Assistance (General Social Survey, 1996).

	Give vs. No Exp(B)-Odds Ratio	**Confidence Interval of 95%**		**Receive vs. No Exp(B)-Odds Ratio**	**Confidence Interval of 95%**
Sex					
Men	1.04	0.83-1.30		0.82	0.67-1.01
Women®	1.00			1.00	
Age					
15 to 29	**0.65**	0.47-0.91		**0.39**	0.29-0.53
30 to 49	**0.60**	0.40-0.89		**0.36**	0.25-0.53
50 to 64	**0.35**	0.21-0.57		**0.30**	0.19-0.47
65 to 79	**0.26**	0.09-0.77		0.89	0.41-1.95
80 and over®	1.00			1.00	
Health Status	0.62	0.25-1.52		**0.32**	0.14-0.73
Marital Status					
Married/common-law®	1.00			1.00	
Non-married	1.14	0.84-1.56		**1.45**	1.07-1.97
Living Arrangements					
Alone	**3.90**	2.49-6.09		**8.21**	5.11-13.19
With other(s)®	1.00			1.00	
Presence of Children <15					
No Children	0.88	0.67-1.16		0.86	0.66-1.10
Child(ren)®	1.00			1.00	
Education Level					
Less than high school	0.89	0.65-1.22		0.80	0.60-1.07
Graduated high school	**1.47**	1.14-1.89		0.84	0.66-1.07
At least some post-secondary®	1.00			1.00	
Employment					
Not employed®	1.00			1.00	
Employed part time	0.87	0.65-1.16		0.93	0.71-1.22
Employed full time	1.29	0.92-1.81		1.24	0.90-1.70
Region					
Atlantic Canada®	1.00			1.00	
Non-Atlantic Canada	1.12	0.85-1.46		1.18	0.92-1.52
Bold signifies statistical significance p< 0.05					

Table D.10: Coefficients of Binonimal Logistic Regression of Indicators of Helping Relationships of Emotional Support for Those Who Give Assistance and Those Who Receive Assistance (General Social Survey, 1996).

	Give vs. No Exp(B)-Odds Ratio	**Confidence Interval of 95%**		**Receive vs. No Exp(B)-Odds Ratio**	**Confidence Interval of 95%**
Sex					
Men	**2.05**	1.69-2.47		**2.19**	1.79-2.67
Women®	1.00			1.00	
Age					
15 to 29	0.83	0.63-1.09		**0.68**	0.51-0.90
30 to 49	**0.54**	0.38-0.76		**0.36**	0.25-0.52
50 to 64	**0.35**	0.23-0.53		**0.29**	0.18-0.45
65 to 79	**0.15**	0.06-0.36		**0.35**	0.17-0.70
80 and over®	1.00			1.00	
Health Status	**0.28**	0.12-0.57		**0.17**	0.08-0.37
Marital Status					
Married/common-law®	1.00			1.00	
Non-married	1.04	0.79-1.38		0.79	0.59-1.05
Living Arrangements					
Alone	0.85	0.57-1.27		1.00	0.67-1.51
With other(s)®	1.00			1.00	
Presence of Children <15					
No Children	1.02	0.80-1.30		1.13	0.88-1.47
Child(ren)®	1.00			1.00	
Education Level					
Less than high school	1.28	0.98-1.66		0.99	0.74-1.31
Graduated high school	**2.42**	1.95-3.00		**2.20**	1.75-2.76
At least some post-secondary®	1.00			1.00	
Employment					
Not employed®	1.00			1.00	
Employed part time	1.02	0.80-1.31		0.97	0.74-1.26
Employed full time	1.24	0.93-1.65		**1.40**	1.04-1.87
Region					
Atlantic Canada®	1.00			1.00	
Non-Atlantic Canada	**1.64**	1.31-2.05		**1.89**	1.50-2.39
Bold signifies statistical significance p< 0.05					

Table D.11: Patterns of Helping Relationships - Types of Assistance Given by Sex, in Percent and Total Numbers (General Social Survey, 1996).

	Men		**Women**		**Total**	
	Yes	**N**	**Yes**	**N**	**N**	**Statistics χ^2 '000**
Child Care	0	1,053	3	14,289	771,868	$\chi^2 = 4.79$**** Phi = 0.08 (weak)
Meal Preparation	25	64,332	43	221,859	771,867	$\chi^2 = 22.18$**** Phi = 0.17 (moderate)
House Cleaning	21	53,447	38	196,477	771,867	$\chi^2 = 22.02$**** Phi = 0.17 (moderate)
Home Maintenance	41	103,355	19	99,254	771,867	$\chi^2 = 41.08$**** Phi = -0.23 (moderate)
Grocery Shopping	24	61,164	48	248,573	771,867	$\chi^2 = 40.26$**** Phi = 0.23 (moderate)
Transportation	36	92,346	40	205,285	771.867	$\chi^2 = 0.73$**** Phi = 0.03 (weak)
Banking/Bill Paying	17	44,048	30	157,688	771,867	$\chi^2 = 15.02$**** Phi = 0.14 (moderate)
Personal Care	24	59,620	42	217,677	771,867	$\chi^2 = 25.27$**** Phi = 0.18 (moderate)
****$\underline{p} < .0001$						

Table D.12: Patterns of Helping Relationships - Types of Assistance Given by Age, in Percent and Total Numbers (General Social Survey, 1996)

	29 and Under		**30 to 49**		**50 to 64**		**65 to 79**		**80 and Over**		**Total**	
	Yes	**N**	**Yes**	**N**	**Yes**	**N**	**Yes**	**N**	**Yes**	**N**	**N**	**Statistics χ^2 '000**
Child Care	0	0	2	8,534	4	6,436	1	371	0	0	771,866	χ^2 = 5.25**** Cramer's V= 0.08 (weak)
Meal Preparation	37	40,732	36	154,426	42	75,180	29	15,512	7	341	771,868	χ^2 = 5.67**** Cramer's V= 0.09 (weak)
House Cleaning	44	48,474	29	122,043	38	67,687	22	11,721	0	0	771,867	χ^2 = 17.19**** Cramer's V= 0.15 (moderate)
Home Maintenance	33	36,803	25	104,976	32	55,784	9	4,918	3	129	771,867	χ^2 = 15.36**** Cramer's V= 0.14 (moderate)
Grocery Shopping	35	38,176	37	157,485	50	88,247	45	23,791	41	2,038	771,867	χ^2 = 10.56**** Cramer's V= 0.18 (moderate)
Transportation	18	19,979	38	160,424	49	86,367	56	29,747	23	1,114	771,867	χ^2 = 34.63**** Cramer's V= 0.21 (moderate)
Banking/Bill Paying	12	12,769	25	105,249	40	70,054	25	13,340	7	324	771,866	χ^2 = 30.06**** Cramer's V= 0.20 (moderate)
Personal Care	32	34,912	37	158,594	35	62,342	36	19,032	49	2,417	771,868	χ^2 = 1.59**** Cramer's V= 0.04 (weak)
****$\underline{p}$ < .0001												

