Economic Development Framework of Small Communities in Canada

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EXECUTIVE SUMMARY

Many rural and small town places and larger rural regions within Canada are experiencing a long period of economic and social restructuring initiated by plant restructuring, mechanization of industries, changes to transportation and communication infrastructure, as well as the regionalization of services. This is evidenced by population loss, an out-migration of youth, an aging population, a decline in primary sector resource activity, an increase in tourism activity, and a shift to retail, dynamic services and non-market services activities. The impacts of continued population loss and shifting economic realities have been many. They include, but are not limited to: fewer opportunities for economic development, new business development, and job creation; depression of the resale housing market; rising vacancy rates in rental properties; diminished access to and provision of social services (health care, education, etc.,) as population levels fall below demand thresholds; and diminished municipal capacity to provide critical and necessary municipal infrastructure due to an eroding tax base.

From a housing perspective, there are some very important linkages. Housing developers and builders make decisions about new housing investments based on their projected future of the community and its region. Private sector employers looking to relocate to or expand within a small community may face difficulties if there is insufficient housing choice or a lack of affordability. Providers of mortgage insurance make their decisions in part based on an assessment of whether or not there is an ability to recover losses on a property in default of its mortgage. In the context of a long run period of population and economic decline, many housing stakeholders face tough decisions.

The focus of this report is on relatively isolated rural and small town places which are more likely to experience population and economic decline, and which have fewer resources and less capacity to respond to economic shocks. There are significant variations among these communities across rural and small town Canada, with respect to their economic base, proximity to urban centres, and socio-economic characteristics. This means that for those interested in understanding economic development activity and change over time, there is a need to define *relatively isolated rural and small town places*, and to understand the context within which these communities function and change over time. This is important from a public policy and program perspective because decisions about changes to policies and programs can have important consequences for these places collectively. Decisions made using broad assumptions about the future of such places collectively can have damaging outcomes if they are not grounded in, or supported by, a well-developed understanding of the significant variation that exists from one place to the next in terms of their economic development activity and potential alternative futures.

This report developed a framework that enables analysts to assess the stage of economic development of relatively isolated rural and small town places. This report developed an understanding of the conditions under which communities move through a period of economic decline and into one or more *Alternative Futures*.

Project Objectives

The purpose of this project was to provide an understanding of how economic development activity within relatively isolated rural and small town places in Canada changes over time. More specifically, the four objectives identified for this project included:

1. Develop a definition of relatively isolated rural and small town places for the purpose of quantifying and classifying such places for further analysis to assess economic development changes over time.

2. Develop an appropriate scheme for classifying relatively isolated rural and small town places based on their economic base(s) for the purpose of understanding how different types of these communities change over time.

3. Develop a framework for understanding how relatively isolated rural and small town places change over time, the variations that might be exist among different types of such communities, and the types of socio-economic indicators which help to explain changes over time within the framework.

4. Illustrate the usefulness of the framework by using case studies which show how different communities change over time and how socio-economic indicators may provide some insights into these changes.

Methodology

The project was completed in four phases. In each, a combination of a literature review and an analysis of Census data, primarily from 1986 to 2001, was used to characterize communities, as well as to develop and apply the framework.

Defining Relatively Isolated Rural and Small Town Places

To define the geographic parameters of the study, a focus was placed on analytical reports and working papers prepared by Statistics Canada and the United States Department of Agriculture's Economic Research Service (USDA-ERS). Scholarly work defining small communities, or defining rural and small town places was also reviewed, with a particular emphasis on those which employed or 'tested' the models, approaches, and ideas developed by the two statistical agencies. Census Subdivisions (CSDs) from the 1996 Census, which had been previously coded by their population and 'zone of metropolitan influence' (MIZ) (by Rambeau and Todd), were used to sort the CSDs into clusters based on the parameters identified in the literature review. A population threshold of more than 50 but less than 5,000 population, and a Weak MIZ or No MIZ status, were used as the parameters for defining Census Subdivisions (including both incorporated and unincorporated places, but excluding First Nations reserves) which were *relatively isolated rural and small town places*.

First Nation reserves and other federal reserve lands were excluded from the analysis due to their unique property tenure and housing market characteristics that limit comparisons to other places. Places which have fewer than 50 residents were excluded because they are too small to have a functional housing market. The upper population threshold of 5,000 was chosen because Statistics Canada uses 5,000 as a low end cut off for reporting data on urban places.

Clustering by Economic Activity

A range of clustering approaches were examined to provide a foundation for developing economic indicators by which to cluster rural and small town places by economic activity. The 1980 Standard Industry Classification (SIC) codes were applied to the 2001 Census data, and a threshold of 25% of the labour force employed in a sector was used as the cutoff to categorize each CSD by economic activity. This was supplemented with a threshold of 25% of the population 65 years of age or more for the purpose of determining if a community was a retirement community. Below this 25% threshold, more than half of the communities have more than one dominant sector (dual specialization). Beyond this 25% threshold, many communities have no specialization. Therefore, the 25% threshold provides balance between the presence of dual specialization and non-specialization. Using a 25% threshold, the economic sectors identified were:

- agricultural communities,
- fishing communities,
- forestry communities,
- mining communities,
- tourism communities,
- manufacturing communities,
- dynamic services communities,
- non-market services communities,
- dual specialization communities (two sectors with at least 25% of the labour force employed in each sector), and
- non-specialized communities (no sector with at least 25% of the labour force employed).

Framework for Stages of Economic Development

Previous studies were examined to propose a framework suitable to identifying the stage of a community's economic development activity. The recommended framework includes the following stages: Startup, Growth, Plateau, Decline, and Alternative Futures. Within this framework, socio-economic characteristics (e.g. population, population change, age structure, labour force characteristics, incomes, and migration) were described that could be used as a starting point for understanding the 'directionality' of a given place. An analysis of socio-economic data from Statistics Canada between 1991 and 2001 was completed to examine those changes for the communities within the definition of relatively isolated rural and small town places.

Case Studies

A case study methodology was used to illustrate how the framework could be applied in practice. A purposeful sampling methodology was used to identify case studies for each of the eleven different types of sectors identified. Case studies were also selected based on the availability of a range of additional sources of information, such as newspaper articles, reports, books, journal articles, and other types of statistical information. The case studies explored the characteristics of communities as they moved through a period of 'Decline' into one or more 'Alternative Futures'.

Key Findings

The Universe of Relatively Isolated Rural and Small Town Places

There are 1,432 CSDs (or communities, or places) which meet the criteria of 50 to less than 5,000 population, excluding First Nation reserve CSDs, and within the Weak MIZ and No MIZ designations. Slightly more than half of the communities are within the Weak MIZ designation. Most of the larger communities are within the Weak MIZ designation. On the other hand, most No MIZ communities have less than 2,500 people.

Distribution of Communities by MIZ Designation and Population Group, 50-4,999 Population, Incorporated and Unincorporated Communities, 1996.

	MIZ Code		Total
Population Group	No MIZ	Weak MIZ	
2,500 - 4,999			
Count	5	129	134
% within population group	3.7%	96.3%	100.0%
% within MIZ code	0.8%	15.9%	9.4%
50-2,499			
Count	614	684	1298
% within population group	47.3%	52.7%	100.0%
% within MIZ code	99.2%	84.1%	90.6%
Total			
Count	619	813	1432
% within population group	43.2%	56.8%	100.0%
% within MIZ code	100.0%	10.7%	100.0%

Source: Derived from Table 35 in Rambeau, S. and K. Todd. 2000. *Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ) with Census Data*. Ottawa: Statistics Canada.

Classification into Economic Sectors

Many previous studies have used labour force by industry type to cluster places into economic sectors. However, they are not consistent in identifying a threshold defining what percent of the labour force employed in a given sector should be used as a cutoff for determining 'concentration'. Clemenson (1992) used 30% as a cutoff for rural and small town places in Canada. Elo and Beale (1985) used 20% for rural communities in the United States, as did Wilson (2004) in looking at mining communities in the United States.

Within our parameters, at the 20% threshold, many communities have at least 20% in one sector and employment in other sectors is spread thinly below the 20% mark. More than half the communities have at least 2 or more 'dominant' sectors (763 in dual specialization). At the 25% threshold, much of this 'dual specialization' begins to disappear, but one begins to see an increase (to 179) in the number of non-specialized communities (meaning that they have no sectors with at least a 25% concentration). At 30%, there are so many communities (almost one-third) which have no specialization under this criteria. To balance these, we use a 25% threshold for classification purposes.

Economic type of community by % of labour force employed in specific sectors (and % age 65+), All Communities with 50-4,999 Population, 2001

Economic Type	Percent of Labour Force Employed in Sector		
	20%	25%	30%
Agricultural	206	277	282
Fishing	14	19	25
Forestry	3	10	5
Mining	18	26	19
Tourism	11	15	11
Manufacturing	83	120	108
Dynamic Services	39	63	65
Non-market Services	230	306	293
Retirement	24	45	45
Dual Specialization	763	372	144
Non-Specialized	41	179	435
Total	1432	1432	1432

Source: Statistics Canada 2001.

The distribution of communities at this 25% threshold, by both MIZ and population clusters, shows relatively few variations in the distributions within each of these two clusters. However, there are relatively more agricultural and non-market services communities within the Weak MIZ group and relatively more dual specialization communities within the No MIZ group. There are relatively more agricultural and dual specialization communities within the population group 50-2,499, and relatively more non-market and non-specialized communities in the larger population group.

Distribution of Economic Type of Community by (25% or More of the Labour Force Employed in Specific Sectors and 25% Age 65+), Communities with Weak and No MIZ Status, and Communities with 50-2,499 and 2,500-4,999 Population

Economic Type	Total		Weak MIZ		No MIZ		50 - 2499		2500-4999	
	#	%	#	%	#	%	#	%	#	%
Agricultural	277	19.3	173	21.3	104	16.8	260	20.0	17	12.7
Fishing	19	1.3	10	1.2	9	1.5	19	1.5	0	0
Forestry	10	0.7	6	0.7	4	0.6	9	0.7	1	0.7
Mining	26	1.8	16	2.0	10	1.6	21	1.6	5	3.7
Tourism	15	1.0	5	0.6	10	1.6	14	1.1	1	0.7
Manufacturing	120	8.4	74	9.1	46	7.4	113	8.7	7	5.2
Dynamic Services	63	4.4	29	3.6	34	5.5	62	4.8	1	0.7
Non-market Services	306	21.4	203	25.0	103	16.6	255	19.6	51	38.1
Retirement	45	3.1	18	2.2	27	4.4	43	3.3	2	1.5
Dual Specialization	372	26.0	150	18.5	222	35.9	352	27.1	20	14.9
Non-Specialized	179	12.5	129	15.9	50	8.1	150	11.6	29	21.6
Total	1432	100.0	813	100.0	619	100.0	1298	100.0	134	100.0

Source: Statistics Canada 2001.

Framework for Exploring Stages of Economic Development Activity

Drawing from a range of ideas in the literature, the following stages of economic activity were applied to understanding of the economic trajectory of small places:

Startup: Characteristics of town start-up may include a range of activities. The municipal charter establishing the settlement would have been recently granted. There would be evidence of new construction of buildings and municipal infrastructure (water supply and sewerage, roads and streets, municipal administration and service buildings, houses and other residential buildings). Basic and essential services would also be established in the early part of the Startup period, as would a large population influx. The community may experience changes in its population with the emergence, and perhaps subsequent out-migration, of construction crews, as well as changes in local economic employment opportunities.

Growth: Characteristics of town growth may include new developments in the community, such as retail stores in the downtown core, an expansion of essential services, or construction of an industrial park. Expansion of municipal boundaries may be another indicator of growth. Sustained population and/or household growth over a long period of time, and a high pace of building starts for all types of structures are other features that would also be indicators of growth.

Plateau: There are fewer physical signs of change in a town during the plateau stage. New economic activity, as well as new building construction, is limited. There is also little net population growth or decline. Services peak in terms of the volume of activity and staffing, and there is a progressive aging/maturing of the population.

Decline: The decline stage is characterized by a decline in the resource industry or economic activity which fueled the initial growth and sustained the Plateau period. This might include a

depletion of the resource, the closure or withdrawal of public services or institutions, or the closure of the both major employers and small retail or supply businesses. Net population decline from out-migration is a key characteristic.

Alternative Futures: At any point within the framework, but often following a period of decline, conditions may change to the point where a very different community economy develops. Depending upon local history and context, such transition may occur through a diverse range of individual pathways. These include:

- Transform to some other economic activity and grow again. The community responds to change by aggressively transforming its economy into other activities which place it in a growth stage again.
- Transform to some other economic activity and plateau at a similar or lower level than before. The community transforms its economy into other activities, or allows the community to adopt a new primary economic activity by default, either of which provides a measure of stability, but one which is at a lower economic and population level than before the change.
- Transform to some other economic activity and decline more. The community attempts to transform its economy into something else, but the efforts do not halt a further period of decline.
- Remain in the same primary activity, but function at a lower plateau than before. A period of decline may occur over a finite period of time, after which there is a leveling off of economic and population change and the community 'settles in' to a period of stability which is at a lower level compared to previously.
- Decommission or closure. The community, or an outside agency, makes the decision to close the community (often after a long and sustained decline). In some cases, the decision is made quickly where nearly the entire workforce may be employed when a major employer closes.

Population change (loss) is the primary indicator of a community in decline. Most of the rural and small town places in this study are declining. There are very few instances where new communities are being established. This trend is evident regardless of the size of place examined, the degree of metropolitan influence, or the economic sector of a place. For example, only about 27% of the No MIZ communities grew in population, and only about 31% of the Weak MIZ communities grew between 1991 and 2001.

Summary of Rural and Small Town Places in Decline, Population Changes for all Communities with 1991 Population of 50 - 4,999, 1991-2001

Category	Total Lost	%	Total Gained	%	n=
All communities	954	71.0%	388	29.0%	1342
All communities, 2001 population of 100 - 2,499	814	71.5%	325	28.5%	1139
All communities, 2001 population of 2,500 - 4,999	72	63.7%	41	36.3%	113
Communities with Weak MIZ	526	69.4	232	30.6	758
Communities with No MIZ	360	72.9	134	27.1	494
Agricultural communities	236	84.9%	42	15.1%	278
Fishing communities	21	95.5%	1	4.5%	22
Forestry communities	9	69.2%	4	30.8%	13
Mining communities	23	88.5%	3	11.5%	26
Tourism communities	6	50.0%	6	50.0%	12
Manufacturing communities	90	80.4%	22	19.6%	112
Dynamic communities	27	54.0%	23	46.0%	50
Non-market communities	143	54.0%	122	46.0%	265
Retirement communities	30	71.4%	12	28.6%	42
Dual specialization communities	217	72.8%	81	27.2%	298
Non-specialized communities	144	65.2%	77	34.8%	221

Source: Statistics Canada 2001, 1991.

The framework pointed to a need for understanding of the indicators of movement into and through a period of *Decline*, and in understanding the various local and contextual conditions which might shape the *Alternative Future* of a community after a period of *Decline*. For this reason, analysis of socio-economic characteristics to explain the stages of economic development through the *Decline* period was completed, with the following question in mind: How can changes in various social and economic characteristics of communities be used to understand if a community is in a period of *Decline*, and what its *Alternative Future* might be?

The analysis found that there is significant variation in the values of various socio-economic characteristics from one community to the next, and from one cluster of similar types of communities (based on economic sector classification) to another. The significant diversity from one place to the next does not permit the identification of a 'threshold' for each characteristic to show when a community is in *Decline*. But, findings did reveal some consistent directions of change for each characteristic, through the 1991-2001 period, in terms of their increase or decrease in value.

The framework identified that context is important to understanding changes in the local economy. Key questions that should be asked about a given community to understand much more about the nature of the *Decline*, and which type(s) of *Alternative Future(s)* might be possible, including:

- What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

- What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?
- What is the strength / quality of local leadership to help move the community forward or to address the problems it faces?
- What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?
- How exposed is the local economy to global economic forces (e.g., what are the commodity prices for the local resource, and how is it change?)
- What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?
- Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?
- What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?
- For communities which are classified as either dual specialization or non-specialized, how has the distribution of the labour force across all sectors changed in recent years, and where is the distribution headed? Is the community moving towards greater concentration or more diversity in its economy, and if so, to which or from which economic sector(s)?

Answers to these questions provide a much better position to make sound judgments and decisions about the nature and extent of the period of economic *Decline* in the community, where the community might be headed in terms of an *Alternative Future*, and how best to support its future development.

Case Study Findings

The eleven case studies showed reasonable consistency in terms of how changes to specific socio-economic characteristics of declining communities behave like those identified in the framework. There were, however, some variables in each case study which moved in the opposite direction, or showed no change, relative to expectations. As such, there are some contextual issues that are not captured within the range of comparable statistics which are collected and published for Canadian communities.

Communities move through many changes over time, and they often have different economic sector classifications over those time periods. Within this context, each community is unique even though it may share some or many features in common with others. Exposure to the global economy is an important factor influencing rural change. The regional economy also helps to shape the local economy of small places. There are also differences between seemingly similar communities. Within a general framework, there is still a need to recognize the importance of context and the uniqueness of place.

Limitations

The methodology employed has some limitations. Using socio-economic data for any characteristics may occur when a town experiences a change in its stage of development during or shortly after a census. In the early stages of development, a community may be too small to reveal changes in socio-economic characteristics. There may also be long periods over which a community may be within a single stage. On the other hand, other places may go through a number of stages in the short time between two census periods. Furthermore, time lags mean that trigger events may not show their implications for a period of time. For example, Wilson (2004) notes that the impacts of boom and bust cycles in mining towns will differ by mineral and often lag behind many years. One possibility for filling census time gaps could be the use of small area tax filer data (available on an annual basis, two years after the current year).

The characteristics associated with varying economic activities may also change over time (Stedman *et al.* 2004). For example, women have not traditionally found employment in resource towns, particularly in resource industries, but this has been changing (Everitt and Gill 1993; Krahn and Gartrell 1981). Characteristics associated with agricultural communities may also vary according to farm size, structure, agricultural commodity, and region (Stedman *et al.* 2004). Within manufacturing communities, characteristics may differ according to the product (i.e. veneer, construction wood, pulp and paper, or wood chips). Even in fishing communities, characteristics may be influenced by market niches (Peluso *et al.* 1994).

The framework for clustering small communities in rural Canada has some limitations. Given the dynamics of economic change over time, individual CSDs may move in and out of categories over time. For example, a community with 25% of its labour force employed in mining in 1986, for example, may have less than that in 2001, and thus be classified as a different type of community. The framework provides a tool for assigning a given community to a given type of economic activity at any one point in time. This may provide a challenge for examining changes in a community over time. For example, a community may be classified as 'mining' in 1996, but may become a 'retirement' community in 2001. However, mining characteristics are used to demonstrate or track socio-economic characteristics over the decline period even though the economic sector, and corresponding socio-economic characteristics, may have changed. This produces a complex landscape that is not easily understood by Statistics Canada data or without further research in the community.

Like other classification systems, such as Statistics Canada Low Income Cut Off, the 25% threshold is an issue which can be revisited in other research. Its purpose, however, is not to set an absolute measure of economic orientation, but rather to give a baseline against which change within economic orientation can be evaluated. The selection of the 25% level as the threshold for assigning a community to a particular type of economic activity might need to be reviewed and modified at some future time. Flexibility in the approach is required. For example, as our economy changes over time, there might be a need to adopt different thresholds other than 25%. As employment levels decline in the primary sector, it might be necessary to think about lowering the threshold for a community to be assigned to a particular resource sector. In a similar

way, there might be a need to adopt a broader or narrower range of economic cluster categories, to reflect a new reality of economic activity in small places. For example, as economies in small communities evolve over time, there might be a need to identify a range of specific dual economy communities, such as retirement and forestry, or non-market services and agriculture. The definition of specific for either or both would need to debated and tested.

The characteristics of a particular economic cluster may change over time. As communities age, mature, and move through different economic development processes and cycles, their social and economic characteristics may change.

Although the directionality of change for each socio-economic variable examined offers potential insights into changes in each economic cluster of communities, its usefulness is limited in the cases of 'dual-specialization' and 'non-specialization' communities. While there may be some general patterns within each of the clusters, there is significant variation in the labour force composition from one individual community to the next within each of these clusters. For example, dual-specialization communities could include up to 55 different combinations of dual specialties (e.g. agricultural and retirement; agricultural and manufacturing; manufacturing and tourism; etc.). In a similar way, there will be significant variations within the non-specialized cluster, where any individual community may have a single labour force component that is very close to the 25% threshold we use, while another may have widespread distribution of its labour force across a number of sectors. Taken together, the relative influences of the various economic sectors present in a community will have different outcomes in terms of directionality of the various socio-economic characteristics over time. Therefore, it is not possible to 'map' the directionality of the change in variables over time from the general pattern of these clusters as a whole onto individual communities. Greater reliance on local knowledge is required to understand the change dynamics in these dual-specialization and non-specialization communities.

Conclusions

Across Canada, there are many different types of rural and small town places, and the ways in which service restructuring and economic development is occurring in communities varies significantly. Despite this diversity, decisions about changes to housing policies and programs are based upon broad assumptions about the future of such places collectively. This research on relatively isolated rural and small town places in Canada builds upon previous research and makes an important new contribution to rural development research because it provides:

- A categorization / differentiation of relatively isolated rural and small town places from all other such places by using a population threshold of 50 to less than 5,000 and by using Weak and No MIZ status. This allows for a closer examination of those places most vulnerable to population decline and economic restructuring.

- A classification of communities by economic type based on labour force activity in each sector. Although this is an imperfect approach, and has its limitations because it

may not fully capture other employment which is directly or indirectly related, this approach uses widely available Census data which can be used to make assessments of the types of important local economic activities and how they may have changed over time.

- Recognition that communities may have different types of economic drivers over time, and that this is influenced by a complex process of labour force expansion and contraction which may contribute to increasing or decreasing specialization in rural and small town communities.

- A framework for understanding how different types of communities change over time, with a particular emphasis on what is happening in communities as they move through stages in a community development model. Case studies were then used to explore examples of rural and small town places as they move through a period of population decline and explore alternative economic and community development futures.

- A way to incorporate and acknowledge the importance of local, regional, and global contexts which significantly shape and influence the economic trajectory of our relatively isolated rural and small town places.

For public policy and program decision-makers, this research provides important new information about the evolution and economic trajectory of relatively isolated rural and small town places. Decisions made about policies and programs which may affect the future viability of these places must be taken with care, caution, and appropriate information. This research shows that not all of these places are alike, and that there are also large differences among those which have the same economic orientation. The framework points to the importance of understanding context in order to fully understand how an individual community is moving through a period of Decline and how it might proceed with an alternative future. In other words, 'place matters'.

1.0 INTRODUCTION

Many rural and small town places and larger rural regions within Canada are experiencing a long period of significant economic and social restructuring. This is evidenced by population loss, an out-migration of youth, an aging population, a decline in primary sector resource activity, an increase in tourism activity, and a shift to retail, dynamic services and non-market services activities. The impacts of continued population loss and shifting economic realities have been many. They include, but are not limited to: fewer opportunities for economic development, new business development, and job creation; depression of the resale housing market; rising vacancy rates in rental properties; diminished access to and provision of social services (health care, education, etc.,) as population levels fall below demand thresholds; and diminished municipal capacity to provide critical and necessary municipal infrastructure due to an eroding tax base.

The picture appears somewhat bleak. However, there are many different types of rural communities and small towns in Canada, and the ways in which these changes play out in individual communities varies significantly. The variation among different community types is influenced or conditioned by many factors, including, but not limited to:

- the size of the population;
- the presence or absence of a local government (with the ability and mandate to govern locally, manage the assets, and take action on opportunities or threats);
- the relative distance from and relationship with larger urban centres (which provide opportunities for employment, shopping, services, and much more);
- the type(s) of economic activity within the local community and the surrounding region; and
- the role of the community within a larger settlement pattern (communities with the same population size may play different roles as service centres, for example, depending on their relationship with other communities in their larger region).

It is not surprising, therefore, that economic development activity in rural Canada varies significantly from one community to the next given the broad range of variations noted above. For example, communities located near large urban centres typically have growing populations while those in more isolated places have declining population. Those with larger populations have more diversity in their economy compared to those with smaller populations. But these are gross oversimplifications of the complexity and diversity that one would find throughout rural Canada.

The focus of this report is on communities which are more likely to experience population and economic decline, and which have fewer resources and less capacity to respond to economic shocks. These can generally be described as relatively isolated rural and small town places. The variations within rural Canada, as noted above, mean that for those interested in understanding economic development activity and change over time in rural Canada, there is a need to identify the parameters that define ‘relatively isolated rural and small town places’, and to understand the

context within which these communities function and change over time. This is important from a public policy and program perspective because decisions about changes to policies and programs which affect these places collectively, or decisions made using broad assumptions about the future of such places collectively, can have damaging outcomes if they are not grounded in or supported by a well-developed understanding of the significant variation that exists from one place to the next in terms of their economic development activity and potential future alternatives.

Thus, this report is intended to develop a framework that will enable analysts to assess the stage of economic development of relatively isolated rural and small town places, and to understand the conditions under which communities move through a period of economic decline and into one or more 'Alternative Futures'. From a housing perspective, there are some very important and key linkages. Housing developers and builders make decisions about new housing investments based on their projected future of the community and its region. Private sector employers looking to relocate to or expand within a small community may face difficulties if there is insufficient housing choice or a lack of affordability. Providers of mortgage insurance make their decisions in part based on an assessment of whether or not there is an ability to recover losses on a property in default of its mortgage.

The purpose of this report is to provide an understanding of how economic development activity within relatively isolated rural and small town places in Canada changes over time. More specifically, the objectives include:

- Develop a definition of relatively isolated rural and small town places for the purpose of quantifying and classifying such places for further analysis to assess economic development changes over time.

- Develop an appropriate scheme for classifying relatively isolated rural and small town places for the purpose of understanding the range of different types of such places based on their economic base(s), and for the purpose of understanding how different types of these communities change over time.

- Develop a framework for understanding how relatively isolated rural and small town places change over time, the variations that might be exist among different types of such communities, and the types of socio-economic indicators which help to explain changes over time within the framework.

- Illustrate the usefulness of the framework by using case studies which show how different communities change over time and how socio-economic indicators may provide some insights into these changes.

The report begins with a detailed discussion of the methodology employed to assess the literature on rural development, and to develop a longitudinal approach to using Census data (from 1986 to 2001) for analytical purposes. The report then discusses an appropriate definition of relatively

isolated rural and small town places and quantifies their number, type, and geographic distribution. The next section examines a variety of approaches which might be used to classify or cluster such places, and uses ‘concentration of the labour force by industry type’ to cluster these places into eleven different economic activities. This is followed by the development of a framework for understanding and assessing how economic development activity in these different types of relatively isolated rural and small town places changes over time, and the implications for public policies and programs. A series of brief case studies are presented to illustrate how the framework might be employed. The report concludes with a short discussion of the usefulness of the framework, the importance of this research, and some potential further research questions which might be pursued.

2.0 METHODOLOGY

Four steps were undertaken to develop a framework approach for understanding community development change in rural and small town Canada. The first step included defining parameters for identifying the universe of relatively isolated rural and small town places which may experience economic development challenges. This also entailed providing background information on the different types of small places across Canada. Differences provide a foundation for evaluating the housing impacts on rural and small town places, and for facilitating an appropriate decision making process about future housing investments in such communities. The second step identified a clustering approach to categorize rural and small town places into economic sectors. The third step involved developing a framework to identify the community's stage of economic development activity. Finally, a case study methodology was applied to illustrate how the framework could be applied in practice. A range of sources were used to develop and apply this framework approach including literature from previous studies, newspaper archives, documents by both private and public service providers, and government sources. Furthermore, Statistics Canada data, primarily from 1986 to 2001, was used to characterize communities, as well as to develop and apply the framework. This section will describe the methodology for each of these steps, including a discussion of the limitations of the methodology.

Rural and Small Town Places

To define the parameters for rural and small town places, a focus was placed on searching for analytical reports and working papers prepared by national statistical agencies in both Canada (Statistics Canada) and the United States (USDA-ERS). Both agencies have worked extensively over the past 15 years to develop more appropriate ways to differentiate the broad range of rural and small town places within each of their national contexts. In addition, the work of the Organization for Economic and Cooperation and Development (OECD) to develop a set of indicators or measures of rural that would be applicable internationally was consulted. To supplement these, a search was also conducted for scholarly work on the issue of defining small communities or defining rural and small town places, with a particular emphasis on examining work which employed or 'tested' the models, approaches, and ideas developed by the two statistical agencies.

For the purpose of developing the inventory of small communities based on recommendations from the literature review, the electronic version (spreadsheet) of the 1996 Census developed by Rambeau and Todd, which coded all Census Subdivisions (CSDs) by their population and 'zone of metropolitan influence' (MIZ), was used to sort the CSDs into clusters based on the parameters identified in the literature review.

Limits to Sample

It is important to note that the sampling frame for this study is the 2001 Census; however, we have also included analysis of Census data from 1986, 1991, and 1996 for the purpose of examining change over time. To maintain our focus upon small places, we used an upper threshold of 5,000 people as the cut off for inclusion on the sample and comparison against the community development framework. At the other end of the population scale, we used a low threshold of 50 people as the cut off for inclusion in the sample and comparison against the economic development framework.

To maintain the focus on rural and small town places that are not under influence from large urban centres, we used Statistics Canada's MIZ (metropolitan area influenced zone) measure to include only those CSDs noted as having Weak or No MIZ.

Clustering by Economic Activity

To categorize rural and small town places by economic activity, previous studies were examined to explore characteristics of small towns associated with a particular economic sector. From this, a range of clustering approaches were examined to provide a foundation for developing economic indicators by which to cluster rural and small town places by economic activity. Based on previous studies, and using the 1980 Census SIC codes, a threshold of 25% of the labour force employed in a sector was used as the cutoff to categorize each CSD by economic activity. This was supplemented with a threshold of 25% of the population 65 years of age or more for the purpose of determining if a community was a retirement community. The economic sectors identified are:

- agricultural communities,
- fishing communities,
- forestry communities,
- mining communities,
- tourism communities,
- manufacturing communities,
- dynamic services communities[1],
- non-market services communities[2],
- dual specialization communities, and
- non-specialized communities.

If an individual CSD had a labour force concentration of 25% in any one sector (or 25% or more of the population was 65 years of age and over), it was classified or clustered into that sector. To

[1] Includes transportation and storage industries, communication and other utility industries, wholesale trade industries, finance and insurance industries, real estate operator and insurance agent industries, and business service industries (Alasia 2004).

[2] (Includes government service industries, educational service industries, and health and social service industries (Alasia 2004).

accommodate the fact that some CSDs may have more than one economic concentration, a CSD was classified as 'dual specialization' if this was the case (for example, a CSD might have 25% of its labour force in agriculture, and another 25% in dynamic services). Similarly, if it did not have any concentrations at the chosen threshold, it was classified as 'non-specialized'). This approach is consistent with the work of Ehrensaft and Beeman (1992), and Randall and Ironside (1996). These authors emphasize that not all CSDs are easily classified into only type of economic activity.

To this point we have referred to CSDs. For the most part, Census Geography aligns CSDs with incorporated municipalities. While not always coincident with local functional areas, these municipalities form the basis of our analysis.

Within this context, there are some limitations. It is important to acknowledge there will be variations created by the classification system. For example, some towns will have high employment levels in forestry, while other towns will have high employment levels in manufacturing industries associated with forestry. Intuitively, these would both be considered as forestry towns; however, the former would be classified as a 'forestry community', while the other, a 'manufacturing community', given the use of employment by industry variable. Furthermore, some mining towns will consist of jobs requiring low skill levels, while other mining towns may require higher skilled jobs and professional workers. Both would be classified as mining towns, but they would have very different social and economic characteristics. There are also limitations in the extent in which the data can depict the number of jobs dependent upon a particular sector. As noted by Reed (n.d.), for example, jobs that are influenced by the forest industry, such as administrators, researchers, planners, and technicians may not be considered as forestry jobs.

Framework for Stages of Economic Development

A literature review, and an analysis of socio-economic data from Statistics Canada between 1991 and 2001, was used to develop a methodology to identify the stage of community development of particular place. Drawing from previous work, a community economic development model is recommended that includes the following stages: Startup, Growth, Plateau, Decline, and Alternative Futures. In addition, previous studies were examined to develop a set of characteristics that indicate changes in these stages of development.

A limitation to using data for any of these characteristics may occur when a town experiences a change in its stage of development during or shortly after a census. In the early stages of a community development model, the town may be too small to reveal socio-demographic characteristics. There may also be long periods over which a community may be within a single stage. On the other hand, other places may go through a number of stages in the short time between two census periods. Furthermore, time lags mean that trigger events may not show their implications for a period of time. For example, Wilson (2004) notes that the impacts of boom and bust cycles in mining towns will differ by mineral and often lag behind many years. One

possibility for filling census time gaps could be the use of small area tax filer data (available on an annual basis, two years after the current year).

The characteristics associated with varying economic activities may also change over time (Stedman *et al.* 2004). As noted earlier, while women have not traditionally found employment in resource towns, particularly in resource industries, this has been changing (Everitt and Gill 1993; Krahn and Gartrell 1981). Characteristics associated with agricultural communities may also vary according to farm size, structure, agricultural commodity, and region (Stedman *et al.* 2004). Within manufacturing communities, characteristics may differ according to the product (i.e. veneer, construction wood, pulp and paper, or wood chips). Even in fishing communities, characteristics may be influenced by market niches (Peluso *et al.* 1994).

Case Studies

Finally, a case study methodology was used to illustrate how the framework could be applied in practice. Using a purposeful sampling methodology (Patton 1990), case studies were selected for each of the eleven different types of sectors identified. These case studies were drawn from a database that identified communities with a population of less than 5,000 people, as well as communities with a Weak or No MIZ status. For illustrative purposes, the focus of the case studies is to explore the characteristics of communities as they move through a period of Decline into one or more 'Alternative Futures'. Selected case studies were undergoing transition and allow us to test the usefulness of the framework and demonstrate examples where local and regional contexts may be important. In order to facilitate triangulation (Pettigrew 1995), case studies were also selected because of the availability of a range of additional sources of information, such as newspaper articles, reports, books, journal articles, and other types of statistical information. The case studies selected include:

- Agriculture: Wood River, Saskatchewan,
- Fishing: Trout River, Newfoundland and Labrador,
- Forestry: Port Clements, British Columbia,
- Mining: Fermont, Québec,
- Tourism: Ear Falls, Ontario,
- Manufacturing: Gold River, British Columbia,
- Dynamic Services: Valemount, British Columbia,
- Non-market Services: Springhill, Nova Scotia,
- Retirement: Preeceville, Saskatchewan,
- Dual Specialization: Churchill, Manitoba, and
- Non-Specialized: Digby, Nova Scotia.

Each case study will explore how the socio-economic indicators have changed over the Decline period. It will describe how the dominant sector(s) emerged, along with prospects for any Alternative Futures. To understand the context for change, each case study will also explore the following questions:

- What is the nature of the regional economy surrounding this community? Is it healthy or unstable?
- What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?
- What is the strength / quality of local leadership to help move the community forward or to address the problems it faces?
- What is the nature of ownership of industry and businesses in the community? Is it local or from outside? Is it diversified or concentrated?
- How exposed is the local economy to global economic forces (e.g. what are the commodity prices for the local resource, and how is it changing?)
- What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?
- Are there are range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?
- What are the strengths, if any, of regional development agencies who may play a role in the transformation of this community?

For the purpose of this study, we focus only on an analysis of the Census characteristics and their relative value and power to explain the stage of economic development activity for communities. The problems associated with the availability of data for other potential characteristics, such as off-farm income or commodity prices, means that their analysis must be left to additional research beyond the scope of this study. The balance of this report is devoted to an exploration of the socio-economic characteristics in the Census to determine if and how they might be used to 'populate' the framework we have developed for understanding how communities move through various stages of economic development activity over time. Within this context, there are no easy answers or thresholds for understanding or predicting the future economic development activity of a community. Communities are dynamic and living. The key is to understand how the local situation and the broader economic context are likely to shape and influence the ability of the community to respond to change.

3.0 DEFINING RURAL AND SMALL TOWN PLACES

Introduction

The first step to developing a framework to explore changes in community economic development in rural and small town places is to define parameters for identifying the universe of relatively isolated rural and small town places which may experience economic development challenges. This entails providing background information on the different types of small places across Canada. Differences provide a foundation for evaluating the housing impacts on rural and small town places, and for facilitating an appropriate decision making process about future housing investments.

This section will provide the context and background to how small communities are defined in the literature, explore definitions of 'small communities' that might be applicable in all provinces and territories, and consider alternative definitions. It will also indicate the parameters (population density, population size, influence by urban area, distance to an essential service) within the above definitions used in classifying the boundaries of small communities. This is followed by a discussion of the parameters, including whether or not they can be applied to all provinces and territories. Finally, based on a series of recommendations, a list is compiled of rural and small town places across Canada relevant for this study.

Defining Small

The adoption of a place-based policy or regulation approach has been advocated by the Organization for Economic Cooperation and Development (OECD 1996) as one way to provide flexible responses to the complex range of rural and small town places being impacted by the changes brought on through social, political, and economic restructuring. We know that the outcomes of change and restructuring vary tremendously across rural Canada. To address this, it is necessary to have a definitional framework which effectively differentiates places by criteria important to the public policy issues at hand. To date, however, efforts at defining rural and small town Canada within a place-based public policy approach have been limited.

When moving to consider choices in a definitional framework, it is worth revisiting the argument by du Plessis *et al.* (2004) that it is important to know why you need to know about places and then to select a definitional framework that provides data appropriate to informing that need. Key context issues can be considered to include:

- sufficient population size as to have a robust economy or a developed housing market;
- local government organized territory (CSDs) in order to provide a foundation for basic data collection and linkages to the building blocks used by Statistics Canada definitions; and
- a regional context to capture a functioning economy or housing market through the pressures organized within commuter influenced labour markets.

The definitions used to describe rural and small town places outlined in the literature employ a range of parameters in order to draw together various geographical boundaries and relationships. The common goal among these diverse approaches is to provide ways of building a better understanding of rural areas, their diversity, characteristics, and conditions. For the most part, the definitions use similar types of parameters, but employ differing thresholds or levels for each of these parameters depending on the country context. For example, many of the definitions use population counts as a parameter, with different choices for the boundaries of what is considered metropolitan or non-metropolitan.

Statistics Canada uses a set of general territorial building blocks in order to facilitate nationally comparable data. While some of these are very small (the area a Census enumerator walks on a route) these building blocks must be of sufficient size as to usefully capture housing market dynamics. Using CSDs as the building block within the 'rural and small town' (RST) definition (of any CSD less than 10,000 population) provides a solid foundation for capturing functional housing markets. The emphasis within the RST definition on labour market commuting equates well with the regional structure of housing markets, which also fluctuate with the relative health of that labour market. A third key element comes with the addition of the MIZ (metropolitan area and Census Agglomeration Influenced Zone) classification. Analysts in both Canada and the US have long struggled with the vast size of their countries and the need to differentiate the relative level of influences rural areas receive from large metropolitan areas. The 4 tier MIZ system provides a way to differentiate Rural and Small Town (RST) units across this metro-adjacent to remote continuum. Much progress has been made from the starting point where places were defined simply as the residual not counted within urban Canada.

In the US, population analysts have also struggled with most of the same issues confronting Canada. The United States Department of Agriculture Economic Research Service (USDA-ERS), for example, has worked on ways to provide more detailed information about rural and urban places, to better illustrate the relationships and integration of rural and urban places, and to provide more ways to describe the complexity within and between those places. The adoption of counties as one of the basic statistical building blocks provides a relatively stable structure for comparison over time. This is similar to the use of CSDs in the Canadian context. Experiments with ways to recognize the degree of economic and social integration within regions, and the degree of influences rural regions receive from urban and metropolitan areas, has led to the creation of mechanisms such as the Beale Codes. In turn, these have been adapted to Canada by researchers such as Ehrensaft. Together, these US and Canadian experiments formed the impetus for creation of Canada's MIZ classification system. The need for a nationwide system, which builds upon regionally integrated economic units, and which recognizes the diversity that ranges from metro-adjacent to remote rural locales, all match the types of Census Geography challenges faced in Canada. Rationales for public policy choices in the US also match those argued in this section as important in the selection of a statistical framework suited to place-based policy analysis.

In addition to the US, the OECD has been very active in the identification of territorial based data frameworks and sets of indicators that will:

- facilitate international communication and comparison of rural conditions and trends; and
- support place-based policy, regulation, and program development and monitoring.

The OCED also recognizes that:

- rural development is complex and multi-sectoral;
- rural indicators are needed not just to increase understanding of rural conditions but also to evaluate change over time; and
- common definitional frameworks can assist with knowledge transfer between member states on questions of rural change and development.

As a result, they have spent considerable time developing definitional frameworks to meet these objectives. Their rural classification system recognized the need for stable building blocks, grouped into functional regional relationships, and set within contexts ranging from near-metropolitan territories to very remote territories. This matches well with the suggestions noted above about the use of CSDs within RST Canada differentiated by the MIZ classification system.