Table D.13: Patterns of Helping Relationships - Types of Assistance Given by Living Arrangements, in Percent and Total Numbers (General Social Survey, 1996)

	Live Alone		**Live with Other(s)**		**Total**	
	Yes	**N**	**Yes**	**N**	**N**	**Statistics χ^2 '000**
Child Care	0	259	2	15,083	771,868	χ^2 = 0.76**** Phi = 0.03 (weak)
Meal Preparation	28	16,421	38	269,770	771,867	χ^2 = 2.01**** Phi = 0.05 (weak)
House Cleaning	17	9,678	34	240,247	771,867	χ^2 = 6.97**** Phi = 0.10 (weak)
Home Maintenance	25	14,507	26	188,102	771,867	χ^2 = 0.04**** Phi = 0.01 (weak)
Grocery Shopping	41	23,502	40	286,235	771,867	χ^2 = 0.00**** Phi = -0.00 (weak)
Transportation	43	24,768	38	272,863	771,867	χ^2 = 0.49**** Phi = -0.03 (weak)
Banking/Bill Paying	25	14,547	26	187,189	771,867	χ^2 = 0.03**** Phi = 0.01 (weak)
Personal Care	46	26,328	35	250,969	771,867	χ^2 = 2.51**** Phi = -0.06 (weak)
****$\underline{p} < .0001$						

Table D.14: Patterns of Helping Relationships - Types of Assistance Given by Region, in Percent and Total Numbers (General Social Survey, 1996).

	Atlantic Canada		**Non-Atlantic Canada**		**Total**	
	Yes	**N**	**Yes**	**N**	**N**	**Statistics χ^2 '000**
Child Care	2	3,717	2	11,625	771,867	$\chi^2 = 0.14$**** Phi = 0.01 (weak)
Meal Preparation	39	84,528	37	201,663	771,867	$\chi^2 = 0.27$**** Phi = -0.02 (weak)
House Cleaning	37	81,062	31	168,862	771,867	$\chi^2 = 2.91$**** Phi = -0.06 (weak)
Home Maintenance	31	69,001	24	133,608	771,867	$\chi^2 = 4.27$**** Phi = -0.07 (weak)
Grocery Shopping	41	89,871	40	219,867	771,868	$\chi^2 = 0.08$**** Phi = -0.01 (weak)
Transportation	42	91,123	37	206,508	771,866	$\chi^2 = 1.13$**** Phi = -0.04 (weak)
Banking/Bill Paying	22	47,180	28	154,557	771,868	$\chi^2 = 3.42$**** Phi = 0.07 (weak)
Personal Care	30	66,267	38	221,030	771,868	$\chi^2 = 4.38$**** Phi = 0.08 (weak)
****$p < .0001$						

Table D.15: Patterns of Helping Relationships - Types of Assistance Received by Sex, in Percent and Total Numbers (General Social Survey, 1996).

	Male		**Female**		**Total**	
	Yes	**N**	**Yes**	**N**	**N**	**Statistics χ^2 '000**
Child Care	8	11,621	2	3,452	305,072	χ^2 = 4.90**** Phi = -0.13 (moderate)
Meal Preparation	50	74,204	39	59,774	303,910	χ^2 = 3.53**** Phi = -0.11 (moderate)
House Cleaning	61	91,780	69	106,479	304,276	χ^2 = 1.98**** Phi = 0.08 (weak)
Home Maintenance	45	66,919	41	63,773	303,802	χ^2 = 0.35**** Phi = -0.03 (weak)
Grocery Shopping	48	72,030	43	65,874	302,608	χ^2 = 0.94**** Phi = -0.06 (weak)
Transportation	44	65,478	46	69,671	301,895	χ^2 = 0.07**** Phi = 0.02 (weak)
Banking/Bill Paying	29	43,203	33	50,039	301,494	χ^2 = 0.48**** Phi = 0.04 (weak)
Personal Care	37	55,065	34	52,610	302,746	χ^2 = 0.32**** Phi = -0.03 (weak)
****$\underline{p} < .0001$						

Table D. 16: Patterns of Helping Relationships - Types of Assistance Received by Age, in Percent and Total Numbers (General Social Survey, 1996)

	29 and Under		**30 to 49**		**50 to 64**		**65 to 79**		**80 and Over**		**Total**	
	Yes	**N**	**Yes**	**N**	**Yes**	**N**	**Yes**	**N**	**Yes**	**N**	**N**	**Statistics χ^2 '000**
Child Care	19	6,421	14	6,739	0	0	0	110	3	1,803	305,072	χ^2 = 30.64**** Cramer's V= 0.32 (strong)
Meal Preparation	70	23,962	39	19,105	59	27,672	32	34,299	43	28,940	303,910	χ^2 = 19.95**** Cramer's V= 0.26 (moderate)
House Cleaning	70	23,962	67	32,798	65	30,679	60	63,385	70	47,435	304,275	χ^2 =2.60**** Cramer's V= 0.09 (weak)
Home Maintenance	6	2,019	55	26,830	59	27,613	49	51,639	34	22,592	303,802	χ^2 =30.61**** Cramer's V= 0.32 (strong)
Grocery Shopping	70	23,962	56	27,393	48	22,463	29	30,884	50	33,201	302,606	χ^2 =22.54**** Cramer's V= 0.27 (moderate)
Transportation	63	21,504	54	26,483	41	19,053	30	31,378	55	36,731	301,896	χ^2 =19.39**** Cramer's V= 0.25 (moderate)
Banking/Bill Paying	44	15,180	42	20,276	18	8,641	21	22,230	41	26,915	301,494	χ^2 =16.67**** Cramer's V= 0.24 (moderate)
Personal Care	43	14,543	14	6,680	32	14,923	35	37,270	52	34,260	302,747	χ^2 =18.67**** Cramer's V= 0.25 (moderate)
****$\underline{p}$ < .0001												

Table D.17: Patterns of Helping Relationships - Types of Assistance Received by Living Arrangements, in Percent and Total Numbers (General Social Survey, 1996).