Within this context, five key factors are considered for the purpose of developing an inventory of small communities to analyze their characteristics to better understand their economic trajectories, and to better inform debates about place-based information and decision-making:

- First, that CSDs (or their territorial equivalents in unorganized areas) form the building blocks for data collection mechanisms aimed at housing issues. These units provide relative stability to facilitate comparison over time and are large enough to escape the idiosyncrasies that may crop up in very small housing 'markets'. They also address the challenge of finding a data unit that bridges administrative (municipal incorporated versus unincorporated places) and territorial units.
- Second, CSDs will be considered within the context of their respective Census Divisions (CDs). As noted above, Canada, the US, and the OECD recognize the need to situate individual places within functional regional contexts. Comparison of local economic trajectories relative to those recorded for the larger CDs does this. Its focus on integrated regional labour markets also links well to the organization of housing markets. As noted by both the US Census Bureau and the USDA, a local economy and its labour market is not delimited by a county line, but by interrelationships between buyers and sellers of labour. To understand the diversity of non-metropolitan places, we need a geographic framework that better captures local and regional economic and labour force activities.
- Third, CSDs (and equivalents) will be used to further differentiated according to the MIZ classification system. In Canada, the US, and the OECD, attempts have been made to address the diversity and regional context of rural areas through estimating levels of urban or metropolitan influence. Adding MIZ information provides a way of capturing size and regional context diversity. We recommend that the universe of small communities be confined to those within the 'No' and 'Weak' MIZ categories to identify economic trajectories for rural and small town places well removed from metropolitan influence.

- Fourth, Indian reserve and federal reserve lands are removed from the analysis due to their unique property tenure and housing market characteristics that limit comparisons to other places.
- Fifth, places which have fewer than 50 residents are excluded because they are too small to have a functional housing market. Two upper population thresholds were also outlined, including places with 2,500 residents and places with 5,000 residents that enable two community clusters based on population size to be examined. This will help test the use of various variables or indicators related to understanding the economic trajectory of small places. The US Census Bureau and the USDA both use the 2,500 cut off as important for delimiting small towns, while Statistics Canada uses 5,000 as a low end cut off for reporting data on urban places. By using these two cut off points, we will be able to distinguish two community clusters based on population size, and validate the usefulness of particular indicators or parameters.

Table 3.1 CMA/CA Metropolitan Influenced Zones (MIZ)

MIZ disaggregates the rural and small town population into four sub-groups based on the size of commuting flows to any larger urban centre (of 10,000 or more).

Definition	Main Criteria
Strong MIZ	30% or more CSD residents commute to an urban core of a CMA / CA
Moderate MIZ	5% - 30% of CSD residents commute to an urban core of a CMA / CA
Weak MIZ	0% - 5% of CSD residents commute to an urban core of a CMA / CA
No Influence MIZ	0% of CSD residents commute or the occurrence is suppressed

Source: Rambeau and Todd 2000.

Inventory of Small Communities

Table 3.2 shows the distribution of communities which meet the criteria of less than 5,000 population, being a CSD, and within the Weak and No MIZ designations. Slightly more than half of the communities are within the Weak MIZ designation. Most of the larger communities are within the Weak MIZ designation.

Table 3.2 Distribution of Communities by MIZ Designation and Population Group, Less than 5,000 Population, Incorporated and Unincorporated Communities, Canada

	MIZ Code		Total
Population Group	No MIZ	Weak MIZ	
2,500 - 4,999			
Count	5	129	134
% within population group	3.7%	96.3%	100.0%
% within MIZ code	0.8%	15.9%	9.4%
50-2,499			
Count	614	684	1298
% within population group	47.3%	52.7%	100.0%
% within MIZ code	99.2%	84.1%	90.6%
Total			
Count	619	813	1432
% within population group	43.2%	56.8%	100.0%
% within MIZ code	100.0%	10.7%	100.0%

Source: Derived from Table 35 in Rambeau, S. and K. Todd. 2000. *Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ) with Census Data*. Ottawa: Statistics Canada.

4.0 CLUSTERING OF COMMUNITIES BY ECONOMIC ACTIVITY

Introduction

Small places vary not only by size, population density, and economic activity, but also by the degree of economic development. Over time, some places have matured, others have remained undeveloped, and others have declined or even disappeared. The specialization of many rural and small town economies has made these places particularly vulnerable (OECD 1996). As a base for developing a framework useful in understanding rural and small town economic change, it is important to understand the diversity and complexity of these places. To help us organize that diversity and complexity, this literature review section describes a number of 'clustering' approaches for categorizing rural and small town places by their economic sectors or activities. To begin, this section will explore characteristics of places identified with a particular economic sector, such as forestry, oil / gas, mining, fishing, tourism, or mixed economies. Thereafter, a range of clustering approaches will be explored to provide a foundation for developing economic indicators to inform us about rural and small town economic change.

Exploring Characteristics of Small Towns

To date, much of the research on small towns has explored the important roles of different economic sectors as they have restructured. Understanding changes in economic activity is key to understanding various stages of rural and small town development. As such, some general characteristics and restructuring challenges can be identified for agricultural towns, fishing towns, forestry towns, mining towns, oil and gas towns, tourism towns, commuting towns, and towns with mixed economies.

Agricultural Towns

Before World War II, agricultural towns were well established in many regions and shipped product by roads and railways (Robinson 1989). Over time, agricultural communities have experienced a range of changes, such as the impacts of mechanization, transportation changes, labour shedding, and diversification. Farms have become larger, more mechanized, and include the use of bigger machinery and new fertilizers and pesticides (Effland 2000; Everitt and Gill 1993). Some grain farms became operated by seasonal absentee land owners who preferred to live in larger centres with more services. This was possible for certain farm types, such as grain farms, which do not have livestock and do not require year round staffing. Robinson (1990) further notes that labour shedding, often associated with mechanization, and reduced incomes led to the out-migration of some agricultural communities.

Changes in transportation also impacted agricultural towns as trucks for hauling grain widened the distribution range, so that grain elevators were no longer required over short distances. Everitt and Gill (1993) and Robinson (1990) explain that in small Prairie towns, the removal of rail lines, grain elevators, post offices, as well as the mechanization of agriculture, led to declines in both the number of farms and farm population during the 1980s. As such, the number of places dependent upon agriculture has been declining (Effland 2000).

Without diversifying their economies, agricultural communities may face additional pressures from downsizing or even closure (Luloff 1990). Changes experienced by local feed, seed, and fertilizer stores, farm machinery sales and service shops, and farm credit organizations provide clues to the impacts of agricultural boom and bust cycles. Small towns that do not pursue non-farm economic opportunities may further decline, not just due to socio-economic changes to farming hinterlands, but as a result in changes in non-farming economic activity taking place in their region (Swanson 1990). Alternative regional employment opportunities may pull residents from farming communities, who may commute and ultimately migrate to another town for employment. These changes have become noticeable across Canada. Over the past two decades, it has become apparent that with the exception of Prince Edward Island and the Prairie provinces, a very small proportion of the population has been engaged in farming when examining farm and non-farm characteristics (Hay 1992). However, some small towns that have been traditionally engaged in agricultural production are now diversifying their economic activity and are also active in processing and manufacturing, as well as functioning as new centres of industry or dormitory towns for nearby urban centres (Ziebarth 2000; Everitt and Gill 1993).

The social character of agricultural towns has also been changing. Small Prairie towns have aging populations, with the exception of places that are within commuting distance to urban centres (Halseth 1998; Everitt and Gill 1993). Furthermore, as some agricultural communities decline, the ethnicity, and hence cultural fabric, of these places are changing, especially for places founded by specific ethnic and cultural groups (Robinson 1990).

Economic characteristics for households in agricultural communities have also changed. There are an increasing number of family farms pursuing off-farm income, indicating a greater dependency on non-farm economic sectors (Swanson 1990). It is important to note, however, that the pursuit of off-farm income is not new. Effland (2000) noted that farmers have been pursuing off-farm income since the late 1920s. Such off-farm income can help farms stay in production by supplementing staggering farm income.

With mechanization and larger farms, incomes have declined and the percent of families below poverty has become higher (Robinson 1990). Furthermore, in the U.S., farming counties were characterized by higher rates of unemployment (Swanson 1990). As out-migration occurs in agricultural communities, local dependency ratios become high (Luloff 1990).

Fishing Towns

Fishing towns have also been impacted by mechanization and industrial restructuring over time. Changes facing towns dependent upon the fishing industry include changing technologies and regulatory structures, depleted groundfish stocks, and the introduction of new activities such as aquaculture and tourism (Marshall 2001). Within this context, the social structure of fishing towns has also changed since the early development of these places.

The fishing industry has been marked by one of exploration and discovery to the expansion of fishing activities, followed by consolidation. In British Columbia, for example, the expansion of canneries to process fish was noticeable between 1870 and 1900 as the industry expanded along

the coast. However, in tracking the geography of the canning industry in B.C. until the 1970s, Stauffer (2001) found that spatial consolidation was occurring as isolated canneries were closed. Instead, strategic canneries were located in close proximity of large spawning rivers, ports, rail connections, and labour pools.

After 1977, fishing improved after Canada extended its fisheries jurisdiction from 12 to 200 miles (Sinclair 1992). This was followed by the recession of the early 1980s that brought high interest rates, high oil costs, and low product prices. Fish processing companies had difficulties, with many restructuring between 1983-1985. Despite these changes, fishing towns had maintained a stable population in terms of net population growth or decline between 1976 and 1986 (Clemenson 1992).

However, because of inaccurate information, quotas were set too high to permit rebuilding of the stock. Haddock, redfish, and cod are the major groundfish species in Atlantic Canada, and have been overfished (Sinclair 1992). After 1989, the industry experienced low fish prices and declining fish stocks that resulted in lower quotas. With declining stocks and loss of revenue in 1989, National Sea Products and Fisheries Products International announced plant closures and fleet reductions in Atlantic Canada. Other fish processing plants closed or downsized, resulting in many job layoffs (Clemenson 1992). In fishing communities, there were high levels of unemployment, dependence on welfare, or out-migration. For many places, fishing was no longer the economic base of their community. Furthermore, the fishing industry and fishing communities were impacted by the implementation of the northern cod moratorium in July 1992 (Newfoundland Statistics Agency 1997). By 1994, there was no evidence that groundfish stocks were recovering. In fact, declines in groundfish stocks were now being identified in other areas of Atlantic Canada. This led to a moratorium on groundfisheries for other areas of Atlantic Canada and Québec in 1994. With more than 40,000 workers affected, Human Resources Development Canada and the Department of Fisheries and Oceans developed the Atlantic Groundfish Strategy to provide income support and training.

Some fishing towns have attempted to diversify their economies with tourism that has been facilitated by transportation improvements, such as new or updated ferry systems, and government policies for tourism development (Marshall 2001). Other fishing towns have attempted to diversify within the fishing sector by gathering niche products, such as periwinkles, clams, dulse, and seaweed that are harvested by hand. Such activities help to bridge the gap between the seasons or make up for poor harvest levels.

Fishing towns have also displayed changing characteristics over time. Between the world wars, men increasingly worked in processing in fishing communities. However, technology changes and labour shortages in World War II resulted in an increase in female employment in fish processing (MacDonald and Connelly 1989). After World War II, most fishers tended to be men and more women tended to be employed in processing plants. Outside of processing, however, fishing towns have been characterized with limited job opportunities for women in sectors such as education, health, and finance (Marshall 2001). In smaller fishing centres, younger couples tend to be wage workers. Fishing towns have been characterized by seasonal, part-time work (Sinclair 1992; MacDonald and Connelly 1989).

Forestry Towns

Changes experienced by forestry towns have been driven by consolidation of the industry over time and the introduction of labour saving technology. Additional pressures affecting the demand of forest products are underpinned by energy costs, inflation, housing starts, and interest rates for mortgages. Before exploring these pressures, however, this section will outline the emergence of forestry towns.

During the pre-industrial era before the 1880s, sawmills and small forestry towns emerged that were constructed by forest companies (Williamson and Annamraju 1996). From the 1880s, rapid growth occurred in the coastal regions (Barnes and Hayter 1992). Between 1880 and 1945, provincial governments began to create regulations for community development. Management of these places remained a responsibility of the company.

During the Fordist era of the 1950s and 1960s, lumber, plywood, and pulp production increased (Barnes and Hayter 1992). Consequently, the post-war period was marked with rapid growth in the number of forestry towns that emerged, such as those in the interior of British Columbia. Control of these towns was transferred from company control to the residents with a greater concern for the quality of life and stability of these places by developing services and implementing conservation measures to ensure a sufficient timber supply to support the town's industrial base (Williamson and Annamraju 1996).

However, the 1970s and 1980s was marked with downsizing and closures (Barnes and Hayter 1992). The plywood industry suffered problems from a declining large log supply and competition from lower-price particle boards. Forestry towns also experienced problems in the 1970s when energy costs fueled inflation. Housing starts collapsed and demand for wood declined (Luloff 1990). Furthermore, there were demands for new products in new markets. Fluctuations in the demand for lumber and wood products, along with interest rates for home mortgages, contributed to high turnover amongst secondary sector workers in forest towns (Humphrey 1990).

Most notably, the 1980s were marked by technological changes towards computer-based production that reduced manufacturing employment and required a flexible labour force (Barnes and Hayter 1992). The number of jobs created per unit of production declined due to the installation of new labour saving technology in updated facilities. This has led to the decline of a number of forestry dependent communities" (Williamson and Annamraju 1996: 3). At the same time, the forest sector is gravitating towards larger growth centres with a more diversified industrial base. Finally, timber supplies are becoming more strained.

Forestry towns display unique characteristics that set them apart from other resource towns. Humphrey (1990: 36) defines a timber-dependent town as one where "most workers in a community depend upon a forest products industry and its supporting services for employment, and the community is located in a remote place without alternative means of earning income". Forestry towns also tend to have few local commercial or professional services, especially in smaller settings (Humphrey 1990). Forestry towns are export oriented. Individuals employed in forestry have high incomes. In fact, Williamson and Annamraju (1996) note that forestry income

exceeds the provincial average in all provinces. Furthermore, forestry income exceeds non-forestry based income in all provinces except in Alberta where high wages are paid to oil patch employees. Within the forest sector, employees of pulp and paper mills earn higher incomes (Parkins *et al.* 2003). Despite higher incomes, though, logging dependent regions tend to have higher rates of poverty than other regions closely associated with agriculture and tourism.

However, Williamson and Annamraju (1996) also note that there are important distinctions between towns based on different forest sectors. The duration of employment for pulp mill workers can be longer than for sawmill workers due to the variability in the market and the relatively low shut-down and Startup costs. Consequently, the sawmill industry requires a more flexible labour force than the pulp mill industry. Hence, sawmill towns are more transient than towns based on other types of forest processing, leading to more instability in these places.

Forestry towns also have different characteristics based on wood fibre and land ownership. For example, towns in British Columbia are still harvesting old growth timber, while towns in New Brunswick are harvesting second, third, and fourth crops of trees. Consequently, New Brunswick forests have lower growth rates, while there is higher value in B.C.'s forest industry (Parkins *et al.* 2003). Furthermore, while the provincial government in B.C. controls 95% of the land, control in New Brunswick is more divided between private woodlot owners, the provincial government, and large forestry firms.

Mining Towns

Mining towns have experienced tremendous change over the years. The 1880s-1914 represented a period of company dominance, with ad hoc and unplanned communities growing up around mines (Robson 1991). Between 1918-1939, there was a greater concern for social issues, reflected in planned communities. The companies, however, still controlled many aspects of community life, and there was a growing consideration of government concerns and involvement. Consequently, numerous planned mega-projects emerged between 1945-1970. Between 1970-1991, however, Robson (1991) declared this period to be one of crisis management with the decline of towns like Pine Point and Lynn Lake. One important reason for this crisis period was the 1981-1982 recession that led to the closure of many mining communities. In discussing mining communities, Luloff (1990: 15) noted that "as the resource stock became depleted, or as the costs of mining became prohibitive, an exodus of migrants occurred". In some mining towns, economic and social conditions had deteriorated by 1990 as incomes declined and poverty and unemployment rates increased (Nord and Luloff 1993). However, Clemenson (1992) notes that some small towns, such as Fraser Lake and Granisle, B.C., have become 'dual dependent' by dividing their employment between both mining and forestry sectors.

Mining towns may be characterized by the types of employment available in these communities. Previous research has defined a town as mining dependent if 20 percent or more of the total labour and proprietor income came from mining. Robinson (1962) identified two main labour force groups in mining towns. First, there are white collar or supervisory personnel such as managers, professionals, technicians, clerical workers, and civil servants. Second, there are industrial workers, such as miners, mill and smelter workers, oil drillers, as well as general

labour and construction workers. Jobs in the business sector are limited, especially during the early stages when the trades and services are undeveloped. However, Nord and Luloff (1993) note that different types of mining towns use different technologies and, thus, require different labour pools. Most notably, open pit mining has developed new capital intensive mining technology that requires a larger proportion of professional and skilled jobs than other types of mines.

Mining towns have been characterized by a male-dominated labour force, particularly in non-traditional sectors associated with the mining industry (Peacock 1985). Mining towns also generally consist of male-dominated populations during the construction phases of the industry and town, followed by a generally young family-oriented population with good incomes after the mines are in full operation (Halseth and Sullivan 2003). Despite higher incomes, some mining towns have had higher rates of poverty than agricultural or tourism regions (Parkins *et al.* 2003).

Finally, mining towns have been characterized by having limited housing options. In the post-World War II era, housing was used as an incentive to attract and retain employees and their families in remote mining towns in order to reduce labour turnover (Bradbury 1984; Riffel 1975). However, many mining towns are also company towns where the housing stock is owned by the company. There are few rental units available as most of the housing is owned by the company and is available to employees only (Goltz 1992; Porteous 1976). For example, the initial lack of housing assistance and options were cited as problems with the planning of Tumbler Ridge. Housing was unavailable for non-mine employees (Gill n.d.). Furthermore, within this context, peaks and declines in housing demands parallel the development of the mining industry with high demand during construction and operations of the mine and declining demand during restructuring or closing of a mining town.

Oil and Gas Towns

The development of oil and gas towns is different from mining towns. In Canada, with the exception of the Turner Valley near Calgary, petroleum production spread from Edmonton after the late 1940s (Robinson 1989). Large reserves of gas were discovered in the 1950s. However, deeper natural gas fields were discovered during the 1980s that allowed the Prairies to export to the United States. Production has expanded to northeastern British Columbia and to places in Alberta such as Cold Lake, near Lloydminister, and Fort McMurray. However, the boom associated with the petroleum industry did not change settlement distribution patterns. Few centres were created to develop these resources. Most petroleum is shipped out in crude form to be processed in consuming centres. Furthermore, the management and servicing of these resources are located in large cities. While Kroetsch (1993) felt that Fort McMurray was only the first of a number of tar sand towns to be built, ongoing evidence suggests that oil and gas developments have aggressively adopted the fly-in / fly-out model of development. Even new oil and gas activity near Fort Nelson, B.C., is being developed directly adjacent to rough airfields which can bring the crews in from urban areas.

Research on oil and gas towns is more limited. Robinson (1962) described the development of oil towns to include exploration, drilling and development, production, and maintenance. Consequently, unlike other resource towns, employment in the industry and demands for services

are greatest during the early stages of development. As drilling activity declines and oil fields reach full development, employment based on oil field development declines. Employment reductions are experienced in areas including technical services, equipment and supply firms, pipeline and drilling firms, etc. Oil and gas towns are also characterized by their high wages (Williamson and Annamraju 1996). Matthiasson (1971) explored mobility patterns in Fort McMurray where, in the 1970s, more than half of his sample had less than high school education. Furthermore, more than half of his respondents had moved more than five times. Changing technology requirements now preclude these types of low educational entry opportunities. Coupled with the fact that oil and gas production requires few workers, and that maintenance (in addition to discovery and development) has adopted the fly in / fly out model, small towns in oil and gas territory do not have large shares of the population in the primary sector, rather they tend to support service activities for the crews that come and go from urban places.

Tourism Towns

Several key factors are instrumental in exploring tourism or resort towns. Such factors may include accommodations, the diversity of the retail sector, the diversity of services, and age composition of the workforce and residents. In tourism towns, for example, a high proportion of residences have been noted to advertise accommodations for tourists. Tourist towns are also distinguished from other resource towns by examining the residential to commercial area ratio. For example, Jones (1933) noted that the residential – commercial ratio in the mining town of Canmore was 10 to 1 compared to 6.5 to 1 in Banff. These figures reflect businesses geared towards tourist travel and not just the permanent residents. Furthermore, Jones (1933) noted that Banff, as a tourist town, offered more specialized and varied commercial businesses compared to more general stores in mining towns. Hall and Page (1999) also note that tourism towns offer an increased variety of restaurants and entertainment facilities. These places, however, must confront challenges including the emergence of high local prices for goods and services, as well as high accommodation costs and even a shortage of accommodations.

Another way tourism towns may be identified is through the characteristics of the tourism workforce. The tourism workforce tends to be young; characterized by female, part-time employment; low levels of union membership; relatively low skilled work; low wages; mobile workforce and high turnover rates; and low levels of formal education (Gill 2000; Hall and Page 1999). Furthermore, some service sector employment is seasonal or temporary (Kassab *et al.* 1995). More recently, though, resort towns have attracted professional and skilled workers who find new employment opportunities in the resort context (Gill 2000). Resort towns have also been able to attract telecommuters as a result of changes in communication technology that have enabled this workforce to relocated to high-level amenity areas such as tourism towns.

Tourism towns may have a younger oriented population in comparison with other places (Gill 2000). However, as tourism towns develop, they may also attract a group of retirees. As tourism towns develop, the gender distribution becomes more evenly distributed. Resort communities may also have seasonal residents who, along with second home residents, can bias census results (Halseth 1998; Everitt and Gill 1993).

Commuter Towns

Commuter towns have been defined as places with people living in rural areas but who are really part of an urban system. These places exist because of their amenity and relative location, some of which exist near urban recreation centres (Everitt and Gill 1993). These commuter towns have a rural setting surrounded by agricultural land. They are also occupied by middle-class commuters to cities (Robinson 1990). Commuter villages or 'bedroom communities' may also consist of middle-class retirees from urban areas. Commuter villages also attract workers as a result of affordable housing. As some places are surrounded by agricultural land, they may also consist of farm labourers and local tradesmen. Key characteristics include adjacency to urban centres and the availability of high quality, all-weather roads connecting the smaller bedroom towns to urban centres. Examples include Coaldale, Alberta, Carleton Place, Ontario, and Verchères, Québec. As highlighted in the recent Census, urban spillover growth in the corridor between Calgary and Edmonton is generating growth challenges in many small towns that now fall within urban commuting 'sheds'.

Mixed Economy Towns

Rural and small town places have been experiencing an accelerated pace of change and restructuring, particularly during the past ten to fifteen years. In particular, there have been changes to the local economic structures of these places stemming from globalization (Halseth 2004). Recessions, technological change, and restructuring of industries have forced towns to diversify in other resource sectors (Randall and Ironside 1996).

For example, after the mill in Chemainus closed in 1983, a new mill opened two years later with less than one-quarter of the original workforce (Barnes and Hayter 1992). The community responded by obtaining a provincial revitalization grant that was used to paint numerous murals depicting the town's past. Shortly after, there were plans to develop an artisan community that would provide enough activities to keep tourists in the community to develop a hospitality industry.

Fraser Lake and Granisle, B.C. are other examples of small towns that have become 'dual dependent' by dividing their employment between both mining and forestry sectors (Clemenson 1992). Yellowknife has also been identified as a town with a mixed economy. Yellowknife was originally a mining town, but then government, service, and amenity jobs developed after the city was selected as the capital of the Northwest Territories in 1967 (Bone 1998).

Discussion

Two important facets of small towns have been demonstrated. First, small towns represent a wide range of economic activity that has undergone rapid changes over the past few decades. Amongst many pressures experienced by small towns were the energy crisis of the 1970s and the recession of the 1980s. Mechanization and technology changes in plants have trimmed labour and have affected employment and population levels of some small towns. Transportation changes have also altered the relationships between rural and small town places and regional

centres that have encouraged commuting for employment and shopping. In other cases, resources have been depleted. However, other small towns have diversified their economic base.

The second facet obtained from the literature is that small towns engaging in different economic activities also have different economic and demographic characteristics. Each of these places consists of a population with varying characteristics that range from aging farming towns to young family-oriented populations in forestry and mining towns. It is important to acknowledge, however, that these demographic characteristics change over time as a community develops through different stages. Such changes will be explored in more detail in the next section.

Other small towns are described as places with high wages, most notably forestry, mining, and oil and gas towns. Other places have higher dependencies on government transfers, such as agricultural and tourism towns. Some towns have a substantial number of seniors. Furthermore, while much of the literature indicates that small towns will have limited services to provide employment opportunities for women, tourism towns have a much higher ratio of service sector employment for women. Research also indicates that some places are marked by part-time, seasonal employment such as places focused upon tourism and fishing. However, most places were associated with a particular economic sector by having a substantial proportion of their labour force in an industry. Some towns with mixed economies were defined as those with no dominant labour force sector. The notable exception was commuting towns that were defined by the proportion of their labour force commuting to another centre.

Consequently, previous literature highlights the diversity of rural and small town Canada. Some towns have become more specialized as a result of restructuring pressures while others have declined due to resource shortages or plant closures. In other cases, small towns have diversified their economic base to provide a range of employment opportunities for its residents (Randall and Ironside 1996; Clemenson 1992). Chemanius, Kimberly, and Tumbler Ridge were resource dependent towns in British Columbia that have diversified their economic base with tourism (Halseth *et al.* 2003; Everitt and Gill 1993; Barnes and Hayter 1992). In the case of Chemanius, murals were used to promote economic growth during a period of radical downsizing at the local forest products mill. Tumbler Ridge, hit hard by the closure of two major coal mines, has been capitalizing on dinosaur finds to develop a museum and 'dino camps' for children. In Elliot Lake, Ontario, the Elliot Lake Retirement Living Organization was formed after closure of mining operations (Farkouh 1999). After receiving a provincial grant, this organization acquired many of the homes and marketed them to retirees that enabled Elliot Lake to make the transformation from a mining town to a retirement community. In Altona, Manitoba, both the industries and the companies within industrial sectors were diversifying (Penner and Friesen 1990). This traditionally agricultural community expanded manufacturing sectors as D.W. Frieson & Sons Ltd., a national printing company, added new equipment, including an automated book line for publishing. Loewen Manufacturing Co. Ltd. is a manufacturer of farming equipment parts and expanded its operations locally and its markets worldwide in North America, Australia, and Europe (Penner and Friesen 1990). These examples not only point out options for diversification, but also that small towns have the capacity to change their economic base. Therefore, places that once were known as agricultural centres, for example, may now be driven by other economic activities in addition to continued agricultural production. However,

after exploring previous literature, it has become apparent that different authors have used different indicators for exploring specific issues of interest to them.

Categorizing Small Places by Economic Function - Clustering Approaches

Clustering small towns according to economic function provides a foundation to track the development of these places. In the past, rural areas were largely associated with agricultural development (Effland 2000). Research, though, changed these assumptions and explored rural and small town places associated with a range of economic sectors. More recently, towns associated with specific economic functions have diversified their economies and are no longer dependent upon a single sector. To track the development of small towns, it is important to first identify places according to economic functions. This is because economic sectors may be affected by different pressures that ultimately impact the economic and social well-being of residents, and hence, the retention of the population during times of social and economic restructuring. Methodologies are explored for clustering small towns according to economic functions.

The key to most clustering approaches has been to determine the specialization of a small town's economy. Randall and Ironside (1996) explored resource specialization by grouping small towns into six categories including places dependent upon forestry, wood processing, pulp and paper processing, fish and food processing, mining, oil and gas, and primary metals processing. Randall and Ironside (1996) explored specialization through employment indicators, but also described resource-based towns as export oriented.

Beshiri (2001a) examines primary sector employment for rural metro-adjacent, rural non-metro adjacent regions, and rural northern regions. Primary sector employment categories include agriculture, fishing and trapping, logging, and mining, oil / gas, and quarrying. The intent of Beshiri's paper, however, was to focus on primary sector industries, and therefore, was not intended to include processing or manufacturing sectors associated with primary sector resources. Instead, Beshiri (2001b) examined the manufacturing sector in a different paper. Beshiri (2001b) found that manufacturing jobs in rural and small town places are concentrated in traditional manufacturing sectors that process primary resources, such as fish, wood, pulp and paper, and minerals.

Ziebarth (2000) identifies a range of small towns such as agricultural processing plants, tourism, and new prison towns by examining economic development strategies, labour force characteristics, and housing needs. Cramer *et al.* (1993) identify small places based upon resource-based industries such as agriculture, forest products, ranching, recreation, tourism, mining, and energy development. After examining employment by industry, Kassab *et al.* (1995) grouped workers into traditional higher-wage industries such as high-wage manufacturing, mining, and government; agriculture, forestry, fisheries, construction and low-wage manufacturing; consumer services; and higher-wage service industries. Machlis *et al.* (1990) review a classification scheme based on four resource systems including forestry, tourism, mining, and agriculture. In this case, indicators used to identify the specialization of the economy included production and harvest levels, market value of products, and employment. Effland (2000) demonstrated the diversity of rural and small town places in the United States by

exploring employment by industry and occupation. By exploring the proportion of residents employed in different sectors, such as agriculture, mining, manufacturing, construction, finance, insurance, and real estate, and transportation and public utilities, Effland (2000) worked to dismiss the myth that rural and small town places are mostly associated with agricultural development.

The Interdepartmental Committee on Rural and Remote Canada (1995) explored demographic characteristics of rural and small town places by examining population change and population age structure. Employment characteristics of small towns were examined by looking at employment and unemployment rates, employment by industry, employment by age, and employment by primary industries. Indicators used by the OECD (1996) to cluster small towns within or between sectors such as agriculture, forestry, mining, fishing, manufacturing, and services, included labour force, income, employment, sectoral shares, productivity, and investment.

Robinson (1990) reviews a clustering approach to search for agricultural towns. Fifteen indicators were used in this clustering approach. Population characteristics were determined by the total population, population density, the percentage of rural population, and the percentage of population economically active in agriculture. Land use was explored by examining the percentage of arable land, the percentage of permanent (tree) crops, the percentage of pasture, the percentage of forest, and the percentage of other land uses (Robinson 1990). The remaining indicators focused specifically on classifying the degree of influence that agriculture had on these rural and small town places. These included tractors / head of population, fertilizer consumption / head of population, GDP per capita, agriculture as a percentatge of GDP, food and beverage as a percentage of imports, and food and beverages as percentage of exports (Robinson 1990). From this, correlations were explored between agriculture's proportional contribution to gross domestic product and agricultural employment as a proportion of all employment.

Everitt and Gill (1993) categorize small towns according to their function (Table 4.1). First, some small towns are grouped to exist because of their amenities and their relative location to other places that allow them to function either as dormitory towns, regional service centres, or even near-urban recreation centres. Second, small towns are grouped into various resource-based categories where the local economies are based on either non-renewable (mining) or renewable industries (forestry, fishing, tourism). The important distinction provided is that while service centres are located in agriculturally productive areas, resource towns are frequently isolated.

Table 4.1 Functional Classification of Small Towns - Everitt and Gill

Location - and amenity-dependent	*Examples*
Regional service centres	Ville Marie, Québec, Dauphin, Manitoba, Rosetown, Saskatchewan
Dormitory towns	Verchères, Québec, Carleton Place, Ontario, Airdrie, Alberta
Specialized manufacturing	Bridgetown, Nova Scotia, Taber, Alberta, Brooks, Alberta
Near-urban recreation	Bracebridge, Ontario, Collingwood, Ontario, Grand Beach, Manitoba
Retirement centres	Hamiota, Manitoba, Kelowna, B.C.**
Specialty retailing, life-style, and culture	Acton, Ontario, Elora, Ontario, Ganges, B.C.
Resource-dependent	*Examples*
Non-renewable	Thompson, Manitoba, Tumbler Ridge, B.C.
Renewable - fishing	St. George's, Newfoundland, Lunenburg, Nova Scotia
Renewable - forestry	Cornerbrook, Newfoundland, Hinton, Alberta
Renewable - tourism	Jasper, Alberta, Penticton, B.C.
'Ghost' towns	Bannerman, Manitoba, Moore Park, Manitoba, Sheridon, Manitoba, Bevan, B.C.

Source: Everitt and Gill 1993. **Kelowna has grown rapidly over the past ten years and is now a CMA.

It is important to note that there are no 'economic' sectors with Statistics Canada data to label places specifically as retirement centres, rather these types of places may be indicated by employment in service sectors, transfer payments, and age structure. Dormitory towns may be indicated by examining commuting levels.

On behalf of the U.S. Department of Agriculture, Economic Research Service, Cook and Mizer (1994) classify non-metro counties into farming-dependent counties, mining-dependent counties, manufacturing-dependent counties, government-dependent counties, services-dependent counties, and non-specialized counties (Table 4.2). The economic classification of these non-metro counties was based upon the percentage of the labour force employed within a particular sector. From this foundation, other descriptive indicators were used to further describe non-metro counties grouped by economic sector. Additional descriptive indicators included population characteristics, settlement patterns, income and other employment characteristics, and education levels. The population structure was examined by exploring variables including population numbers, population change, population increase and decrease, and population density. Economic structure of counties was explored by looking at per capita income, family income, earnings, change in earnings, employment and unemployment rates, job growth, total earnings, sector earnings, industrial activity, and worker population ratio.

Table 4.2 ERS Typology for Rural Diversity I

Cluster Category	Characteristics
Farming dependent counties	remotely located, population decline through out-migration, youth out-migration, high ratio of dependent population to working adults, and economic base declined, job losses.
Mining dependent counties	specialized economies in coal, gas and oil, and metals, population decline through out-migration, loss of mining jobs.
Manufacturing dependent counties	urban orientation, metro adjacent, densely populated, economies grew, manufacturing jobs increased most in non-urban areas.
Government dependent counties	specialized in government activities, population growth, growth in jobs, levels of economic well-being lower.
Services-dependent counties	growth in service sector jobs, service sector earnings have grown, includes recreation centres, consumer centres, and trade and service centres.
Non-specialized counties	did not qualify for economic specialization, experienced job growth, include places with small economic bases and high poverty as well as places with strong economies.

Source: Cook and Mizer 1994.

As such farming dependent counties in the United States were remotely located. However, U.S. farming counties were also associated with out-migration, especially with youth, job losses, a declining economic base, and a high ratio of a dependent population to working adults (Cook and Mizer 1994). Mining dependent counties were identified as those with economies dependent upon coal, oil and gas, and metals. These places also experienced out-migration and loss of mining jobs. Manufacturing counties in the U.S. tended to be urban oriented and adjacent to metropolitan areas. Manufacturing counties were also experiencing a growing economy. While government dependent counties experienced a growth in jobs, these counties had lower levels of economic well-being. Recreation centres and service centres have been growing in both the number of jobs provided and in the income earned in service-dependent counties. Finally, this typology identified non-specialized counties that did not have any economic specialization. Of interest, this typology did not identify any counties that were specifically dependent upon the forest or fishing sectors. Instead, these economic activities were most likely associated with manufacturing activities.

In addition to classifying counties by economic type, Cook and Mizer (1994) classified counties by policy type to assist rural policy making. Counties are classified into five policy types including retirement destination counties, federal land counties, commuting counties, persistent poverty counties, and transfer dependent counties (Table 4.3). Retirement-destination counties had a greater proportion of seniors and offered services associated with recreation and resort towns. Federal land counties had land dominated by federal ownership. These areas were sparsely populated. Growth in service and government related jobs was speculated to largely reflect recreational and land management needs. Commuting counties tended to consist of smaller land areas and were adjacent to metropolitan areas to facilitate the flow of commuters between places. Persistent poverty counties had high rates of poverty that was indicated by low incomes, unemployment rates, low levels of education, and a less urban oriented population. Finally, transfer-dependent counties consisted of a greater proportion of residents drawing from social security, unemployment insurance, or government pensions. These counties tended to be remote and sparsely populated, consist of poverty characteristics, and may also contain a large share of seniors. As such, Cook and Mizer (1994) noted that some counties fall into more than one category. For example, some counties could be both designated as retirement-destination

counties and as transfer-dependent counties. Other counties could be identified as both persistent poverty and transfer-dependent. This policy approach for clustering small towns is similar to the 'functions' approach applied by Everitt and Gill (1993) who also identified commuting and retirement centres, as well as service centres.

Table 4.3 ERS Typology for Rural Diversity II

Cluster Category	Characteristics
Retirement-destination counties	%15 or greater increase in population aged 60+, also serve as recreation or resort sites, also attract younger populations, population growth, high growth in earnings and jobs.
Federal lands counties	lands dominated by federal ownership, larger land areas, sparsely populated, population growth, growth in service / government jobs reflecting recreational and land management needs.
Commuting counties	workers commuting to jobs in other counties, counties have smaller land areas, metro-adjacent.
Persistent poverty counties	have poverty rates of 20% or higher, smaller, less urban population, disproportionate at risk people - minorities, female-headed households, high school drop outs, and disabled people, low incomes, and unemployment.
Transfers-dependent counties	government transfer payments - social security, unemployment insurance, medicare, medicaid, food stamps, government pensions, and welfare benefits, remote and sparsely populated, poverty characteristics, and include a large share of seniors.

Source: Cook and Mizer 1994.

Hawkins (1995) clustered places across Canada into seven typology categories according to a range of characteristics by using a multivariate analysis at the Statistics Canada Census Division level. Hawkins (1995) explored demographic characteristics of small towns in Canada by examining age structure, population change, and even migration by examining the percent of households who occupied same dwelling five years ago. She was also able to explore the attractiveness of a particular area to youth or retirees. To examine youth, Hawkins subtracted residents between the ages of 25-34 in 1991 from those aged 15-24 in 1981. To examine retirees, residents over 65 years of age in 1991 were subtracted from the population over 55 years of age in 1981. Economic indicators included overall employment rates, including employment rates by sex, unemployment rates, including changes in unemployment rates, as well as a breakdown of the labour force according to different sectors. Furthermore, Hawkins (1995) used such indicators as percent of males and females with post secondary education. However, Hawkins (1995) acknowledges that services and service provision are the main data gaps. For example, while it is possible to identify teachers and doctors per capita based on Census occupation data, other services are more difficult to identify.

From these indicators, Hawkins (1995) clustered the Census Divisions into seven categories (Table 4.4). *Primary settlements* are CDs that contain major metropolitan areas. Primary settlements contain a large urban population, high incomes, high education levels, a skilled workforce, and a service-based economy. CDs categorized as *urban frontiers* contain a large city, such as Québec City. They consist of similar but less extreme characteristics that are found in primary settlements. *Rural enclaves* contain CDs with limited economic opportunities, declining sectoral employment, low income levels, a high percentage of families below the low income cut off level, and a high rate of dependency on government transfer incomes. These CDs

also consist of below average education levels, although youth out-migration appears to be limited. *Rural Nirvana* CDs experience the out-migration of urban residents into the countryside. There are high skill and income levels, and a commuting labour force. *Agro-rural* areas are those marked by rapid population decline, youth out-migration, moderate incomes, as well as a dependence on government services for employment and transfer payments for income. *Resourced areas* are dominated by the presence of oil and mining with young family structures, good incomes, and a high proportion of the population with post-secondary education. Finally, CDs dominated by a young population structure, mining and government employment, low levels of education, and low to moderate incomes are categorized as the *Native North*. A limitation to this clustering approach was the use of Census Divisions (CDs) that mask variations at a smaller scale.

Table 4.4 Hawkin's Typology of Small Towns Across Canada

Cluster Category	Characteristics
Primary settlements	Large urban population, high incomes, high education levels, skilled workforce, service-based economy
Urban Frontier – Less extreme than primary settlements	Large urban population, high incomes, high education levels, skilled workforce, service-based economy
Rural enclave	Declining sectors (manufacturing, forestry, fishing), low income levels, high percentage of families below low income cut off, high government transfer income dependency, low education levels, good demographic structure, portion of young population
Rural nirvana	High levels of commuting, high income levels, high skills levels, economic and social integration with nearby cities
Agro-rural	Rapid population decline, youth out-migration, moderate incomes
Resourced Areas	Dominant sectors (mining and oil), young families, good and stable income, high levels of post secondary education
Native North	Young population structure, dominant resource sector, secondary sector, low levels of post secondary education, low to moderate – but rising incomes

Source: Hawkins 1995.