	Live Alone		**Live with other(s)**		**Total**	
	Yes	**N**	**Yes**	**N**	**N**	**Statistics χ^2 '000**
Child Care	0	0	6	15,074	305,074	χ^2 = 4.48**** Phi = 0.12 (moderate)
Meal Preparation	32	21,104	48	112,874	303,910	χ^2 = 5.01**** Phi = 0.13 (moderate)
House Cleaning	65	42,801	65	155,458	304,276	χ^2 = 0.01**** Phi = 0.01 (weak)
Home Maintenance	40	26,586	44	104,107	303,803	χ^2 = 0.24**** Phi = 0.03 (weak)
Grocery Shopping	39	25,572	47	112,332	302,607	χ^2 = 1.45**** Phi = 0.07 (weak)
Transportation	40	25,690	46	109,459	301,896	χ^2 = 0.93**** Phi = 0.06 (weak)
Banking/Bill Paying	25	15,831	33	77,411	301,493	χ^2 = 1.62**** Phi = 0.07 (weak)
Personal Care	31	20,418	37	87,257	302,746	χ^2 = 0.72**** Phi = 0.05 (weak)
****$\underline{p} < .0001$						

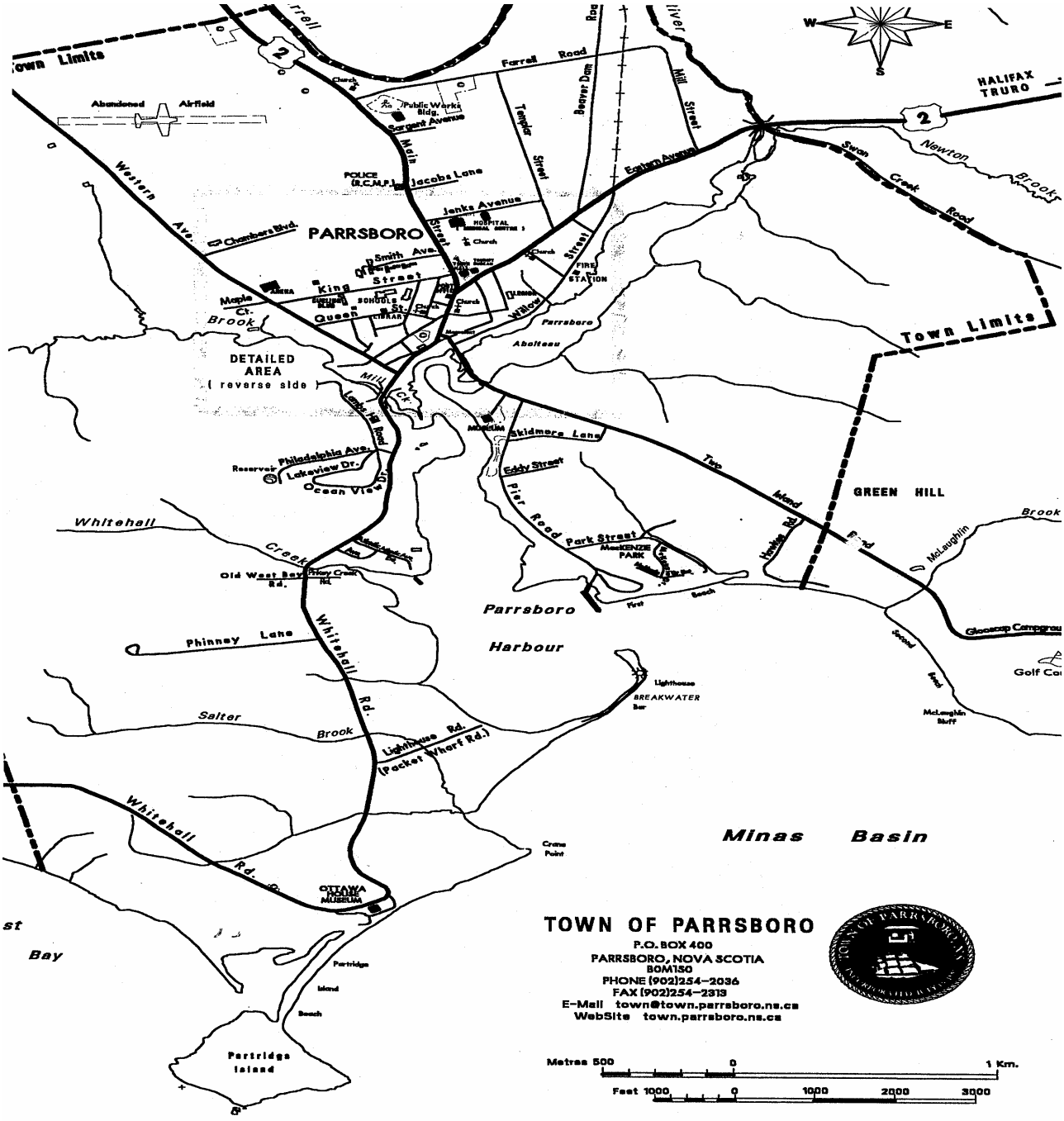
Table D.18: Patterns of Helping Relationships - Types of Assistance Received by Region, in Percent and Total Numbers (General Social Survey, 1996).

	Atlantic Canada		**Non-Atlantic Canada**		**Total**	
	Yes	**N**	**Yes**	**N**	**N**	**Statistics χ^2 '000**
Child Care	2	1,658	7	13,416	305,073	χ^2 = 3.46**** Phi = 0.11 (moderate)
Meal Preparation	44	44,251	44	89,727	303,909	χ^2 = 0.00**** Phi = -0.00 (weak)
House Cleaning	66	66,013	65	132,246	304,275	χ^2 = 0.02**** Phi = -0.01 (weak)
Home Maintenance	45	44,871	42	85,822	303,803	χ^2 = 0.21**** Phi = -0.03 (weak)
Grocery Shopping	49	48,469	44	89,435	302,608	χ^2 = 0.52**** Phi = -0.04 (weak)
Transportation	47	47,001	44	88,148	301,895	χ^2 = 0.41**** Phi = -0.04 (weak)
Banking/Bill Paying	33	32,629	30	60,613	301,494	χ^2 = 0.26**** Phi = -0.03 (weak)
Personal Care	44	44,246	31	63,429	302,745	χ^2 = 4.90**** Phi = -0.13 (moderate)
****$\underline{p} < .0001$						

Table D.19: Patterns of Helping Relationships - Types of Assistance Received by Health Status Index (General Social Survey, 1996).

	Mean		N			
	No	**Yes**	**No**	**Yes**	**F**	**Significance**
Child Care	0.68	0.47	433	5	4.072	0.04
Meal Preparation	0.72	0.61	264	172	23.324	0.00
House Cleaning	0.72	0.66	150	286	7.770	0.01
Home Maintenance	0.66	0.71	248	187	4.364	0.04
Grocery Shopping	0.73	0.61	255	176	28.033	0.00
Transportation	0.73	0.61	241	189	29.807	0.00
Banking/Bill Paying	0.73	0.55	311	118	58.005	0.00
Personal Care	0.74	0.58	265	171	53.144	0.00
****$\underline{p} < .0001$						

Appendix E: Map of Parrsboro, Nova Scotia



Appendix F: Case Study Focus Group Participant Consent Form

Consent to Participate in Research – Focus Group

Research: Net Loss Population Settlement Patterns & Maintenance of Rural Health Status: A Case Study in Atlantic Canada.

Introduction

You are invited to participate in a **focus group** with other members of your community being conducted by Dr. Katherine Side at Mount Saint Vincent University. This research is part of a project being conducted by Dr. Janice Keefe and Dr. Katherine Side which examines the impact of changes in the population of the community (i.e. population loss or gain) on the health of the Canadian population, with a specific focus on rural Atlantic Canada (see description attached). The research is funded by the Canadian Institutes Health Research. One component of this research is a single-case, case study of a rural community in Atlantic Canada that has experienced a population loss. A number of communities have been reviewed and we believe that Parrsboro is a good illustration of the community we want to include in this project. It is our hope that through these focus groups we may discover the individual and community strategies used in Parrsboro to maintain the health status of the community in light of population loss.

Procedure:

A place and time convenient to participants will be selected to conduct the focus group. The interview will have specific questions but will also allow participants to guide the discussion. The session is not expected to exceed two hours. Other members of the research team may be present. Light refreshments will be available. The discussions will be audio-tape recorded and notes will be taken to assist in identifying important themes that emerge during the discussions. The audio tapes will be transcribed and analyzed by members of the research team. During the research these tapes will be securely stored and destroyed after transcription and verification. Findings will be published in a final report for the funder and disseminated upon request. Results will also be presented at scholarly conferences and published in academic journals.

Your participation in this research is entirely voluntary. You have the right to refuse to answer any questions and to withdraw from the focus group at any time. Please be assured that your name will not be associated with your responses in any publications generated by this work. And, as a participant in this group meeting you are requested to respect the privacy of other participants by not discussing any others' comments to any one other the researchers. While a breach of confidentiality may be a foreseeable risk, steps will be taken to ensure confidentiality.

Specifically, actual participant names will not be identified during the focus group, pseudonyms will be used in the transcripts and audio-cassettes and transcripts will be only available to members of the research team. Finally, audio-cassettes and documents will be stored in secure locations throughout the research and later shredded.

For More Information:

If you have any questions or concerns about this research or your participation, please do not hesitate to contact the researchers as follows:

Janice Keefe, PhD
Associate Professor
Family Studies and Gerontology
Canada Research Chair in Aging and Caregiving
Mount Saint Vincent University
Halifax, NS B3M 2J6
(902) 457-6466 (office)
Janice.Keefe@msvu.ca

Katherine Side, PhD
Assistant Professor
Women's Studies
Mount Saint Vincent University
Halifax, NS B3M2J6
(902) 457-6712 (office)
Katherine.Side@msvu.ca

Other members of the research team are: Pamela Fancey, Research Associate and Graduate Student Research Assistants – Kate Hemeon, Patricia Thille, Christine Kennedy.

If you would like to speak to someone outside of the research project, you may contact: Dr. Stephen Perrott, Chair, University Ethics Review Committee, Mount Saint Vincent University, Halifax, Nova Scotia, Canada, B3M 2J6. He can also be reached at Stephen.Perrott@msvu.ca or (902) 457-6337.

Consent:

I understand the purpose of this focus group. I have been given the opportunity to have my questions answered. I hereby consent to participate in the focus group. I understand that my participation is voluntary and I can discontinue my participation at any time and "pass" on any particular question asked.

SIGNATURE OF PARTICIPANT _____

NAME (PLEASE PRINT) _____

DATE _____

For participants under the age of 18

As parent/legal guardian of the above-noted individual, I have reviewed the *Consent to Participate in Research* information and I hereby consent to have him/her participate in said focus group.

SIGNATURE OF PARENT/GUARDIAN _____

NAME (PLEASE PRINT) _____

DATE _____

Appendix G: Case Study Individual Interview Participant Consent Form

Consent to Participate in Research – Interview

Research: Net Loss Population Settlement Patterns & Maintenance of Rural Health Status: A Case Study in Atlantic Canada.

Introduction

You are invited to participate in a **personal interview** being conducted by Dr. Katherine Side at Mount Saint Vincent University. This research is part of a project being conducted by Dr. Janice Keefe and Dr. Katherine Side which examines the impact of changes in the population of the community (i.e. population loss or gain) on the health of the Canadian population, with a specific focus on rural Atlantic Canada (see description attached). The research is funded by the Canadian Institutes Health Research. One component of this research is a single-case, case study of a rural community in Atlantic Canada that has experienced a population loss. A number of communities have been reviewed and we believe that Parrsboro is a good illustration of the community we want to include in this project. It is our hope that through these interviews we may discover the individual and community strategies used in Parrsboro to maintain the health status of the community in light of population loss.

Procedure:

A place and time convenient to you will be selected to conduct the interview. The interview will be guided by a number of specific questions but allow for further discussion on key points as they emerge. The session is not expected to exceed one hour. Other members of the research team may be present. The discussion will be audio-tape recorded and notes will be taken to assist in identifying important themes that emerge during the discussions. The audio tapes will be transcribed and analyzed by members of the research team. During the research these tapes will be securely stored and destroyed after transcription and verification. Findings will be published in a final report for the funder and disseminated upon request. Results will also be presented at scholarly conferences and published in academic journals.

Your participation in this research is entirely voluntary. You have the right to refuse to answer any questions and to withdraw from the focus group at any time. Please be assured that your

name will not be associated with your responses in any publications generated by this work. While a breach of confidentiality may be a foreseeable risk, steps will be taken to ensure confidentiality. Specifically, your name will not be identified during the interview, a pseudonym will be used in the transcripts and audio-cassettes and transcripts will be only available to members of the research team. Finally, audio-cassettes and documents will be stored in secure locations throughout the research and later shredded.

For More Information:

If you have any questions or concerns about this research or your participation, please do not hesitate to contact the researchers as follows:

Janice Keefe, PhD
Associate Professor
Family Studies and Gerontology
Canada Research Chair in Aging and Caregiving
Mount Saint Vincent University
Halifax, NS B3M 2J6
(902) 457-6466 (office)
Janice.Keefe@msvu.ca

Katherine Side, PhD
Assistant Professor
Women's Studies
Mount Saint Vincent University
Halifax, NS B3M2J6
(902) 457-6712 (office)
Katherine.Side@msvu.ca

Other members of the research team are: Pamela Fancey, Research Associate and Graduate Student Research Assistants – Kate Hemeon, Patricia Thille, Christine Kennedy.

If you would like to speak to someone outside of the research project, you may contact: Dr. Stephen Perrott, Chair, University Ethics Review Committee, Mount Saint Vincent University, Halifax, Nova Scotia, Canada, B3M 2J6. He can also be reached at Stephen.Perrott@msvu.ca or (902) 457-6337.

Consent:

I understand the purpose of this interview. I have been given the opportunity to have my questions answered. I hereby consent to participate in the interview. I understand that my participation is voluntary and I can discontinue my participation at any time and "pass" on any particular question asked.