Few studies were 'time series' studies to look at changes over time. Furthermore, researchers tended to apply indicators to explore specific issues (Table 4.5). For example, many researchers used employment and income indicators to explore dependencies of a particular place upon a resource sector. However, this approach alone could not identify towns that function as retirement centres or commuting centres. Similarly, Hawkins (1995) explored socio-economic characteristics to group small towns into different categories, but also does not account for emerging centres that serve a retirement population. Everitt and Gill (1993) classified non-resource based towns, such as retirement and commuting centres, by looking at amenities, distance to urban centres, and age structure. Initially, Cook and Mizer (1994) used employment indicators to cluster non-metro counties. But then, they examined economic indicators and socio-economic descriptors to cluster non-metro counties for policy purposes. This allowed them to explore other types of towns that have important implications for policy development, such as retirement or poverty centres, which are not solely determined by examining employment by sector. However, Cook and Mizer examined these characteristics at the county level, which could mask individual characteristics of small towns. A longitudinal approach is needed to explore changes in rural and small towns over time at the local and regional level.

Table 4.5 Range of Approaches for Clustering Small Towns

← Range of Approaches →			
Employment / Income	Socio-economic Characteristics	Function	Policy
(Many)	(Hawkins)	(Everitt / Gill)	(Cook / Mizer)

Discussion of Indicators of Characteristics of Small Towns

The previous section has demonstrated a wide range of clustering approaches for rural and small town places. While some common indicators have emerged, these approaches identify a range of characteristics that have not been consistently examined to identify places according to their economic function. Moreover, there have been a range of methods applied to examine these characteristics. Clearly, the most common indicators used included employment and income.

Employment Indicators

Employment indicators allowed previous research to characterize a small town according to its dependence or specialization in a given economic sector or industry for employment (Randall and Ironside 1996; Cramer *et al.* 1993; Everitt and Gill 1993; Ehrensaft and Beeman 1992; Gill and Smith 1985; Himelfarb 1976). Classification of places ranges from the proportion of the community labour force in standard industrial sectors to more sophisticated measures of industrial specialization and diversification. For example, one method to determine the specialization of a town included "comparing the occupational or industrial characteristics of local workers to the same characteristics of the statistical standard such as a region or nation" (Humphrey 1990: 36).

Other places were identified as resource dependent if "employment in the resource sector with the greatest number of employees exceeded employment in any other two-digit standard industrial sector or employment in a combination of all the resource sectors exceeded employment in the combination of health and education services" (Randall and Ironside 1996: 24). Machlis *et al.* (1990) found that resource industries in timber and mining employed a high percentage of the local population compared to the provincial average.

Some studies have used indicators to explore resource dependency of small towns according to a particular resource sector. For example, Williamson and Annamraju (1996) used an economic base methodology to examine Census Subdivisions (CSDs) in the 1991 Canada Census to determine the size of the economic base of each CSD, as well as the percentage of the economic base accounted for by the forest products sector. After examining 6,006 CSDs, Williamson and Annamraju (1996) found 337 CSDs in Canada where the forest products sector accounts for at least 50% of the economic base of the community (Table 4.6).

Table 4.6 Degree of Reliance of Rural Communities on the Forest Products Sector by Province, 1991

Province	Total Population	Slight or no reliance on forestry[1]	Moderate reliance on forestry[2]		Heave reliance on forestry[3]	
		% of pop.	% of pop.	No. of comm.	% of pop.	No. of comm.
B.C.	3,282,061	30.9	54.7	180	14.4	89
Alta.	2,545,553	93.0	6.3	50	0.7	3
Sask.	988,928	92.2	7.2	39	0.6	6
Man.	1,091,942	95.5	3.5	21	1.0	5
Ont.	10,084,885	92.2	6.6	177	1.2	55
Que.	6,895,963	74.5	22.7	565	2.8	127
NB	723,900	45.2	45.4	128	9.4	40
NS	899,942	74.2	22.8	31	3.0	7
Nfld.	568,474	77.1	22.1	85	0.8	35
Canada	27,296,852	78.4	18.2	1,294	3.4	337

[1] Communities with less than 10% of their economic base in forestry. [2] Communities with 10-49% of their economic base in forestry. [3] Communities with 50% and greater of their economic base in forestry.
Source: Williamson and Annamraju 1996.

Williamson and Annamraju (1996) also examined the distribution of communities that are heavily reliant on the forest sector by examining the size of small towns. While most small towns dependent on the forest sector were located in British Columbia, Québec, Ontario, and New Brunswick, British Columbia had a greater proportion of forest dependent towns with a population greater than 4,999 people. Thus, this approach was able to explore issues of dependency and town size (Table 4.7).

Table 4.7 Distribution of Communities Heavily Reliant on the Forest Products Sector by Size of Community, 1991.

Province	Population Range of Community			
	less than 1,000	1,000 - 4,999	greater than 4,999	Total
	Number of communities			
Nfld.	4	1	-	5
NS	-	6	1	-
NB	8	31	-	40
Que.	78	43	6	127
Ont.	22	25	8	55
Man.	2	2	1	5
Sask.	4	2	-	6
Alta.	-	1	2	3
B.C.	26	33	30	89
Total - Canada	144	144	49	337

Source: Williamson and Annamraju 1996.

Beshiri (2001a) used the location quotient to compare employment concentration of a sector in a given location to the industry's employment concentration in a larger context, such as the province or country. Employment concentration is defined as the "percent of the workforce employed in a given sector" (Beshiri 2001a: 3). The location quotient for primary employment in RST areas is equal to the [number of RST individuals employed in the primary sector / number of RST individuals employed in all sectors] divided by [total number of individuals employed in the primary sector / total number of individuals employed in all sectors] times 100.

Table 4.8 Location Quotients of Relative Intensity of Employment by Industry in Rural and Small Town Areas Compared to the Province

Industry	Canada	Nfld	PEI	NS	NB	Que	Ont.	Man.	Sask	Alta	B.C.
Total Primary	342	167	198	195	183	382	422	309	209	255	288
Agriculture	389	109	183	192	192	408	472	321	221	338	244
Fishing and trapping	405	209	22	242	204	na	0	na	na	na	0
Logging	342	205	na	207	189	407	477	291	219	214	354
Mining, oil, and natural gas	171	38	na	85	145	167	194	221	120	90	354
Manufacturing	98	137	119	151	134	121	96	74	67	77	109
Traditional	127	147	131	163	142	151	113	74	69	82	124
Complex	61	89	44	107	57	65	74	53	40	4	13
Construction (excluding related services)	117	125	123	111	118	122	136	116	87	99	113
Transportation and storage	110	100	114	99	101	116	127	90	92	102	90
Communications and utilities	74	75	61	74	61	55	107	75	48	63	61
Trade (wholesale and retail)	91	97	83	96	90	91	96	85	86	86	85
Finance, insurance, and real estate	58	50	69	66	75	68	52	62	72	61	61
Services (sub-total)	84	86	78	84	89	79	85	80	77	86	95
Services related to primary industries	202	128	129	137	137	185	223	224	156	164	205
Services related to construction industries	25	na	na	na	na	na	0	na	na	0	0
Business services	42	43	50	53	52	39	45	36	47	40	59
Educational services	90	98	85	90	100	80	84	89	83	90	108
Health and social services	94	81	84	89	96	87	104	89	84	89	90
Accommodation, food & beverage services	97	90	74	89	90	104	100	79	76	96	116
Other services	88	96	92	95	91	92	86	78	72	88	94
Public Administration	80	79	60	66	79	63	86	82	63	89	97
Federal and Prov. government	61	82	60	59	86	35	56	74	53	85	78
Local government	90	77	62	73	77	74	105	85	67	90	106
Total RST	100	100	100	100	100	100	100	100	100	100	100

Source: Bollman, R., R. Beshiri, and A. de Champlain. 2003. The Rural and Small Town Labour Market. In: The New Countryside: Geographic Perspectives on Rural Change, edited by K. Beesley, H. Millward, B. Ilbery, and L. Harrington, 214-239. Brandon: Brandon University.

A location quotient higher than 100 indicates a high employment concentration in rural and small town places compared to the overall economy (Table 4.8). This also indicates that such places are dependent and specialized in a particular industrial sector, which indicates that it is an export activity (Beshiri 2001a).

Other approaches used various methods to explore diversification of small town economies. On the basis of the percent of the labour force in a specific industry, Ehrensaft and Beeman (1992) note that few nonmetro Census Divisions (CDs) have dual specialization. Instead, most of these areas are dependent upon one sector.

Another descriptor of rural and small town places examined was employment rates. Many people are attracted to resource towns for employment opportunities (Robinson 1962). In the past, some of these small towns have shown low unemployment rates. This may be due to company housing policies where individuals that are no longer employed with the company are not eligible for company housing. With limited housing options, some unemployed individuals may have to leave town. Hawkins (1995) also cautions that low unemployment rates may not always indicate that an economy is doing well. Instead, those without jobs may move to places where they feel they have a better chance of obtaining employment. However, some resource-based communities have been characterized by higher unemployment and seasonal fluctuations (Everitt and Gill 1993). Consequently, rural and small town places receive more transfers partly due to these higher unemployment rates (Rupnik *et al.* 2001).

Previous research also indicates that it is important not just to examine employment by industry or occupation, but also to examine the relationship between employment by industry and descriptors such as gender. Randall and Ironside (1996) note that employment in resource-dependent communities is male-dominated. There are limited employment opportunities in resource towns, particularly in the resource sector (Reed n.d.; Everitt and Gill 1993; Himelfarb 1976; Porteous 1976; Riffel 1975). Hawkins (1995) observed that low female employment rates are mirrored by high rates of unemployment, which suggests that there is a lack of employment opportunities in these places. In the resource industry, women have traditionally been excluded from all work except office duties (Peacock 1985; Lucas 1971). As noted earlier, women search for employment in the service sector where they find lower wages. These jobs tend to be part-time and non-unionized (Gibson-Graham 1996). However, female participation in core mining and construction industries has been increasing slightly (Krahn and Gartrell 1981).

Reed (n.d.) cautions that Census definitions have not capture the range and type of female participation in resource sectors. For example, women Reed identified to be working in administration, as well as technicians, foresters, and planners at the Ministry of Forests District Office were not classified as forestry jobs by Census definitions. Another challenge identified in examining employment as a variable is that categories of employment have changed over time. Furthermore, while trades have been an important occupation, particularly in resource towns, skilled occupation variables have not always included trades and professional employment (Hawkins 1995). It is also important to determine whether the labour force and employment data refer to 'place of residence' or 'place of work' (OECD 1994).

The timing of data collection for the Canada Census also poses limitations for interpreting employment by industry or occupation. For example, certain forestry workers, such as loggers, may be unemployed during the spring breakup period as Census data is collected (Stamm 2004). Furthermore, since the Census is conducted in early June, the groundfish season has not begun, which may exlude many inshore, part-time fishermen, whose main employment at other times may not be fishing. Therefore, the Census data may not accurately reflect the number of people dependent upon a particular resource sector. Furthermore, Sinclair (1992) found discrepancies surrounding employment in the fishing industry after comparing data from Statistics Canada, the Department of Fisheries and Oceans and the Task Force on Atlantic Fisheries. While Statistics Canada data was deemed to be the most reliable, it was also felt that it offered the highest estimation of fishing occupations. It is important to acknowledge that Census data will be outdated after it is collected. A town can experience numerous changes shortly after the collection of data, as well as between Census periods, such as the loss of government service jobs or restructuring of industries such as forestry, agriculture, or tourism. Consequently, it is important to pursue a longitudinal approach for examining places.

Table 4.9 shows a comparison of industry classification used by Statistics Canada in recent years. The move to adopt the NAICS (1997) for 2001 Census data results in a significant reorganization of employment categorizations. For example, under the SIC, each of the major primary sector industries were reported as separate categories, but under the NAICS the renewable sectors are clustered into one category, while the non-renewables are clustered in another. Also of note is that there are more industry categories used in the NAICS scheme, to reflect the expanding diversity of the economy.

Table 4.9 Comparison of SIC and NAICS Classification Schemes Used by Statistics Canada for Employment

2001 Census 1997 North American Industry Classification System (NAICS)	1996 Census 1980 Standard Industrial Classification System (SIC)
	A Agricultural and related service industries
11 Agriculture, forestry, fishing, and hunting	B Fishing and trapping industries
21 Mining and oil and gas extraction	C Logging and forestry industries
22 Utilities	D Mining (including milling), quarrying and oil well industries
23 Construction	
31-33 Manufacturing	E Manufacturing industries
41 Wholesale trade	F Construction industries
44-45 Retail trade	G Transportation and storage industries
48-49 Transportation and warehousing	H Communication and other utility industries
51 Information and cultural industries	I Wholesale trade industries
52 Finance and insurance	J Retail trade industries
53 Real estate and rental and leasing	K Finance and insurance industries
54 Professional, scientific and technical services	L Real estate operator and insurance agent industries
55 Management of companies and enterprises	M Business service industries
56 Administrative and support, waste management and remediation services	N Government service industries
	O Educational service industries
61 Educational services	P Health and social service industries
62 Health care and social assistance	Q Accommodation, food and beverage service industries
71 Arts, entertainment and recreation	
72 Accommodation and food services	R Other service industries
81 Other services (except public administration)	
91 Public administration	

Source: Statistics Canada 2001.

Income Indicators

Income indicators have been an important variable to examine different community characteristics across different economic sectors. Income indicators have also been able to provide clues about other characteristics. For example, higher incomes have been associated with jobs that frequently require higher levels of education (Kassab *et al.* 1995).

Higher incomes in resource towns are thought to be motivating factors for people to move and stay in these places (Iverson and Maguire 2000; Williamson and Annamraju 1996; Krahn and Gartrell 1981; Himelfarb 1976; Riffel 1975; Robinson 1962). However, not all small towns are characterized by high incomes. Previous research noted that higher incomes tended to be associated with jobs in the oil and gas industry, as well as the forest industry. Towns with a high percentage of service sector employment, such as tourism towns, tend to have lower incomes (Hall and Page 1999). However, Kassab *et al.* (1995) indicated that the gap between incomes earned in resource sectors and service sectors may be closing due to restructuring processes. As mechanization occurs, middle-waged jobs that required skilled labour are deskilled and may be replaced with lower-paying jobs in resource sectors depending on the skill level required to operate the new technology. At the same time, wages in the service sector have been increasing. If this is the case, then income may become a less useful indicator to cluster communities.

Examining transfer payments to rural and small town places may be important to identify characteristics of small towns with high unemployment rates, a higher proportion of children, or even a higher proportion of retirees receiving Canada and Québec Pension Plan benefits (Rupnik *et al.* 2001). Consequently, it may be expected that a small town with high transfer payments and an aging population, may be classified as a retirement centre. However, Hawkins (1995) expects that elderly in settlements attractive to retiring couples will have higher incomes than elderly people in settlements suffering population decline.

Discrepancies have been found between the income earned by men and women, particularly in resource dependent towns. High incomes are mostly associated with jobs held mostly by men in the resource industry. Women are more likely to find employment in the secondary labour market in the service sector where they find lower wages (Randall and Ironside 1996). However, while many clustering approaches have examined employment and gender, they have not examined income and gender relationships.

Industry Indicators

Resource-dependent communities have been the source of extraction of exports, such as manufactured products made from lumber processing, pulp and paper processing, and fish processing (Randall and Ironside 1996; Williamson and Annamraju 1996; Barnes and Hayter 1992; Bradbury 1988). In addition to exports, other industrial indicators include production levels and commodity prices (Machlis *et al.* 1990). Unfortunately, territorially disaggregated production data is not good for many countries (OECD 1994).

Small towns, especially those dependent upon a resource sector, have been influenced by commodity prices (Himelfarb 1976). Robinson (1962) established the effects commodity prices can have on a local economy as the Soviet Union reportedly flooded world markets with aluminum, generating lower prices than Alcan. This posed difficulties for Kitimat, B.C. Data on commodity prices, however, may be difficult and complex to obtain and interpret. Data for commodity prices, production, and harvesting levels, is useful to explore dependence of towns on various resource sectors. But it is important to keep in mind that these indicators are not directly useful for exploring new types of small towns, such as retirement towns, tourism towns, or commuting towns. Furthermore, while industry indicators are useful for tracking pressures on a particular community over time, it is strongly felt that identifying towns by economic sector can be accomplished by examining other indicators, such as those associated with employment, income, or commuting.

Other Indicators

Some clustering approaches have used indicators associated with specific resource sectors. Such examples included the number of tractors per population, the consumption of fertilizer per population, and harvesting levels in the forest and agricultural sectors. The proportion of land designated for a specific resource use has also been used.

But traditional economic indicators may no longer be sufficient to cluster small towns. In the past employment and income indicators were used to cluster small towns by resource type. New community types have been emerging, most notably retirement towns and commuting towns (Effland 2000; Cook and Mizer 1994; Everitt and Gill 1993). Employment and income alone, though, cannot identify these community places. Instead, additional indicators are required, such as transfer payments, age structure, worker-population ratios, and commuting levels between places.

Data Availability Issues

One of the challenges that researchers and analysts face is the access to and use of appropriate data to carry out an exercise involving the classification of communities by economic activity, and changes in economic activity over time. The Census is the most reliable and comprehensible data available, in terms of its relative consistency from one census period to the next, in terms of its consistency from place to place, and in terms of its availability at the smallest of geographic places. Almost every other type of data collected nationally (such as the monthly labour force survey, or special studies on population health) is not available at the micro level of small towns or settlements less than 10,000, and the data may not necessarily be available consistently over a period of time in terms of when the surveys or studies are carried out, and the definitions used. For data collected by provinces, there are problems with comparability from one province to the next in terms of what they collect, what is and is not available, and how they define each variable or piece of data. For data collected at the municipal level, such as property taxes or property assessment values, the data is typically not available from one source for all municipalities. There may also be limitations based on the definitions applied to specific types of data, and the availability of the data in terms of consistency in collection from one place to the next.

Geographic Unit of Analysis

Most of these clustering approaches, though, have focused upon the Census Division or county level. By examining regional data instead of more localized data, findings may mask individual community characteristics. Regional data may also hide the extent of commuting that may occur between places within a particular Census Division. Regional data may also indicate that a region, overall, is diversified, while the communities within the region are specialized as different resource towns, such as forestry or fish processing. Approaches have not comprehensively examined data sets to look at both local and regional contexts, as well as the influence of distance and isolation through metropolitan influences over time. A longitudinal approach is also lacking that would help decision makers project local needs, such as housing demands. Many clustering approaches have only examined Census data over two census periods. This is not long enough to track changes in community development.

Conclusion

This literature review has demonstrated the diversity of rural and small town places across Canada. Small places are characterized by different demographics, employment characteristics, land-use, geographic size, and location. Therefore, it is important to keep in mind that each of these small localities may face different challenges that will impact the types of services needed

and their ability to meet those needs. Within this context, however, Randall and Ironside (1996: 21) make an important distinction that while individual communities within a region are often highly specialized in one sector, the regions, representing many places, are macro-diversified and depend on a range of resources and manufacturing sectors, such as agriculture, forestry, mining, fishing, government, and manufacturing. Some studies have examined this larger regional context by using the Census Division (CD) as the level of geographic inquiry (Alasia 2004; Hawkins 1995). This current study is restricted to the classification of small places, *within* these larger regional places.

Classifying Communities into Economic Clusters Using Concentration of Labour Force Activity

In this section, we describe the rationale used for identifying an appropriate measure of economic activity classification for small communities in rural and small town Canada. While there are a variety of potential measurers, working with the Census makes good sense because it is universally accessible and because it is available consistently every five years. Information in the Census about the type of industry in which each person in the labour force is employed is particularly useful, but it does have some limitations. These include:

- the 1980 Standard Industrial Classification (SIC) is not available for each of the census years; for example, in 1986 the data in both print and electronic form has been collapsed into fewer categories, including having all of the primary resource sector employment classified as one group;

- prior to the 2001 Census a decision was made to adopt the North American Industrial Classification System (NAICS), which also collapses the primary resource sectors into one group; and

- it is not always possible to determine if labour force activity in some sectors is closely linked to others; for example, a person working in a fish processing plant would be classified as being in the manufacturing industry; however, in terms of understanding the concentration of economic activity in the fishing sector it would be useful to have this person classified in the fishing sector (but the fishing industry data from the Census is based on the primary resource activity of harvesting fish and related activities).

Despite these limitations, the labour force by industry type is the most readily available data for classifying communities into economic activities based on how many people work in a particular sector.

This clustering approach for small places should focus on the economic activity of any given community - an approach used in many other studies, noted earlier. Table 4.10 provides a list of the labour force activity (by industry type) and age related variables that will be applied to cluster small places across Canada. Exploring employment by industry provides a measure of the population dependent upon a particular economic sector. Age structure assists in the identification of retirement centres.

Table 4.10 Variables for Community Classification - 1996 Census, Statistics Canada

EMPLOYMENT BY INDUSTRY	AGE COMPOSITION
All industries, pop. 15 yrs +	Total population
-Agricultural & related service industries	-Population aged 65 and over
-Fishing and trapping	
-Logging & forestry	
-Mining, quarrying, and oil	
-Manufacturing	
-Dynamic Services	
-Transportation & storage	
-Communication & other utilities	
-Wholesale trade	
-Finance & insurance	
-Real estate & insurance agent	
-Business service	
-Non-market Services	
-Government service	
-Education	
-Health & social service	
-Tourism	
-Accommodation, food & beverage	

Source: Statistics Canada 1996.

For the purpose of looking at the current economic activity of rural and small town places, the 2001 Census is the most recent data. Custom tabulations of the 2001 Census data to convert the NAICS coded data to the SIC codes was used to obtain the breakout of data into each primary resource sector, and to ensure that there was some consistency in the classification coding with 1996 and 1991 census years (for examining changes over time).

The literature is not consistent in its treatment of defining what percent of the labour force employed in a given sector should be used as a cutoff for determining 'concentration'. Clemenson (1992) used 30% as a cutoff for rural and small town places in Canada. Elo and Beale (1985) used 20% for rural communities in the United States, as did Wilson (2004) in looking at mining communities in the United States more specifically.

Using this 20% to 30% window as a starting point, we computed the percent of the labour force in each of the following sectors:

- agriculture,
- fishing,
- forestry,
- mining,
- tourism (accommodation, food, and beverage services),
- manufacturing,
- dynamic services (transportation, communication, wholesale, finance, insurance, real estate, and business services), and
- non-market services (government, education, health, and social services).

We also computed the percent of the population age 65 and over as a proxy for 'retirement' communities as an economic activity.

A series of coding tests were administered to determine an appropriate 'cutoff' for our population of small communities with Weak or No MIZ status. The iterations included assigning an economic activity to a community if it had 10% or more, 15% or more, 20% or more, 25% or more, and 30% or more, of its labour force in a given sector (and population 65 years of age or more). However, to accommodate the fact that some communities may have more than one concentration of economic activity, a community was classified as 'dual specialization' if this was the case (for example, a community might have 25% of its labour force in agriculture, and another 25% in dynamic services). Similarly, if it did not have any concentrations at the chosen threshold, it was classified as 'non-specialized'. This approach is consistent with the work of Ehrensaft and Beeman (1992) and Randall and Ironside (1996).

The results of each iteration are shown in Table 4.11 for the entire group of 1,432 communities (both Weak and No MIZ communities, and all within the 50 to 4,999 population range). As we increase the threshold (from 10% incrementally up to 30%), several things unfold:

First, when the threshold is so low, many communities have at least 10% employed in at least 2 different sectors or 1 sector plus retirement, so that unless one sector is so dominant that it suppresses everything else to below 10%, the result is that you see very little specialization of economic activity under this criteria.

Second, at the 20% threshold, many communities have at least 20% in one sector and employment in other sectors is spread thinly below the 20% mark. However, even at this threshold, there are still more than half the communities with at least 2 or more 'dominant' sectors (763 in dual specialization).

Table 4.11 Economic Type of Community by % of Labour Force Employed in Specific Sectors (and % age 65+), All Communities, 2001

Economic Type	Percent of Labour Force Employed in Sector				
	10%	15%	20%	25%	30%
Agricultural	6	80	206	277	282
Fishing	4	6	14	19	25
Forestry	0	1	3	10	5
Mining	0	4	18	26	19
Tourism	2	4	11	15	11
Manufacturing	1	21	83	120	108
Dynamic Services	2	11	39	63	65
Non-market Services	34	95	230	306	293
Retirement	12	17	24	45	45
Dual Specialization	1367	1187	763	372	144
Non-Specialized	4	6	41	179	435
Total	1432	1432	1432	1432	1432

Source: Statistics Canada 2001.
Note: If a community has at least two sectors with 25% of its labour force employed in it, the community is classified in dual specialization only (it is not also classified in both of the sectors in which it has at least 25% of the labour force employed).

Third, at the 25% threshold, much of this 'dual specialization' begins to disappear, but one begins to see an increase (to 179) in the number of non-specialized communities (meaning that they have no sectors with at least a 25% concentration).

Fourth, at 30%, the threshold is quite high, so there are many communities (almost one-third) which have no specialization under this criteria. It is interesting to note, however, that there are still 144 communities which would be classified as dual specialization, even at this high threshold.

Given this pattern, our examination of the classification of small communities into economic activities makes most sense at the 25% of labour force (and of those age 65 and over) threshold. Reflecting on the distribution of communities at the 25% threshold, some interpretations and explanations for the 'distribution' are required. First, many of the 108 manufacturing communities are likely related to a primary sector. For example, many manufacturing communities in Newfoundland and Labrador are likely so because of the presence of fish processing plants. Second, the overall relatively low number of communities in the primary sector (other than agriculture) can be attributed to a number of factors. Over the years, the labour force in resource sectors has been shrinking, and thus fewer communities are at the 25% or more threshold, and they may in fact have more than 25% of the labour force working in another sector such as non-market services, or they may no longer have any specialization whatsoever. In addition, the communities in our study are only those with a Weak or No MIZ status. There are many other small communities with a Strong or Moderate MIZ status which are not part of this study, which would be mining, forestry, and fishing communities. Furthermore, the communities in this study are restricted to those with less than 5,000 population. There are other communities in the 5,000 to 9,999 population range which fall under the broad 'rural and small town Canada' definition, which are excluded but which are also fishing, forestry, and mining communities.

Table 4.12 provides a summary of the distribution of communities at this 25% threshold, by both MIZ and population clusters. There are relatively few variations in the distributions within each of these two clusters. However, there are relatively more agricultural and non-market services communities within the Weak MIZ group and relatively more dual specialization communities within the No MIZ group. There are relatively more agricultural and dual specialization communities within the population group 50-2,499, and relatively more non-market and non-specialized communities in the larger population group.

Table 4.12 Distribution of Economic Type of Community by (25% or more of the labour force employed in specific sectors and % age 65+), Communities with Weak and No MIZ Status, and Communities with Less Than 2,500 and with 2,500-4,999 Population

Economic Type	Total		Weak MIZ		No MIZ		Less than 2500		2500-4999	
	#	%	#	%	#	%	#	%	#	%
Agricultural	277	19.3	173	21.3	104	16.8	260	20.0	17	12.7
Fishing	19	1.3	10	1.2	9	1.5	19	1.5	0	0
Forestry	10	0.7	6	0.7	4	0.6	9	0.7	1	0.7
Mining	26	1.8	16	2.0	10	1.6	21	1.6	5	3.7
Tourism	15	1.0	5	0.6	10	1.6	14	1.1	1	0.7
Manufacturing	120	8.4	74	9.1	46	7.4	113	8.7	7	5.2
Dynamic Services	63	4.4	29	3.6	34	5.5	62	4.8	1	0.7
Non-market Services	306	21.4	203	25.0	103	16.6	255	19.6	51	38.1
Retirement	45	3.1	18	2.2	27	4.4	43	3.3	2	1.5
Dual Specialization	372	26.0	150	18.5	222	35.9	352	27.1	20	14.9
Non-Specialized	179	12.5	129	15.9	50	8.1	150	11.6	29	21.6
Total	1432	100.0	813	100.0	619	100.0	1298	100.0	134	100.0

Source: Statistics Canada 2001.

Limitations of the Framework

It is important to emphasize that this framework (as with any framework or approach for analysis of places) for clustering small communities in rural Canada has some limitations. These include:

Given the dynamics of economic change over time, individual communities or CSDs may move in and out of categories over time. For example, a community with 25% of its labour force employed in mining in 1986, for example, may have less than that in 2001, and thus be classified as a different type of community. The framework provides a tool for assigning a given community to a given type of economic activity at any one point in time.

The characteristics of a particular economic cluster may change over time. As communities age and mature and move through different economic development processes and cycles, their social and economic characteristics may change. This will be explored more in the next section - but the key point is that the variables identified (and their values) provide a basis for monitoring changes in an economic cluster over time.

The selection of the 25% level as the threshold for assigning a community to a particular type of economic activity might need to be reviewed and modified at some future time. Flexibility in the approach is required. For example, as our economy changes over time, there might be a need to adopt different thresholds other than 25%. As employment levels decline in the primary sector, it might be necessary to think about lowering the threshold for a community to be assigned to a particular resource sector. There are examples of this practice, where frameworks and models are fine-tuned without dropping the core principles employed. One example would be the ongoing modifications made to the calculation of the low income cutoffs (LICOs) by Statistics Canada. These are periodically adjusted to take into account inflation, changing incomes and expenses of households, family size, and size and location of the community. Another example within CMHC is the calculation of housing need using the Core Need model (CMHC Research Division

1988). Over time, this model has been refined to reflect changes in housing standards and changes to incomes.

In a similar way, there might be a need to adopt a broader or narrower range of economic cluster categories, to reflect a new reality of economic activity in small places. For example, as economies in small communities evolve over time, there might be a need to identify a range of specific dual economy communities, such as retirement and forestry, or non-market services and agriculture. The definition of specific for either or both would need to debated and tested.

5.0 FRAMEWORK FOR UNDERSTANDING ECONOMIC CHANGE

Introduction

As noted in the previous section, rural and small town places can vary by size, population density, economic orientation, degree of economic development, and other characteristics. To date, there is no analytical tool to simultaneously assess the economic characteristics and status of rural and small town places across Canada. To date, most methods and attempts at classifying such places have tended to reflect the different agencies interested in the results (Hawkins 1995; Cook and Mizer 1994; Robinson 1990). However, it is important to recognize that the scope of economic restructuring, as well as the experiences, stresses, and opportunities for rural and small town small places will differ by economic sector and across Canada (Hawkins 1995).

The section explores the literature in order to propose a framework suitable to identifying the stage of a community's economic development activity (e.g. is the community in a startup stage, or one of growth, plateau, decline, or closure). Within this framework, it will identify a range of socio-economic characteristics (e.g. population, population change, age structure, labour force characteristics, incomes, and migration) that could be used as a starting point for understanding the economic 'trajectory' of a given place. This section also proposes a rationale for using these socio-economic characteristics as indicators of different economic development stages and among different types of communities based on their economic sector. It also discusses the relative explanatory power of each cluster of characteristics to indicate the stage of community economic development for each type of community. Within this context, this section will also illustrate the potential value of the framework in not only classifying the stages of community economic development, but also in facilitating communication and comparison of the conditions in rural and small town places, not only within regions, but also provincially, nationally, and internationally (OECD 1994). The focus will be on the relatively isolated rural and small town places that fall within Statistics Canada's Weak MIZ and No MIZ categories.

Models of Community Development

There have been numerous attempts to understand the phases of development in rural and small town places (Bone 1998; Bradbury 1988; Riffel 1975; Lucas 1971). Most models of community development have focused on single-industry towns. In spite of this, as Wilson (2004) acknowledges, most studies on resource communities, such as mining towns, focus on periods of downsizing or periods of rapid growth. Other studies have been more comprehensive and have explored multiple phases of development in resource and tourism towns. This section includes a description of these models.

Life Cycle Model

Before examining possible changes at the community level, it is equally important to explore possible changes that may occur at the individual level. There are numerous changes that take

people through their life span and may influence how many times they move, as well as the types of housing they pursue. Resident mobility may be induced by changes in employment or changes stemming from life-style factors (Pacione 2001). Kirby (1983) and Yeates and Garner (1971) identify models that explore decisions people make about moving in accordance to their life cycle (Table 5.1). This has important implications for the types of housing that may be required during each stage of a person's life (Pacione 2001). This 'Life Cycle Model' research shows that even though families may move eight or nine times in a lifetime, people may make an average five moves that are directly related to changes in their life cycle stage.

Rossi (1980) and Yeates and Garner (1971) explore why families and individuals move. During the early years, location decisions are made by a child's parents. As people reach maturity and gain independence, they may move for employment or educational purposes. The next move comes with marriage. Location decisions will become related to family needs. However, with dual incomes, moves may also be influenced by a desire to be close to services, such as a range of recreational facilities. Changes in housing needs emerge as the couple has children. Location decisions are also influenced by proximity of services for the children's needs, such as proximity to schools. A final move may occur after the size of the household declines after children leave home or simply in preparation for retirement.

Table 5.1 Changes of Residence Related to Life Cycle Stages

Age	Stage		Move
0	Birth		
	Child	→	1
	Adolescent		
20	Maturity	→	1
	Marriage	→	1
30	Children	→	1
40-50	Children mature		
60-70	Retirement	→	1
70 and over	Death		

Source: Yeates and Garner 1971.

Pacione (2001) similarly outlines ten life-cycle events related to residential location. These include completion of secondary education, completion of tertiary education, completion of occupational training, marriage, birth of the first child, birth of the last child, first child reaches secondary school age, last child leaves home, retirement, and death of a spouse. During the maturity and child bearing stages, many individuals will occupy rental flats or houses (Kirby 1983). As the family expands and raises their children, households are more likely to occupy owned dwellings. However, moves may be restricted due to limited resources or limitations placed on tenure. Life cycle models alone, however, do not identify specific measures or thresholds for characteristics to track changes from one stage of community development to another in places with different economic activities.

Community Development Models

Many community development models have been detailed, but many of these have focused upon specific types of communities. An early model was developed by Lucas (1971) who proposed that single-industry towns and regions undergo four stages of development including construction, recruitment, transition, and maturity (Table 5.2).

Resource towns grow rapidly after the discovery of a resource or after technology, tariff protection, or demand made resource production profitable (Lawrence *et al.* 2001; Robinson 1962). During the construction phase, resource towns may be characterized largely by a transient, single male population (Halseth and Sullivan 2000; Reed 1995; Bradbury 1988). These are individuals who are highly mobile and willing to make short-term sacrifices to make money (Himelfarb 1976). During the early stages of these communities, female labour participation may be limited as the service and business sectors are undeveloped.

There is also high labour turnover during the recruitment phase with many young people and families from diverse ethnic backgrounds and high birth rates (Bradbury 1988). This stems from workers who prefer to make money, establish credit, and then adopt a 'get-out attitude' (Robinson 1962). However, other couples may leave because of limited employment opportunities for women (Beckley and Burkosky 1999; Gibson-Graham 1996; Reed 1995; Himelfarb 1976). There remains high labour turnover for unmarried men. The recruitment phase will also experience an increase in residential construction and business development as a community experiences an influx of families (Hanson 2001).

During the third stage, a stage of transition, the community changes from being dependent upon the company to becoming a more independent community. A sense of community stability and involvement develops. From this point, these resource towns are generally characterized by a young, family-oriented population (Halseth and Sullivan 2000; Reed 1995; Lucas 1971; Robinson 1962).

During the final stage of maturity, there is lower mobility in the workforce, more retirees, and out-migration of youth who leave the community to obtain a higher education or search for other employment opportunities (Bone 1998; Bradbury 1988; Himelfarb 1976). Such characteristics can be found in the maturing communities of Kitimat and McBride, B.C. (Statistics Canada 1971, 1981, 1991, 1996, 2001). Agricultural communities will also experience a maturing population as children opt not to take over the farm from their parents, resulting in an aging population with a growing number of seniors (Hanson 2001). However, the model Lucas developed did not reflect global restructuring challenges to these small town places. Furthermore, it is important to note that while communities benefited from tariff protection and subsidization in the past, this trend has been replaced with a preference for free markets, user pay systems, and self-help mechanisms (Lawrence *et al.* 2001).

Table 5.2 Model of Community Development - Lucas (1971)

Town Management	Stage	Demographic / Characteristics
Lucas (1971)		
company	construction	high population turnover, mostly young men
	recruitment	young family-oriented population, strong ethnic mix
community	transition	stable workforce
	maturity	lack of job mobility, youth out-migration

Source: Adapted from Lucas 1971.

In Table 5.3, Bradbury added to Lucas' model a fifth stage termed 'winding down' and a sixth stage termed 'closure' (Bone 1998; Bradbury 1988). These stages reflect company decisions to close the primary employer in a small town, particularly in mining towns. Due to isolation and limited employment options, large out-migration led to the 'winding down' and 'closure' (Archer and Bradbury 1992).

Small towns that may be susceptible to these stages may include resource dependent communities where a single sector is dominated by a single large company. Places at risk may also include communities with poor quality resources or where the resources are inaccessible or isolated from markets. Furthermore, communities with absentee land ownership and a low-skilled labour force may also be more vulnerable (Stedman *et al.* 2004; Peluso *et al.* 1994). Poverty may also be more associated with agricultural communities with low profit margins and limited alternative sources of employment and income off of the farm (Stedman *et al.* 2004). Residents may experience personal, family, and community related stresses that increase demands for support services (Freudenberg and Gramling 1994). Furthermore, the community may experience the loss of white-collar workers or government employees who also provide leadership on committees and organizations within the community (Lawrence *et al.* 2001).

It is also important to note that agricultural communities may exhibit a range of unique characteristics during declining periods. For example, while the population and number of farms may be reduced during declining periods (Effland 2000; Everitt and Gill 1993; Robinson 1990; Zimmerman and Moneo 1971), agricultural communities may follow a process to amalgamate rural properties to increase the viability of their operations (Lawrence *et al.* 2001). Still, median real estate values may fall during economic crises (Lobao and Meyer 1995). Women's labour in farming and non-farming employment is mobilized during economic downturns in order to enable family farms to survive and compete with larger scale farming operations. In fact, residents, particularly women, in these communities will pursue off-farm income. Small places that do not pursue non-farm employment opportunities may face further declines (Swanson 1990). Young farmers will be particularly affected since they are newer and more highly leveraged. Furthermore, during this period, agricultural communities may experience the loss of youth and services. Consequently, some agricultural communities show aging populations that need appropriate services. Local dependency ratios become high (Luloff 1990).

As experienced in the mining community of Kirkland Lake, Ontario, communities facing decline may experience municipal budget deficits, a fall in real estate prices, and a drop in housing prices. A number of business closures may also take place and unemployment rates rise (Mavrinac 1992).

Table 5.3 Model of Community Development - Bradbury (1988)

Town Management	Stage	Demographic / Characteristics
Lucas (1971)		
company	construction	high population turnover, mostly young men
	recruitment	young family-oriented population, strong ethnic mix
community	transition	stable workforce
	maturity	lack of job mobility, youth out-migration
Bradbury (1988)		
company (care taker)	winding down	job losses
	closure	out-migration

Source: Adapted from Lucas 1971; Bradbury 1988.

However, previous work notes that phases of development do not imply sequential progress through each successive phase. Development can be halted at any stage (Paget and Rabnett 1983). A number of other factors can also impact the pace and movement of a place through different stages of development. For isolated towns, state subsidies and regional development grants can offset the costs of location and progression to maturity or decline. Other industries, such as agriculture, may be protected by tariff regimes and price-support mechanisms (Conradson and Pawson 1997). Even the use of technology may compensate for distance (Peluso *et al.* 1994).

Growth may also prevent a place from completing its life cycle in a given economic sector. Instead, communities may transform their economies due to technological development. For example, forestry towns may become 'forest manufacturing' towns with pulp and paper plants or sawmilling operations. Agricultural and fishing communities may develop food processing plants. However, they move from being classified as agricultural and fishing communities to manufacturing places.

Similar to Lucas, Bone (1998) developed a five stage model to compare changes in the population structure with changes in resource town activities as these places developed and matured (Table 5.4). In the first stage, the company announces plans to build a resource town and construction begins. After the completion of the town site, there is a sharp increase in the population as workers and their families arrive. During the third stage, the population stabilizes as resource production reaches its peak. The final stage of the model occurs when the company announces closure and the population of the town drops when the town is abandoned. Again, while Bone's model reflects some of the restructuring challenges that result in town closure, it does not include alternative development strategies that have emerged to enable small places to diversify into a mixed economy or to develop a new industry.

Table 5.4 Population Life-cycle Model for Resource Towns - Bone

Phase	Population Characteristics	Associated Events
1	Uninhabited site	Company announces plans to build a resource town
2	Sharp increase in population size	With the completion of the construction of a company town, workers and their families arrive
3	Population size stable	Resource production reaches its peak and the demand for additional workers ceases
4	Sharp decrease in population size	Company decides to close its operations: workers and their families depart
5	Population size returns to zero	Company closes its mine and the town is abandoned

Source: Bone 1998.

Instead, Bone (1998) further placed towns into four categories to reflect the potential of a place to sustain a life cycle through revitalization or diversification, as opposed to town closure (Table 5.5). These four categories include boom-bust towns, towns of uncertainty, diversified towns, and sustainable towns. First, boom-bust towns refer to single-industry mining towns that have completed their population life cycle, such as Pine Point, Northwest Territories. Construction of this town and its mine began in 1962. The announcement of the mine closure came in 1983, and by 1996, Pine Point was a ghost town. Bone (1998) predicts that Pine Point's fate was influenced by its remote location and limited access to the outside world. Furthermore, it had to compete with an established regional service centre, Hay River, that already performed basic service functions for the residents of the region before Pine Point was established. This provides an important example that demonstrates the need to not only look at the local context, but also the regional context.