SIGNATURE OF PARTICIPANT _____

NAME (PLEASE PRINT) _____

DATE _____

Appendix H: Case Study Photograph Release Form

PHOTO RELEASE FORM

Halifax Nova Scotia Canada B3M 2J6 www.msvu.ca Tel 902-457-6466 Fax 902-457-6134

Name of Photographed (PLEASE PRINT): _____

I hereby authorize the taking and use of photographs and/or videotape for use by Janice Keefe and Katherine Side, researchers at Mount Saint Vincent University as part of their CIHR-funded project entitled *"Net Loss Population Settlement Patterns & Maintenance of Rural Health Status: A Case Study of Atlantic Canada."*

This consent is expressly intended to release from liability Mount Saint Vincent University, its employees and the photographer/videographer taking said photographs/videotapes.

Signature of Photographed: _____ **Date:** _____

Parrsboro study

University to explore population loss

By Susan Belliveau

PARRSBORO: Parrsboro may soon find itself under the scrutiny of a team from Mount Saint Vincent University who plan to include the town in part of a study on population loss and health status in rural Nova Scotia.

The study information was part of the Finance Committee report delivered to Parrsboro Council on Feb. 25.

Deputy Mayor Gleneida Canning indicated the study will involve "focus group discussions with various stakeholders in Parrsboro such as the Board of Trade and Youth Town Council who have already been contacted."

Katherine Side of Mount Saint Vincent met with the Board of Trade on Feb. 24, in what Mayor Doug Robinson called a "productive meeting."

In other finance news, Canning indicated Town Clerk Ashley Brown recommended a minor revision to item 7 of the tax collection procedure which specifies that the final 15-day notice is sent out in July.

She said, "he noted that it has been the practice to send the final letter in June and in order to be consistent the wording should be changed to indicate that the final 15-day notice is sent out in June."

Canning also reported that correspondence from the Dept. of Transportation indicated that the department is developing the annual temporary traffic count program for 2003 and although the program will be concentrated on the Western District they will be able to do 100 special counts in each of the four districts on an as requested basis.

In discussion it was noted that the Fundy Geological Museum keeps detailed information on traffic volume counts, and it was recommended that the curator be consulted for his thoughts on whether or not it would be advantageous to participate in this program this year.

In his comments on the report, Mayor Robinson indicated that he had spoken with the curator, Ken Adams, and was told that the museum had not yet received information from the last report which was done.

In the Public Works Committee report, Coun. Lloyd Smith told council that concern was raised at the committee meeting as to whether recent winter weather conditions have been putting a strain on the town's snow removal budget. Council was advised that Clerk Ashley Brown had indicated that the weather was having an impact on snow removal, and it would likely be over budget by year's end, but that the overrun is not expected to be that significant.

In the Recreation report, the Deputy Mayor said the town is looking for nominees for Volunteer of the Year, Teen Volunteer and Sobey's Family Volunteer representatives for the province's annual volunteer awards. She said anyone who wishes to put forth a nomination can pick up the forms at the town hall.

Federal research program to use Parrsboro as case study

By Andrew Wagstaff
The Citizen

PARRSBORO - Census figures in Canada have shown the population to be shifting from rural to urban centres. The resulting impact of this trend on health services is the subject of a nationally funded research project, and Parrsboro has been selected as a case study.

Conducting the research are Janice Keefe and Katherine Side, faculty members of Mount Saint Vincent University, who spoke about the project at the Feb. 24 luncheon of the Parrsboro and District Board of Trade.

This project is one of six being funded by the Canadian Institutes of Health Research, and the information will be presented to government policy-makers in the fall, according to Keefe, who said they plan to speak about these issues to people in the community during the next couple of months.

"We're hoping to come back a couple of more times for focus groups, maybe speak to other community organizations and have some one-on-one interviews as well," she said. "We would like to have a final report by the end of June, and be able to come back and talk about our findings."

A project coordinator and three graduate students are among the research team for the case study, which is expected to be the on front end of 2-3 years of continued research.

Community consultation for the study will be conducted on a confidential, voluntary basis, Side explained, with the first phase being focus groups and talks with community organizations, and the second being more intimate, one-on-one interviews with individuals.

"We want to look at policies," she said. "Very little work has been done excited to be able to start looking at these things."

With the 2001 Canadian census figures being released on a gradual basis, the figures are speaking for themselves. Eighty per cent of Canadians live in urban centres, including a growing number in Atlantic Canada. Newfoundland is being hit the hardest, while other Atlantic provinces are also seeing significant shifts.

In Nova Scotia, Halifax continues to live in Halifax) while rural areas continue to see a decline in population. The last census saw a 10 per cent population drop in Guysborough and similar declines in areas such as Shelburne, Cape Breton, Digby and Cumberland County. Parrsboro was in the middle of the pack with a 5.4 per cent drop, although the inclusive "Parrsboro shore" area saw a drop of 8.1 per cent.

Trying to maintain health services in rural communities with declining [illegible] to Parrsboro Mayor Doug Robinson, who speculated that the decline is due less to migration than to a high mortality rate in an area with a high population of seniors.

"We need to find a way to bring more young people to town," said the mayor. "By 'young people' I don't necessarily mean people in their 20s, but people 45, 55 and 60 years of age. These people could do an awful lot for the population."

The senior population in Parrsboro [illegible] per cent of the population is over the age of 65, and that figure is higher than both the national and provincial average, the latter of which is 13.2 per cent.

Robinson encouraged people in the community to cooperate with the case study, and do whatever they can to help.

"The more help you can give these two ladies, the more help they can give us," he said.

The final report to come out of the case study could also be made available to the community and its groups in the future, according to Keefe.

"We want the project to be mutually beneficial," she said. "The information may also be used to help other communities avoid any pitfalls that may have happened here."

A number of questions will be asked during the community information gathering process, mainly the following: How has the community health in rural areas been affected by changes in the population of their communities? What impact has health care restructuring had on health services and health status in rural communities experiencing population changes? What are the strategies that individuals and communities adopt to maintain their health status in rural communities experiencing population changes? Which strategies have proven effective for maintaining community health? Why are particular strategies effective for some communities and not effective for others?

Parrsboro was selected over other Nova Scotian communities such as St. Mary's, Annapolis Royal and Shelburne for the case study due to a number of factors, according to Side.

"We looked for an area that had experienced population change, and changes to its local health service," she said. "We also looked for an area that had taken steps to try and maintain its status of health care."

The researchers indicated an interest in a number of specific local [illegible] of South Cumberland Memorial Hospital into South Cumberland Community Care Centre, and the delivery of services through the provincial system of district health authorities and community health boards.

POPULATION DECLINE

Janice Keefe (right) and Katherine Side of Mount Saint Vincent University spoke at the Feb. 24 luncheon of the Parrsboro and District Board of Trade about their research on population loss and the effect on rural community health, particularly Parrsboro's role as a case study. The speakers are shown here with Board of Trade President Ron Levy. (Wagstaff

The Amherst Citizen, March 1, 2003, pp. B2

Parrsboro a perfect case for impacts of population decline

Janice Keefe and Katherine Side do not need to explain to local people why Parrsboro has been selected as a case study for a federally funded research program on population loss and the resulting effect on rural community health. Those of us who live here have seen the impact.

The researchers from Mount Saint Vincent University spoke about the project at the Feb. 24 luncheon of the Parrsboro and District Board of Trade. For those curious about their interest in Parrsboro, they explained that this community is a prime example of an area that has experienced population decline, has seen changes to its local health services, and has made a concerted effort to maintain its status of health care throughout the changes.

The research team will be speaking to as many community members as they can during the next couple of months to answer a number of questions. Key information from their final report will be presented to government policy-makers, and will hopefully bring about improvements to the system. Canada's population is increasingly shifting to urban centres, and steps must be taken to stop similar centralization of health care services.

to encourage community members to participate in the study, perhaps Parrsboro Mayor Doug Robinson said it best at the luncheon: "The more help you can give these two ladies, the more help they can give us."

Many of effects population changes have had on community health, and the impact health care restructuring has had on health services. Others have been involved with community strategies to maintain the health status here. All of these people should participate in this study, which will keep their information confidential. Those interested can contact the researchers themselves, or speak to members of the Board of Trade, who would be happy to refer them.

—NAW

Appendix J: Project Description

Population Loss and the Effect on Rural Community Health

Summary

The focus of this research is to examine the impact of changes in population in rural communities in Canada, with a specific focus on rural Atlantic Canada. Recent data from Census Canada indicate a shifting of the population from rural to urban centers. This shift in population may have implications for rural communities in terms of the health of their members and type of informal and formal supports needed and available. A variety of individual and community strategies are used to maintain health status including access to health services and the use of support offered by family and friends. To help understand the impact of population shifts, this research will explore these issues by asking the following questions:

- How has community health in rural areas been affected by changes in the population of their communities?
- What impact has health care restructuring had on health services and health status in rural communities experiencing population changes?
- What are the strategies that individuals and communities adopt to maintain their health status in rural communities experiencing population changes?
- Which strategies have proven effective for maintaining community health? Why are particular strategies effective for some communities and not effective for others?

This research is being conducted by Janice Keefe and Katherine Side, faculty members at Mount Saint Vincent University. The researchers have expertise in rural communities, continuing care policy and the exchange of help among family and friends. The research is funded by the Canadian Institutes of Health Research.

Your Participation

Parrsboro has been selected to participate in this research as a case study. Members of the Parrsboro community, such as yourself, may be asked to participate in a focus group or meet with the researchers for a personal interview at a place and time convenient for you. Your responses will be kept confidential. Your participation in this research is entirely voluntary. However, to ensure the success of this important research you are encouraged to participate.

Implications and Outcomes

Research findings will be of interest to policy makers in the areas of health and social services, health service providers, community planners and the voluntary sector, and will provide information about future research directions with implications for the sustainability of healthy, rural communities.

For additional information contact:

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Mount Saint Vincent University
Excellence • Innovation • Discovery

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Appendix K: Case Study Focus Group Interview Schedule

Intro: As you know, Statistics Canada population data tell us that the Town of Parrsboro has experienced a 5.4% population loss between 1996 and 2001. This is higher than the provincial average. We are interested in examining the affects of this population loss on your community, specifically as it relates to your community's health and well-being. First, we want to discuss reasons for this loss. Second, we want to understand the implications of the loss specifically to the community's health status and health services – short and long term. And third, we would like you to identify and discuss the strategies used, or those under consideration, to deal with the affects of your community's population decline.

1. Tell us how you came to live in Parrsboro.

2. What are the benefits of living in this community?

3. What are the limitations of living in this community?

4. Tell me what characteristics or features contribute to the well-being of a community.

5. What qualities can individuals bring to the community that foster community well-being?

6. What contributions can be made by organizations or collective groups of people that foster community well-being?

7. Tell me what your thoughts are about population changes and your community of Parrsboro.

   [probe – what factors influenced these changes?]

8. How is the community different as a result of the changes (positive and negative)?

9. Specifically, what have been the effects of this population change on the well-being of members of your community?

   [probe – health services, health status, informal support networks]

10. What has the community done to address the effects of population change (directly and indirectly)?

    [probe – who initiated? Community response? Outcomes/results?]
    [*probe – have there been specific initiatives that have been successful in supporting or fostering community well-being?]*

11. Which initiatives have worked and which have not?

[probe – why?]

11. In your opinion, what specific changes would you make in your community to enhance the well-being of the community?

12. Do you have questions of us?

Thank-you for your time.

[*remember – distribute demographic and health status questionnaires]*

Appendix L: Case Study Youth Focus Group Interview Schedule

Intro: The focus of this research is to examine the impact of changes in population in rural communities in Canada, with a specific focus on rural Atlantic Canada. Recent data from Census Canada indicates that people are moving from rural to urban communities. This shift in populations may have effects on rural communities in terms of their personal and community health and well-being. We would like to explore how individuals and communities use to manage the effects of population change.

12. How long have you lived in Parrsboro?

13. What do you like about living in Parrsboro as it is right now?

14. What do you dislike about living in Parrsboro as it is right now?

15. Would you like to stay in Parrsboro?

16. If not, what specific changes would be necessary to make you want to stay (or come back here)?

6. How have you noticed the population changes in Parrsboro?

17. Why do you think these changes are happening?

18. What has happened to your community as a result of the population changes?

19. In your opinion, what specific changes would you make to the community to enhance its well-being?

20. On the whole, what makes a community a good place to live?

10. Do you have questions of us?

Thank-you for your time.

[*remember – distribute demographic and health status questionnaires]*

Appendix M: Case Study Demographic Survey

A.1 Sex	○ ○	Female Male
A.2 Age	○ ○ ○ ○ ○ ○ ○	14-19 20-29 30-39 40-49 50-64 65-79 80+
A.3 Marital Status	○ ○ ○ ○ ○ ○ ○	Single Legally married Common-law/partnered Separated Divorced Widowed Other, Specify _____
A.4 What is your highest level of education?	○ ○ ○ ○ ○ ○ ○ ○ ○ ○	No formal schooling Some elementary (to grade 6) Some junior high (grade 7-9) Some high school Completed high school Completed Trade, vocational or technical school, or business college Some community college Completed community college Some university Completed university Other, Specify _____
A.5 Birthplace: Where were you born?	○ ○ ○ ○ ○	Nova Scotia ○ Cumberland County ○ Outside of Cumberland County Other Atlantic Province In Canada outside Atlantic region Outside of Canada Don't know

If you were born outside of Canada, what country were you born in?

_____

If you were born outside of Canada, in what year did you begin to live in Canada?