Table 5.5 Ability of Towns to Sustain the Life Cycle Through Revitalization / Diversification

Category	Characteristics	Examples
Boom-bust towns	• single industry mining towns • completed population life cycle • remote location • limited access to outside • competing with regional centres	Pine Point, NWT
Towns of uncertainty	• single industry mining towns • early phase of population life cycle • opportunity exists to diversify economic base	Fort McMurray, Alberta Norman Wells, NWT
Diversified towns	• diversify economic base (i.e. from mining to services centres)	Yellowknife, NWT
Sustainable towns	• based on production of renewable resources (i.e. forestry) • ability to avoid short life cycle of mining towns	Mackenzie, B.C.

Source: Bone 1998.

Towns of uncertainty are single-industry mining towns in the early phase of their population life-cycle that still have an opportunity to diversify their economic base. Two examples are Fort McMurray in northern Alberta and Norman Wells in the Northwest Territories (Bone 1998). Fort McMurray is far from other population centres, making it difficult for the town to develop a

regional service role. However, it has a 'complex urban infrastructure' to meet local needs that is noted as an advantage.

Yellowknife was identified as an example of a diversified town. Yellowknife was originally a mining town, but then government, service, and amenity jobs developed after the city was selected as the capital of the Northwest Territories in 1967 (Bone 1998). Finally, sustainable resource towns are those based on the production of renewable resources, such as forestry towns. With a sustainable resource management strategy, these places can avoid the relatively short life-cycle associated with most mining towns. An example of a sustainable resource town is Mackenzie, B.C. that is based primarily on forest products manufacturing.

To compliment new paths for communities, Halseth and Sullivan (2002) build upon earlier community development models by Lucas (1971) and Bradbury (1988) and suggest a seventh stage termed 'Alternative Futures' to closure (Table 5.6). As a result of economic restructuring and local economic development initiatives, some small towns have been sustained. These places have pursued tourism, diversified into more than one industry, have created small scale value added industries, or have taken advantage of new communication technologies.

Table 5.6 Model of Community Development - Halseth and Sullivan (2002)

Town Management	Stage	Demographic / Characteristics
Lucas (1971)		
company	construction	high population turnover, mostly young men
	recruitment	young family-oriented population, strong ethnic mix
community	transition	stable workforce
	maturity	lack of job mobility, youth out-migration
Bradbury (1988)		
company (care taker)	winding down	job losses
	closure	out-migration
Halseth and Sullivan (2002)		
community	Alternative Futures	economic transition, sustainable community development

Source: Adapted from Halseth and Sullivan 2002; Bradbury 1988; and Lucas 1971.

For example, Reefton, New Zealand, originally established as a gold-mining town, transformed to have a diversified economy based upon coal mining, forestry, and agriculture following World War I (Conradson and Pawson 1997). In the 1960s, a clothing manufacturing factory was also set up. It is important to note, however, that much of the success of this transition was based on the continued availability of state subsidies for transport and power. Reefton would face challenges during the economic and social restructuring stemming from new policies of the Labour Party with declines in the levels of state sector employment, such as those with the New Zealand Forest Service. After the workforce was restructured, Reefton experienced a plateau at a lower level as it was able to attract residents with inexpensive housing and maintain its hospital for an aging population.

Glace Bay, Nova Scotia made the transition from a mining community to a call centre (McGee *et al.* 2002). After a series of layoffs, the final set of layoffs at Cape Breton Development Corporation's last mine occurred in 2001 (Toughill 2001). However, prior to this announcement, the community attracted the Stream International Call Centre from Boston to employ more than 1,100 people. This was accomplished after the government attracted a company to the area using payroll subsidies (Flinn 2003). While this new industry does not provide the same levels of employment for the community, it has allowed the town to plateau at a lower level.

Kirkland Lake, Ontario provides a good example of a community that has experienced several boom and bust cycles and has had to adapt and revitalize itself several times. In 1938, Kirkland Lake had seven major gold mines operating in the area. But throughout the 1950s, 1960s, and 1970s, several mines closed including Tolburn, Wright-Hargreaves, Sir Harry Oake's Lakeshore, and the Upper Canada (Mavrinac 1992). In 1970, the community hired an economic development officer and set up a commission for economic development. Mapping surveys conducted during this time would eventually lead to the opening of the Holt-McDermott Gold Mine. However, they were also able to attract the development of the Adam's iron ore mine. Furthermore, the community developed its tourism industry by building the Museum of Northern History and refurbishing Sir Harry Oake's Chateau. However, in 1989, Adam's iron-ore mine would close due to poor commodity prices (Mavrinac 1992). Moreover, fewer drills were exploring due to constraints posed by high taxes, capital gains rules, and the elimination of flow-through share tax breaks. Companies were not able to raise exploration funding. Again, the community adapted by developing a custody facility for young offenders and a bus terminal. Furthermore, an area office for the goods and services tax and the Federal Department of Veterans Affairs was allocated to Kirkland Lake. A generating power plant has also been constructed by Northland Power. Franchise restaurants, including Tim Horton's and McDonald's, also opened in 1990. The community is now facing another phase of decline after Barrick Gold Corporation announced it would wind down operations at the Holt-McDermott gold mine and cut 200 jobs (Edmonton Journal, October 17, 2003).

In the early 1980s, Tumbler Ridge emerged as an instant town created for coal mining in northeastern British Columbia (Halseth *et al.* 2003). Production was based on two open pit coal mines at Quintette and Bullmoose. Construction of the town site began in 1981, and the first residents arrived in 1982 (Page and Rabnett 1983). An extensive social planning assessment went into the planning and development of Tumbler Ridge. It was deemed important that the town site plan provide more than the standard curling rink and ice rink. Multi-purpose spaces, coffee shops, a library, and day care were also viewed as critical pieces to help residents bond and interact within the community. The District of Tumbler Ridge was incorporated on April 9, 1981. During the early stages of development, local government was formed; clubs, associations, and support groups were established; and volunteers emerged. It is difficult, though, to comment on the socio-demographic characteristics of Tumbler Ridge since residents moved into the town largely after the construction of the town site, and, therefore, were not included in the 1981 Census.

Shortly after the announcement of the Quintette mine closure in 2000, the Tumbler Ridge Revitalization Task Force was formed with representatives from not just Tumbler Ridge, but communities around the region. One of this committee's accomplishments was the development of the Tumbler Ridge Housing Corporation and the subsequent housing sale at prices from $23,000 to $28,000 (Halseth and Sullivan 2002). Furthermore, the task force managed to negotiate stable funding with the provincial government if needed to maintain education and health services that would be key for attracting new homeowners. The housing sale was a success in attracting retirees, as well as families and individuals who could commute for employment in the region or take advantage of Internet infrastructure to operate consulting businesses (Halseth and Ryser 2002). After the closure of both the Quintette and the Bullmoose mines, Tumbler Ridge has also been capitalizing on dinosaur finds to develop a museum and 'dino camps' for children.

The case study of Tumbler Ridge demonstrates the importance of cooperation between residents and government in facilitating transition. Other research supports the important role that various levels of government agencies play in working with the private sector, industry, workers, and communities throughout the recovery process (Oregon State University Extension Service 1996; Rempel 1996) (Table 5.7). Notably, while a community crisis is usually triggered by a single event, revitalization or recovery may be a three-stage process including endings, neutral zone, and new beginnings. These three stages highlight the development of support networks and the importance of service provision during times of crisis. Such mechanisms help residents to respond to the shock and provide support to workers and their families who have been impacted by industrial restructuring (Halseth *et al.* 2003; Sullivan 2002).

Table 5. 7 The Recovery Process

Recovery Stage	Timing	Community Experiences
Endings	After industry closure	• Experiencing loss • Acceptance and grieving • Compensation • Defining what is gone and what is left
Neutral Zone	1 year after industry closure	• Normalize, clarify, neutralize • Rebuilding identity and connectedness • Monitoring • Creativity
New Beginnings	3-5 years later	• Change cannot be forced • Long term planning - inclusive • Reinforce new beginning

Source: Oregon State University Extension Service 1996.

Another example of a community that developed an 'alternative future' is Maynard, Massachusetts, formerly home to the world's largest woolen mill. In this case, location played a key role in the recovery process. In 1950, the Assabet mill closed and 1,200 jobs were lost (Mullin *et al.* 1986). Previously, many of the mill workers came from two-income families with one member typically working outside of the mill. After the closure of the mill, workers who remained in the community tended to be older and opted for retirement. The town leaders organized a citizens committee to develop recommendations for revitalization and to sell the mill

facilities. The purchase price for the mill complex was $200,000, even though the net worth of the facilities according to assessment files was $839,145. Within six months, the town attracted a plastics firm called Bracon Company, and by 1960, the mill was fully rented. The mill was purchased three years later by Maynard Industries Incorporated, which began renting space to industrial tenants.

By 1960, more than thirty small firms were located in the facility (Mullin *et al.* 1986). Three types of companies were attracted to the facility. There were companies developing new products attracted to the mill facility for cheap space, a trainable labour force, and proximity to Greater Boston's research and development firms and universities. The facility also attracted expanding companies with main plant facilities nearby that needed more space, but wanted to still have quick access to its new operations. Finally, the mill attracted companies that needed to consolidate operations.

However, in 1974, the mill facility was purchased by Digital Equipment Corporation which would become a large producer of minicomputers (Mullin *et al.* 1986). Slowly the company began to replace tenants with its own workers and eventually became the sole occupant of the mill. The availability of cheap space, a large labour supply, and a prime location were instrumental in its transition. The town was on the fringe of metropolitan Boston and within easy commuting distance. Other factors were also important to the successful transition of the community. The companies that rented space in the mill in the 1950s and 1960s were modern, growth-oriented companies. Moreover, the municipality had its fiscal affairs in order with little debt or growth pressure.

Lawrence *et al.* (2001) also discuss how agricultural communities have pursued alternative paths towards tourism. Some farming communities have developed eco-tourism or farm stays. Others have developed retirement homes, wetland tours, and heritage festivals. However, not all agricultural communities have been transformed into different economies by choice. For example, the Oldman River Region in Alberta was historically ranching land. However, in the 1950s, Shell Canada drilled its first well and built a gas processing plant in the town of Pincher Creek. Furthermore, a more mobile workforce and influx of retirees brought escalating land prices and increased pressure for ranch land (Hanson 2001).

Another community development model was put forward by Riffel (1975). The model describes the following stages for resource town development:

- natural or prediscovery,
- prospecting, discovery,
- exploration and survey,
- industrial and community construction,
- industrial operation and community improvement,
- industrial and community operation, including expansion of secondary and service industries,
- community diversification, and

- community maturity.

These stages reflect changes in both economic activity and residential characteristics. For example, during the construction and development of the town and the industrial operation, the annual turnover rate can be as high as 200% (Riffel 1975). During the industrial and community operation phase, turnover rates are reduced to 60% and amenities are developed. During the community diversification phase, labour turnover stabilizes at 35%, and employment for wives becomes available. Labour and job mobility is lowest during the community maturity phase. Again, this model does not reflect the closures of some small towns due to economic restructuring, nor does it describe the alternative development paths that have emerged for some small towns.

In assessing the impacts of development, Freudenberg and Gramling (1994) provide a community development model to assess the impacts on the physical, cultural, social, political, economic, and psychological characteristics of a place (Table 5.8). In this model, three phases are outlined including opportunity / threat, development / event, and adaptation / post-development. Unlike some previous studies, the model highlights possible changes in property values due to speculation of investment prior to development. Also of interest, this framework highlights the potential impacts of inflation and family violence during community growth and development. As places adapt to change or experience challenges associated with post-development, there are large scale job losses and increases in bankruptcies. However, this framework poses a more simplistic view of the community phases of development. As noted earlier, community development can be more complex as a place can experience different characteristics during the construction and growth phases. Furthermore, this framework does not discuss community characteristics during more stable periods.

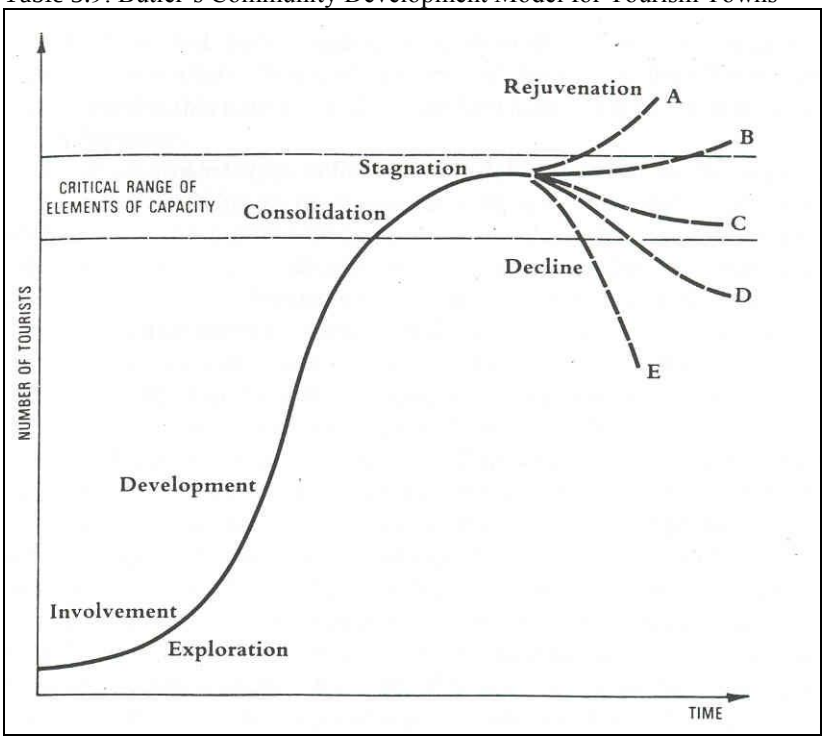
Table 5.8 Freudenberg's and Gramling's Framework for Assessing Impacts of OCS Development

Potential Impacts by Phase of Development			
System Affected	Opportunity - Threat	Development / Event	Adaptation / Post-Development
Physical	Anticipatory construction or lack of maintenance; decay of existing structures and facilities; new construction	Potentially massive alteration of the physical environment; destruction of old, and construction or upgrading of new / existing facilities	Loss of some uses due to the exploitation of others; deterioration of alternative productive facilities
Cultural	Initial contact; potential for loss of cultural continuity; threats to the legitimacy of existing institutions	Suspension of activities that assure cultural continuity, i.e. subsistence harvest; reduced effectiveness of traditional norms / sanctions	Gradual erosion of culture; loss of unique knowledge, skills, and / or perspectives; loss of cultural leaders, seeking jobs elsewhere
Social	Organization; investment of time, money, and energy for support or resistance; conflicts resulting from differential construction of risks	Population increases; influx of outsiders; decline in density of acquaintanceship; social change; formation of newcomer / old-timer cleavages	Alteration of human capital, through refocus on specialized skills with few other applications; losses of organizational skills and networks
Political / Legal	Litigation to promote or block proposed development; intensified lobbying; organized protests; potential 'civil disobedience' or even violence	Intrusion of development activity into community politics; litigation and conflict over activity impacts; decreasing capacity of community facilities and services	Recriminations over loss of earlier options and / or 'unexpectedly' short duration of boom-bust prosperity; zoning / regulatory changes in search of new development
Economic	Decline or increase in property values; speculation and investment; efforts to 'lock up' particularly promising parcels	Traditional boom-bust effects; inflation; entrance of 'outsiders' and national chains into local labour market and retail sector	Large-scale job loss and / or unemployment; loss of economically flexible businesses; increased bankruptcies, even in 'spin-off' sectors of economy
Psychological	Anxiety, stress, anger; gains or losses in perceived efficacy	Euphoria; stress associated with rapid growth; psychosocial pathology; family violence; losses or gains in efficacy	Depression and other problems associated with loss of employment; acquisition of potentially maladaptive coping strategies

Source: Freudenberg and Gramling 1994.

However, few community development models have been proposed for small towns that are not based on a resource extraction industry. Butler (1980) proposed a seven stage development model for tourism towns (Table 5.9). During the exploration stage, there are a small number of tourists restricted by lack of access, facilities, and local knowledge. Use of local facilities and contact with local residents is likely to be high, as is the case in the Canadian Arctic where tourists are attracted to natural and cultural-historical features.

Table 5.9: Butler's Community Development Model for Tourism Towns



Source: Butler 1980.

During the involvement stage, the number of visitors increases and is accompanied by more regularity. Some local residents begin to become involved by providing facilities primarily or exclusively for visitors (Butler 1980). In the development stage, a well-defined tourist market area has developed, accompanied with heavy advertising in tourist-generating areas. As this stage progresses, local involvement and control of development will decline rapidly. Some local facilities will disappear being replaced with larger, modern facilities created by external organizations, particularly for visitor accommodation. During peak periods, the number of tourists may equal or exceed the local population. Imported labour may be utilized and auxiliary facilities for the tourist industry, such as laundry facilities, emerge. During the consolidation stage, the rate of increase in numbers of tourists declines, although the numbers will still increase. The total visitor numbers exceed the number of permanent residents and a major part of the area's economy will be connected with tourism. When the peak number of visitors is reached, the community has entered the stagnation stage. Capacity levels have been reached or exceeded, and are accompanied with environmental, social, and economic problems. Cottage resorts in Ontario have displayed these characteristics. During the decline stage, the area is not able to compete with newer attractions and experience a declining market. Property turnover is high and tourist facilities may be replaced by non-tourism related structures as the area moves out of tourism. Hotels may become condominiums or retirement homes, and the attraction of tourism areas make them equally attractive for permanent settlement, particularly for the elderly. However, rejuvenation may develop, although it is rare for this stage to develop without a complete change in the attractions on which tourism is based. For example, the village of Aviemore, Scotland was rejuvenated by developing a winter sports market, thus allowing the

area to experience year-round tourism. While this model offers a detailed model tailored to the unique developments of a tourism town, it does not describe the characteristics of tourism town during a stable or plateau period.

It is important to note that, depending upon the tourism activities, tourism communities can exhibit a range of characteristics during its development. For example, these places may either have a young-oriented population or an older oriented population (Gill 2000). As these communities develop, they tend to have a young, mobile workforce. It may also be characterized by female, part-time employment (Hall and Page 1999; Kassab *et al.* 1995).

In general, these community development models provide examples of measures which describe what is taking place in communities with varying economic activities. These measures, though, are not predictive in nature. They simply describe trends that are taking place.

Towards a Framework

Early models of community development in small towns pre-date more recent global economic restructuring and technological changes. Revisions to these models have been made to reflect alternative development paths that may either lead to town closure, new economic development, or diversification. Regardless, these models are important because they demonstrate that small town places are not static, but demonstrate a variety of characteristics over time. Furthermore, the ability of small towns to embark on alternative development paths has been demonstrated to be partly influenced by their geographic setting of isolation or proximity to nearby places.

Early development models also focus primarily on resource communities and do not reflect the breadth of economic activity that can take place in rural and small town places. They do not cover the emergence, decline, or transformation of retirement communities, non-market service communities, or non-specialized communities. It is also important to note that it is difficult to comment upon the Startup phases of agricultural communities since many of these places were settled prior to World War II (Robinson 1989; Zimmerman and Moneo 1971) at a time when gender employment and commuting opportunities were quite different. Similar difficulties also exist for fishing communities that were settled throughout the 18th, 19th, and early 20th centuries (Sinclair 1992).

Drawing from a range of ideas in the literature, we recommend that the following categories or stages of economic activity be applied to understanding of the economic trajectory of small places:

- Startup. The process of starting a new community or of a community entering into a significantly different type of economic activity varies quite a bit from one type of community to the next. Fishing communities were established in the outports of Newfoundland and Labrador centuries ago, at places which provided an opportunity to dry fish on land. Mining communities were established much more recently in Northern Ontario, sometimes with a detailed plan in place before settlement, and sometimes in an

ad hoc fashion as buildings and infrastructure grew up around a mineshaft. Not all types of communities begin with a Startup phase. Communities may have reinvented themselves as retirement communities by attracting people to live there. Communities, such as Elliot Lake, Ontario and Hamiota, Manitoba, may have reinvented themselves as retirement communities by attracting people to live there (Farkouh 1999; Everitt and Gill 1993).

- Growth. This is marked by a period of expansion of the physical boundaries (legal or otherwise) and / or population growth. The Growth period may be very short or very long, depending upon the type of community and the local circumstances.

- Plateau. This stage is characterized by a period of relative stability in terms of economic activity. Again, this period may be very short or very long, depending upon the type of community and the local circumstances.

- Decline. This stage is characterized by a decline in the resource industry or activity which fueled the initial growth and sustained the Plateau period (see Table 5.6 and Table 5.7 re: stages of development and recovery processes). This might be a depletion of the minerals, the withdrawal of the public service or institution, or the closure of the major employer for other reasons.

- Alternative Futures. After a period of stability, the community begins to change, usually as a result of a decline of the economic activity driving the community. The community enters one of the following transition stages:

    - Transform to some other economic activity and grow again. In this case, the community responds to the decline by aggressively transforming its economy into other activities which place it in a Growth stage again.

    - Transform to some other economic activity and plateau at a similar or lower level than before. In this case, the community responds to the decline by transforming its economy into other activities, or by passively allowing the community to adopt a new primary economic activity by default, either of which provides a measure of stability or a plateau, but one which is at a lower level than that before the period of Decline. Glace Bay is an example of a former mining community that became a dynamic services centre through call centre operations, and is at a lower plateau than before (McGee *et al.* 2002; Toughill 2001).

    - Transform to some other economic activity and decline more. In this case, the community attempts to transform the economic activities into something else, but the efforts fail and a second period of Decline ensues.

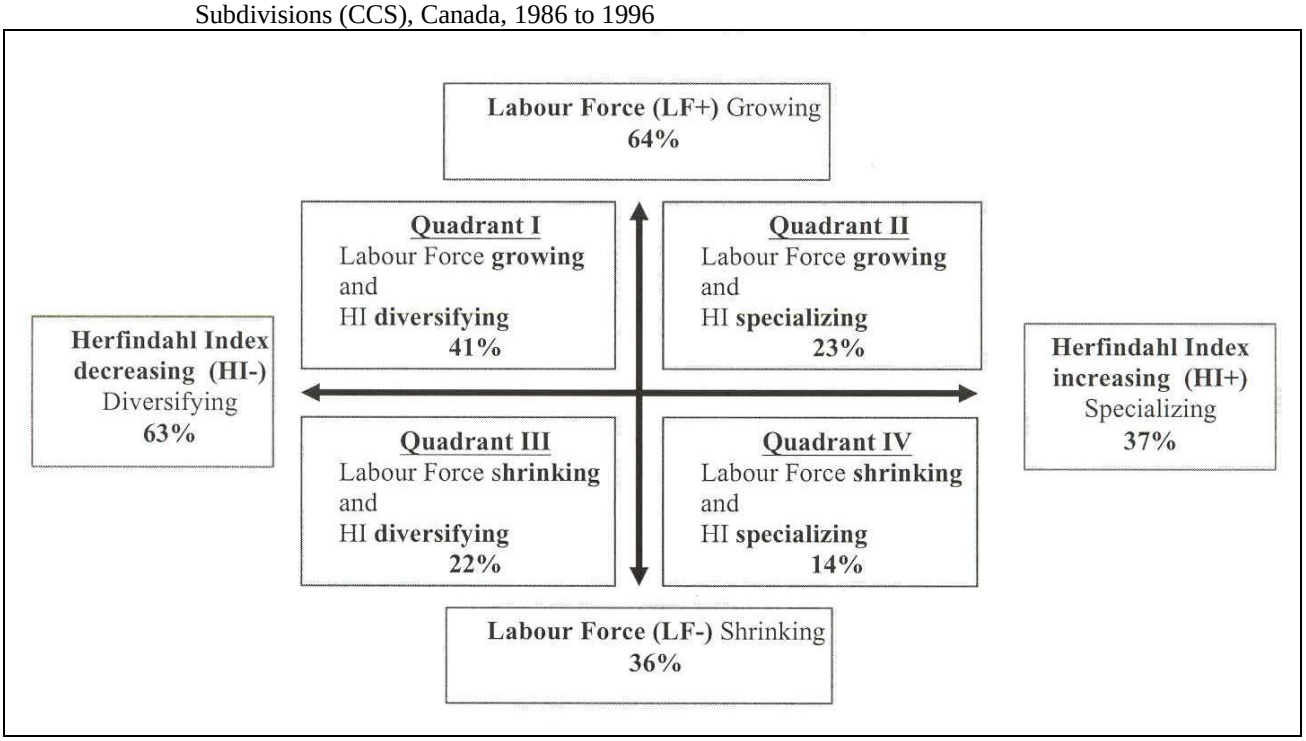
    - Remain in the same primary activity, but function at a lower plateau than before. In this case, the period of Decline occurs for a finite period of time and there is a

leveling off of the decline and so the community 'settles in' to a period of stability or a plateau which is less prosperous or healthy compared to the period of stability before the decline occurred. For example, Zimmerman and Moneo (1971) note that some agricultural communities that survived the Depression in the 1930s emerged to become 'farm cities' only to revert back to villages.

- Decommission or closure. The community, or an outside agency, makes the decision to close the community after a long, sustained period of Decline. In some cases, the decision is made quickly in the case of very small communities where the nearly the entire workforce may be employed by a major employer which closes.

It is important to note that communities sometimes move through different stages of economic activity, or move from one type of economic activity to another, without the community consciously making an effort to manage change. Page and Beshiri (2003) use the Herfindahl Index of Concentration (HI) to provide another method for determining change in community economic diversification or specialization. This index equals the sum of the squared employment shares of each industrial sector in each community. A decline in the HI indicates lower levels of concentration in an industry or greater diversification. An increase in the HI indicates more concentration in the dominant industry or greater specialization. Page and Beshiri (2003) applied the Herfindahl Index to rural Census Divisions by examining changes in the workforce between 1986 and 1996 (Table 5.10).

Table 5.10 Changes in experienced labour force and Herfindahl Index of rural Census Consolidated Subdivisions (CCS), Canada, 1986 to 1996



Source: Page and Beshiri 2003.

Quadrant I indicates small places with a growing workforce and a more diversified economy. This also identifies communities with a robust economy due to economic diversification that is linked to higher product demands and exports from the community. The highest share of Quadrant I communities are located in the Northwest Territories and Nunavut, Ontario, and Alberta. Quadrant II indicates places with a growing workforce and a more specialized economy. Many Quadrant II communities are located in these provinces and territories, along with the Maritime Provinces, Québec, and especially in B.C. Quadrant III identified places with a shrinking workforce and a more diversified economy. Many rural and small town places in Newfoundland and Labrador, Manitoba, and Saskatchewan were in Quadrant III. Finally, Quadrant IV identified places with a shrinking workforce and a more specialized economy (Page and Beshiri 2003). Most Quadrant IV places tended to be located in Newfoundland, Saskatchewan, and Nova Scotia. Overall, 41% of all rural and small town places examined had a growing labour force and a diversifying economy between 1986 and 1996. In particular, small places dominated by agriculture and mining had experienced a growing labour force and a diversifying economy between 1986 and 1996. The importance of this work for our purposes is to underscore the point that communities change over time, and that their economic classification at one period in time may be very different than it is at another, depending on the changing nature of the distribution of the labour force across various sectors within the community.

An important illustration of this is found among the communities in our study, and is summarized in Table 5.11. Looking at communities which lost population between 1991 and 2001[3], slightly more than half of these declining communities - 496 of the 952 in the sample - had the same classification in 1991 and 2001, indicating that there was a reasonable measure of stability in those communities in terms of a continued dominance of a single sector, the same two sectors, or no prominent sector. However, there may have been changes in the share of the labour force employed in the various sectors (or percent of the population age 65 and over), but not enough to move above or below the 25% threshold. Furthermore, there may have been some reclassification or movement over the 10-year period, but not at the specific end points of 1991 and 2001. For example a forestry community may have had a decrease in the share of employment in forestry to a point below 25% at some time between 1991 and 2001, but by 2001 it may have been back to 25% or more of the labour force. More agricultural, non-market services, and manufacturing communities exhibited this measure of stability.

However, almost 150 had become dual specialization communities over the 10-year period - suggesting perhaps some measure of growth or some other form of stability occurring, as another sector employed at least 25% of the labour force (or 25% of the population was now age 65 and

[3]For the purpose of summarizing the characteristics and for further analysis in this report, we only include those census subdivisions with constant boundaries between 1991 and 2001. For example, if there was an amalgamation sometime between 1991 and 2001 of two or more CSDs which were in the 1991 database, these were dropped for the purpose of making comparisons. This affected some CSDs in most provinces, especially in Ontario. In other cases there were revisions of CSD boundaries for administrative purposes. This was especially the case in British Columbia where the boundaries of many of the unincorporated "subregions" of regional districts were reorganized. Consequently, 90 CSDs were dropped from the analysis.

over). Although, another possibility is that dual specialization may be produced through economic decline. Notably, employment in a dominant sector may have declined to the point where it is now equal to another economic sector that had previously employed fewer people. Furthermore, 60 rural and small town places became non-specialized. This could have occurred as the local economy became more diverse, thus resulting in fewer than 25% being employed in any sector, or that the economy worsened and the employment in the leading sector declined. About 250 communities had a completely different single sector classification by 2001. Most of these were dual specialization communities becoming specialized in only one sector, or non-specialized communities becoming specialized in one sector. Again, there are a variety of explanations for these changes, ranging from employment gains to employment losses.

Table 5.11 Change in Economic Sector Classification, 1991 to 2001, Communities with Population Loss 1991-2001

Type	All Communities 50-4,999 in 1991	Number With Same Economic Sector in 2001	Number Classified as Dual Specialization in 2001	Number Classified as Non-Specialized in 2001	Number Classified as Another Sector in 2001
Agriculture	242	192	27	8	15
Fishing	21	3	3	2	13
Forestry	9	1	2	1	5
Mining	23	10	5	3	5
Tourism	6	1	3	0	2
Manufacturing	90	36	20	9	25
Dynamic Services	27	6	8	2	11
Non-Market Services	143	76	26	20	21
Retirement	30	4	24	1	1
Dual Specialization	217	126	N/A	14	77
Non-Specialized	144	41	30	N/A	73
Total	**952**	**496**	**148**	**60**	**248**

Source: Statistics Canada 2001, 1991.
Note - based on 25% of Labour Force employed in sector in 1991 compared to classification based on 25% of Labour Force employed in sector in 2001

The key findings from this analysis are:

- some communities have change in economic sector classification over time, while others have the same economic sector classification;
- the changes could be due to a variety of factors;
- some of the communities may be in a period of Decline, but still have the same economic sector classification; and
- some of the communities may be in a period of Alternative Futures, shifting to a new economic sector or a more diversified or a more specialized economy.

For the purposes of exploring this framework and identifying characteristics which would be helpful to explain or interpret the stage of local economic development, we examined the stage of Decline only (focusing on those only which lost population in the 1991 to 2001 period), for

the purpose of understanding how a community moves through a period of Decline and into an Alternative Future.

Our review of the literature (Apedaile 2004; Freshwater 2004; Wilson 2004; Bruce 2003; Halseth and Ryser 2002; Beshiri 2001; Farkouh 1999; Everitt and Gill 1993; Mavrinac 1992; Sinclair 1992; Robinson 1990) suggests that most communities in relatively isolated rural and small town places in Canada (especially those that were once or currently are dependent upon natural resources as their economic base) are in one of the three stages noted below:

- a long run period of decline (collectively, but for some specific communities this period of decline may be relatively short);
- a period of transition to an alternative future (this may be on a pro-active basis, in an attempt to redefine the community and its future, or it may be on a passive basis, waiting to see how the situation unfolds); or
- having moved into an alternative future (either recently or some time ago).

There are virtually no new 'instant communities' or communities at a start-up phase today. For example, most new developments involving mineral exploration and extraction involve 'fly-in and fly-out' type of commuting. This is being done to avoid the expensive infrastructure costs of building a community. In a similar way, few of the relatively small and isolated rural and small town places are experiencing growth. Most were settled many years ago. Others may have been more recently settled, such as Tumbler Ridge in the mid-1980s. But the initial growth and expansion phases have long since passed and communities have matured. As noted above, most have moved beyond a period of relatively stability.

The last 15 to 20 years have seen population and economic declines as communities have aged, technology has advanced requiring fewer people to produce more, and improved transportation networks have made it easier for people to choose to live, work, shop, and play in a variety of locations. Furthermore, the exposure of many communities to changes in the global economy (increased competition from other countries that produce similar products, loss of markets, price changes for resources and commodities, industrial restructuring) coupled with declines in natural resource availability (depletion of mines, loss of farmland, collapse of fish stocks) has resulted in an erosion of stability in many of these rural and small town places.

If we focus on population change as the primary indicator of a community in decline, most of the rural and small town places in this study are declining (Table 13). There are very few instances where new communities are being established. This trend is evident regardless of the size of place examined, the degree of metropolitan influence, or the economic sector of a place. For example, only about 27% of the No MIZ communities grew in population, and only about 31% of the Weak MIZ communities grew between 1991 and 2001.

Table 13: Summary of Rural and Small Town Places in Decline, Population Changes for all Communities with 1991 Population of 50 - 4,999, 1991-2001

Category	Total Lost	%	Total Gained	%	n=
All communities	954	71.0%	388	29.0%	1342
All communities with 2001 population of 100 to 2,499	814	71.5%	325	28.5%	1139
All communities with 2001 population of 2,500 to 4,999	72	63.7%	41	36.3%	113
Communities with Weak MIZ	526	69.4	232	30.6	758
Communities with No MIZ	360	72.9	134	27.1	494
Agricultural communities	236	84.9%	42	15.1%	278
Fishing communities	21	95.5%	1	4.5%	22
Forestry communities	9	69.2%	4	30.8%	13
Mining communities	23	88.5%	3	11.5%	26
Tourism communities	6	50.0%	6	50.0%	12
Manufacturing communities	90	80.4%	22	19.6%	112
Dynamic communities	27	54.0%	23	46.0%	50
Non-market communities	143	54.0%	122	46.0%	265
Retirement communities	30	71.4%	12	28.6%	42
Dual specialization communities	217	72.8%	81	27.2%	298
Non-specialized communities	144	65.2%	77	34.8%	221

Source: Statistics Canada 2001, 1991.

Thus, the contemporary value of a framework showing the economic development activity trajectory of communities is highest in terms of developing an understanding of the indicators of movement into and through a period of decline, and in understanding the various local and contextual conditions which might shape the alternative future of a community after a period of decline. For this reason, we focus our analysis on the potential of the socio-economic characteristics for helping to explain the stages of economic development through the decline period. We ask the fundamental question: How can changes in various social and economic characteristics of communities be used to understand if a community is in a period of decline, and what its alternative future might be?

While the focus of our analysis is on one aspect of the framework - the period of decline into an alternative future - and before we examine this aspect in more detail for the balance of the report, it is important to briefly note some aspects of the other components of the framework. The startup and growth phases of small communities in relatively isolated places is indicated or marked more by evidence ‘on the ground’ than by changes in social and economic characteristics. By this we mean that there are significant changes to the physical landscape and the built environment as a community is established and developed. As communities move out of a Startup period and into Growth or finding a relatively stable Plateau, the evidence or indicators typically include both physical and socio-economic indicators[4].

[4] The tables in Appendix C also provide some suggested socio-economic characteristics of communities in

Communities in a Startup stage have some distinguishing features. The municipal charter establishing the settlement as a municipality would have been recently granted. There would be evidence of new construction of buildings and municipal infrastructure (water supply and sewerage, roads and streets, municipal administration and service buildings, houses and other residential buildings). There would also be evidence of planned for, but undeveloped land, within the municipality, included building lots for sale, signage indicating 'future development', and much more. Basic, essential services would also be established in the early part of the Startup period. The number and type of these will depend on the community size and its location relative to other communities. These services may include medical care facilities, schools, protective services, and other community services.

Communities in a Growth stage will show a range of possible physical indicators. New business developments in the community, such as retail stores in the downtown core or an expansion of new retail areas (such as highway commercial development), are possible. A business or industrial park could be developed or be nearing capacity if one was built immediately during the Startup stage. Expansion of municipal boundaries may be another indicator of growth. Sustained population and/or household growth over a long period of time, and a high pace of building starts for all types of structures are other features. Some of the essential services which were noted in the Startup stage may be expanded, depending on the size, location, and pace of growth.

As a community moves into a Plateau stage, there are fewer physical signs of change. There are fewer new buildings constructed, services peak in terms of the volume of activity and staffing, and there is a slow by progressive aging/maturing of the population.

Socio-Economic Characteristics for Indicating Decline

Most studies have not used predictive indicators to capture change in the economic and social restructuring of small towns as they change over time. Some of the indicators identified in the literature can be the framework proposed. In addition, other indicators, such as gender and marital status will be explored to determine their applicability in the proposed framework.

A limitation of using data for any of these characteristics may occur when a town emerges or changes during or shortly after a census. In the early stages of a community development model, the town may be too small to reveal socio-demographic characteristics. There also may be long periods over which a community may be within a single stage. On the other hand, other places may go through a number of stages between two census periods. Furthermore, time lags mean that trigger events may not show their implications for a period of time. For example, Wilson (2004) notes that the impacts of boom and bust cycles in mining towns will differ by mineral and often lag behind many years. One possibility for filling census time gaps could be the use of small area tax filer data (available on an annual basis, two years after the current year).

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periods of growth and plateau. However, we have not completed a detailed statistically analysis of the data for these stages of economic activity. Instead, the suggestions are drawn from the literature review only.

The characteristics associated with varying economic activities may also change over time (Stedman *et al.* 2004). For example, while women have not traditionally found employment in resource towns, particularly in resource industries, this has been changing (Everitt and Gill 1993; Krahn and Gartrell 1981). Characteristics associated with agricultural communities may also vary according to farm size, structure, and region. Within manufacturing communities, characteristics may differ according to the product produced, such as places producing wood products such as veneer, construction wood, pulp and paper, or wood chips. Even in fishing communities, characteristics may be influenced by market niches for Pacific versus Atlantic salmon (Peluso *et al.* 1994).

It is important to note, as well, that the framework for this study was grounded in the 2001 Census. Therefore, some communities may have been fewer than 5,000 people in the past and may have grown beyond our upper threshold of 4,999 to be included in this framework. Likewise, some communities may have consisted of more than 49 people in the past and may have declined in population to below 50 and are also excluded from this demonstration. Furthermore, it was not possible to include certain communities or unincorporated places that have been amalgamated over time.

In an effort to determine if it is possible to 'measure' the changes in economic development activity of a given community over time, we now turn our attention to the identification of potential socio-economic and other quantifiable characteristics that might be helpful. Our review of the literature provides some suggestions about which characteristics are indicators of change in the economic structure and activities of communities. In particular, the following characteristics which are captured in each Census offer some potential to assess where a community is at in its economic development trajectory, and the possible future direction it might be headed:

Population

- population
- population age structure
    - % population age 0-14
    - % population age 15-24
    - % population age 25-54
    - % population age 55-64
    - % population age 65 and over
- % population that is male (sex ratio)

Households

- household type
    - % families which are lone parents
    - % households which are one person non-family households
- % families with children at home (married or common-law families and lone parent families)
- youth dependency ratio (ratio of population age 0-14 to population age 15-64)

- elderly dependency (ratio of population age 65 and over to population age 15-64)

Migration

- in-migration, last five years (% population who moved into the community in the five years prior to the census)
- out-migration of youth 15-24 (% change in population age 25-34 in Census Year B (e.g., 2001) and population age 15-24 in Census Year A (e.g., 1991))

Income

- % of total income from employment
- % of total income from government transfers
- % of total income from other sources

Labour Force Activity

- % labour force in employed in each major economic sector
- labour force participation rate
    - labour force participation rate age 15-24
    - labour force participation rate age 25 and over
    - labour force participation rate of females age 15 and over
- % of the labour force working outside of community (outside of the Census Subdivision)

Housing

- housing completions in last 5 years (% of all dwellings completed in the five years prior to the Census)
- average value of dwelling

Our review of the literature also suggests that there are additional characteristics which might also be potentially useful to assess where a community is at in its economic development trajectory, and the possible future direction it might be headed. These would be locally available or non-census data. From an analytical point of view, these are difficult to collect and analyze for multiple communities for a variety of reasons, including: it would be time consuming to collect for the large number of communities involved in our study; the data may not be available in some communities; the data may not be collected in the same way or available in the same format for all communities; and, some of the data may require the user to purchase it from the supplier of the data. These non-census characteristics include but are not limited to the following:

- business starts
- business closures
- business bankruptcies
- personal bankruptcies
- size of property tax assessment base (industrial, commercial, and residential)
- annual capital expenditure on new municipal infrastructure

- ownership of businesses (local or external)
- commodity prices
- production levels
- off-farm income
- MLS sales volume
- MLS average sale price
- MLS number of listings
- others as locally appropriate.