_____

A.6 How long have you resided in this community?	○ ○ ○ ○ ○ ○ ○	Less than 1 year 1 to 5 years 6-10 years 11-15 years 16-20 years 20-39 years 40 or more years
A.7 Has your residence in this community been continuous?	○ ○	Yes No If no, what is the total number of years that you have resided outside of this community?_____ What was the most recent year that you resided outside of this community? _____
A.8 Do you live alone?	○ ○	Yes No If no, how many people live with you?_____ What is your relationship(s) to the people who live with you? _____
A.9 Over the past 12 months, did you receive any income from employment or self-employment (*wages, salaries, commissions, tips)*?	○ ○	Yes No If yes, did you consider this employment to be full-time, part-time, seasonal, other? Please explain. _____
A. 10 Over the past 12 months, what was your main occupation? _____		

A.11 Over the past 12 months, check additional sources of income: (check all that apply)	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	Employment Insurance (EI) Worker's Compensation Canada Pension plan (Disability/ or pension) Workplace Retirement pensions, superannuation & annuities Old Age Security Guaranteed Income Supplement / Spousal Allowance Veteran's Pension Provincial social assistance Child Tax Benefit Child Support or Alimony Other, please specify _____
A.12 What is the best estimate of your personal income (gross) over the past 12 months from all sources of income?	○ ○ ○ ○ ○ ○ ○	Less than $5,000 $5,000- $9,999 $10,000 - $19,999 $20,000 - $39,999 $40,000 - $59,999 $60,000 - $79,999 $80,000 or higher
A.13 What is the best estimate of your household income (gross) over the past 12 months?	○ ○ ○ ○ ○ ○ ○	Less than $5,000 $5,000- $9,999 $10,000 - $19,999 $20,000 - $39,999 $40,000 - $59,999 $60,000 - $79,999 $80,000 or higher
Thank you for your participation.		

Appendix N: Case Study Health Status Survey

RURAL HEALTH - HEALTH STATUS SURVEY

Please mark appropriate categories.

How one feels at any particular time is affected by life experiences.

B.1 In the past 12 months, have you:

__ changed a job?
__ lost a job?
__ had a family member seriously ill or injured?
__ had a friend seriously injured or ill?
__ had a person move into your home, or leave your home?
__ had a death in the family?
__ had a death of a close friend?
__ had a serious illness or injury?

B.2 Compared to other people your age, how would you describe your health status? Would you say it is

__ excellent?
__ very good?
__ good?
__ fair?
__ poor?

B.3 Would you describe your life as

__ very stressful?
__ somewhat stressful?
__ not very stressful?
__ not at all stressful?

B.4 How much control do you feel you have in making decision that affect your everyday activities?

__ no control
__ control over few or some decisions
__ control over most decisions
__ control over all decisions

B. 5 Are you limited in the amount or kind of activity you can do at work, at home, or at school because of a long-term condition or health problem?

__ yes
__ no

In what year were you first limited in the amount or kind of activity?

_____

Are there other considerations that are important to your health status?

_____

Appendix O: Case Study Personal Interview Schedule

In this study, we are interested in learning more about helping relationships within rural communities related to four key areas:

i) social networks
ii) reciprocity or exchange
iii) existing community-based health services
iv) individual/community well-being needs and concerns

To proceed with this interview, we must have your consent. Do you consent to participate?

We have number of questions; the interview may take take up to 1& 1/2 hours.

1. How long have you lived in this community?

2. With whom do you currently live?

   [probe – previous living arrangements; changes to living arrangements]

3. Who are your closest relationships with in this community?

   [probe – relation; duration]

4. What contact do you have with these people?

5. Who are your closest relationships with outside of this community?

   [probe – distances;relation; duration]

6. What contact do you have with these people?

   In our research, we are particularly interested in the kinds of support and assistance that individuals give, receive and/or exchange with one another. This may include specific tasks, such as child care, personal care and home maintenance. It may also include non-specific tasks, such as visiting, telephoning, providing and receiving emotional support. This support and assistance can be on an occasional basis or on a regular basis; it may be in the short-term or in the long-term.

7. What kinds of support and assistance do you give to others in this community?

   [probe – specific tasks; frequency; quality]

8. What kinds of support and assistance do you receive from others in this community?

[probe – specific tasks; frequency; quality]

9. Is there anyone else that you give support or assistance to?

10. Is there anyone else that you receive support or assistance from?

11. Has providing help or support to others affected your health? If yes, how?

12. An individual's health is often affected by their larger community. In your opinion, what kinds of support and assistance do you think are most needed in the larger community?

13. What factors affect your overall well-being in this community?

[probe – positive; negative]

14. In your opinion, what would further enhance the well-being of your community?

[probe – challenges]

15. Do you have any questions of me/of us?

[probe – ask them to complete the demographic and health status survey]

Appendix P: Case Study Former Residents Interview Schedule

Statistics Canada population data tell us that the Town of Parrsboro has experienced a 5.4% population loss between 1996 and 2001. This is higher than the provincial average. We are interested in examining the affects of this population loss on the community of Parrsboro, specifically as it relates to the community's health and well-being. First, we want to discuss reasons for this loss. Second, we want to understand the implications of the loss specifically to the community's health status and health services – short and long term. And third, we would like you to identify and discuss the strategies used, or those under consideration, to deal with the affects of your community's population decline.

1. How long did you live in Parrsboro?

2. How long ago did you leave?

3. Why did you leave?

4. What do you like about Parrsboro?

5. What do you dislike about Parrsboro?

6. Do you plan (or hope) to return to Parrsboro? If no, what would have to change to spur you to return?

7. While you were there, did you notice population changes in Parrsboro? If so, why do you think these are happening?

8. An individual's health is often affected by their larger community. In your opinion, what kinds of support and assistance to do you think are most needed in Parrsboro?

9. What factors affected your overall well-being in Parrsboro?

   [probe – positive, negative]

10. In your opinion, what would further enhance the well-being of the community of Parrsboro?

    [probe – challenges]

11. Do you have any questions of me?

    [probe – ask them to complete the demographic and health status survey and get mailing addresses]

Appendix Q: Case Study Key Informant Interview Schedule

This research examines the impact of changes in the population of the community (i.e. population loss or gain) on the health of the Canadian population, with a specific focus on rural Atlantic Canada (see description attached). The research is directed by Janice Keefe and Katherine Side and is funded by the Canadian Institutes Health Research. One component of this research is a single-case, case study of a rural community in Atlantic Canada that has experienced a population loss. A number of communities have been reviewed and we believe that Parrsboro is a good illustration of the community we want to include in this project. It is our hope that interviews with Key informants such as yourself will assist us in understanding the individual and community strategies used in Parrsboro to maintain the health status of the community in light of population loss.

To proceed with this interview, we must have your consent. We recognize that you are not speaking for the organization – but ask that you think of these questions through the experience you have as a member of the organization.

We have number of questions; the interview may take up to an hour.

16. Can you give us a brief overview of the organization that you represent ?

17. How long have you worked with this organization? What type of work do you do in the community ? Are you also a resident ? how long?

18. How would you characterize the health/well-being of the Parrsboro Community?

19. From the perspective of your organization what are the benefits of living in this community?

20. From the perspective of your organization what are the limitations of living in this community?

21. Over the past twenty years, what have been the significant events or changes that have affected the health and well-being of the community?

    [probe – health; economic; education;]

22. How has the community responded to these changes?

23. How has your organization responded to these changes?

24. [if population loss was not identified as a change] Tell me what your thoughts are about population changes and your community of Parrsboro.

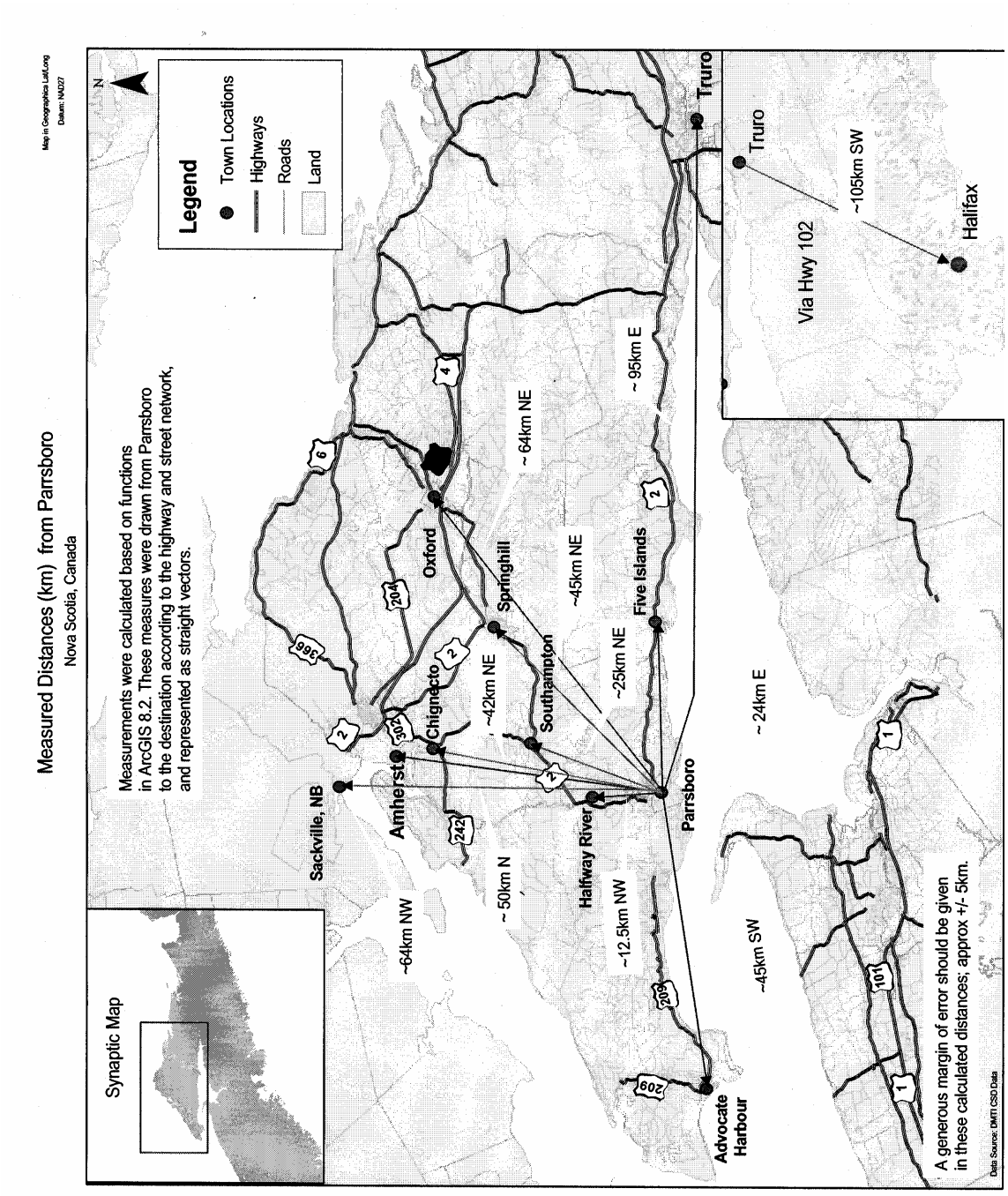
25. What contributions can be made by organizations or collective groups of people that foster community well-being?

26. Tell me what characteristics or features contribute to the well-being of a community.

27. In your opinion, what would further enhance the well-being of your community of Parrsboro?

28. Do you have any questions of me?

Appendix R: Map of Parrsboro and Surrounding Area, Nova Scotia



Map produced by Candace Anderson, Map and GIS Intern, at the Map and Geospatial Information Collection, Dalhousie University. Creation of the map was made using ArcView 3.3 and data from DMTI Spatial Inc. under license to Dalhousie for research and scholarly communication

Appendix S: Partial List of Voluntary Organizations in Parrsboro

United Baptist Church
Pentecostal Tabernacle
St. Brigid's Catholic Church
St. George's Anglican Church
Trinity United Church
Age of Sail Museum, Port Greville
Block Parents Association
Cancer Society
Community Health Board (SPAR)
Don Yorke Memorial Ball Association
Fundy Geological Museum
Fundy Shore Auto Club
Healthy Parrsboro and Area Committee
Ricky Hunter Memorial Hockey
L.A. Animal Shelter
Lioness Club
Lions Club
Moms & Tots
Over Sixties Club
Masonic Lodge
Minor Ball Organization
Minor Hockey Organization
Parrsboro Radio Society
Parrsboro & District Board of Trade
Parrsboro Tennis Club
Parrsboro Citizen's Band
Parrsboro & Area Skating Club
Parrsboro Art Guild
Parrsboro Boy Scouts
Parrsboro Girl Guides
689 Handley Page Air Cadet Squadron
Economic Development Committee
Parrsboro Volunteer Fire Dept Auxiliary
Parrsboro Volunteer Fire Department
Parrsboro Golf Club
Parrsboro Gun Club
Parrsboro Head Start Program
Parrsboro & Area Home & School
Parrsborough Shore Historical Society
Rebekah Lodge
Royal Canadian Legion Br # 45
Royal Canadian Legion Ladies Auxiliary
SCCCC Adult Day Care
SCCCC Recreation Committee
The Ship's Company Theatre
Snowmobile Club
Youth Town Council
Young Geologists

Source: Parrsboro, Nova Scotia (2003). Volunteers- the heart of our community. Retrieved May 28, 2003 from http://www.town.parrsboro.ns.ca/volunteer.htm.