For the purpose of this study, we focus only on an analysis of the Census characteristics and their relative value and power to explain the stage of economic development activity for communities. As noted above, the problems associated with the availability of other potential characteristics means that an analysis of these characteristics must be left to additional research beyond the scope of this study.

Turning back to the Census variables, we examined and tested those variables using a variety of 'screens', including:

- descriptive summaries of means and standard deviations for each variable for all communities with Weak or No MIZ, with a population of 50 to 4,999;
- descriptive summaries of means and standard deviations for each variable for all communities with Weak or No MIZ, with a population of 100 to 4,999;
- comparing means and standard deviations for each variable within Weak and No MIZ communities;
- comparing means and standard deviations for each variable within population clusters 100 to 2,499 and 2,500 to 4,999; and
- comparing them for 1991 and 2001 for each of the above.

We found that communities with a very small population can have a major impact on means or averages within a larger group of communities. In this case, this is primarily due to the reporting practices of Statistics Canada, which include data rounding (up or down to the nearest '5'), and data suppression (if there are not enough cases to have at least '5' for a particular characteristic). When we removed the 90 communities with a 1991 population of 50 to 99, we found that there was some normalizing of the means (i.e., a smaller standard deviation for most characteristics, and generally fewer characteristics with higher or extreme standard deviation values).
We concluded that these characteristics hold some potential for helping to identify if a community is in a period of Decline because of their importance in the literature, and because they are applicable across a variety of community sizes and types (they showed relatively few differences between clusters of 100 - 2,499 and 2,500 - 4,999 population, and between those with Weak MIZ and No MIZ status). However, we have some reservations about their collective potential at this point for two reasons.

The first is that all of the communities included in the 1991 - 2001 time series were chosen based on their population (less than 5,000) and isolation (Weak or No MIZ status) features only. While

the literature suggests that most of these places were in a period of Decline in the 1990s, there were some which were stable, and some which grew. Thus the values and the variability we uncovered are not necessarily just for communities in decline, but they are influenced by communities in other stages of economic development activity. Thus, the descriptive data by themselves are not particularly helpful.

The second relates to the high degree of variability within each characteristic. The nature and distribution of the socio-economic characteristics is not surprising. Other research has demonstrated that most rural and small town places are unique and different from one another, even if they have the same economic activity as its primary driver of the local economy. Ehrensaft and Beeman (1992) refer to this as 'macro-diversity and micro-specialization' among rural and small town places. In other words, they stress the importance that one cannot simply lump all or most of the places together and say that they share the same characteristics and features. On a national scale, they found that there was a great deal of diversity in the economic activities of rural and small town places across the country. They also found that even within clusters of similar types of economic activity (for example, within all fishing communities) there was a degree of 'micro-specialization', in that individual fishing communities were in fact different from one another. These differences might be based on the species of fish caught and processed locally, the range of other economic activity happening in the community, and so on.

Randall and Ironside (1996) also identified this differentiation in their study of primary industry communities in rural Canada. They noted, for example, that within all forestry dependent communities, the degree of dependence varied based on the share of the community labour force employed in the sector, that there were different 'mixes' of other economic activity occurring locally, and that the degree of geographic isolation (road distance from a large urban centre) was also quite variable. These features then suggest that a range of socio-economic descriptive characteristics would likely be quite variable as well.

Despite these concerns and limitations, however, the characteristics themselves are important in the context of understanding a community in decline. A refinement of the analysis of these variables, focusing on the changes in the values of these characteristics in the 1991-2001 period was completed.

Table A-1 (Appendix A) shows the average or mean change in percent from 1991-2001 for each of the socio-economic characteristics from the Census identified, for all of the communities in decline between 100 and 4,999 population, regardless of economic sector and regardless of Weak or No MIZ status. Not surprisingly, we see a great deal of variability in the change in percent value in virtually every characteristic - suggesting that most places are unique and have their own particular patterns of change. This is supported by the extreme minimum and maximum values, and the high standard deviation values (for most characteristics) relative to their means.

Another striking feature is that there are some characteristics which have changed significantly over a ten-year period, and many others which have not. Collectively, there has been a 18.1%

decline in population, a decline in the percent of the population age 0-14, a decline in the youth dependency ratio, a decline in the labour force participation rate among those age 15-24, and a decline in the share of dwellings built in the previous five years compared to that of ten years ago (implies relatively fewer new housing starts).

Table A-2 shows the mean change in percent from 1991-2001 for each of the socio-economic characteristics from the Census identified, for all declining communities between 100 and 2,499, and between 2,500 and 4,999 population, regardless of economic sector and regardless of Weak or No MIZ status. There are almost no differences in the change in percent value for most characteristics when comparing the smaller and larger population clusters. However, there are a few differences, including that smaller communities have had a larger population decline, a decline in the percent of families with children, a larger decline in the youth dependency ratio, and a larger decline in labour force participation rates for those between 15-24 years of age. Larger communities had a larger decline in overall labour force participation rate and that of the female labour force, a larger decline in the share of the workforce commuting outside the community, and a higher increase in average dwelling value.

Table A-3 shows the change in percent from 1991-2001 for each of the socio-economic characteristics from the Census identified, for declining communities between 100 and 4,999, sorted into Weak and No MIZ status, regardless of economic sector. There are even fewer differences between these two community clusters compared to those based on population size. Weak MIZ communities had a marginal increase in share of income from employment and from government transfer payments, and an increase in average dwelling value. No MIZ communities had a larger decline in labour force participation rates for people age 15-24, but an increase for female labour force participation rates.

To summarize, our analysis clearly shows that there is a high degree of variability (in terms of the minimum and maximum values and the standard deviation) for the change in the value of each of the socio-economic characteristics between 1991 and 2001. When we combine this with our findings in the literature about the high degree of diversity of small communities in isolated rural and small town places in Canada (even among those with similar economic activity), it suggests that it is not useful nor possible to define or establish thresholds for each characteristic which point to a period of Decline in a community. An average income, for example, in one mining community may be different than in another. Labour force participation rates may be quite different in communities with similar economic activities, and thus as they move from one stage of economic development to the next, the 'thresholds' are likely to be quite different.

For most of the socio-economic characteristics we examined, there appeared to be a reasonably clear 'direction of change'. In other words, most characteristics showed a specific pattern of either increasing or decreasing. There were some for which the mean value of change was close to zero. We feel, therefore, that it is important to look in more detail at the directionality of each characteristic within each economic sector, to determine if there are more strong indications or signals about the characteristics of a community in decline. For example, for some of the characteristics where the mean value of change might have been very close to zero, it might be

more strongly positive or negative within one or more specific economic sectors. This idea of examining the directionality of a characteristic is supported by previous studies of specific types of rural communities (such as forestry or mining), which describe the nature of change and its impact on a variety of socio-economic descriptive characteristics, such as incomes, employment rates, and more.

When we looked at changes in the values of the various characteristics between 1991 and 2001 in each of the eleven economic sectors, we found that there are some very important differences in the magnitude of change in the value of the characteristics over time, among the different types of communities (Appendix Tables B-1 to B-11). For example:

- mining communities experienced an average 55% decline in population, while non-specialized communities experienced an average decline of 14.5%,
- tourism communities experienced an average decline of 7.2% in the share of population age 0-14, while retirement communities experienced a decline of 2.3%,
- tourism communities experienced an average increase of 13.2% in the share of population age 65 and over, while dual specialization communities experienced an increase of 0.8%,
- tourism communities experienced an average increase of 8.9% in the percent of households which are one-person households, while agricultural communities experienced an increase of 3.0%,
- fishing and tourism communities experienced an average decline of 10.3% in the youth dependency ratio, while retirement communities experienced a decline of 4.2%,
- mining communities experienced an average decline of 8.5% in the share of income from employment, while tourism communities experienced an increase of 10.4%,
- fishing communities experienced an average decline of 6.0% in the labour force participation rates among all in the labour force, while tourism communities experienced an increase of 8.1%, and
- dual specialization communities experienced an average increase of $2,763 in the average dwelling value, while tourism communities experienced an average increase of $14,926.

These variations in magnitude and directionality underscore the fact that individual communities, and that different types of communities based on their employment share in a dominant sector, are different from each other in terms of changes in socio-economic conditions over time.

As suggested at earlier, there is significant and meaningful use in examining whether or not a characteristic is increasing, decreasing, or remaining relatively stable (the direction), through a period of Decline, for each sector. When we examined the magnitude and direction of each characteristic in the eleven different sectors, we found some differences (as noted in the bullet list above). These differences suggest that it is important for policy and program analysts to understand the type of community (based on its economic activity defined by the percentage of the labour force employed in each sector) before passing judgement or making decisions about the future economic trajectory of a community.

A more detailed examination of the direction of change for each characteristic for each economic sector showed that there is a different 'mix' of characteristics which are increasing, and those which are decreasing, over time, which characterize the nature of decline in one particular type of community compared to another. Notably, when comparing agricultural and manufacturing communities, most characteristics exhibit the same pattern. However, in declining agricultural communities, for example, labour force participation rates for females and the percentage of those commuting outside the CSD increase over time while they decrease over time in declining manufacturing communities.

Overall, a number of characteristics have been *increasing* in all of the eleven sectors with declining communities. These include:

- % lone-parent families,
- % one-person households,
- % population 45-64,
- % population 65 and over, and
- change in average dwelling value ($).

A number of characteristics have been *decreasing* in all of the eleven sectors with declining communities.

- % population change,
- % population 0-14,
- % population 25-44,
- youth dependency ratio,
- % youth out-migration,
- % employed in a given sector (except retirement communities),
- labour force participation rate 15-24 years of age, and
- % built during the last five years.

A number of characteristics have been *increasing* for certain types of rural and small town places. These include the following:

- % population 15-24 has been increasing for agricultural and dynamic services communities,
- % of families with children has been increasing for tourism communities and non-market communities,
- % employment income has been increasing for forestry, tourism, dynamic services, retirement, and dual specialization communities,
- % government transfer has been increasing for agricultural, mining, tourism, manufacturing, and dual specialization communities,
- % other income has been increasing for fishing, mining, tourism, manufacturing, dynamic services, non-market services, and non-specialized communities,

- labour force participation rates 15 and over have been increasing for forestry, tourism, dynamic services, retirement, and dual specialization communities,
- labour force participation rates for females have been increasing for agricultural, forestry, mining, dynamic services, non-market services, retirement, dual specialization, and non-specialized communities, and
- % commuting outside of the CSD has been increasing for agricultural, fishing, forestry, mining, dynamic services, and retirement communities.

In addition, a number of characteristics have been *decreasing* for certain types of rural and small town places. These include the following:

- % population 15-24 has been decreasing for fishing, forestry, mining, tourism, manufacturing, retirement, non-market services, dual specialization, and non-specialized communities,
- % population that is male has been decreasing for agricultural, fishing, forestry, mining, tourism, dynamic services, non-market services, retirement, dual specialization, and non-specialized communities,
- % of families with children has been decreasing for agricultural, fishing, forestry, mining, manufacturing, dynamic services, retirement, dual specialization, and non-specialized communities,
- % employment income has been decreasing for agricultural, fishing, mining, manufacturing, non-market services, and non-specialized communities,
- % government transfer has been decreasing for fishing, forestry, dynamic services, non-market services, retirement, and non-specialized communities,
- % other income has been decreasing for agricultural, forestry, retirement, and dual specialized communities,
- labour force participation rates 15 and over have been decreasing for fishing, mining, manufacturing, non-market services, and non-specialized communities,
- labour force participation rates for females have been decreasing for fishing, tourism, and manufacturing communities, and
- % commuting outside of the CSD has been decreasing for tourism, manufacturing, non-market services, dual specialized, and non-specialized communities.

Limitations of the Directionality Approach

Having said this, there are some important considerations to be raised when using this 'directional approach'. Not all of these characteristics will come into play at the same time during Decline. In fact, the Decline phase itself may be broken into further stages. For example, while some residents may move out of the community after an industry closure, others may not immediately move out of the community. Depending on commuting opportunities, some residents may seek employment opportunities in nearby places, such as the case in some agricultural towns (Lawrence *et al.* 2001; Lobao and Meyer 1995). Eventually, commuting for work or shopping may lead to additional economic leakage and out-migration (Thomas and

Bromley 2002; Findlay *et al.* 2001; Halseth and Sullivan 2000; Pinkerton *et al.* 1995). Therefore, out-migration may take place in stages and the pace of decline may vary from place to place.

The percentage of employment income within a place may decline if the 'unemployed' remain in the community during Census periods. If the 'unemployed' migrate, it is possible that the percentage share of those with employment income could remain the same or increase. This may explain why the percentage of incomes from employment and overall labour force participation rates increase despite declines in the population for forestry communities.

In addition, government transfers may increase initially as unemployment rises after industry closure. However, in declining communities, these transfers may decrease as the 'unemployed' move out of the community to pursue employment or even retraining and educational services in other places. This may be particularly important in smaller places that have fewer social or educational services to help residents adjust to change.

Some rural and small town places, such as dynamic services and agricultural communities, have retained or even increased the share of the population between the ages of 15-24 despite declines in the labour force participation rates for this age group. Lower labour force participation rates for this age group will be an important issue confronting these communities in order to prevent youth out-migration.

Furthermore, when we explore tourism communities, for example, the percentage of families with children may be increasing, but the actual number of families in the community may have declined. This may explain why the percentage of families with children has on average increased dramatically (23.7%) despite declines in the percentage of the population between the ages of 0-24. Moreover, there are many different types of tourism communities. In some tourism towns, those staying behind are older, drawing upon other incomes in the form of RRSPs or pensions through government transfers. As unemployment is 'exported' out of the community, population numbers could drop followed by an increased share in the percentage of residents with employment income. These numbers may be further influenced by seasonal residents.

Moreover, the number of communities specializing in a given economic sector may be small, such as the case with fishing and forestry communities. As such, it is possible for a small community to substantially influence the mean values for characteristics exploring rural and small town places in decline. The wide range in values indicated in the minimum and maximum columns for tables in Appendix B really demonstrates the variations experienced in these places.

Although the directionality of change for each socio-economic variable we examined offers potential insights into changes in each economic cluster of communities, its usefulness is limited in the cases of ‘dual-specialization’ and ‘non-specialization’ communities. While there may be some general patterns within each of the clusters, there is significant variation in the labour force composition from one individual community to the next within each of these clusters. For example, dual-specialization communities could include up to 55 different combinations of dual specialties (e.g. agricultural and retirement; agricultural and manufacturing; manufacturing and

tourism; etc.). In a similar way, there will be significant variations within the non-specialized cluster, where any individual community may have a single labour force component that is very close to the 25% threshold we use, while another may have widespread distribution of its labour force across a number of sectors. Taken together, the relative influences of the various economic sectors present in a community will have different outcomes in terms of directionality of the various socio-economic characteristics over time. Therefore, it is not possible to 'map' the directionality of the change in variables over time from the general pattern of these clusters as a whole onto individual communities. Greater reliance on local knowledge will be required to understand the change dynamics in these dual-specialization and non-specialization communities.

To summarize, we have developed an understanding of indicators of decline in type of economic sector. There are some limitations to this, given that within the 10-year period used for this analysis, in any given economic sector some communities may have been in a period of Decline or transformation to another economic sector while continuing to decline. More research will be needed to unpack the variation among communities. For example, individual case studies of specific communities will be important (this will be completed in Section 6.0). Another approach, beyond the scope of this study, would be to look specifically at communities which had a change in its economic sector classification (for example, from agriculture to dual specialization), to understand more about the dynamics of community change. Now, we turn to a discussion of the relative explanatory power of the change in the socio-economic characteristics themselves, and consider other factors which should be analyzed to understand a community moving through a period of Decline and into an Alternative Future.

The Relative Explanatory Power of Socio-Economic Characteristics: The Importance of Context

To this point in the analysis we have been exploring the potential of a range of socio-economic characteristics to explain, describe, or identify when a community is in a period of Decline. We have explored the changes in these characteristics over the 1991 - 2001 period in rural and small town Canada. We have concluded that there is significant variation in the values of these characteristics from one community to the next, and from one cluster of similar types of communities (based on economic sector classification) to another. At best, we have been able to determine the direction of change for each characteristic, through this 10-year period, in terms of its increase or decrease in value. The significant diversity from one place to the next does not permit the identification of an easily identifiable 'threshold' for each characteristic to show when a community is in Decline.

Socio-economic characteristics are only part of the story of change in rural Canada. Each community is unique, and each economic sector is unique as well. These places are conditioned and shaped by a range of other local and exogenous factors which are not easily measured with statistics. Context is important to understanding changes in the local economy. Reimer (2003) notes that communities with similar economic outcomes over time may in fact be much different in terms of the extent to which their economic base is more or less exposed to the global

economy (for example, the products produced locally are sold to foreign companies and, therefore, the local economy is exposed to changes in international trade rules, changes in the value of the dollar, etc.). Lawrence *et al.* (2001) also emphasize the importance of exposure to the global economy as a factor influencing rural decline. Page and Beshiri (2003) highlight the importance of the regional economy as something which helps to shape the local economy of a small place. Others have identified that the differences between seemingly similar communities in terms of the specific resource which shapes the local economy are important (Randall and Ironside 1996; Wilson 2004). This includes, for example, that there may be very important differences between a coal mining town and a gold mining town - even though both are classified as 'mining' communities.

Changes over time in a community happen in the context of these elements. Thus there are a number of key questions that should be asked about a given community to understand much more about the nature of the decline, and which type(s) of alternative future(s) might be possible. These questions include:

- What is the nature of the regional economy surrounding this community? Is it healthy or unstable?
- What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?
- What is the strength/quality of local leadership to help move the community forward or to address the problems it faces?
- What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?
- How exposed is the local economy to global economic forces (e.g., what are the commodity prices for the local resource, and how is it changing?)
- What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?
- Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?
- What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?
- For communities which are classified as either dual specialization or non-specialized, how has the distribution of the labour force across all sectors changed in recent years, and where is the distribution headed? Is the community moving towards greater concentration or more diversity in its economy, and if so, to which or from which economic sector(s)?

Policy and program officers who are able to generate answers to these questions, and who are informed about the broader trends associated with the type of community in question, will be in a much better position to make sound judgments and decisions about the nature and extent of the period of economic decline in the community, where the community might be headed in terms of an alternative future, and how best to support its future development.

FRAMEWORK FOR EXPLORING STAGES OF ECONOMIC DEVELOPMENT ACTIVITY IN RELATIVELY ISOLATED RURAL AND SMALL TOWN PLACES IN CANADA

- Startup
- Growth
- Plateau
- Decline
- Alternative Futures

Focus: Relatively isolated rural and small town places, with a population of 50 to 4,999, and which have either a Weak MIZ or No MIZ status.

Startup: The municipal charter establishing the settlement would have been recently granted. There would be evidence of new construction of buildings and municipal infrastructure (water supply and sewerage, roads and streets, municipal administration and service buildings, houses and other residential buildings). Basic and essential services would also be established in the early part of the Startup period, as would a large population influx.

Growth: New developments in the community, such as retail stores in the downtown core, an expansion of essential services, or construction of an industrial park are possible. Expansion of municipal boundaries may be another indicator of growth. Sustained population and/or household growth over a long period of time, and a high pace of building starts for all types of structures are other features that would also be indicators of growth.

Plateau: There are fewer physical signs of change. New economic activity, as well as new building construction, is limited. There is also little net population growth or decline. Services peak in terms of the volume of activity and staffing, and there is a progressive aging/maturing of the population.

Decline: This stage is characterized by a decline in the resource industry or economic activity which fueled the initial growth and sustained the Plateau period. This might include a depletion of the resource, the closure or withdrawal of public services or institutions, and the closure of the both major employers and small retail or supply businesses. Net population decline from out-migration is a key characteristic.

Alternative Futures: At any point within the framework, but often following a period of decline, conditions may change to the point where a very different community economy develops. Depending upon local history and context, such transition may occur through a diverse range of individual pathways. These include:

- ***Transform to some other economic activity and grow again***. The community responds to change by aggressively transforming its economy into other activities which place it in a growth stage again.
- ***Transform to some other economic activity and plateau at a similar or lower level than before***. The community transforms its economy into other activities, or allows the community to adopt a new primary economic activity by default, either of which provides a measure of stability or a plateau, but one which is at a lower economic and population level than before the change.
- ***Transform to some other economic activity and decline more***. The community attempts to transform its economy into something else, but the efforts fail and a further period of decline ensues.
- ***Remain in the same primary activity, but function at a lower plateau than before***. A period of decline may occur over a finite period of time, after which there is a leveling off of economic and population change and the community 'settles in' to a period of stability or a plateau which is at a lower level compared to previously.
- ***Decommission or closure***. The community, or an outside agency, makes the decision to close the community (often after a long and sustained decline). In some cases, the decision is made quickly where nearly the entire workforce may be employed when a major employer closes.

6.0 CASE STUDIES

Introduction

The purpose of this section will be to use case studies to illustrate how the framework could be applied in practice and explore how some communities moved through a period of decline and now find themselves in an Alternative Future. By starting in the past, and tracing forward to the present, the case studies provide an opportunity to see if the model is useful. For example, a community may have declined, transformed to another economic activity, and may have started to grow again. It may have transformed to a different economic activity and plateaued at a similar or lower level than before. A place may have transformed to another economic activity and declined further. It may have remained in the same economic sector, but now functions at a lower plateau than before. Finally, a community may have been decommissioned or closed.

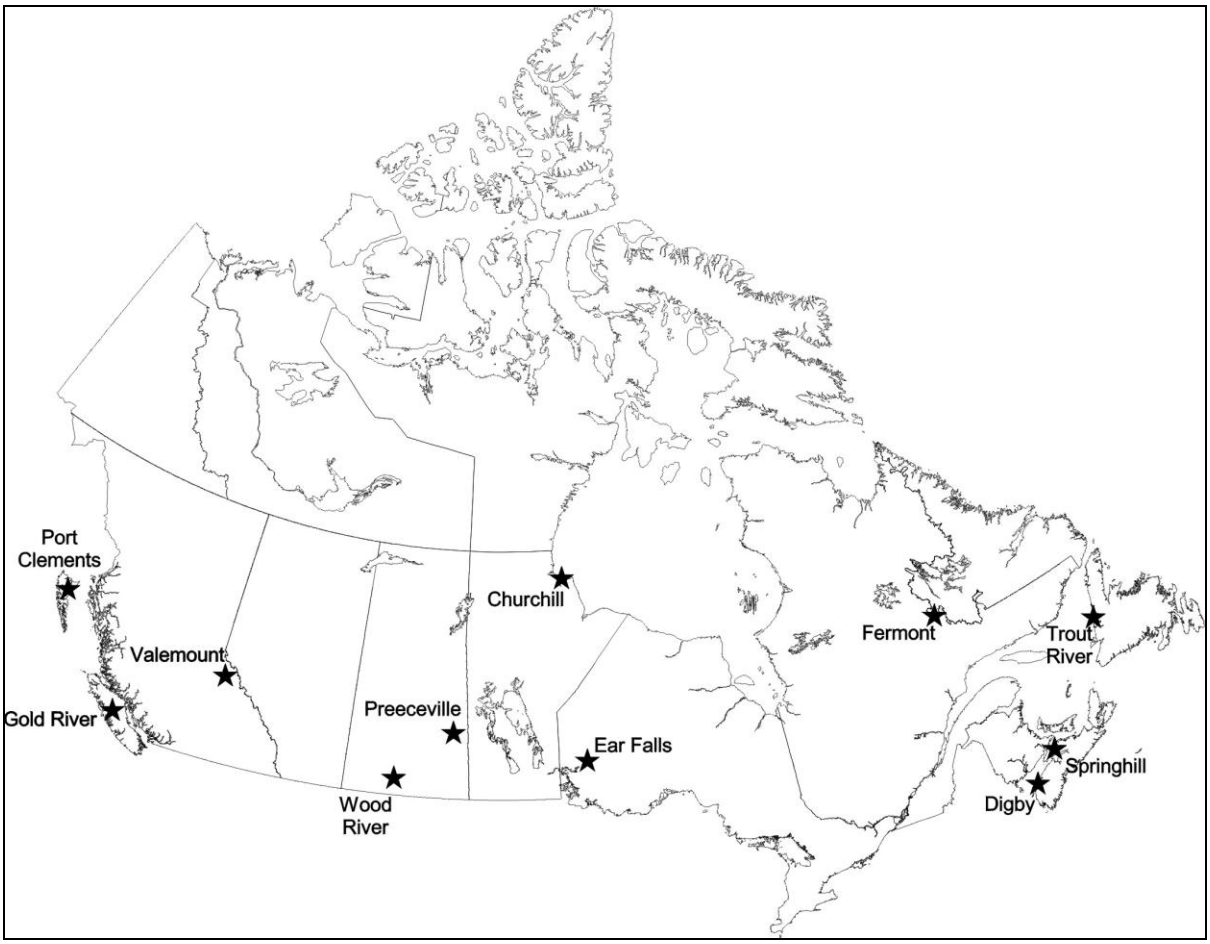
Case studies were selected for each of the eleven different types of sectors identified. These case studies were drawn from a database that identified communities with a population of less than 5,000 people, as well as communities with a Weak or No MIZ status. Since the focus of the case studies is to explore the characteristics of communities as they moved through (or are moving through) a period of Decline into one or more 'Alternative Futures', the authors selected case studies undergoing transition in order to test the usefulness of the framework and demonstrate examples where local and regional contexts may be important. To facilitate triangulation (Pettigrew 1995), case studies were also selected because of the availability of a range of additional sources of information, such as newspaper articles, reports, books, journal articles, and other types of statistical information. The case studies selected include:

- Agriculture: Wood River, Saskatchewan,
- Fishing: Trout River, Newfoundland and Labrador,
- Forestry: Port Clements, British Columbia,
- Mining: Fermont, Québec,
- Tourism: Ear Falls, Ontario,
- Manufacturing: Gold River, British Columbia,
- Dynamic Services: Valemount, British Columbia,
- Non-market Services: Springhill, Nova Scotia,
- Retirement: Preeceville, Saskatchewan,
- Dual Specialization: Churchill, Manitoba, and
- Non-Specialized: Digby, Nova Scotia.

These case studies collectively illustrate that individual communities are unique and do not necessarily fit 'models' as evident by the deviation of some of the characteristics and statistics from the model. Communities move through many changes over time, and they often have different economic sector classifications over time. In most cases these different classifications are the result of outside forces rather than specific actions taken by individuals within the community or their economic development agencies which serve them. As such, each case study description will also demonstrate the importance of context by describing the unique features of

rural and small town places across Canada, such as global exposure, ownership of industry, or infrastructure, that ultimately impact the stability or change of a place.

Figure 6.1: Selected Case Studies for Exploring Change in Community Development



6.1 Agriculture – Wood River, Saskatchewan

Introduction

This case study examines the agricultural community of Wood River, Saskatchewan. Due to the limited data availability for earlier Census periods, this case study will focus on the Decline period from 1986-2001 when Wood River has faced a number of challenges.

Population: In 2001, the Rural Municipality (RM) of Wood River had a population of 370. It is located in south-central Saskatchewan. The RM includes the two communities of Woodrow and Melaval, and a smaller population in Thomson Lake Regional Park. The Town of Lafleche is located inside the Rural Municipality, but since it is a separate incorporated municipality it is not part of the Census Division of Wood River. Although Lafleche is excluded from the data in this case study, the majority of services are located there. Two provincial highways pass through the RM crossing each other at the southeast corner of Lafleche.

MIZ Status: Wood River has a Weak MIZ status. It is located 140 km southwest of Moose Jaw (population 32,131) and 80 km north of the Canada-United States border. A smaller regional service centre is located in Assiniboia (population 2,483) roughly 42 km from Wood River. Gravelbourg (population 1,187) is roughly 10 km from Wood River while Regina (population 178,225) is located 211 km away.

Economic Classification: Wood River is classified as an agricultural community specializing mostly in grain and oil seed production. However, the southern part of the Rural Municipality also consists of ranching and mixed farming.

Alternative Future for Wood River: Since prior to 1966, as Wood River has moved through a period of decline, its economy continues to be classified as "agricultural". This alternative future, when compared to the 1980s, could be described as "Remained in the same economic sector and continued to function at a lower plateau". While we cannot predict the future, there may be a range of opportunities that policy analysts should be aware of. These include opportunities for Wood River to diversify through tourism or continuing to build a foundation for attracting retirees. Thomson Lake Regional Park is 8 km north of Lafleche and is the first human-made lake and park in Saskatchewan. There is a small community of cabins and houses, over 200 camping sites, a marina, swimming pool, and a golf course. As the population of the RM is aging, the regional park may be one reason why housing construction and average dwelling values have increased during the past five years.

Period of Decline: Pre-1966 to present. Wood River is an example of a community that has been experiencing a long period of Decline. This may have been sparked in 1957 when Highway 13 was moved to the other side of the railway tracks. Consequently, the main street of Melaval was no longer Highway 13, and traffic through town was reduced. Shortly after, the CPR water tower was torn down in 1959 and the Melaval hotel closed

in the early 1960s. In 1970, the school closed in Melaval, followed by the closure of the Lucky Dollar Store (1975), the hockey rink (1977), and the first elevator (1980). In 1982, the second elevator was closed, and the remaining three were dismantled in 1987. In 1997, the Memorial Hall was closed.

Socio-economic Indicators

Since 1966, there has been a steady loss of residents from the Rural Municipality of Wood River. Data from 1986 to the present indicates that this trend has not changed (Table 6.1.1). The loss of young families is particularly evident, a trend supported by a consistent decline in the youth dependency ratio from 50.8 in 1986 to 20.8 in 2001. There was a modest increase in individuals between 15-24 years of age between 1991 and 1996. By 2001, the population of this age group had declined to 55 individuals. Wood River has experienced a consistent trend of youth out-migration, particularly in 2001 as the community lost 69.2% of residents that were between the ages of 15-24 in 1991. Instead, the population appears to be aging as both the numbers and the percentage of the population 45 years of age and older has been increasing since 1986. This is also supported by consistent increases in the elderly dependency ratios between 1986 and 2001.

Table 6.1.1 Socio-Economic Characteristics of Wood River, 1986-2001

Characteristics	1986	1991	1996	2001
Economic Type of Community	n/a	Agricultural	Agricultural	Agricultural
Total population	524	487	437	370
Total age 0-14	160	125	85	50
Total age 15-24	65	65	75	55
Total age 25-44	80	145	115	70
Total age 45-64	95	90	110	115
Total age 65 and over	50	60	70	85
% Pop'n change (previous 5 years)	-3.1	-7.1	-10.3	-15.3
% Pop'n 0-14	30.5	25.7	19.5	12.2
% Pop'n 15-24	12.4	13.3	17.2	14.8
% Pop'n 25-44	29.6	29.8	26.3	17.6
% Pop'n 45-64	18.1	18.5	25.2	53.8
% Pop'n 65 and over	9.5	12.3	16.0	20.3
% Pop'n Male	56.3	54.4	56.1	52.7
% Lone parent families	3.6	0.0	0.0	8.3
% One-person households	15.2	18.1	16.1	13.3
% families with children	57.1	57.7	52.0	45.5
Youth dependency ratio	50.8	41.6	28.3	20.8
Elderly dependency ratio	15.9	20.0	23.3	35.4
% 5-year movers	15.6	5.9	8.0	2.8
% Youth Out-Migration (over previous 10 years) **see note below.	33.3	47.1	38.5	69.2
% Employment income	72.6	70.4	78.2	65.9
% Gov't transfer payments	12.2	10.7	12.6	12.6
% Other income	15.2	18.9	9.3	21.5
% Agriculture employment	n/a	56.9	62.5	53.7
LF Participation rate, 15+	80.0	81.7	79.2	79.1
LF Participation rate, 15-24	38.5	58.3	66.7	93.3
LF Participation rate, Females 15+	73.5	75.8	71.0	66.7
% Commute Outside CSD	n/a	32.7	29.1	28.8
% Dwellings Built Last 5 Years	9.4	0.0	6.5	10.3
Average Dwelling Value $	26,347	40,719	36,008	79,606
% Change in Average Dwelling Value	n/a	54.5	-11.6	121.1

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

Employment and income characteristics have also changed in Wood River over time. Employment figures for agriculture are not available at this time for the period before 1991 as all primary sectors were combined together. However, in 1991 over half of the labour force (56.9%) was employed in agriculture. The percentage of the labour force employed in agriculture increased to 1996, but declined thereafter to 2001. The percentage of income from employment appears to coincide with changes in employment in agriculture, which also increased in 1996 followed by a decline in 2001. However, there has been very little change in the percentage of income from government transfer payments over time. There have been changes in the percentage of income from other sources as it grew to 18.9% in 1991, declined to 9.3% in 1996, and then increased again to 21.5% in 2001. When total labour force participation rates for all individuals over 15 years of age are explored, there has been very little change from 1986 to 2001. That said, labour force participation rates for individuals between 15-24 years of age have increased dramatically while labour force participation for women has declined. Since 1991, the percentage of the labour force commuting outside of the CSD had declined, although more than 25% of the population still commutes. In 1990, the Pioneer elevator and the Alberta Pacific elevator were closed. In 2000, the Reliance elevator was closed. In 2001, the Wheat Pool elevator was closed. It is important to remember, however, that Wood River has a small population and changes in any of the variables can exert wide fluctuations in the data. Of particular interest, however, is that the percentage of privately owned dwellings built in the last five years has been increasing since 1991 and the average dwelling value increased substantially between 1996 and 2001. Adjacency to the Town of Lafleche adds to a complex local economy.

Table 6.1.2 shows that many of the socio-economic variables that our general framework uses to describe Decline in agricultural communities performed as expected in the Rural Municipality of Wood River. Its population has declined by almost 30%. It has also experienced an aging of the local population. As such, the percentage of families with children and the youth dependency ratio has been declining, while youth out-migration has been increasing as has the elderly dependency ratio.

As the population has aged, the percentage of incomes from government transfer payments and other income has modestly increased. The exodus of young families has been accompanied by a decline in income from employment and a decline in the percentage of the labour force employed in agriculture. There have also been modest declines in the labour force participation rates for all individuals over 15 years of age, and declines have also occurred for labour force participation rates for females in the same age group.

Wood River also exhibits characteristics not typically exhibited with a declining community. Notably, there is a substantial increase in the labour force participation rate for individuals between 15-24 years of age. One-person households have also declined. Furthermore, the percentage of individuals commuting outside of the CSD has declined. However, over recent Census periods, more than 25% of the individuals had been commuting. As noted earlier, commuting is a typical feature associated with declining agricultural towns as families attempt to support their household farm income. Consequently, these commuters may have decided to move to their place of employment. Finally, Wood River has experienced a small increase in the percentage of privately owned dwellings built during the past five years. This has been

accompanied by a substantial increase in the average dwelling value. These changes may be associated with new recreational opportunities in Wood River, growth in the Town of Lafleche, and opportunities for retaining retirees.

Table 6.1.2 Change in Characteristics for Agricultural Communities in Decline

Socio-Economic Characteristics	Decline Stage Expectations For Agricultural Communities	Wood River 1986-2001
% Pop'n change	decrease	-29.4%
% Pop'n 0-14	decrease	-68.8%
% Pop'n 15-24	decrease	-15.4%
% Pop'n 25-44	decrease	-12.5%
% Pop'n 45-64	increase	21.1%
% Pop'n 65+	increase	70.0%
Change in % Pop'n Male	X	X
Change in % Lone parent families	X	X
Change in % One-person households	increase	-1.9%
Change in % families with children	decrease	-11.6%
Change in Youth dependency ratio	decrease	-30.0%
Change in Elderly dependency ratio	increase	19.5%
Change in % 5-year mover	X	X
Change in % Youth Out-Migration (over previous 10 years)	increase	35.9%
Change in % Employment income	decrease	-6.7%
Change in % Gov't transfer payments	increase	0.4%
Change in % Other income	increase	6.3%
Change in % Agriculture employment	decrease	-3.2%
Change in LF Participation rate 15+	decrease	-0.9%
Change in LF Participation rate 15-24	decrease	54.8%
Change in LF Participation rate Females 15+	increase	-6.8%
Change in % Commute Outside CSD	increase	-3.9%
Change in % Built Last 5 Years	decrease	0.9%
% Change in Average Dwelling Value	decrease	202%

Source: Statistics Canada 2001, 1996, 1991, 1986.
Note: X indicates characteristics which are not important socio-economic indicators for a particular phase.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

The regional economy is not as stable as other regions. In 1996, for example, the hospital in Lafleche was downgraded to a community health centre with the loss of up to 20 jobs. The purchase of the local rail line, and development of a producer's co-operative, may help to stabilize the local and regional economies.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

There are a number of communities within short commuting distance (less than one hour) from Wood River. This has provided potential access to many alternative employment opportunities as evident by the fact that more than 25% of its population has been commuting to other CSDs for employment since 1991.

What is the strength / quality of local leadership to help move the community forward or to address the problems that it faces?

The Producer Co-operative began in 2000. It was formed in response to the closures of the elevator to save farmers transportation and loading costs that would be incurred by using the terminal located in Shaunavon. For shipping grain and seeds, members pay $150 per car, while non-members pay $250 per car. Approximately 38-40 farmers use the service. An auger was recently purchased to help load the grain into the storage bins and then into the rail cars. They are looking at the possibility of buying more cars in the future. More recently, in 2004, a group of farmers from many communities, including Wood River, along the 500 km stretch of the Great Western Railway raised $4 million to purchase the rail line that would secure their future.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

The nature of ownership has changed over time. While farmers have been local, the elevators and rail line had been controlled by external business interests. Before regional farmers bought the Great Western Railway in 2004, it was owned by Westcan Rail of Abbotsford, B.C., which previously had belonged to Canadian Pacific.

How exposed is the local economy to global economic forces (i.e. what are the commodity prices for the local resource, and how is it changing?)

Wood River's economy has been exposed to global restructuring pressures, not just by grain prices, but also international pressures for Canada to restructure some of its agriculture related policies.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

The deregulation of freight rates has increased costs for farmers shipping their goods to distant ports. Furthermore, the elimination of the Crow rate subsidy in 1995 has also increased the costs farmers must pay to ship their goods.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

Services available in Wood River include 911 service, rural crime watch, cell phone service (analog), postal service, a co-op gas station, auto repair, and train (freight) service. Other local businesses include DeCap Trailer Manufacturing Limited, Déjà vu Inn Bed and Breakfast, plumbing and heating, seed farms and plants, and crafts. Residents can also access recreational services including an outdoor swimming pool, a community playing field, hiking trails, a golf course, a marina, and campgrounds. Many of these recreational services are located at Thomson Lake Regional Park. Thomson Lake was formed in 1961 by the damming of Wood River in order to meet the water needs of Lafleche. There have been many additions to the park over the years including a swimming pool, shower, and laundry facilities in 1975, a changing building in 1980, and a marina in 1984. The marina was funded initially by boating enthusiasts. Most of this development was thanks to grants that were given to the park. In 1994, natural gas became available, and water and sewer lines were installed. Improvements were made to the camp in the following year, including a

sheltered kitchen area and a shower building. The next year, a new pumphouse was built and in 2000, the shower building was replaced. Currently, there are 104 campsites services with electricity at Thomson Lake and 120 seasonal sites. There are also two churches.

There are no educational or health services in Wood River. However, most of these services are accessible within 30 minutes. For example, students travel to Lafleche where an elementary school and a high school are located within the same building. A health centre is also located in Lafleche. For more specialized services, residents must travel to Gravelbourg, Assiniboia, or Moose Jaw. Other services, such as law offices, shopping, and community and business services are also accessible within 30 minutes of Wood River in Gravelbourg and Assiniboia.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

There is a Merchants Association and an Economic Loans Co-operative in Lafleche that also serves Wood River residents and businesses. South Central Community Futures Development Corporation is located in Assiniboia (approximately 40 km away).

Summary

The Rural Municipality of Wood River is an example of an agricultural community that has been experiencing a long period of Decline. This Decline may have been sparked by the relocation of Highway 13, which used to bring traffic through the community. Over time, there have been a number of elevator closures within the area and farmers have faced additional challenges from the elimination of subsidies and the deregulation of freight rates. Wood River has been attempting to cope with these challenges by diversifying its economy through the development of Thomson Lake Regional Park and through the Producers Cooperative's initiatives that include grain loading facilities and partnering with other regional farmers to purchase the rail line.

Sources Consulted

Globe and Mail, Toronto, Ontario.

Martz, D., I. Brueckner., and K. VanderZwan. *Service Provision in Rural and Small Town Places: A Report for Wood River, Saskatchewan.* 2003. Muenster, Saskatchewan: St. Peter's College.

6.2 Fishing Community - Trout River, Newfoundland

Introduction

This case study examines the fishing community of Trout River from 1991 to the present. With the collapse of the ground fishery in the 1990s, there has been a decline in the number of people working in fishing and fish processing. The relative share of the active workforce employed in the fishery remains, however, above 30%. Today, the community has a dual specialization, with the labour force in non-market services (government, health, and education services) and in the fishery. The discussion focuses on the changes in the community between 1991 and 2001.

Population: The Town of Trout River had a 1991 population of 763. It is located at the southern end of the Great Northern Peninsula on the west coast of Newfoundland and Labrador. The population has declined from 763 to 616 (19%) between 1991 and 2001.

MIZ Status: Trout River has a Weak MIZ status. It is located 85 km northwest of Deer Lake (population 4,800, where there is a regional airport) and it forms the southern boundary of Gros Morne National Park. Corner Brook, with a population of more than 25,000, is more than a 2 hour drive away.

Economic Classification: Trout River has been a fishing community since its founding in the early 1800s. In more recent years, non-market services have been an important source of employment. With the collapse of the ground fishery, and the out-migration people, the labour force has shrunk and the community now has more than 25% of the labour force in both fishing and non-market-services. Employment in manufacturing has declined.

Alternative Future for Trout River: Between 1991 and 2001, as Trout River moved through a period of decline as a "fishing" community, its economy changed and became classified as "dual-specialization". This alternative future, when compared to its previous economic classification, could be described as "Transform to some other economic activity and decline more". The community is one of many in the province to suffer significant population loss in the 1990s. Non-market services now play an important role in providing employment for the people who remain. Looking ahead, it is possible that there may be further changes. While we cannot predict the future, there may be a range of possibilities that policy analysts should be aware of. The region and province are attempting to increase tourism opportunities and the fact that Trout River is a gateway community to a national park suggests potential for growth in that sector, notwithstanding that employment in the tourism sector by residents of the town itself has declined in the 1990s. Some people from the surrounding unincorporated rural communities were employed in this sector. In addition to the development of hiking and skiing trails, campground and day-use picnic areas, boat tours, and boardwalks, the town recently opened a fishermen's museum and a discovery centre. Employment generated by these activities should become evident in the next Census.

Period of Decline: 1991 to the present.

Socio-economic Indicators

Since 1991, there has been a decline in the absolute and relative share of the population aged less than 25 years, and increases in the 45 and over age cohorts (Table 6.2.1). Lone parent families became more prevalent during the early 1990s, perhaps as a product of family stress from job losses in the fisheries; today there are 20 such families - about 11% of all families. The number of one-person households has risen dramatically and accounts for 17% of all households. The percent of families with children, and the youth dependency ratio, have both declined, while the elderly dependency ratio has risen. These are products of the out-migration of young persons. The share of income from employment sources has fallen to less than half of the total income in the community. There is still a great deal of dependence on government transfer payments (including employment insurance and Old Age Security).

Table 6.2.1 Socio-Economic Characteristics of Trout River, 1986-2001

	1986	1991	1996	2001
Economic Type of Community	n/a	fishing	fishing	dual specialization
Total population	771	763	688	616
Total age 0-14	225	206	165	115
Total age 15-24	155	146	95	95
Total age 25-44	210	226	205	175
Total age 45-64	120	126	125	145
Total age 65 and over	70	81	75	85
% Pop'n change (previous 5 years)	1.6	-1.0	-9.8	-10.5
% Pop'n 0-14	29.0	27.0	23.9	18.7
% Pop'n 15-24	20.0	19.1	13.8	15.4
% Pop'n 25-44	27.1	29.6	29.7	28.5
% Pop'n 45-64	15.5	16.4	18.1	23.6
% Pop'n 65 and over	9.0	10.5	10.9	13.8
% Pop'n Male	52.6	52.3	53.6	51.2
% Lone parent families	11.1	11.1	17.5	10.8
% One-person households	7.9	2.4	4.8	16.7
% families with children	83.3	78.0	77.5	70.3
Youth dependency ratio	46.4	41.4	38.8	27.7
Elderly dependency ratio	14.4	16.2	17.6	20.5
% 5-year movers	18.6	13.3	7.0	10.9
% Youth Out-Migration (over previous 10 years) **see note below.	17.2	-15.6 (pop. grew)	38.7	51.7
% Employment income	43.8	57.2	50.9	45.0
% Government transfer payments	54.5	41.4	46.8	45.3
% Other income	1.6	1.4	2.4	9.4
% Fishing employment	n/a	29.1	25.0	33.3
% Non-market services employment	20.3	23.6	20.0	33.3
LF Participation rate, 15 +	65.0	58.1	58.3	45.0
LF Participation rate, 15-24	61.5	51.7	45.5	52.4
LF Participation rate, Females 15 +	59.6	47.2	50.0	48.0
% Commute Outside CSD	n/a	0.0	19.4	23.8
% Dwellings Built last 5years	13.5	13.0	0.0	4.7
Average Dwelling Value $	26,843	30,097	50,231	33,654
% Change in Average Dwelling Value	n/a	12.1	66.9	-33.0

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

The total number of people working has declined since 1991, but the relative mix across industries has not changed significantly. Fisheries and non-market services remain the most important, and there have been declines in the number of local people working in the local fish plant, a manufacturing industry. The overall labour force participation rate has dropped to below 50% as some people have given up looking for work or have moved on to other activities in their lives, but the rate is up for youth aged 15-24. There are fewer people commuting elsewhere for work today, but they make up a larger share of the labour force - almost 25%. The average dwelling value is up marginally from the early 1990s, but down significantly from the average self-reported value of the mid-1990s. Only 10 new homes were built in the late 1990s.

Table 6.2.2 shows that most of the socio-economic variables that our general framework used to describe Decline in fishing communities performed as expected in Trout River. However, there were some differences. There was a small increase in the relative share of the labour force employed in the fishery (even though the absolute numbers employed in the sector declined). There was almost no change in the percent of families which were lone parent (it was expected to increase), and the labour force participation rates among young adults (age 15-24) and females, when each of these were expected to decline. There was a very marginal increase in the average dwelling value, when it was expected to decrease.

Table 6.2.2 Change in Characteristics for Fishing Communities in Decline

Socio-Economic Characteristics	Decline Stage Expectations For Fishing Communities	Trout River 1991-2001
% Pop'n change	decrease	-19.3%
% Pop'n 0-14	decrease	-44.2%
% Pop'n 15-24	decrease	-34.9%
% Pop'n 25-44	decrease	-22.6%
% Pop'n 45-64	increase	15.1%
% Pop'n 65+	increase	4.9%
Change in % Pop'n Male	decrease	-1.1%
Change in % Lone parent families	increase	-0.3%
Change in % One-person households	increase	14.3%
Change in % families with children	decrease	-7.7%
Change in Youth dependency ratio	decrease	-13.7%
Change in Elderly dependency ratio	increase	4.3%
Change in % 5-year mover	X	X
Change in % Youth Out-Migration (over previous 10 years)	increase	67.3%
Change in % Employment income	decrease	-12.2%
Change in % Gov't transfer payments	increase	3.9%
Change in % Other income	increase	8.0%
Change in % Fishing	decrease	4.2%
Change in LF Participation rate 15+	decrease	-13.1%
Change in LF Participation rate 15-24	decrease	0.7%
Change in LF Participation rate Females 15+	decrease	0.8%
Change in % Commute Outside CSD	increase	23.8%
Change in % Built Last 5 Years	decrease	-8.3%
% Change in Average Dwelling Value	decrease	11.8%

Source: Statistics Canada 2001, 1996, 1991.
Note: X indicates characteristics which are not important socio-economic indicators for a particular phase.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

The regional economy is in a long period of Decline, primarily due to the collapse of the ground fishery. All such communities across the province, and the economic development agencies which serve them, struggle with rebuilding the economy. In some cases, there has been diversification into other fishery species, while there have been other efforts in tourism development, information technology-related businesses, and other activities. The economic zone within which Trout River is located is no different. One advantage the area has is its proximity to Gros Morne National Park, which serves as an anchor destination for visitors.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

There is limited potential for commuting elsewhere. Close to one-quarter of the small labour force commutes elsewhere, mostly to Rocky Harbour. The small communities up and down the coast on either side of Trout River offer few employment prospects, and Deer Lake is too far for an easy commute.

What is the strength/quality of local leadership to help move the community forward or to address the problems it faces?

See notes in regional development agencies below.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

All of the businesses are small and independently-owned.

How exposed is the local economy to global economic forces (e.g., what are the commodity prices for the local resource, and how is it changing?)

Competition, overfishing, and management issues in the fishery created problems beyond the control of the local community. With an increasing interest in tourism, the region's economy will also be affected by changes in the global economy, exchange rates, and international travel issues.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

The community, like all other former and current fishing communities, is affected by federal and provincial policies related to the management of the fish stock and the fisheries. This would include, for example, the setting of stock quotas and the policies associated with the sale or transfer of fishing licenses. Due to the seasonal nature of the fishery (and the potential for an emerging tourism economy), the community is also affected by current Employment Insurance policies associated with hours / weeks worked, and the benefits they may receive / claim.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

The major core service in the community is the Jakeman All Grade School. All other services, including provincial and federal government offices, medical care, and other services, are located more than 30 minutes away in Deer Lake. The Town of Rocky Harbour, located 15 km away, houses the RCMP and the court house which serves Trout River.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

The town is located within Economic Zone 7, and served by the RED Ochre Regional Board Inc., one of the twenty Regional Economic Development Boards established by the Government of Canada and Newfoundland and Labrador in 1995. The Board's vision for the region is "one in which Community and Economic Development is based upon an active and diversified economy". There are several residents from Trout River who sit on the RED board. The organization, which is responsible for developing and implementing a strategic plan for community and economic development in the region, has identified waterfront development and hiking trail development as top priorities for the Trout River area. There have been investments in these developments in recent years. A fishermen's museum and a discovery centre also recently opened, thanks in part to the efforts of the RED board.

Summary

Trout River finds itself in a situation similar to most other fishing communities in the province. The traditional fishery is more or less gone, and some remnant of fishing and fish processing remains although the activity is in other species and the markets are elsewhere. Population decline and out-migration of young people greatly affected the community through the 1990s and it is uncertain if the trend will continue. The community's smaller labour force is now diversified in fisheries and non-market services, and there have been new developments in tourism.

Sources Consulted

RED Ochre Regional Board Inc. Strategic Economic Plan 1997-2001. 1997. Town of Trout River http://www.k12.nf.ca/jakeman/troutriver/community.htm

6.3 Forestry – Port Clements, British Columbia

Introduction

This case study examines the forestry community of Port Clements, British Columbia, from 1996-2001. Change in Port Clements is linked to a decline in forest employment through industry restructuring, as well as the Softwood Lumber Dispute with the United States, and unsettled aboriginal land claims. Isolation is also a challenge for residents who may have to travel long distances to access needed services.

Population: Port Clements has a 2001 population of 516. It is located on the estuary of the Yakoun River and Masset Inlet in the north-central part of Graham Island in the Queen Charlotte Islands.

MIZ Status: Port Clements has a No MIZ status. It is located 42 km from Masset (population 996), 60 km from Queen Charlotte City (population 1,045), but it is a 6 hour ferry ride to Prince Rupert (population 14,643).

Economic Classification: Port Clements is classified as a forestry community. Following World War II, MacMillan Bloedel took over logging leases in the area and spruce was in high demand. Today, there is an industrial park with a sawmill owned by Abfam Enterprises and a pole site owned by O'Brien's Logging Ltd. Other industrial activities include a range of contractors and silviculture. A number of independent sawmills also produce specialty wood products.

Alternative Future for Port Clements: Between 1996 and 2001, as Port Clements has moved through a period of decline, its economy continues to be classified as "forestry". This alternative future, when compared to the late 1980s and early 1990s, could be described as "Remained in the same economic sector and continued to function at a lower plateau". While we cannot predict the future of Port Clements, there may be a range of possibilities that policy analysts should be aware of. Port Clements may become a dual specialization community with a focus in forestry and non-market services. Employment in non-market services has been growing to support the needs of an aging population. Future employment opportunities may also be influenced by decisions on the offshore oil and gas moratorium and whether an Australian-based company decides to develop the Cinola mine site 18 km south of Port Clements. However, there are environmental concerns about the effects of sulphuric acid and the project is only in the planning and exploration phase. In addition, if Port Clements is granted a community forest, a range of new opportunities may be created within the forestry and ecotourism sectors.

Period of Decline: 1996-2001.

Socio-economic Indicators

Through the 1986-2001 period, Port Clements experienced a number of population fluctuations (Table 6.3.1). Population declines between 1986 and 1991 were replaced with gains to 1996. By 2001, however, the community recorded population losses. The number of young families (population 0-14 and population 25-44) and youth dependency ratio appears to fluctuate during each of these Growth and Decline periods. Although, the percentage of families with children consistently declined since 1986, the percentage of lone-parent families has increased. There was no youth out-migration in Port Clements between 1986 and 1996. This changed in 2001 when the community lost 20% of residents that were between the ages of 15-24 in 1991. On the other hand, the number of residents 45 years of age and over has continued to increase during each census period since 1986. The elderly dependency ratio has also continued to increase since 1986. The gender distribution has changed very little over time and continues to be predominantly male. The number of one-person households has continued to rise since 1986.

Table 6.3.1 Socio-Economic Characteristics of Port Clements, 1986-2001

Characteristics	1986	1991	1996	2001
Economic Type of Community	n/a	Forestry	Forestry	Forestry
Total population	586	483	558	516
Total age 0-14	155	110	140	115
Total age 15-24	80	75	75	70
Total age 25-44	220	180	200	140
Total age 45-64	65	95	120	135
Total age 65 and over	10	20	30	35
% Pop'n change (previous 5 years)	54.2	-17.6	15.5	-7.5
% Pop'n 0-14	28.7	22.7	25.0	23.2
% Pop'n 15-24	14.8	15.5	13.4	14.1
% Pop'n 25-44	40.7	37.1	35.7	28.3
% Pop'n 45-64	12.0	19.6	21.4	27.3
% Pop'n 65 and over	1.9	4.1	5.4	7.1
% Pop'n Male	56.5	57.7	57.1	56.6
% Lone parent families	7.4	4.0	15.2	29.6
% One-person households	19.4	23.7	25.6	30.2
% families with children	59.3	56.0	48.5	33.3
Youth dependency ratio	42.5	31.4	35.4	33.3
Elderly dependency ratio	2.7	5.7	7.6	10.1
% 5-year movers	68.1	52.1	64.0	26.0
% Youth Out-Migration (over previous 10 years) ** see note below.	-100.0 (pop. grew)	-72.7 (pop. grew)	-12.5 (pop. grew)	20.0
% Employment income	92.8	83.3	84.6	85.5
% Gov't transfer payments	5.7	7.0	5.7	6.9
% Other income	1.5	9.7	9.7	7.2
% Forestry employment	n/a	39.1	44.6	33.3
% Non-market Services employment	n/a	11.1	12.5	22.8
LF Participation rate,15+	73.9	79.0	81.2	79.3
LF Participation rate, 15-24	53.8	65.0	75.0	80.0
LF Participation rate, Females 15+	57.5	77.8	63.9	75.6
% Commute Outside CSD	n/a	53.2	43.5	7.0
% Dwellings Built Last 5 Years	23.1	10.5	20.9	4.8
Average Dwelling Value $	53,436	57,470	98,662	116,925
% Change in Average Dwelling Value	n/a	7.5	71.7	18.5

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

A number of income and employment characteristics have also changed in Port Clements since 1986. In 1991, 39.1% of the labour force was employed in forestry, by 1996 this had increased to 44.6%. By 2001, however, only one-third of the labour force was in forestry. Of interest, the percentage of the labour force employed in non-market services has been increasing over time. It is possible that Port Clements could become a dual specialization community in the future. Labour force participation rates for individuals over 15 years of age had been increasing until 2001 when there was a small decline. Labour force participation rates for individuals between 15-24 years of age have been increasing since 1986, while the participation rates for women over 15 years of age have fluctuated. In 1991, over half of the labour force commuted outside the CSD for employment. This has declined to the point where only 7.0% now commute outside the CSD for employment. The percentage of income from employment, from government transfer payments, and from other sources, has fluctuated over time.

When housing and construction was examined, statistics indicate that the percentage of privately owned dwellings built during the previous five years had declined in 1991. After construction had increased in 1996, the percentage of privately owned dwellings built in the previous five years had declined to just 4.8% in 2001. Between 1986 and 1991, there had been a modest increase in the average dwelling value. This was followed by a substantial increase in 1996, and more modest gains by 2001.

Since 1996, Port Clements appears to have moved into a Decline period (Table 6.3.2). The percentage of the population containing youth (0-14 years of age) and individuals between 25-44 years of age has declined. This is further supported by a drop in the percentage of families with children and a decline in the youth dependency ratio. Youth out-migration has also increased during the past five years. Furthermore, the population has been aging as indicated by a growth in the percentage of the population over 44 years of age, and by the increase in the elderly dependency ratio. There has also been an increase in lone parent families and one-person households in Port Clements.

Port Clements also exhibits some characteristics not typically associated with a declining forestry community. For example, the percentage of income from employment did not decline, and the percentage of income from other sources did not increase. In addition, labour force participation rates for youth between the ages of 15-24 and for women 15 years of age and over did not decline, but increased during this period. As households cope with restructuring and rising unemployment for men, female spouses have been known to seek jobs to help the household cope with transition. The percentage of the labour force commuting outside of the CSD during this period declined. Moreover, the average dwelling value increased by 18.5% between 1996-2001.

Table 6.3.2 Change in Characteristics for Forestry Communities in Decline

Socio-Economic Characteristics	Decline Stage Expectations For Forestry Communities	Port Clements 1996-2001
% Pop'n change	decrease	-7.5%
% Pop'n 0-14	decrease	-17.9%
% Pop'n 15-24	decrease	-6.7%
% Pop'n 25-44	decrease	-30.0%
% Pop'n 45-64	increase	12.5%
% Pop'n 65+	increase	16.7%
Change in % Pop'n Male	stable	-0.5%
Change in % Lone parent families	increase	14.4%
Change in % One-person households	increase	4.6%
Change in % families with children	decrease	-15.2%
Change in Youth dependency ratio	decrease	-2.1%
Change in Elderly dependency ratio	increase	2.5%
Change in % 5-year mover	X	X
Change in % Youth Out-Migration (over previous 10 years)	increase	32.5%
Change in % Employment income	decrease	0.9%
Change in % Gov't transfer payments	increase	1.2%
Change in % Other income	increase	-2.5%
Change in % Forestry	decrease	-11.3%
Change in LF Participation rate 15+	decrease	-1.9%
Change in LF Participation rate 15-24	decrease	5.0%
Change in LF Participation rate Females 15+	decrease	11.7%
Change in % Commute Outside CSD	increase	-36.5%
Change in % Built Last 5 Years	decrease	-16.1%
% Change in Average Dwelling Value	decrease	18.5%

Source: Statistics Canada 2001, 1996.
Note: X indicates characteristics which are not important socio-economic indicators for a particular phase.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

The region has been undergoing a period of economic and social restructuring. In the mid-1990s, the Department of National Defense closed the military base in Masset, costing 300 jobs. In 1997, this DND station was reclassified as a detachment of the Canadian Forces Station Leitrim located in Ottawa and employs 18 people. Queen Charlotte City continues to provide various government, education, tourism, and retail services. The resolution of aboriginal land claim issues is part of bringing stability to the region. Furthermore, the region's forest industry has not diversified with limited value-added processing opportunities.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

Over half of the labour force from Port Clements was commuting outside of the CSD for employment in 1991, and more than 40% commuted for employment in 1996. Some of these commuting opportunities were linked to Weyerhauser logging operations in the region. There are also a number of smaller logging contractors on the island. However, there are some limited opportunities for residents to commute to nearby communities such as Masset or Queen Charlotte City.

What is the strength / quality of local leadership to help move the community forward or to address the problems that it faces?

There has been a group of individuals working to develop community and tourism facilities. There has been an active historical society and a museum was created in 1987. In 2000, the Port Clements Multi-Purpose Complex Society received provincial funding to finalize planning and determine local support for a facility to host educational, cultural, sporting, and other events. Port Clements has been active in seeking partnerships with neighbouring communities; one successful example of which is a partnership agreement for a new hospital in the region.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

Sawmills operating in Port Clements are both locally and non-locally owned. However, MacMillan Bloedel had controlled large areas of Crown land that has made it difficult for smaller independent operators. MacMillan Bloedel's Queen Charlotte Division was taken over by Weyerhauser in 1999. Licensing fees for tour operators have been controversial because they have been too expensive for residents on the islands. Consequently, many tour operators on the islands are not locally owned.

How exposed is the local economy to global economic forces (i.e. what are the commodity prices for the local resource, and how is it changing?)

The economy of Port Clements is exposed to the global economy and has been recently affected by the Softwood Lumber Dispute. However, since the tree farm license has been largely controlled by non-local corporations, the stability of the local economy has also been affected by decisions made in distant urban centres.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

Forestry in the area had been impacted by unsettled disputes associated with aboriginal land claims and by the Softwood Lumber Dispute. Furthermore, sawmills have been petitioning the province to return volume to support value-added wood products. Currently, logs are barged south for value-added wood processing. Forestry jobs have also been impacted by reductions in the annual allowable cuts. Recently, the Minister of State for Forestry Operations announced there will likely be two community forest licenses for the Queen Charlotte Islands with Port Clements and Masset being possible locations. Additional development in the region may also be impacted if the offshore oil and gas moratorium is lifted. However, in 2004, the Mayor of Port Clements was not in favour of lifting the moratorium. Expensive licensing fees for tour operators may also impact the ability of locals to develop tourism.

As health services are increasingly centralized in Terrace, residents from Port Clements are facing increased transportation costs despite a program that covers 30% of their flight. However, in 2004, a new hospital was approved for Masset that is intended to combine health services for Port Clements, Old Massett, and Masset in one location. These three communities created a partnership to provide 40% of the costs of the new hospital, while the province will cover the rest. Also, in 2004, the Port Clements Elementary School benefited

from faster Internet service through the Provincial Learning Network that upgraded dial-up services to broadband access.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

Port Clements has a bed and breakfast, a lodge, and a motel. Other commercial services include a gas station, an auto repair shop, grocery and liquor store, a museum, gift shops, and a few cafes. There is also a fishing and diving charter company, and a government wharf. It also has an elementary school and a public library.

There is no hospital in Port Clements. A local health clinic continues to operate with a nurse practitioner. Residents may travel to Masset, which has an old hospital. For more specialized services, residents travel to Prince Rupert and Terrace. Nearby airports are located in Sandspit and Masset (the Masset airport was recently upgraded with a runway extension). High school students from Port Clements travel to Masset. Ferry services are located roughly 60 km from Port Clements. At times, strikes at B.C. Ferries have impacted businesses and the ability of residents to access services on the mainland.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

The Northwest Corridor Development Corporation promotes commercial and infrastructure developments in Western Canada. It is also serviced by the Queen Charlotte Islands Recreation Commission. The Haida Gwaii Trust established in 1988 has also helped groups in Port Clements obtain computer, health, and fire fighting equipment, and has helped with the development of emergency plans, swimming programs at the elementary school, upgrades for the Port Clements TV Society, improvements to the community hall, water and sewer systems, and funds for a multi-purpose complex. It is also served by a Community Futures Development Corporation in Masset.

Summary

Port Clements is an example of a forestry community that has been declining since 1996. Important challenges facing the community include isolation, the Softwood Lumber dispute, provincial policies that limit timber access and value-added processing opportunities, as well as aboriginal land claim issues. A number of recent initiatives include expanding broadband Internet access and partnering with nearby communities to build a regional hospital. Furthermore, there may be future employment opportunities with a community forest, mining, and oil and gas development. Resource development provides commuting opportunities for residents in Port Clements. Finally, local groups have been working to develop local services for an aging population and to promote tourism.

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6.4 Mining – Fermont, Québec

Introduction

This case study examines the mining community of Fermont, Québec, from 1991 to 2001. Important challenges facing this community include isolation, a need to diversify its economic base, cyclical demands for iron ore, and high energy costs.

Population: In 2001, Fermont had a population of 2,918. It is located in the North Shore region of Québec.

MIZ Status: Fermont has a Weak MIZ status. It is located 565 km from Baie-Comeau, 878 km from Chicoutimi, 976 km from Québec City, and 1,234 km from Montreal. Smaller places closer by include Mont Wright (17 km) and Manic 5 (351 km). Labrador City is just 27 km away in Newfoundland and Labrador, although all services in Labrador City are provided in English.

Economic Classification: Fermont was established in 1974 as a mining town with the iron ore operations of the Québec Cartier Mining Company (QCMC). When it was created, it adopted an instant town planning model, as well as climate responsive design principles, to promote stability and limit turnover within the population. Such features included a compact land use plan and the incorporation of a windscreen building that encompasses residential, commercial, recreational, and institutional uses. There is a road to Labrador City and Wabush, but these places are located in Newfoundland and Labrador and are predominantly anglophone.

Alternative Future for Fermont: Between 1991 and 2001, as Fermont has moved through a period of decline, its economy continues to be classified as "mining". This alternative future, when compared to 1991 could be described as "Remained in the same economic sector and continued to function at a lower plateau". While we cannot predict the future of Fermont, policy analysts should be aware of a range of potential opportunities. Mazarin, an industrial mining company, and Graftech, an American manufacturing company, were conducting feasibility studies into developing the Lac Knife graphite deposit that could provide supplies for Ballard Power Systems, a fuel cell company. The Lac Knife deposit is located 30 km south of Fermont and, if developed, may allow the town to diversify its industrial base. While commercial production has not begun, many environmental studies, as well as studies on the deposit itself, have been completed. In 2001, QCMC continued exploration on its Lac Hesse property in order to increase iron ore reserves near its Mont Wright facilities. Although Fermont has been working to promote tourism, it is likely to focus its attention on diversifying its industrial base and remain a mining community.

Period of Decline: 1991-2001.

Socio-economic Indicators

While Fermont's population grew between 1986 and 1991, by 2001 its population had declined by 21.9% (Table 6.4.1). The decline in the population was particularly evident amongst young families, particularly for individuals under 45 years of age. Youth out-migration has also become a concern for the community after 1991. On the other hand, the number of residents between 45 and 64 years of age has been growing since 1986. Unlike other communities in Decline, however, the population over 65 years of age has not been growing. Lone parent families increased between 1986 and 1996, but had declined in 2001. One-person households increased between 1986 and 1991, with a more modest decline since. However, the percentage of families with children has consistently been declining since 1986. This has also been reflected in a decline in the youth dependency ratio since 1986. However, elderly dependency ratios have not changed much over time.

Table 6.4.1 Socio-Economic Characteristics of Fermont, 1986-2001

Characteristics	1986	1991	1996	2001
Economic Type of Community	n/a	Mining	Mining	Mining
Total population	3592	3735	3234	2918
Total age 0-14	1045	905	660	560
Total age 15-24	570	565	525	405
Total age 25-44	1570	1560	1265	975
Total age 45-64	410	665	780	970
Total age 65 and over	10	25	15	10
% Pop'n change (previous 5 years)	-14.8	4.0	-13.4	-9.8
% Pop'n 0-14	29.1	24.2	20.4	19.2
% Pop'n 15-24	15.9	15.1	16.2	13.9
% Pop'n 25-44	43.7	41.8	39.1	33.4
% Pop'n 45-64	11.4	17.8	24.1	33.2
% Pop'n 65 and over	0.3	0.7	0.5	0.3
% Pop'n Male	54.2	54.8	54.4	54.1
% Lone parent families	4.9	7.9	9.2	4.2
% One-person households	15.7	26.4	23.4	25.2
% families with children	77.0	66.5	63.0	59.3
Youth dependency ratio	41.0	32.4	25.7	23.8
Elderly dependency ratio	0.4	0.9	0.6	0.4
% 5-year movers	60.3	49.0	33.0	34.6
% Youth Out-Migration (over previous 10 years) **see note below.	-38.8 (pop. grew)	-6.5 (pop. grew)	11.4	33.6
% Employment income	94.9	94.3	95.1	96.5
% Gov't transfer payments	3.4	3.3	3.2	1.8
% Other income	1.8	2.4	1.7	1.6
% Mining employment	n/a	59.1	58.6	58.4
LF Participation rate, 15+	74.9	73.8	71.4	73.5
LF Participation rate, 15-24	54.9	53.1	31.1	35.8
LF Participation rate, Females 15+	54.4	55.9	54.4	56.7
% Commute Outside CSD	n/a	11.7	2.6	5.9
% Dwellings Built Last 5 Years	3.0	1.1	0.8	1.3
Average Dwelling Value $	26,098	30,651	31,960	40,756
% Change in Average Dwelling Value	n/a	17.4	4.3	27.5

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

There have been some changes in employment and income characteristics over time. First, however, it is important to note that the 1986 data for employment in mining is unavailable at

this time because it did not have its own Census category. Instead, mining was grouped with all primary sectors. Since then, however, the percentage of the labour force employed in mining has changed little. In February 1986, QCMC laid off 150 employees at its mine, pelletizing plant, and port operations due to depressed market conditions. There were also five shut down periods between 1999 and 2001. High wages have helped to retain residents. In fact, the highest earners in Canada in 1995 were from Fermont, Québec with a median employment income of $52,700.

The percentage of income from employment, government transfer payments, and other income has also changed very little over time. In terms of labour force participation, only individuals between 15 and 24 years of age appear to have experienced a decline in labour force participation from 1991 to 2001. There were some fluctuations in commuting outside of the CSD from 1991 to 2001. Finally, average dwelling values increased substantially between 1986 and 1991, followed by a more modest increase (4.3%) between 1991 and 1996. Average dwelling values increased again (27.5%) between 1996 and 2001.

Table 6.4.2 shows that many of the socio-economic variables that our general framework uses to describe Decline in mining communities performed as expected in Fermont. Population characteristics indicate a declining community, especially since 1991. In particular, the percentage of families with children has been declining, while youth-out-migration has been increasing. Limited availability of jobs may be influencing this trend as referenced by the labour force participation rate for young people (aged 15-24).

Table 6.4.2 Change in Characteristics for Mining Communities in Decline

Socio-Economic Characteristics	Decline Stage Expectations For Mining Communities	Fermont 1991-2001
% Pop'n change	decrease	-21.9%
% Pop'n 0-14	decrease	-38.1%
% Pop'n 15-24	decrease	-28.3%
% Pop'n 25-44	decrease	-37.5%
% Pop'n 45-64	increase	45.9%
% Pop'n 65+	increase	-60.0%
Change in % Pop'n Male	increase	-0.7%
Change in % Lone parent families	increase	-3.7%
Change in % One-person households	increase	-1.2%
Change in % families with children	decrease	-7.2%
Change in Youth dependency ratio	decrease	-8.6%
Change in Elderly dependency ratio	increase	-0.5%
Change in % 5-year mover	X	X
Change in % Youth Out-Migration (over previous 10 years)	increase	40.1%
Change in % Employment income	decrease	2.2%
Change in % Gov't transfer payments	increase	-1.5%
Change in % Other income	increase	-0.8%
Change in % Mining	decrease	-0.7%
Change in LF Participation rate 15+	decrease	-0.3%
Change in LF Participation rate 15-24	decrease	-17.3%
Change in LF Participation rate Females 15+	decrease	0.8%
Change in % Commute Outside CSD	increase	-5.8%
Change in % Built Last 5 Years	decrease	0.2%
% Change in Average Dwelling Value	decrease	33.0%

Source: Statistics Canada 2001, 1996, 1991.
Note: X indicates characteristics which are not important socio-economic indicators for a particular phase.

However, Fermont also exhibits some characteristics that may not typically be associated with a declining community. For example, its senior population is not growing. In fact, the elderly dependency ratio has remained stable over time. Lone-parent families and one-person households have also been decreasing. This may be due to the relative isolation of Fermont, along with the limited availability of a range of services.

Furthermore, there have not been many significant changes in employment and income characteristics that would normally indicate a declining community. The percentage employed in mining has declined very little. Income from employment has actually increased. Government transfer payments and other income has also declined rather than increased. There has been very little change in the overall labour force participation rate, and the participation rates for women have slightly increased. However, a community may not experience 'declining' characteristics all at once. With the limited availability of services and opportunities to commute for jobs within the region, residents who become unemployed may not choose to stay within the CSD. Finally, average dwelling values have increased over time rather than declining. This may be due to the speculation around new mine developments in the area.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

Gagnon was a mining town located 175 km from Fermont. It operated from 1960 to 1985. However, during the 1980s recession, industrial restructuring consolidated iron ore mining activities in Québec. This led to the shutdown of mining operations in Fire Lake and the closure of the town of Gagnon. Following closure, Sidbec-Normines, controlled by the Québec government, leased its Port Cartier pellet plant to QCMC for $1 a year. This enabled the QCMC to increase operations at its Mount Wright mine near Fermont. However, other nearby places, such as Labrador City and Wabush in Newfoundland and Labrador, are more stable.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

There are still opportunities to commute and work in resource extraction industries within the region, such as iron ore operations in Labrador City. Other opportunities would require long distance commuting (more than an hour). There are more limited opportunities to commute for jobs in dynamic and non-market service sectors outside of Labrador City, an anglophone centre.

What is the strength / quality of local leadership to help move the community forward or to address the problems that it faces?

Local leaders have been developing partnerships with a range of service providers, regional economic development organizations, tourism associations, and transportation associations. However, local groups have not taken full advantage yet of communication tools, such as the Internet.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

Over time, the mining industry has not been owned locally. For example, in 1989, Dofasco Incorporated sold 50% of its interest in QCMC to Mitsui & Company Limited of Japan and Companhia Auxiliar de Empresas de Mineracao of Brazil. Mazarin Mining Corporation, the company developing graphite deposits, is Canadian owned with offices in Québec City. It also has partners on its Fermont project for Lac Knife based in the United States.

How exposed is the local economy to global economic forces (i.e. what are the commodity prices for the local resource, and how is it changing?)

Fermont's economy is exposed to the global economy. Iron ore prices suffered during the recession of the early 1980s. However, Fermont benefited from the consolidation of the industry.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

In 1985, the federal Minister of State for Mines and Québec Energy and Resources Minister pledged to spend up to $50 million each during the following five years on measures to stimulated development in Québec. An additional $42 million was pledge for mining companies to construct required roads and power lines for specific mining projects. Furthermore, $15 million was announced to complete a 25 km section of highway between Manic 5 and Gagnon, which subsequently links up with Fermont. At the time, a 64 km road between Fire Lake and Fermont was being built by the Québec Ministry of Transport to link Baie Comeau with Fermont and Wabush / Labrador City. These measures were aimed at combating problems in Québec's mining sector, which had suffered a 25% drop in employment between 1980 and 1984. More recently, the provincial Ministry of Natural Resources has provided funds to assist with mineral exploration and to support junior exploration companies.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

While Fermont has an elementary school and a high school, one of the challenges is that the community does not have a CEGEP. Fermont does have a public library. Health services are provided by the health centre and telehealth services. Wellness facilities include a youth centre, residential and long-term care, alcohol and drug rehabilitation, rehabilitation for physical disabilities, and psychiatric care. Emergency services include police and ambulance. Recreational facilities and activities include mini golf, an ice rink, tennis courts, soccer fields, a swimming pool, snowmobiling trails, and downhill skiing. Caribou hunting is another popular activity for the area that brings in tourism dollars. The closest regional airports are located in Baie Comeau and Sept Iles.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

Fermont has a local development agency called Le Centre local de développement de Caniapiscau (CLD) with a mandate to promote economic development and tourism. The CLD serves Fermont, Schefferville, and the Innu and Naskapi First Nations groups. The

CLD played a role in the founding of the Chamber of Commerce and contributes financially to the Merchants Association. The local office also has relations with the employment centre in Sept-îles, Revenue Québec, the mining association called le Fonds d'exploration minière de la Côte-Nord, and a regional tourism association called l'Association touristique régionale de Duplessis. While working to attract junior and major mining enterprises, Fermont also has a local tourist association working to develop the human and financial resources for tourism, including an interpretation centre. Within this context, caribou hunting has been an important part of its tourism industry. In 1995, for example, SEPAQ, a crown corporation managing all facilities within Québec's parks and wildlife reserves, selected 800 applicants for caribou hunting in the Fermont area. These hunters were also permitted to bring a friend. These hunters are an important source of revenue for the area's hotels, restaurants, and suppliers. Finally, Fermont is part of la Coalition 389/500 route Trans Québec / Labrador, a group of organizations and communities working to improve the transportation infrastructure to this remote region.

Summary

Fermont has experienced aspects of decline since 1991. Challenges for the town include limited economic diversification, isolation, and cyclical demands for iron ore. It has been working to diversify the mining industry by exploring graphite options. Due to its isolation there are limited opportunities for commuting within the immediate area. However, Fermont's participation in la Coalition 389/500 route Trans Québec / Labrador may be a sign that barriers across the provincial border are changing. Furthermore, it is continuing its efforts to diversify the local economy through tourism.

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6.5 Tourism Community - Ear Falls, Ontario

Introduction

This case study examines changes in Ear Falls as a tourism community from 1996 to 2001. Ear Falls has been primarily a natural resources town (forestry and mining) up until 1996, and has since gone through a variety of changes. While the discussion focuses on changes between 1996 and 2001 (the period of Decline in tourism employment), there is discussion about the events leading up to 1996 as well.

Population: The Township of Ear Falls is located in northwestern Ontario. It had a 1996 population of 1,170, but this declined by 20 people or 1.7% between 1996 and 2001.

MIZ Status: Ear Falls has a Weak MIZ status. The Municipality of Red Lake is the largest community in the region (population of about 5,000) and is located at the end of Hwy 105, 170 km north of the Trans-Canada Highway. The Township of Ear Falls is located 65 km south of Red Lake at the junction of Lac Seul and the English River. Dryden is 215 km away, and Kenora is 270 km away.

Economic Classification: Ear Falls was a tourism community in 1996 as employment in the sector grew by more than 100 people compared to that in 1991. This change occurred at the same time as employment declines in forestry and mining.

Alternative Future for Ear Falls: Between 1996 and 2001, as Ear Falls moved through a period of decline, its economy transformed from being a "non-specialized" community in 1991 to a "tourism" community in 1996, and back to "non-specialized" in 2001. In both of the non-specialized classification periods, forestry employment was strong, while in 2001, manufacturing and tourism employment were also strong. Thus, a series of alternative futures may be described for Ear Falls over this period. The first alternative future, compared to its 1991 economic classification as a non-specialized community, could be described as "Transform to some other economic activity and decline more". This same alternative future was repeated when we compare the classification of Ear Falls as a tourism community in 1996 with Ear Falls as a non-specialized community in 2001. While we cannot predict the future of Ear Falls, there may be a range of possibilities that policy analysts should be aware of. Despite the importance of the forestry and mining sectors as economic drivers, the employment distribution across tourism, forestry, mining, and non-market services (government, health, and education) suggests the potential for a reasonably diversified and non-specialized future economy. However, this may be tempered by the fact that the major employers are not local and the community is exposed to global changes in the economy.

Period of Decline: 1996 to the present, but most of the population loss occurred in the 1986 to 1996 period, when 525 people (31% of population) left the community.

Socio-economic Indicators

In the 1996-2001 period, there were few changes in most of the indicators because there was little population change. However, the community has a much different socio-economic profile today than in 1986 (Table 6.5.1). The number and percent of the population age 0-14 continues to fall - there were more than 500 (30% of the population) in 1986, but only 250 in 2001 (22% of the population). In contrast, the number and percent of the population over 65 has increased over time. There are relatively few lone parent families, and even fewer than back in 1986. Single person households have declined in total number but have represented just over 20% of all households since 1991. The number and percent of families with children has declined steadily over the years and the pattern continued in the 1996-2001 period. Youth dependency ratios have declined and elderly dependency ratios have risen in this period as well.

Table 6.5.1 Socio-Economic Characteristics of Ear Falls, 1986-2001

	1986	1991	1996	2001
Economic Type of Community	n/a	non-specialized	tourism	non-specialized
Total population	1695	1294	1170	1150
Total age 0-14	510	340	285	250
Total age 15-24	275	170	150	160
Total age 25-44	575	440	355	340
Total age 45-64	260	265	285	300
Total age 65 and over	75	75	105	115
% Pop'n change (previous 5 years)	-16.2	-23.7	-9.6	-1.7
% Pop'n 0-14	30.1	26.3	24.3	21.5
% Pop'n 15-24	16.2	13.1	12.8	13.7
% Pop'n 25-44	33.9	34.0	30.2	29.2
% Pop'n 45-64	15.3	20.5	24.3	25.8
% Pop'n 65 and over	4.4	5.8	8.9	9.9
% Pop'n Male	51.0	51.7	50.0	49.1
% Lone parent families	11.6	7.6	16.2	9.2
% One-person households	17.8	23.2	20.0	21.6
% families with children	77.9	67.6	63.2	61.5
Youth dependency ratio	45.9	38.9	36.1	31.3
Elderly dependency ratio	6.8	8.6	13.3	14.4
% 5-year movers	61.4	44.1	42.1	43.3
% Youth Out-Migration (over previous 10 years) **see note below.	26.2	37.7	43.6	5.9
% Employment income	87.1	84.2	79.6	83.4
% Government transfer payments	8.3	9.6	16.2	9.5
% Other income	4.5	6.3	4.1	7.4
% Forestry employment	n/a	23.4	12.5	15.5
% Manufacturing employment	6.5	5.1	1.8	17.2
% Tourism employment	n/a	2.2	25.0	17.2
% Dynamic services employment	12.5	14.6	9.9	12.9
% Non-market services employment	5.3	19.7	18.9	19.8
LF Participation rate, 15 +	70.7	73.4	64.2	71
LF Participation rate, 15-24	61.2	69.2	56.2	65.6
LF Participation rate, Females 15 +	54.6	58.2	56.2	62
% Commute Outside CSD	n/a	16.1	14.4	6.1
% Dwellings Built last 5 years	2.8	3.2	0.0	6.8
Average Dwelling Value $	53,579	55,353	66,440	85,137
% Change in Average Dwelling Value	n/a	3.3	20.0	28.1

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

The share of income from employment has risen since 1996. This is because of the purchase and expansion of the Weyerhauser forestry mill (who purchased the local mill in 1998), which provides better paying and year round jobs compared to those in the tourism sector, which dominated the 1996 employment distribution. Conversely, income from government transfer payments is down from 1996, likely due to reduced use of employment insurance by seasonally employed tourism workers.

The changing figures related to employment by sector tell the story of a fluctuating local economy. There were many people working in the forestry sector in 1991, but today there are half as many. However, manufacturing employment is up significantly because of the Weyerhauser mill expansion. Tourism employment grew steadily in the early 1990s to become the dominant employer in 1996. Employment levels have since dropped. Employment in dynamic services has declined over time, but since 1996 there has been a net increase of 20 jobs. Non-market services continue to be an important provider of jobs. While mining is important in the regional context, fewer people who live in town actually work in mining today compared to 10 or more years ago.

The rebound in the economy from the early to mid-1990s has resulted in increased labour force participation rates for all groups, and more local jobs means that fewer people are traveling to Red Lake or other communities for work. The huge loss of population from 1986 to 1996 meant that there was almost no construction of new housing in that period, but with improving economic conditions and diversification, 30 new homes were built in the 1996-2001 period, and the average dwelling value increased by nearly 30% in that time period.

Table 6.5.2 shows that most of the socio-economic variables that our general framework used to describe Decline in tourism communities do not fit the Ear Falls example well. This is primarily because of the short time frame (1996 to 2001) and also because the community was moving through a temporary stage of high levels of employment in the tourism sector relative to that in other sectors. Key variables where there were important variations from the expected indicators include increases in employment and other income as a share of total employment, increases in labour force participation rates, and decreases in the number of people commuting elsewhere for work. Much of this can be explained by the increase in local manufacturing jobs with the Weyerhauser mill expansion.

Table 6.5.2 Change in Characteristics for Tourism Communities in Decline

Socio-Economic Characteristics	Decline Stage Expectations For Tourism Communities	Ear Falls 1996-2001
% Pop'n change	decrease	-1.7%
% Pop'n 0-14	decrease	-12.3%
% Pop'n 15-24	decrease	6.7%
% Pop'n 25-44	decrease	-4.2%
% Pop'n 45-64	increase	5.3%
% Pop'n 65+	increase	9.5%
Change in % Pop'n Male	X	X
Change in % Lone parent families	X	X
Change in % One-person households	increase	1.6%
Change in % families with children	decrease	-1.7%
Change in Youth dependency ratio	decrease	-4.8%
Change in Elderly dependency ratio	increase	1.1%
Change in % 5-year mover	X	X
Change in % Youth Out-Migration (over previous 10 years)	decrease	-37.7%
Change in % Employment income	decrease	3.8%
Change in % Gov't transfer payments	increase	-6.7%
Change in % Other income	decrease	3.3%
Change in % employed in tourism	decrease	-7.8%
Change in LF Participation rate 15+	decrease	6.8%
Change in LF Participation rate 15-24	decrease	9.4%
Change in LF Participation rate Females 15+	decrease	5.8%
Change in % Commute Outside CSD	increase	-8.3%
Change in % Built Last 5 Years	decrease	6.8%
% Change in Average Dwelling Value	decrease	28.1%

Source: Statistics Canada 2001, 1996.
Note: X indicates characteristics which are not important socio-economic indicators for a particular phase.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

The region's economy is based on natural resources. Ear Falls bills itself as 'The Bald Eagle Capital of North America', and the region identifies itself as the gateway to the largest stand of mature forest in Canada. It is not surprising, therefore, that timber, gold, base metals, aggregates, hydro-electric power generation, granite, and nature-based tourism are key drivers of the regional economy. The tourism sector is primarily built around outdoor activities in the remote parts of the region, including sport fishing, hunting, hiking, snowmobiling, and more. In general, these are stable and healthy sectors, but minerals have a finite life and tourism is subject to fluctuations in the economy.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

Ear Falls, and the region as a whole, are relatively isolated. Red Lake is nearby and a small number of people commute to work there. Most people who live in Ear Falls also work in the township. The largest centres are too far for commuting options.

What is the strength/quality of local leadership to help move the community forward or to address the problems it faces?

The Township Council is concerned about ensuring the long term sustainability of the region. The vision statement, described as "A Declaration Of What Our Generation Intends To Leave For Tomorrow" reads:

> Our preferred future for Ear Falls and the surrounding communities, is to responsibly create social and economic growth and stability to ensure prosperity for all citizens through the wise use and stewardship of our natural resources.

The Council supports this long term vision by actively seeking out economic development opportunities which will provide for social and economic growth while enhancing the quality of life for citizens and the protection, preservation, and conservation of the natural environment.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

The major employers (Weyerhauser, Ontario Hydro, and Ontario Power Generation) are not local companies but are owned and controlled from outside the community. Two mines operate nearby and they too are owned but outside interests (Goldcorp and Placer Dome Canada). Most of the other businesses in Ear Falls are small and independently-owned.

How exposed is the local economy to global economic forces (e.g., what are the commodity prices for the local resource, and how is it changing?)

The area is highly exposed to changes in the global economy. Natural resources and their processed products are subject to fluctuations in world prices, demand, and competition from other suppliers. The outdoor tourism sector is also affected by exchange rates and by international travel issues, as many of the tourists who come to the region are Americans.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

Because of the local and regional dependence on forestry, the area has been affected by the ongoing dispute between Canada and the US over softwood lumber prices and tariffs. This has created uncertainty in the sector. In addition, the provincial government's decision in the early 2000s to de-regulate energy supply and break up Ontario Hydro has also resulted in change. Energy prices have gone up and employment in the energy provision sector has become unstable.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

Most federal and provincial offices and services are located in Red Lake (65 km away). The Margaret Cochenour Memorial Hospital is also in Red Lake. A medical clinic operates in Ear Falls, and there are a range of other services including ambulance, dental, and scheduled visits for special needs available in Ear Falls. Elementary and senior high schools are present in the community, and Contact North operates a network of electronic classrooms located in communities across Northern Ontario. It allows post secondary students to take courses or programs delivered by an educational institution when the student is unable to relocate to the

distant campus. Confederation College and Lakehead University currently have courses available through Contact North. A small municipal airport operates in Ear Falls as well.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

The Township is served by the Chukuni Communities Development Corporation, one of the many community futures development corporations operating across rural Canada. It provides business counseling, loans, and development support to entrepreneurs and organizations in the region. The head office is located in Red Falls.

Summary

Ear Falls lost a good portion of its population in the 1986 to 1996 period, and by that time the employment mix had changed significantly to the point where more people were working in tourism than in any other sector. Since that time, the economy has continued to change, and with population stability there has been some redistribution of employment across forestry and manufacturing (related to processing the wood fibre). Natural resources provide some stability for the area, but the largest employers are international companies without a stake in the long term future of the community and region. The community functioned as a tourism community through the mid-1990s not because of strategic investments and decisions to do so, but simply because of the shifting nature of economic activity in the region at that time.

Sources Consulted

Township of Ear Falls www.ear-falls.com

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6.6 Manufacturing – Gold River, British Columbia

Introduction

This case study examines Gold River, British Columbia, and its transformation from a manufacturing economy in 1991 to a non-market services economy in 2001. The community has faced challenges stemming from pulp and paper commodity prices, transportation and energy costs, stumpage rates, and pollution.

Population: Gold River has a 2001 population of 1,359. It is located on Muchalat Inlet off Nootka Sound, approximately half way up the west coast of Vancouver Island.

MIZ Status: Gold River has a Weak MIZ status. It is located roughly 90 km from Campbell River (population 28,456), 240 km from Nanaimo (population 73,000), and 355 km from the provincial capital in Victoria (CMA population 311,902).

Economic Classification: Gold River was originally settled after a gold rush in the area in 1870. Later, Gold River was established as a forest manufacturing town by Tahsis Company Ltd., a timber processing firm in 1965. The company was sold to Canadian Pacific Forest Products in the 1970s. In the late 1980s, a newsprint mill was added to the Gold River plant. However, layoffs in the pulp and paper operations would occur throughout the 1990s with closures occurring in 1993, 1998, and 1999. The pulp and paper mill has now been closed and dismantled. In 2001, Gold River became a non-market services community with the two major employers being Western Forest Products and the administrative offices of School District 84.

Alternative Future for Gold River: Between 1991 and 2001, as Gold River moved through a period of decline as a "manufacturing" community, its economy became classified as "non-market services". This alternative future, when compared to the 1980s, could be described as a "Transform to some other economic activity and decline more". This transformation took place after the pulp and paper mill closed in 1999. The mill had suffered from poor demand and market prices, high stumpage rates, transportation and energy costs, economic downturns in the Asian economy, and limited access to fibre. A successful housing sale attracted many seniors to the community. Within this context, non-market services emerged as the dominant sector of the local economy. While we cannot predict the future of Gold River, there may be a range of possibilities that policy analysts should be aware of. Residents in Gold River have been developing economic options, such as creating bentwood boxes and native silkscreen designs. The town has also been trying to accept garbage from other small communities in hopes of becoming a recycling centre. In 2001, Epcor, a utility company owned by the City of Edmonton, announced a $40 million investment to build a power plant on the site of the former pulp and paper mill. The company will use two boilers from the mill to generate up to 85 megawatts of electricity from wood waste. The project was expected to create 30 full-time jobs. The benefit of the site is that it has ready access to B.C. Hydro's transmission

lines. The town is also hoping to develop its tourism industry, targeting fishing and recreation.

Period of Decline: 1991-2001.

Socio-economic Indicators

Between 1986 and 1991, Gold River experienced a Growth period as the population increased by 15.3% (Table 6.6.1). Since that time, however, Gold River has experienced a decline in population, particularly among those less than 45 years of age. On the other hand, there have been a growing number of residents aged 45 years and over. These changes in age distribution are also reflected in a decline in the youth dependency ratio and an increase in the elderly dependency ratio for Gold River. Youth out-migration has experienced a considerable increase during the past five years. In addition, the percentage of one-person households has increased, while both the percentage of lone parent families and families with children have decreased between 1991 and 2001.

Table 6.6.1 Socio-Economic Characteristics of Gold River, 1986-2001

Characteristics	1986	1991	1996	2001
Economic Type of Community	Manufacturing	Manufacturing	Manufacturing	Non-market
Total population	1879	2166	2041	1359
Total age 0-14	525	605	540	285
Total age 15-24	270	315	255	150
Total age 25-44	765	870	770	380
Total age 45-64	300	360	445	450
Total age 65 and over	20	15	30	105
% Pop'n change (previous 5 years)	-15.6	15.3	-5.8	-33.4
% Pop'n 0-14	27.9	28.0	26.5	20.8
% Pop'n 15-24	14.4	14.6	12.5	10.9
% Pop'n 25-44	40.7	40.3	37.7	27.7
% Pop'n 45-64	16.0	16.7	21.8	32.8
% Pop'n 65 and over	1.1	0.7	1.5	7.7
% Pop'n Male	52.1	52.5	53.2	51.5
% Lone parent families	5.8	8.4	6.8	6.1
% One-person households	14.8	13.3	15.0	20.4
% families with children	68.9	65.5	60.7	39.0
Youth dependency ratio	39.3	39.2	36.7	29.1
Elderly dependency ratio	1.5	1.0	2.0	10.7
% 5-year movers	45.6	54.5	47.6	33.6
% Youth Out-Migration (over previous 10 years) **see note below.	-1.3 (pop. grew)	-7.2 (pop. grew)	-22.2 (pop. grew)	57.1
% Employment income	92.7	91.8	90.5	76.2
% Gov't transfer payments	3.8	4.4	5.4	10.2
% Other income	3.5	3.7	4.0	13.7
% Manufacturing employment	35.5	47.1	32.6	2.7
% Non-market Services employment	n/a	13.1	16.7	28.9
LF Participation rate, 15+	76.9	81.4	78.3	71.2
LF Participation rate, 15-24	66.1	72.1	72.9	63.2
LF Participation rate, Females 15+	59.0	69.1	68.1	68.6
% Commute Outside CSD	n/a	4.0	2.3	7.4
% Dwellings Built Last 5 Years	4.8	9.2	3.6	0.0
Average Dwelling Value $	57041	88493	100061	76913
% Change in Average Dwelling Value	n/a	55.1	13.1	-23.1

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

There have also been a number of changes in employment and income characteristics. In 1991, Gold River was classified as a manufacturing community with almost half of its population (47.1%) employed in the manufacturing sector. Growth in employment in the manufacturing sector between 1986 and 1991 occurred when a $320 million newsprint mill was added providing 130 permanent jobs and 250 support jobs. The mill also added a new warehouse at the deep water port facility in Gold River. It is important to note, however, that the provincial government closed the commercial fishery in 1989 due to high dioxin levels believed to have been caused by saw logs treated with wood preservatives at the pulp mills. At this point, Gold River's prawn fishery was worth $160,000 at landing and accounted for 3% of B.C.'s catch.

The percentage of residents employed in the manufacturing sector had dropped to 32.6% by 1996. In 1993, Canadian Pacific Forest Products Ltd. wrote off its mill in Gold River, blaming low newsprint prices. Some critics also expressed concerns over high fibre costs and low productivity. During the same year, however, the Mowachaht-Muchalaht Band signed an agreement with the federal government to provide them with $10 million for new reserve land and services. The commercial fishery remained closed during the past four years due to pollution, which prompted the move of the first nations community. The new community was built just outside of Gold River and encompassed a band office, a recreation centre, a nursery and kindergarten, and a playing field. However, Avenor Incorporated, formerly Canadian Pacific Forest Products, closed its paper division in December 1993 and eliminated 170 jobs due to poor newsprint prices, high fibre, transportation and energy costs, and high bank interest. Fibre was imported from as far away as Stewart, B.C., Alaska, and Washington State.

Additional restructuring had occurred in the forest manufacturing sector between 1996 and 2001. In 1997, Avenor Incorporated laid off 70 employees due to increased stumpage rates. A six week shutdown was also blamed on poor pulp prices and an economic slump in Asia. However, economic opportunities improved in 1997 when the commercial fishery re-opened after being closed since 1989. The re-opening of the fishery was also expected to increase tourism over time. However, 360 workers lost their jobs in 1998 when poor markets and low revenues closed the pulp mill. After Bowater Incorporated bought the mill, it announced its permanent closure in 1999. By 2001, the percentage of the labour force employed in manufacturing had been reduced to just 2.7%. Shortly after, there was an exodus of local businesses.

Gold River had become a non-market services economy with 28.9% of the employed labour force. This service sector appears to have emerged with an aging of the local population, a population which appears to be supported by an increase in the percentage of income from government transfer payments and other income. There has been a steady decline in the percentage of income from employment since 1986. Labour force participation rates have also declined for most categories. However, the labour force participation rates for women over 15 years of age have changed very little during this Decline period. Instead, it appears that male participation in the labour force has been particularly affected. This is likely due to the transition of the economy to non-market services where women have been more likely to find employment in services such as health and education. Commuting outside of the CSD has increased between 1991 and 2001.

Finally, the average dwelling values have experienced significant fluctuations during each census

period. These values increased by just over 55% between 1986 and 1991 and continued to increase more modestly by 1996. The town is surrounded by company owned land and Crown land, which the company controlled through tree farm licences. After the mill closure, the 2001 average dwelling values had declined by 23.1%. Realtor Al Galbraith formed a joint venture with Bowater Pulp & Paper Canada called Gold River Housing Corporation to sell 141 housing units in Gold River in 1999. Condominiums were on the market for between $24,000 and $29,000 and houses were on the market starting in the mid-$40,000 range. The community's amenities and ocean side location were considered important factors why people chose to move to Gold River during the housing sale.

Table 6.6.2 shows that most of the socio-economic variables that our general framework used to describe Decline in manufacturing communities appears to fit with the case of Gold River. Not only has the overall population been declining, but one-person households have been increasing and the percentage of families with children has been decreasing. The youth dependency ratios have been declining, while the elderly dependency ratios have been increasing.

Table 6.6.2 Change in Characteristics for Manufacturing Communities in Decline

Socio-Economic Characteristics	Decline Stage Expectations For Manufacturing Communities	Gold River 1991-2001
% Pop'n change	decrease	-37.3%
% Pop'n 0-14	decrease	-52.9%
% Pop'n 15-24	decrease	-52.4%
% Pop'n 25-44	decrease	-56.3%
% Pop'n 45-64	increase	25.0%
% Pop'n 65+	increase	600.0%
Change in % Pop'n Male	stable	-1.0%
Change in % Lone parent families	increase	-2.3%
Change in % One-person households	increase	7.1%
Change in % families with children	decrease	-26.5%
Change in Youth dependency ratio	decrease	-10.1%
Change in Elderly dependency ratio	increase	9.7%
Change in % 5-year mover	X	X
Change in % Youth Out-Migration (over previous 10 years)	increase	79.3%
Change in % Employment income	decrease	-15.6%
Change in % Gov't transfer payments	increase	5.8%
Change in % Other income	increase	10.0%
Change in % Manufacturing	decrease	-44.4%
Change in LF Participation rate 15+	decrease	-10.2%
Change in LF Participation rate 15-24	decrease	-8.9%
Change in LF Participation rate Females 15+	decrease	-0.5%
Change in % Commute Outside CSD	increase	3.4%
Change in % Built Last 5 Years	decrease	0.0%
% Change in Average Dwelling Value	decrease	-13.1%

Source: Statistics Canada 2001, 1996, 1991.
Note: X indicates characteristics which are not important socio-economic indicators for a particular phase.

Consistent with the characteristics of a declining manufacturing community, the percentage of income from employment has been decreasing while the percentage of income from government transfer payments and other income has been increasing. Labour force participation rates have also been declining and the percentage of residents commuting outside of the CSD have been increasing. Further, average dwelling values for Gold River have been declining.

However, Gold River also exhibits characteristics not typically associated with a declining community. For example, lone parent families have been declining since 1991 and labour force participation rates for women over 15 years of age has remained stable.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

Some of the nearby smaller communities, such as Zeballos, are also facing difficult challenges with access to fibre and changing commodity prices. However, Campbell River has a more stable economy, a wider service sector, and industrial base that can provide employment opportunities for commuters.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

There is potential for residents in Gold River to commute to the regional centre of Campbell River, roughly 90 km away, especially after Highway 28 was paved. Campbell River is a regional transportation hub, and provides diverse employment opportunities in logging, mining, education, health, tourism and recreation, and others.

What is the strength / quality of local leadership to help move the community forward or to address the problems that it faces?

The mill owned by Bowater Incorporated, formerly Avenor Inc., represented 80% of the tax base in 1999. When the mill closed, there was a loss of $1.8 million in municipal taxes. However, the local government and Chamber of Commerce worked to obtain funding, attract new businesses, and develop a tourism base. In 1999, Gold River received $8 million from the Government of British Columbia to rebuild itself. The funds will help the town to maintain services while adjusting to a reduced tax base and lower population. In 2000, the first annual EHS Golf Tournament was held in Gold River with corporate donations from various industries and businesses. The event attracts visitors from all over the island, as well as Vancouver. More recently, it has attracted Epcor, a utility company, to build a power plant at the old mill site.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

The manufacturing industries are not owned locally. Avenor Incorporated was based in Montreal, Bowater Incorporated is an American company, and Fletcher Challenge is a New Zealand based company.

How exposed is the local economy to global economic forces (i.e. what are the commodity prices for the local resource, and how is it changing?)

Gold River's economy is exposed to the global economy. Poor pulp and paper prices led to layoffs in 1993 and 1997, and eventually the closure of the mill in 1999. These difficulties were compounded by declines in Asian markets. However, even though the mill closed,

companies have maintained their tree farm licenses (TFLs) and logging is still being done in the area.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

In 1999, Gold River received $8 million from the Government of British Columbia to maintain its community services during the transition period. Health, education, and child support services will be supported by $1.3 million over the next five years. The town received $2 million to help pay off the municipal debt and $4.21 million to ease the burden of lost tax revenues. The government also provided $410,000 for small business initiatives.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

Gold River has a newspaper, a regional library, and a North Island College campus (which offers a computer lab on learning resources). Gold River also has an elementary school and a high school, and there are three other elementary schools in nearby communities. The community has a health clinic that functions as a diagnostic and treatment facility. Other health services offered include ambulance, a doctor, dentistry, in-support services, homemakers, drug and alcohol counseling, family services, and victim services. Local groups include a senior's club, historical society, arts council, curling club, beavers, guides, cubs, and scouts, ventures, and health care auxiliary. Business services include spas and hair salons, five restaurants and cafes, a book store, grocery stores, Field's and Sears retail outlets, a video store and skate shop, gas station, computer and web design services, a fish hatchery, construction companies, and four logging contractors.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

Gold River has a Chamber of Commerce. It is also served by the Island North Film Commission.

Summary

Due to layoffs and closures in the manufacturing sector, Gold River's population has declined since 1991. Consequently, Gold River has changed from being a manufacturing economy to a non-market services economy. The re-opening of the commercial and tourism fishing industries, along with the successful housing sale in 1999, has helped the community to pursue alternative paths for its future. There are also opportunities for residents to commute to the regional centre in Campbell River.

Sources Consulted

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National Post, Don Mills, Ontario.

The Province, Vancouver, B.C.

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The Vancouver Sun, Vancouver, B.C.

6.7 Dynamic Services - Valemount, British Columbia

Introduction

Dynamic services communities encompass a wide range of services from transportation and wholesale, to financial and real estate. This case study examines economic changes in Valemount, B.C. since the mid-1980s. Between 1986 and 1991, Valemount declined in population and transformed from a manufacturing community to a dynamic services community. It then grew into a non-specialized community, with additional population decline into 2001. As a result, this case study creates an opportunity to examine both growth and decline expectations around a dynamic services economy.

Since the mid-1980s, the Valemount economy has been challenged by a number of economic and services issues. In terms of economics, restructuring within the forest industry has been exacerbated of late by the Softwood Lumber Dispute with the United States. Service issues have focused primarily upon cutbacks, a change that is particularly problematic in relatively isolated communities. Residents may have to drive more than three hours to larger regional centres such as Kamloops (320 km) and Prince George (300 km), or Jasper, Alberta (124 km) for specialized goods and services. However, Valemount remains a service centre for smaller communities within the Robson and Canoe Valleys such as Tête Jaune and Albreda. This discussion focused on the changes in the community between 1986 and 2001.

Population: Valemount has a 2001 population of 1,195. It is located in the Canoe Valley in the Rocky Mountain Trench of British Columbia. It is located close to the entrance to Mt. Robson Provincial Park and Jasper National Park.

MIZ Status: Valemount has a Weak MIZ status. Kamloops (population 77,281) and Prince George (population 72,406) are regional centres located more than three hours driving time away. Jasper, Alberta (population 4,180), however, is roughly an hour and a half drive from Valemount.

Economic Classification: Valemount became a dynamic services community in 1991, a change from its manufacturing status in 1986. However, by 1996, it had transformed once again into a non-specialized community and further declined by 2001. A resolution to the Softwood Lumber Dispute could improve prospects for the forest manufacturing sector.

Alternative Future for Valemount: Between 1986 and 1991, Valemount moved through a period of decline from a "manufacturing" community to a "dynamic services" community. Between 1991 and 1996, as Valemount moved through a period of growth as a "dynamic services" community, its economy changed again and became "non-specialized". Since 1996, Valemount has moved through a period of decline as a "non-specialized" community. Thus, a series of alternative futures may be described for Valemount over this period. Before 1991, the dynamic services future compared to its previous manufacturing classification could be described as "Transformed into a different

economic sector and declined more". Between 1991 and 1996, the change to a non-specialized future compared to its previous dynamic services classification could be described as "Transformed into a different economic sector and grew again". After 1996, it could be described as "Remained in the same economic sector and continued to function at a lower plateau".

While we cannot predict the future of Valemount, there may be a range of possibilities that policy analysts should be aware of. One potential source of growth in the near future is expected to be tourism. These opportunities are available by Valemount's proximity to recreation opportunities and national and provincial parks, such as Jasper, Mount Robson, Mount Terry Fox, and the R.W. Staratt Wildlife Sanctuary. Already, investors and funding is in place to develop hot springs, a gondola, and an interpretive centre in the area. An $85 million project was signed by Canoe Mountain Resorts (Sunrise International) in 2003, and is expected to be completed in 2006. This project will encompass the gondola, residential homes, a resort centre, an 18 hole golf course, a hotel, an additional golf course, and condominium developments. Applications for funding and proposals to develop a community park and extend the trail system are also being reviewed.

Period of Decline: 1986-1991 (manufacturing to dynamic services).

Socio-economic Indicators

Valemount's population decreased between 1986 and 1991; the period when it transformed from a manufacturing to a dynamic services economy. The population then increased between 1991 and 1996; the period when its economy transformed from dynamic services to non-specialized (Table 6.7.1). However, there has been a decline in Valemount's population between 1996 and 2001. The loss of residents under the age of 45 has been particularly affected during this most recent period. The proportion of residents between 45 and 64 years of age has increased, and there has also been a small increase in the proportion of seniors living in Valemount. The most recent decline in population has also been accompanied by a modest increase in the percentage of lone parent families and one-person households, along with a small decline in the percentage of families with children. There has also been decline in the youth dependency ratio and a small increase in the elderly dependency ratio. Youth out-migration has also increased between 1996 and 2001.

Income and employment characteristics have also changed over time. The transition between a manufacturing economy in 1986 and a dynamic services economy in 1991 can be attributed to restructuring within local sawmills as the percentage employed in manufacturing changed from 27.1% to 15.9%. In 1990, falling lumber prices and poor demand lead to the loss of jobs for mill workers, loggers, and truckers at the Valemount mills. The forest manufacturing sector was also impacted when Canarctic Forest Products Kinbasket Lake mill lost its forest license. The manufacturing sector experienced a further downturn with a three month shutdown at Slocan's mill during the winter of 1990 / 1991. After this shutdown, only one shift of 30 workers was brought back to work.

Between 1991 and 1996, Valemount changed again as it grew into a non-specialized economy. In 1992, Slocan Forest Products announced that it would construct a planer mill in Valemount that would provide 20 full-time jobs. This brought considerable construction activity and the planer opened in 1993. A second shift was also recalled at the Slocan mill. Forest manufacturing received another boost in 1994 when All Wood Enterprises opened to produce veneer from poplar and cottonwood. The service sector also continued to diversify. Home care nursing became available in 1992. In 1994, the Village of Valemount received federal and provincial grants for road and park improvements as a part of its downtown revitalization plan. Later on, a learning centre opened in 1995 and a high-tech centre opened in early 1996. The B.C. Forest Service also moved its operations for the Robson Valley to Valemount.

Table 6.7.1 Socio-Economic Characteristics of Valemount, 1986-2001

Characteristics	1986	1991	1996	2001
Economic Type of Community	Manufacturing	Dynamic	Non-Specialized	Non-Specialized
Total population	1161	1128	1303	1195
Total age 0-14	330	320	340	255
Total age 15-24	190	155	200	175
Total age 25-44	370	385	410	325
Total age 45-64	180	210	255	310
Total age 65 and over	80	85	105	115
% Pop'n change (previous 5 years)	2.7	-2.8	15.5	-8.3
% Pop'n 0-14	28.6	28.3	26.2	21.6
% Pop'n 15-24	16.5	13.7	15.4	14.8
% Pop'n 25-44	32.0	34.1	31.5	27.5
% Pop'n 45-64	15.6	18.6	19.6	26.3
% Pop'n 65 and over	6.9	7.5	8.1	9.7
% Pop'n Male	52.8	53.1	53.1	52.1
% Lone parent families	14.8	11.9	12.9	14.7
% One-person households	22.9	26.5	24.2	27.4
% families with children	57.4	55.9	50.0	48.5
Youth dependency ratio	44.6	42.7	39.3	31.5
Elderly dependency ratio	10.8	11.3	12.1	14.2
% 5-year movers	44.0	52.7	52.2	35.8
% Youth Out-Migration (over previous 10 years) **see note below.	-7.9 (pop. grew)	9.5	0.0	6.5
% Employment income	83.0	75.0	77.6	75.8
% Gov't transfer payments	14.1	14.6	17.9	14.7
% Other income	2.8	10.4	4.4	9.3
% Manufacturing employment	27.1	15.9	14.8	11.5
% Dynamic Services employment	n/a	27.1	13.9	19.5
LF Participation rate, 15+	70.8	66.9	63.9	74.2
LF Participation rate, 15-24	57.5	60.0	58.8	69.7
LF Participation rate, Females 15+	58.2	57.9	59.6	68.9
% Commute Outside CSD	n/a	7.6	6.7	6.8
% Dwellings Built Last 5 Years	14.6	8.6	6.1	0.0
Average Dwelling Value $	49653	47011	109041	90399
% Change in Average Dwelling Value	n/a	-5.3	131.9	-17.1

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

Since then, the community has remained non-specialized. The percentage of employment income and government transfers has declined between 1996 and 2001. Labour force participation rates have increased and the percentage commuting outside of the CSD has experienced a small decline since 1991. Against this, average dwelling values increased between

1991 and 1996 (possibly due to speculation of tourism development) but declined after 1996 (possibly due to forest and service sector restructuring).

Dynamic Services and Decline

When the transformation of Valemount from a manufacturing community to a dynamic services community between 1986 and 1991 is examined, most of the socio-economic variables used in our framework to describe decline in dynamic services communities appears to fit with the case of Valemount (Table 6.7.2). There are fewer youth under 25 years of age in the community in 1991, there are fewer families with children, and the youth dependency ratio declined over this period. Socio-economic characteristics also demonstrate that the population is aging. The only exception was for the 25-44 year group.

Labour force characteristics demonstrated a drop in employment in manufacturing. While data for employment in dynamic services is unavailable for 1986, more than 25% of the labour force became employed in dynamic services in 1991. Consequently, Valemount's classification changed from being a manufacturing community in 1986 to a dynamic services community in 1991. Income from employment declined over this period as a greater proportion of income was obtained from other income and government transfer payments. The community also experienced a decline in the labour force participation rate overall, as well as a decline in the labour force participation for women. There was also a decline in average dwelling values.

Dynamic Services and Growth

Between 1991 and 1996, Valemount grew from a dynamic services community to a non-specialized community. Table 6.7.2 shows that most of the household characteristics associated with growth in dynamic services communities appears to fit with the case of Valemount. The community experienced population growth and a slight increase in the percentage of five-year movers. However, other household characteristics did not meet growth expectations through the growth of families with children or youth dependency ratio, for example. Instead, the population appears to be aging.

When employment, income, and housing characteristics were examined, many of the characteristics did not match a dynamic services community in growth. As Valemount grew and became a non-specialized community, employment in dynamic services and income from other sources declined. This demonstrates the complexity of change in small towns as they move into a different economic sector. As such, growth in female labour force participation and average dwelling values were the only characteristics that matched the framework for dynamic services communities.

Table 6.7.2 Change in Characteristics for Dynamic Services Communities in Decline

Socio-Economic Characteristics	Decline Stage Expectations For Dynamic Services Communities	VALEMOUNT 1986-1991	Growth Stage Expectations for Dynamic Services Communities	VALEMOUNT 1991-1996
% Pop'n change	decrease	-2.8	increase	15.5
% Pop'n 0-14	decrease	-3.0	increase	26.2
% Pop'n 15-24	decrease	-18.4	increase	15.4
% Pop'n 25-44	decrease	4.1	increase	31.5
% Pop'n 45-64	increase	16.7	increase	19.6
% Pop'n 65+	increase	6.3	X	X
Change in % Pop'n Male	X	X	X	X
Change in % Lone parent families	X	X	X	X
Change in % One-person households	increase	3.6	increase	-2.3
Change in % families with children	decrease	-1.5%	increase	-5.9
Change in Youth dependency ratio	decrease	-1.9	increase	-3.4
Change in Elderly dependency ratio	increase	0.5	decrease	0.8
Change in % 5-year mover	X	X	increase	0.5
Change in % Youth Out-Migration (over previous 10 years)	increase	17.4	X	X
Change in % Employment income	decrease	-8.0	increase	2.6
Change in % Gov't transfer payments	increase	0.5	X	X
Change in % Other income	increase	7.6	increase	-6.0
Change in % Manufacturing	decrease	-11.2	X	X
Change in % Dynamic Services	decrease	n/a	increase	-13.2
Change in LF Participation rate 15+	decrease	-3.9	increase	-3.0
Change in LF Participation rate 15-24	X	X	X	X
Change in LF Participation rate Females 15+	decrease	-0.3	increase	1.7
Change in % Commute Outside CSD	increase	n/a	increase	-0.9
Change in % Built Last 5 Years	decrease	-6.0	increase	-2.5
% Change in Average Dwelling Value	decrease	-5.3	increase	131.9

Source: Statistics Canada 2001, 1996, 1991, 1986.
Note: X indicates characteristics which are not important socio-economic indicators for a particular phase.
**Due to the wide range of possible activities that may take in non-specialized communities, it is not possible to depict any declining expectations.

Understanding the Context

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

The regional economy has experienced fluctuations due to service and the health sector cutbacks by the provincial government, and industrial restructuring stemming from international competition, changing market pressures, lower lumber prices in the late 1990s, and the Canada/US Softwood Lumber Dispute.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

There is some potential for commuting to work in nearby areas within the region. For example, there is potential to commute and work in Mount Robson Provincial Park or to

commute to work in McBride, approximately 80 km from Valemount. In fact, day care workers, doctors, public health nurses, government agents, and community service workers have served both communities.

What is the strength / quality of local leadership to help move the community forward or to address the problems it faces?

Valemount has strong local leadership embedded in both its civic and civil society. In 1984, the College of New Caledonia had closed its local campus. However, funding was found for continuing education to be delivered through a non-profit organization called the Canoe Robson Education Development Association (CREDA) which ran programming until 1995. From this time, the Valemount Learning Society, another non-profit organization that emerged, would deliver continuing education. The College of New Caledonia reopened again in 2001 delivering the Northern Outdoor Recreation and Ecotourism Program.

In the late 1980s, B.C. Tel added fibre optic lines from Vancouver, through the Robson Valley, and into Alberta. In 1996, the Valemount Education and Technology Committee received $30,000 from Industry Canada's Community Access Project to provide local Internet access. Shortly after, the Valemount Internet Society was formed. The Valemount Library Board allowed the use of space in the basement of the library for storage of the equipment and technical work. Satellite equipment allowing access to the Cancon network was installed on top of the Village Office with the assistance of B.C. Hydro. The secondary school was linked up. In 1997, the Valemount Internet Society was leased to a private company, Web World Warehouse Ltd., with VIS still owning the equipment and Web World managing it for them. A digital receiver has been installed to increase service speed and work is underway to create a wireless network.

In the 1990s, the local government office decided to hire an economic development officer. Investors have been attracted to develop hot springs and a gondola resort project. The business community and volunteers also developed the R.W. Staratt Wildlife Sanctuary.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

In 2004, Canfor and Slocan Forest Products merged. Canfor-Slocan is an international forest manufacturing company with its head office in Vancouver. Hotels, bed and breakfast, restaurants, retail shops, and tour operators are owned locally and non-locally.

How exposed is the local economy to global economic forces (e.g. what are the commodity prices for the local resource, and how is it changing?)

Valemount has a globally exposed economy. Its forest manufacturing industry has been affected by numbers of international market changes since 1980. However, since 1986, it has been diversifying into the tourism and service sectors.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

U.S. tariffs imposed through the Softwood Lumber Dispute impacted Slocan's operations in Valemount. However, these operations have resumed. Provincial government cutbacks have

also impacted local health and education services. When the provincial government closed the area health boards in 1997, residents formed the Robson Health Association. These economic and service pressures are likely to continue in the future.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

As a dynamic services / non-specialized economy, Valemount has had a wide range of services. Transportation services include a small airport, helicopter services, Greyhound bus, and VIA rail passenger service. Business services include CIBC bank, insurance and real estate offices, two grocery stores, two hardware stores, and some small gift and clothing stores. Government services include a government agent's office, local government offices, and a post office. There are two local newspapers; the Robson Valley Times and the Valley Sentinel. The health centre offers emergency services, lab / imaging, drug and alcohol counselling, mental health counseling, well-women clinics, foot care, and home care. There is also a senior's retirement home. Educational services include day care, an elementary school, a high school, a public library, a learning centre for adult education, and a regional campus for the College of New Caledonia. Valemount is also a CAP (Community Access Centre) site. To support the tourism industry, there are approximately a dozen hotels and bed and breakfasts and a range of restaurants, along with a museum and tourism operators. Some additional health services may be accessed in McBride, which is just under an hour's drive from Valemount. However, more specialized health, social, shopping, unemployment, and financial services must be accessed beyond a 30 minute drive in Jasper, Alberta or Prince George or Kamloops, British Columbia.

What are the strengths, if any, of regional development agencies who may play a role in the transformation of this community?

Valemount has an economic development coordinator and a tourism coordinator. A business analyst working for Community Futures is also in the community. Valemount also has access to funds from the Columbia Basin Trust, a body created in 1995 to provide funding for community development projects in places most affected by the Columbia River Treaty.

Summary

Valemount experienced local Decline period between 1986 and 1991 as it transformed into a dynamic services community. It then grew into a non-specialized community, before declining again between 1996 and 2001.While a resolution to the Softwood Lumber Dispute will help the local economy, the community is already working on diversification through tourism and non-market services. While there are limited opportunities for residents to commute to larger centres, there are opportunities to commute in smaller places within the region.

Sources Consulted

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6.8 Non-Market Services Community - Springhill, Nova Scotia

Introduction

This case study examines Springhill, Nova Scotia, a non-market services community which has experienced population loss over the 1986 to 2001 period. Today, the community struggles to compete with a larger town, Amherst, located approximately 20 minutes away. The discussion focuses on the changes in the community between 1986 and 2001.

Population: Springhill has a 2001 population of 4,091 (a decline of 13% from in 1986). It is located in Cumberland County, near the New Brunswick border.

MIZ Status: Springhill has a Weak MIZ status. The Town of Amherst (population 9,470) is 20 minutes away, the Town of Truro (population 11,457) is approximately 45 minutes to the south, and Greater Moncton (population 117,727) is approximately 55 minutes to the north.

Economic Classification: Springhill has been a non-market services economy since the late 1980s. Up until the famous "Springhill Bump" of 1958, which killed many miners, the town was a coal mining town. After the disaster, the town's economy both shrunk and diversified. A campus of the Nova Scotia Community College was built, as was a medium security penitentiary. Today, the largest share of the labour force works in education, health, and social services (both in town and in Amherst). There is also an important local manufacturing sector.

Alternative Future for Springhill: Between 1986 and 2001, as Springhill has moved through a period of decline, its economy continues to be classified as "non-market services". This alternative future, when compared to the 1980s, could be described as "Remained in the same economic sector and continued to function at a lower plateau". However, the relative share of the labour force working in tourism and manufacturing has been increasing in recent years. While we cannot predict the future, there may be a range of possibilities that policy analysts should be aware of. This is a reflection of the growing importance of tourism in the province as a whole, and local efforts to build upon the Anne Murray Centre and local mining heritage. There are also attempts to expand the local industrial park and the number of businesses there.

Period of Decline: 1986 to the present.

Socio-economic Indicators

There has been an absolute decline in the number of people under the age of 45, an increase in the number aged 45 to 64, and about the same number of those aged 65 and over (Table 6.8.1). On a relative basis, there have been increases in the percent of the population aged 45 and over and a large decrease in the percent aged 15-24. There has been an increase in one-

person households. The youth dependency ratio has remained stable, but the elderly dependency ratio has increased over time. The share of income from employment declined in the early part of the 1990s to a low of 54% in 1996 but has since increased to 59%. The share of income from government transfer payments has been the inverse of this pattern.

Table 6.8.1 Socio-Economic Characteristics of Springhill, 1986-2001

	1986	1991	1996	2001
Economic Type of Community		non-market services	non-market services	non-market services
Total population	4712	4373	4193	4091
Total age 0-14	805	726	710	665
Total age 15-24	875	646	525	485
Total age 25-44	1290	1256	1200	1120
Total age 45-64	915	866	925	995
Total age 65 and over	835	861	845	820
% Pop'n change (previous 5 years)		-7.2	-4.1	-2.4
% Pop'n 0-14	17.1	16.6	16.9	16.3
% Pop'n 15-24	18.6	14.8	12.5	11.9
% Pop'n 25-44	27.4	28.7	28.6	27.4
% Pop'n 45-64	19.4	19.8	22.0	24.4
% Pop'n 65 and over	17.7	19.7	20.1	20.1
% Pop'n Male	51.7	50.4	50.1	50.0
% Lone parent families	17.5	14.6	18.1	17.2
% One-person households		27.0	28.0	30.6
% families with children	66.2	57.9	57.7	52.9
Youth dependency ratio	26.1	26.2	26.8	25.6
Elderly dependency ratio	27.1	31.1	31.9	31.5
% 5-year movers	24.2	28.7	29.7	30.9
% Youth Out-Migration (over previous 10 years) **see note below.	5.2	33.3	34.3	19.4
% Employment income		61.9	53.9	58.9
% Government transfer payments		24.3	31.9	26.8
% Other income		13.8	14.2	14.4
% Manufacturing employment	18.8	15.8	20.9	20.7
% Non-market services employment	23.9	40.1	36.7	41.7
LF Participation rate, 15 +	51.8	54.2	50.6	47
LF Participation rate, 15-24	51.0	63	63.4	54.1
LF Participation rate, Females 15 +	41.1	43	44.2	42
% Commute Outside CSD	n/a	31.6	29.8	37.4
% Dwellings Built last 5 years	4.6	3.4	1.8	1.5
Average Dwelling Value $	30534	42355	45966	53181
% Change in Average Dwelling Value	n/a	38.7	8.5	15.7

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

Employment in non-market services peaked in Springhill in 1991, but with cutbacks in the civil service through the 1990s the number of people employed in the sector dropped from 700 to 505. The relative share of the labour force in the sector, however, remains above 40%. Employment in manufacturing has fluctuated through the years, and is now at 250 or 21% of the labour force. Employment in dynamic services has dropped from highs in the early and mid-1990s to about 130, or 11% of the labour force. Labour force participation rates were highest in the early 1990s and have since dropped for the general population and for young adults, but has remained steady among females. Employment opportunities have declined within the town, and now 455 people, or almost 40% of the labour force, commute to another community for work. In most cases, this is to nearby Amherst to work in the regional hospital, in the industrial park, and in the retail

sector. There has been relatively little new housing built in recent years, and the average dwelling value has increased modestly since the early 1990s, reflecting the downward population trend and limited economic diversification prospects.

Table 6.8.2 shows that most of the socio-economic variables that our general framework uses to describe Decline in a non-market services community performed as expected in Springhill. However, there were some differences. The elderly dependency ratio increased rather than remained stable. The share of employment in non-market services rose marginally. Female employment rates rose marginally, and average dwelling values increased.

Table 6.8.2 Change in Characteristics for Non-Market Communities in Decline

Socio-Economic Characteristics	Decline Stage Expectations For Non-Market Communities	Springhill 1986-2001
% Pop'n change	decrease	-13.2%
% Pop'n 0-14	decrease	-17.4%
% Pop'n 15-24	decrease	-44.6%
% Pop'n 25-44	decrease	-13.2%
% Pop'n 45-64	increase	8.7%
% Pop'n 65+	increase	-1.8%
Change in % Pop'n Male	X	X
Change in % Lone parent families	X	X
Change in % One-person households	increase	3.6%
Change in % families with children	decrease	-13.3%
Change in Youth dependency ratio	decrease	-0.5%
Change in Elderly dependency ratio	stable	4.4%
Change in % 5-year mover	X	X
Change in % Youth Out-Migration (over previous 10 years)	increase	14.2%
Change in % Employment income	X	X
Change in % Gov't transfer payments	increase	2.5% (1)
Change in % Other income	increase	0.6% (1)
Change in % Non-market Services	decrease	1.6% (1)
Change in LF Participation rate 15+	X	X
Change in LF Participation rate 15-24	X	X
Change in LF Participation rate Females 15+	decrease	0.9%
Change in % Commute Outside CSD	increase	X
Change in % Built Last 5 Years	decrease	-3.1%
% Change in Average Dwelling Value	decrease	74.2%

Source: Statistics Canada 2001, 1996, 1991, 1986.
(1) For 1991-2001 period only.
Note: X indicates characteristics which are not important socio-economic indicators for a particular phase.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

The regional economy is stable despite the relative remoteness of the region from Halifax. This is because the Trans-Canada Highway bisects the County and passes near to Springhill. Amherst serves as a regional centre, offering a range of economic activity and employment options.

What is the potential for commuting to work in other communities in the region, while

maintaining residence in this community?

The Trans-Canada Highway presents many commuting options for Springhill residents. In addition to Amherst, the small town of Oxford (population 1,400) is 10 minutes from Springhill (it is home to a large food processing company - Oxford Frozen Foods). A few people work in Truro, Nova Scotia, Sackville, New Brunswick, and in the Greater Moncton area. Springhill is attempting to position itself as a residential community offering a high quality of life for people who may want to work elsewhere.

What is the strength/quality of local leadership to help move the community forward or to address the problems it faces?

This is difficult to assess without detailed primary research, but there have been a number of problems in local government over the past decade. For example, there have been conflicts over municipal policing, roles and responsibilities between council and staff, problems developing and implementing a plan to address poor water quality, and more. These and other issues have sidetracked local development planning. A strategic plan for the town, facilitated and prepared by the Cumberland Regional Economic Development Authority (CREDA, the development agency serving the town), was completed in 2001-2002 but has not yet been adopted by municipal council.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

Most of the small businesses are locally owned. However, there are several restaurants and pharmacies which are chain operations. The largest employers in the town's industrial park are not locally owned.

How exposed is the local economy to global economic forces (e.g., what are the commodity prices for the local resource, and how is it changing?)

Most of the economy has low exposure to global economic forces. This is not surprising given the non-market services orientation of employment.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

The town has a source of geo-thermal energy in its abandoned coal mines and this is being used on a limited basis in the industrial park and other properties. This green energy source places the town in a good position to take advantage of any new polices related to green energy and sustainable development.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

Most core services are located within the community, including a small hospital and three schools. There is a larger full scale regional hospital in nearby Amherst, as well as the provincial court house, social services offices, and other services. A new arena and civic centre opened in 2004 in Springhill, which is expected to play a role in population retention and attraction.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

CREDA works to promote economic development in the region. Three people from Springhill serve on its board of directors, there is a staff person who devotes one-third of her time exclusively to development issues and activities for Springhill.

Summary

Springhill's population has declined for decades and there are few signs that this will change. However, the town is moving forward with new initiatives related to geo-thermal energy and industrial park development which are expected to provide employment opportunities. Because it is located relatively close to Amherst, Springhill has the potential to be a bedroom community for those who wish to commute. Relatively inexpensive housing and the opening of the new arena and civic centre should help in this regard.

Sources Consulted

The Springhill and Parrsboro Record.

Town of Springhill Strategic Plan. 2002. Draft.

CREDA Annual Report. 2003-04.

6.9 Retirement Community - Preeceville, Saskatchewan

Introduction

This case study examines Preeceville, a retirement community in Saskatchewan. The discussion focuses on the changes in the community between 1986 and 2001.

Population: The Town of Preeceville had a 1986 population of 1,276. The population has declined by 15.8% between 1986 and 2001 (from 1,276 to 1,074).

MIZ Status: Preeceville has a Weak MIZ status. Located in east-central Saskatchewan approximately 105 km north of Yorkton, Preeceville is accessible by Highways 9, 47, and 49. Rail service is provided by the Canadian National Railway, with Saskatchewan Transportation buses connecting Preeceville to Regina and Saskatoon.

Economic Classification: Preeceville has been classified as a retirement community since 1986, with more than 31% of the population being over 65 years of age. That figure is now 37%. Low cost housing, and the presence of health care services, made this possible. Employment in non-market and dynamic services has made up close to half of the labour force over the past 15 to 20 years, although total employment in dynamic services is declining. In recent years, more people have been employed in agriculture. Tourism-related employment is also on the decline, from 80 jobs in 1991 to only 35 in 2001.

Alternative Future for Preeceville: Between 1986 and 2001, as Preeceville moved through a period of decline, its economy continues to be classified as "retirement". This alternative future, when compared to the 1980s, could be described as "Remained in the same economic sector and continued to function at a lower plateau". The community has struggled with an aging population and a declining population. Out-migration has affected all age categories, including the 65 and over category. While we cannot predict the future of Preeceville, policy analysts should be aware of a range of possibilities for the community. While the economic focus upon being a retirement community has reached a lower plateau than in the past, Preeceville may eventually be a dual specialization economy if employment in agriculture or non-market services reach the 25% or more of the labour force level (either due to net increases or declines in employment in other sectors). A key overriding factor is the overall continuing decline of populations in all of rural Saskatchewan, and this will potentially limit the possibilities for economic diversification in Preeceville in the coming years.

Period of Decline: 1986 to the present.

Socio-economic Indicators

There has been an absolute decline in the number of people in all age categories in the 1986-2001 period, with the largest declines in the 0-14 and 15-24 age groups. However, since

1996 there has been a decline in the 65 and over age category (Table 6.9.1). On a relative basis, there have been moderate increases in the percent of the population aged 25-44 and 65 and over. The proportion of the population who are male is low (45%), having declined from 48% in 1986. The number of lone parent families has remained constant over time but their share of all families has risen to more than 11% from 8% in 1986. One-person households have increased and now represent 44% of all households (reflective of an aging population). The number of families with children has declined by 40 over this period, but with total population loss, these families now make up 50% of all families. The youth dependency ratio has decreased to 21%, but the elderly dependency ratio has increased to more than 70% (and peaked at 80% in 1996). The distribution of income from various sources has remained relatively constant over time, although there has been a marginal decrease in employment income and in income from government sources.

Table 6.9.1 Socio-Economic Characteristics of Preeceville, 1986-2001

	1986	1991	1996	2001
Economic Type of Community	retirement	retirement	retirement	retirement
Total Population	1276	1205	1148	1074
Total age 0-14	190	170	150	115
Total age 15-24	160	110	100	120
Total age 25-44	240	230	235	225
Total age 45-64	275	250	215	210
Total age 65 and over	405	445	440	390
% Pop'n change (previous 5 years)	2.3	-5.6	-4.7	-6.4
% Pop'n 0-14	14.9	14.1	13.0	10.8
% Pop'n 15-24	12.5	9.1	8.7	11.3
% Pop'n 25-44	18.8	19.1	20.4	21.2
% Pop'n 45-64	21.6	20.7	18.7	19.8
% Pop'n 65 and over	31.8	36.9	38.3	36.8
% Pop'n Male	48.4	46.5	44.8	45.6
% Lone parent families	8.2	6.0	8.5	11.3
% One-person households	30.9	39.5	41.8	44.4
% families with children	46.6	43.8	40.7	49.1
Youth dependency ratio	28.1	28.8	27.3	20.7
Elderly dependency ratio	60.0	75.4	80.0	70.3
% 5-year movers	23.9	28.3	35.3	34.5
% Youth Out-Migration (over previous 10 years) **see note below.	6.9	10.0	28.1	13.6
% Employment income	58.2	52.3	54.0	55.8
% Government transfer payments	30.1	31.3	31.2	29.4
% Other income	11.7	16.3	14.7	14.7
% Agriculture employment	n/a	8.8	2.9	17.4
% Dynamic services employment	17.0	22.5	22.4	16.3
% Non-market services employment	0.0	21.6	23.9	23.3
LF Participation rate, 15 +	47.6	52.7	35.8	51
LF Participation rate, 15-24	63.2	71	76.0	68.2
LF Participation rate, Females 15 +	40.4	45	29.3	42
% Commute Outside CSD	n/a	10.8	10.0	18.6
% Dwellings Built last 5 years	12.3	9.6	.0	3.7
Average Dwelling Value $	59247	57444	42748	59679
% Change in Average Dwelling Value	n/a	-3.0	-25.6	39.6

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

Employment in non-market services has declined only marginally since 1991, while there have been steady declines in dynamic services and tourism-related employment. Agricultural

employment has fluctuated with a large increase between 1996 and 2001 (now employing 17% of the labour force). Labour force participation rates are relatively low, hovering near 50% for the entire labour force and even lower for females. With economic depression in the 1990s, especially in agriculture, labour force participation rates declined significantly. On the positive side, the participation rate among young adults age 15-24 is higher, peaking at 76% in 1996. Very few people work outside of the community, but in 2001 the commuters rose to 19%, suggesting that with declining local job prospects people have had to find work in nearby communities. There were more than 120 new houses built through the 1980s to 1991, but since then, only 20 new houses were built, all of them in the 1996 to 2001 period. This suggests a declining and depressed economy. This is confirmed by the fact that the average dwelling value, as reported by occupants, is the same in 1986 and in 2001, and even declined in 1996.

Table 6.9.2 shows that most of the socio-economic variables that our general framework uses to describe Decline in a retirement community performed as expected in Preeceville. However, there were some differences. The share of income from government transfers, and from other sources, each decreased slightly. Female labour force participation rates rose marginally.

Table 6.9.2 Change in Characteristics for Retirement Communities in Decline

Socio-Economic Characteristics	Decline Stage Expectations For Retirement Communities	Preeceville 1986-2001
% Pop'n change	decrease	-15.8%
% Pop'n 0-14	X	X
% Pop'n 15-24	X	X
% Pop'n 25-44	decrease	-6.3%
% Pop'n 45-64	decrease	-23.6%
% Pop'n 65+	decrease	-3.7%
Change in % Pop'n Male	X	X
Change in % Lone parent families	X	X
Change in % One-person households	increase	4.9%
Change in % families with children	X	X
Change in Youth dependency ratio	X	X
Change in Elderly dependency ratio	decrease	-5.1%
Change in % 5-year mover	X	X
Change in % Youth Out-Migration (over previous 10 years)	X	X
Change in % Employment income	decrease	X
Change in % Gov't transfer payments	stable	-1.9% (1)
Change in % Other income	stable	-1.6% (1)
Change in LF Participation rate 15+	decrease	X
Change in LF Participation rate 15-24	X	X
Change in LF Participation rate Females 15+	decrease	1.6%
Change in % Commute Outside CSD	X	X
Change in % Built Last 5 Years	decrease	-8.6%
% Change in Average Dwelling Value	decrease	0.7%

Source: Statistics Canada 2001, 1996, 1991, 1986.
(1) For 1991-2001 period only.
Note: X indicates characteristics which are not important socio-economic indicators for a particular phase.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

Preeceville is located in the northern part of the Parkland Region of Saskatchewan and borders the timber zone; the district is well suited for mixed agriculture. Commercial outlets service a large area, especially farm implement dealers. Tourism and guide-outfitting are expanding sectors of the economy. Several companies in Preeceville and area provide guided hunting, mainly for Americans who hunt bear (bow and gun), deer, elk, moose, ducks, geese and other game birds. Most of the jobs, however, tend to be part-time or seasonal in nature. The numerous lakes in the area support sport fishing year round, cross country skiing and snowmobiling attract people in the winter, and the lakes become 'cottage country' in the summer. Closures in the last ten years include the local IGA grocery store, Standard Motors, the Laundromat, and the Grain Pool Elevator. Development of feedlot operations over the last ten years and, more recently, large hog operations have helped diversify the area's agricultural base and moderate the effects of falling grain prices.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

Preeceville serves an immediate agricultural area, so commuting into Preeceville to work is a common practice for people living just outside of the town. For example, many farm women work in town in order to supplement the farm income. There are some who commute out of Preeceville, for example, to Big Sky Pork. Statistics show that 20 residents of Preeceville travel to nearby Canora for work. There are also a few people who commute from Preeceville to work in Yorkton, almost an hours drive away. However, the prospects for commuting to work in other places are limited.

What is the strength/quality of local leadership to help move the community forward or to address the problems it faces?

No information available at this time.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

Most of the local businesses are small and independently-owned.

How exposed is the local economy to global economic forces (e.g., what are the commodity prices for the local resource, and how is it changing?)

In recent years the local economy has been weakened due to falling prices in the agriculture sector. Grain prices have fallen and have had a negative effect on the town's businesses and residents.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

The regional economy can be affected by changes in policies associated with agriculture. Provincial policies and programs related to health and education services have impacts because these services are located in the community.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

The town has a range of housing options, especially for seniors. In addition to home-

ownership and rental, there is the Lions Hostel (30 hostel units / beds, and 20 duplex units) and the Assiniboine Valley Manor (rental accommodation for low-income seniors, charging 25 percent of gross income). The regional school division office is located in Preeceville. There is a 23-bed hospital and personal care home which together employs 175 people. Social services operate out of the local hospital on a twice-per-month basis. The K-12 school has over 300 students, and the Parkland Community College is located in town.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

The region is served by the Good Spirit Regional Economic Development Authority (head office in Yorkton). Its primary role is business development assistance, but it also supports broader community and economic development in the area's communities. However, Preeceville is not a participating or active member of the regional agency. This means that the town does not benefit from the services provided.

Summary

Preeceville has been a retirement community for many years now. Its role as a central place for the surrounding rural farm areas makes it a good place for people to retire to, especially given the presence of a small regional hospital. Opportunities for economic diversification and expansion within the town are limited due to the ongoing changes and restructuring associated with agriculture specifically, and rural economic and demographic change more generally.

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6.10 Dual Specialization - Churchill, Manitoba

Introduction

This case study examines Churchill, Manitoba as a dual specialization community from the 1980s onward. A dual specialization community exists with two sectors each consisting of 25% or more of the total labour force. It remains a dual specialization community today in dynamic and non-market services, but with a smaller population (from 1,217 in 1986 to 963 in 2001, a decline of 20.9%). The community has declined and faced significant challenges with the competitiveness of its port facility and an aging infrastructure.

Population: In 2001, Churchill had a population of 963. It is located approximately 1,000 km north of Winnipeg along the south-western Hudson Bay coastline. However, there are no roads to Churchill. It is accessible only by air or by train.

MIZ Status: Churchill has a Weak MIZ status. Residents must travel by air or passenger rail to regional centres, notably Thompson (population 13,256) located 563 kilometres away by passenger rail or The Pas (population 5,795) located 955 kilometres from Churchill by rail.

Economic Classification: Churchill has dual specialization in dynamic and non-market services. The dynamic services sector emerged when construction completed the rail link between The Pas and Churchill in 1929, and to the Port of Churchill in 1931.

Churchill was also a base for military activities during World War II, and functioned as a rocket range for the U.S. Air Force, NASA, the Canadian Space Agency, and the National Research Council of Canada in the 1960s. Thereafter, a sounding rocket program for atmospheric research was conducted at the Churchill Research Range from 1962 to 1984. The Churchill Northern Studies Centre is a non-profit research and education facility that was created in 1976 by Churchill's Community Development Corporation, in cooperation with the Government of Manitoba and the Donner Canadian Foundation. Shortly after, the rocket range facilities were sold to the Churchill Research Centre Incorporated in 1985 after the closure of the rocket research program by the Canadian Space Agency and the National Research Council.

The non-market services sector emerged in Churchill in the 1970s. The federal and provincial governments sponsored a redevelopment program for Churchill. Many private homes were bought by the government, and rental houses, apartments, and a large Town Centre Complex were constructed in 1976. This complex houses a theatre, local government offices, a high school, curling rink, swimming pool, skating rink, cafeteria, bowling alley, a games area, and a health centre serving the Churchill area and the Keewatin District in Nunavut.

Alternative Future for Churchill: Between 1981 and 1991, as Churchill has moved through a period of decline, its economy continues to be classified as "dual-specialized". This

alternative future, when compared to the 1980s, could be described as "Remained in the same economic sector and continued to function at a lower plateau". While we cannot predict the future of Churchill, there may be a range of opportunities that policy analysts should be aware of. Tourism remains an important alternative economic sector for the local economy. Even though tourism began to develop in Churchill in the 1970s, it really emerged through the 1980s and 1990s. The tourism industry, has been able to fill economic gaps stemming from declines in military and space operations, and declining grain exports. Tourists come to view polar bears, caribou, beluga whales, northern lights, Inuit crafts, and more. Accessibility to polar bears by tour operators occurred when tundra buggies, once used by the military, were adapted by a local resident to carry tourists in 1979. The tourism industry also gained a boost when Wapusk National Park was established in 1996. Wapusk National Park is home to the world's largest polar bear denning area. There are estimates that as many as 200 residents are employed by the polar bear viewing industry, such as gift shop owners, restaurant owners, and local artists. In 1998, the town also developed a five year $4.5 million development strategy to improve streetscaping and hotel facilities. However, there may be limits to the growth of the tourism industry. Manitoba Conservation is in charge of monitoring tour operators. Only 18 buggies are allowed to operate to prevent stress on the bears, and new permits have not been issued in many years.

Churchill also has an important role in supply operations to the Keewatin District in Nunavut. There have been discussions between the Governments of Manitoba and Nunavut to cooperate on issues such as education and the development of hydro power, with important roles for Churchill in these developments. There have also been talks about developing the first commercial spaceport for launching satellites in Churchill. Such talks have included investors in grain, real estate, and companies like Bombardier. Churchill is attractive due to its established transportation links including a railway, a port, and an airport.

Period of Decline: 1981-2001. The most recent Decline period in Churchill began in 1981. In 1976, Churchill had a population of 1,700. By 1981, this population declined by 23.2% to 1,305, and it has been slowing declining ever since. The late 1970s were marked by a drop in the number of shipments leaving the Port of Churchill. Furthermore, decline continued once the Canadian Space Agency and the National Research Council left Churchill in 1984. Port activity has continued to be a challenge for the community throughout the 1980s and 1990s.

Socio-economic Indicators

Since 1981, there has been a steady decline in the population of Churchill (Table 6.10.1). The loss of residents under the age of 45 is particularly evident between 1986 and 2001. One result has been a small increase in the proportion of seniors within the community. The largest increase in the percentage of the population is for individuals between the ages of 45 and 64. There has been very little change in the gender distribution amongst the population over the past 15 years. However, there has been an increase in the percentage of lone parent families and one person households within the community, and a decline in the percentage of families with

children - all of which are characteristics of a community in Decline. The youth dependency ratios have been decreasing, while there has only been a small increase in the elderly dependency ratios. With the exception of 1996, youth out-migration has been strong in Churchill. It is important to note, however, that one of the limitations of the Statistics Canada data is that it does not capture seasonal residents who come to work the tourism season in Churchill that runs typically from July to November.

There have also been a number of changes in employment and income characteristics. Churchill has consistently had more than 30% of the labour force employed in dynamic services and non-market services when examining the data between 1991 and 2001. Labour force participation rates in all categories have increased between 1986 and 2001. At the same time, the percentage of income from employment, government transfers, and other incomes has remained relatively stable when examining the overall period between 1986 and 2001. Therefore, the Decline may be attributed to youth out-migration or the exodus of those who become unemployed. There have been significant fluctuations in the average housing values since 1986. These increases may be attributed to growth in tourism, government, and service industries.

Table 6.10.1 Socio-Economic Characteristics of Churchill, 1986-2001

Characteristics	1986	1991	1996	2001
Economic Type of Community	n/a	dual specialized	dual specialized	dual specialized
Total population	1217	1143	1089	963
Total age 0-14	340	290	290	240
Total age 15-24	230	205	145	115
Total age 25-44	440	420	430	335
Total age 45-64	165	170	165	210
Total age 65 and over	50	60	50	50
% Pop'n change (previous 5 years)	-6.7	-6.1	-4.7	-11.6
% Pop'n 0-14	27.9	25.3	26.6	25.3
% Pop'n 15-24	18.9	17.9	13.3	12.1
% Pop'n 25-44	36.1	36.7	39.4	35.3
% Pop'n 45-64	13.5	14.8	15.1	22.1
% Pop'n 65 and over	4.1	5.2	4.6	5.3
% Pop'n Male	51.2	51.5	50.9	52.1
% Lone parent families	15.3	12.5	18.2	22.0
% One-person households	25.6	29.4	26.8	35.9
% families with children	57.6	53.6	50.9	44.0
Youth dependency ratio	40.7	36.5	39.2	36.4
Elderly dependency ratio	6.0	7.5	6.8	7.6
% 5-year movers	66.7	66.0	58.8	58.6
% Youth Out-Migration (over previous 10 years) **see note below.	20.0	16.7	-6.5 (pop. grew)	24.4
% Employment income	87.1	86.6	82.9	86.4
% Gov't transfer payments	9.1	10.4	13.5	10.5
% Other income	3.7	3.1	3.6	3.4
% Dynamic Services employment	n/a	33.1	33.3	30.1
% Non-market Services employment	n/a	35.4	38.2	38.8
LF Participation rate, 15+	79.2	77.1	81.0	84.4
LF Participation rate, 15-24	71.1	71.8	69.0	78.3
LF Participation rate, Females 15+	70.9	74.4	75.6	79.7
% Commute Outside CSD	n/a	9.1	0.0	1.9
% Dwellings Built Last 5 Years	3.5	3.5	0.0	0.0
Average Dwelling Value $	30949	43589	49928	77610
% Change in Average Dwelling Value	n/a	40.8	14.5	55.4

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

By examining population characteristics, Churchill appears to have characteristics associated with a declining community. Not only has the overall population been declining, but lone parent families and one-person households have been increasing. The percentage of families with children has also been declining.

However, the Churchill case study also exhibits characteristics that may not be typically associated with a declining community. Most notably, labour force participation rates have been increasing while employment income and government transfer payments have remained relatively stable. As noted earlier, this may be due to the immediate out-migration of the unemployed who leave to find jobs and employment services elsewhere or to the out-migration of youth who may pursue employment or education opportunities elsewhere.

As noted in the limitations of the framework described near the end of Section 5.0, it is not possible to assess the 'fit' of an individual dual-specialization community against general expectations from the model around the directionality of change for each socio-economic variable. This is because of the unique distribution of the labour force across various combinations of two dominant sectors. In some cases, the expected direction of change for variables may be the same for each sector, while in other cases they may be opposite.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

The aboriginal population in the north has been growing. Churchill continues to function as a service centre for some of the North's residents through its health centre and supply operations for Nunavut. This may change if Nunavut develops its own port.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

Given that there are no roads into Churchill, the potential for commuting for work is limited. However, in 1999, the Government of Nunavut formally proposed that a 500 kilometre road link be built from Churchill to Rankin Inlet along the western coast of the Hudson Bay. The concept is still being pursued.

What is the strength / quality of local leadership to help move the community forward or to address the problems that it faces?

The community has been active to form boards for important businesses and services in the past. Following World War II, fear of port closure prompted the creation of the Hudson Bay Route Association and the Port Churchill Development Board. In 1976, Churchill's Community Development Corporation, in cooperation with the Government of Manitoba and the Donner Canadian Foundation, created the Churchill Northern Studies Centre. This Centre continues to attract international researchers and offers funding for research in the area. Field courses are also conducted for students attending universities such as the University of Toronto and Guelph University. Throughout the late 1990s and the 2000s, Churchill's Chamber of Commerce has been pursuing a variety of initiatives from attracting

a commercial space satellite launching program to developing an epic dog sled race from Churchill to Arviat in Nunavut to rival the Iditarod in Alaska.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

In 1997, Omnitrax purchased the rail link between The Pas and Churchill, along with the Port of Churchill. Ownership of tourism and restaurant operators is mixed between local and non-local operators from places such as Vancouver Island and Toronto. However, during the 1970s, many private homes were bought by the government. This eroded the town's tax base as private property was replaced with government rental dwellings. Government employees have been subsidized to meet rental costs, but others cannot afford them.

How exposed is the local economy to global economic forces (i.e. what are the commodity prices for the local resource, and how is it changing?)

The success of the port has been linked to harvest levels, particularly in Manitoba and north-central Saskatchewan. At times, poor and late harvest levels have meant lower volumes of exports at the port. Between the late 1980s to the mid-1990s, the port has handled an annual 285,000 tonnes of cargo on average, short of its break even tonnage of 600,000 and below its capacity of one million tonnes. Cargo has increased after the sale of the rail link and the port to Omnitrax who are looking to diversify the exports beyond grain. There are also speculations that constant labour shortages in Vancouver, climate change, deregulation of rail freight rates in 2000, along with the elimination of the Crow rate subsidy in 1995 will encourage more farmers to look at shipping through the Port of Churchill.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

Since the 1990s, changes in government policies have affected port and service operations. The elimination of the Crow rate subsidy in 1995 meant that farmers had to pay more to transport their goods to a port facility. Furthermore, the deregulation of freight rates has also increased costs for farmers. The absence of the subsidy and higher freight rates means higher costs to ship to these distant ports and, over time, the Port of Churchill may be an attractive option for Prairie farmers.

The creation of Nunavut in 1999 could have a number of implications for Churchill. The territory is hoping to develop a port of its own one day, which could impact port operations in Churchill. On the other hand, Manitoba and Nunavut signed a deal in 2000 to strengthen ties. The Government of Nunavut is hoping a road will be built from the Kivalliq region in Nunavut to Churchill. The Government of Manitoba has expressed interest in this project and both parties are waiting to hear about possible contributions by the federal government. Nunavut is also interested in having a line built to provide electrical power from Manitoba. Today, Churchill remains a service centre for some Nunavut communities.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

Churchill's main economic sectors are dynamic services and non-market services. As such, it offers transportation services through the Port of Churchill and VIA rail passenger services

and freight services, and it also has an airport and helicopter services. The Town Centre Complex includes a public library, local government offices, a games room, bowling alley, curling rink, ice rink, swimming pool, high school, cafeteria, movie theatre, and a health centre. Health and social services include ambulance, emergency services, obstetric and paediatric services, diagnostic lab and imaging services, dental and oral surgery services, optometry, a pharmacy, physiotherapy, addictions counselling, telehealth services, occupational therapy, gynaecology, radiology, urology, and more. A children's centre also offers community day care. The community also has a Royal Bank office, a post office, a liquor store, and a building centre. There are also post-secondary educational opportunities through the Churchill Northern Studies Centre and the regional offices of the Keewatin Community College in Churchill.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

Economic development is facilitated by Community Futures, the Churchill Chamber of Commerce, the Churchill Community Development Corporation, and the Regional Access and Aboriginal Business Service Network. They have also developed the Churchill Sustainable Development Strategy. In 2001, Churchill received $50,000 from the Canada / Manitoba Economic Development Partnership Agreement to develop its web site to promote Churchill internationally as a unique tourist destination. A business plan will also be developed outlining redevelopment options for the Town Centre Complex. Funds will also go towards a roundtable forum with the Kivalliq region in Nunvaut to strengthen technical, social, educational, and tourism links. The Churchill Gateway Development Corporation is a corporation formed by the Province of Manitoba, Western Economic Diversification Canada, and Omnitrax Canada to further develop the Port of Churchill.

Summary

Churchill's population has continued to decline since the mid-1970s. However, there are several organizations that are working to reverse this trend. The potential for Churchill to prevent further decline lies within the development of the port, cooperation on initiatives with the communities and Government of Nunavut, along with a growing tourism industry. At the present time, there are limited opportunities for residents to commute for employment or to access services. However, road infrastructure proposals could change this in the future.

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6.11 Non-Specialized Community - Digby, Nova Scotia

Introduction

This case study examines the community of Digby, Nova Scotia, and its transition from a non-specialized economy to a retirement economy between 1991 and 2001.

Population: The Town of Digby had a 1991 population of 2,311. It is located at the far western end of the Annapolis Valley in a very rural county. The population has declined by 8.7% between 1991 and 2001 (from 2,311 to 2,111).

MIZ Status: Digby has a No MIZ status. The nearest large urban centre is Yarmouth (population 7,561), more than one hour drive to the west. More than one hour to the east lies the Kentville-Wolfville small urban cluster (25,172). Halifax is more than a two-hour drive from Digby.

Economic Classification: Digby was a non-specialized economy in 1991, with non-market services and dynamic services providing most of the employment for the local labour force. By 1996, more than 25% of the labour force was employed in non-market services. Employment in tourism rose to be the second largest employer. By 2001, the population had aged (through natural aging and the out-migration of younger people) to the point where 26% of the population is 65 years of age and over, making Digby a retirement town. Non-market services employment has declined to 20% of the labour force, while employment in tourism continues to grow (also to 20% in 2001). Although there are few town residents employed directly in the famous scallop fishery, the town's port serves as an important home for the Digby Scallop Fleet.

Alternative Future for Digby: Between 1991 and 2001, as Digby has moved through a period of decline as a "non-specialized" community, the economic base and demographics of its population shifted. It became classified as a "retirement" community in 2001. This alternative future could be described as "Transformed into another economic activity and decline more". While we cannot predict the future of Digby, there may be a range of possibilities that policy analysts should be aware of. Pro-active and determined efforts to increase tourism activity could mean that the community is moving towards a dual-specialization in retirement and tourism. However, this may happen in the context of continued population decline as there has been a long run period of out-migration from this region of the province.

Period of Decline: 1991 to the present. The community has been adversely affected by changes in the fishing sector (decline in fish processing employment), and closure of the nearby Canadian Forces Base in Cornwallis in the early 1990s.

Socio-economic Indicators

There has been an absolute decline in the number of people under the age of 45, and an increase in the number aged 45 and over (Table 6.11.1). On a relative basis, there have been large increases in the percent of the population aged 45 and over, and a large decrease in the percent younger than 45 years. The proportion of the population who are male is quite low at about 44%, but has remained stable over time. The number of lone parent families has remained constant over time but their share of all families has risen to more than 22%. There has been a large absolute and relative increase in one-person households. In turn, families with children have declined in both absolute and relative terms. The youth dependency ratio has decreased to 22%, but the elderly dependency ratio has increased to more than 43%. The share of income from employment declined in the early part of the 1990s to a low of 52% in 1996, but has since increased to 63% by 2001. The share of income from government transfer payments has been the inverse. This is reflective of the impact of reduced employment and layoffs that occurred through the early to mid-1990s.

Table 6.11.1 Socio-Economic Characteristics of Digby, 1986-2001

	1986	1991	1996	2001
Economic Type of Community	n/a	non-specialized	non-market services	retirement
Total Population	2525	2311	2199	2111
Total age 0-14	465	405	350	280
Total age 15-24	455	305	255	240
Total age 25-44	635	685	570	515
Total age 45-64	480	405	475	515
Total age 65 and over	495	505	545	550
% pop'n change (previous 5 years)	-1.1	-8.5	-4.8	-4.0
% pop'n 0-14	18.4	17.5	15.9	13.3
% pop'n 15-24	18.0	13.2	11.6	11.4
% pop'n 25-44	25.1	29.7	26.0	24.5
% pop'n 45-64	19.0	17.5	21.6	24.5
% pop'n 65 and over	19.6	21.9	24.8	26.2
% pop'n Male	45.1	44.2	44.3	43.6
% Lone parent families	19.1	16.7	23.1	22.3
% One-person households	28.9	32.8	38.9	39.8
% families with children	63.4	58.9	62.0	56.3
Youth dependency ratio	29.6	29.0	26.9	22.0
Elderly dependency ratio	31.5	36.2	41.9	43.3
% 5-year movers	33.2	49.6	40.8	40.5
% Youth Out-Migration (over previous 10 years) **see note below.	23.0	29.0	39.6	23.0
%Employment income	60.0	60.4	52.1	62.8
%Government transfer payments	25.1	23.4	32.0	24.8
%Other income	14.9	16.3	15.9	12.5
% Tourism employment	n/a	9.0	18.0	19.4
% Dynamic services employment	12.6	17.6	13.7	14.7
% Non-market services employment	10.0	23.9	28.6	20.0
LF Participation rate, 15 +	56.2	53.9	49.3	55
LF Participation rate, 15-24	64.4	66	59.6	71.4
LF Participation rate, Females 15 +	44.4	45	40.3	48
% Commute Outside CSD	n/a	95.5	89.9	17.6
% Dwellings Built last 5 years	3.1	6.2	2.6	1.5
Average Dwelling Value $	48427	72103	62739	84384
% Change in Average Dwelling Value	n/a	48.9	-13.0	34.5

Source: Statistics Canada 2001, 1996, 1991, 1986.

**Youth out-migration = $\frac{\text{population 15-24 years (early period) - population 25-34 years (later period)}}{\text{population 15-24 years (early period)}}$

Employment in non-market services peaked in 1996, but with cutbacks in health care and education since that time the number has declined to 170 in 2001. Employment in dynamic services peaked in 1991 and has declined since, while employment in manufacturing (mostly fish processing) has been in steady decline since 1986. Tourism-related employment has been rising, from 85 in 1991 to 165 in 2001. The tourism sector is anchored by the famous Digby Pines resort, and supplemented by new eco-tourism activities, including whale watching.

Labour force participation rates are higher today than in the past, and were lowest in the mid-1990s. In part, this is due to the out-migration of young people and others, so that most who remain in the local labour force find work. However, participation rates are low for women, less than 50%. Less the 20% of the labour force commutes to other communities - mostly small communities throughout the County - for employment. However, most of the labour force worked outside of the community (at the former military base, and in the fish plants, for example) until the mid-1990s. There has been relatively little new housing built in recent years, with only 15 built between 1996 and 2001, compared to 60 that were built between 1986 and 1991. The average dwelling value has increased by 18% since 1991.

As noted in the limitations of the framework described near the end of Section 5.0, it is not possible to assess the 'fit' of an individual non-specialized community against general expectations from the model around the directionality of change for each socio-economic variable. This is because of the unique distribution of the labour force across various combinations of two dominant sectors. In some cases, the expected direction of change for variables may be the same for each sector, while in other cases they may be opposite.

Understanding the Context for Change

What is the nature of the regional economy surrounding this community? Is it healthy or unstable?

The regional economy has stabilized after the early 1990s, which saw the closure of CFB Cornwallis, decline in the fishery, out-migration, and cutbacks in government spending. Since the late 1990s, however, things have improved. Part of the former military base has been turned into a light industrial park, and many of the homes on the base were sold at low prices, primarily to early retirees (including many who had served in the military and spent part of their career there). The Western Valley Development Authority (WVDA), which serves the larger region surrounding Digby, applied for and was awarded a 5-year "Smart Community" grant to invest in information technology infrastructure, training, and development. Tourism is a key focus for new economic activity as well. Furthermore, the vehicle ferry operating between Nova Scotia and Saint John, New Brunswick operates from Digby. However, the region is still one of the more isolated parts of the province and suffers from a lack of critical mass of population and distance from Halifax.

What is the potential for commuting to work in other communities in the region, while maintaining residence in this community?

The transportation network in the region continues to improve, but the main highway linking Digby to other parts of the province is still a two-lane highway only. There are a string of

small towns and unincorporated villages to the east and west of Digby, but they offer little in the way of opportunity for commuting employment, especially since the nearby military base closed.

What is the strength/quality of local leadership to help move the community forward or to address the problems it faces?

No information available at this time.

What is the nature of ownership of industry and business in the community? Is it local or from outside? Is it diversified or concentrated?

Many of the small businesses in Digby and the surrounding rural area are independently and locally owned. Some of the new operations in the converted former military base are small manufacturers whose parent companies are located elsewhere.

How exposed is the local economy to global economic forces (e.g., what are the commodity prices for the local resource, and how is it changing?)

Digby itself is somewhat linked to the global economy in that tourism is an increasingly important part of the local economy, and the spinoff activities in the traditional fishery have been affected by declining stocks.

What federal and provincial policies affect this community? Are they likely to change? What about larger economic policies, such as GATT, NAFTA, and others?

Federal policies associated with military base closures affected the community in the 1990s. Changes to employment insurance regulations affect those in the seasonal tourism sector and the small number who work in other primary sector seasonal jobs. Provincial policies related to social assistance payments and reorganization of health and education services affect the area.

Are there a range of core services (health, education, justice, etc.) present in the community, or within 30 minutes drive of this community?

There are a limited number of core services in the area. There is a small hospital in Digby, but the nearest regional facility is about one hour away in Middleton to the east, and just over an hour to the west in Yarmouth. Digby has an elementary school and a high school.

What are the strengths, if any, of development regional agencies who may play a role in the transformation of this community?

WVDA is a national leader in community economic development planning and implementation. It has been named to the United Nations Global Best Practices 100 List by the UN Centre for Human Settlements, and the Digby Neck area (which includes the Town of Digby) has been recognized by the United Nations Education Scientific and Cultural Organization (UNESCO) as a paradigm of economic development for North Atlantic Communities.

Summary

Digby is a very small town on the far edge of a very rural and isolated part of the province. Over time the economy has shifted from non-specialization to retirement, and tourism continues to increase in importance.

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Town of Digby www.townofdigby.ns.ca

Summary of Case Study Illustrations of the Framework

Through this project, we have outlined a general framework for understanding the trajectory of economic development within relatively isolated rural and small town places across Canada. The framework describes a series of socio-economic characteristics associated with each different type of community based on an evaluation of its dominant economic sector. These characteristics provide a mechanism for tracking economic impacts and community change over time. The framework also points to the need for understanding a range of important contextual issues which are likely to influence the future of the community. Unfortunately, many of these contextual issues are not captured within the range of comparable statistics which are collected and published for Canadian communities. Thus, a series of case studies have been included in this report so as to illustrate the potential usefulness of the framework and how these issues of context may intervene. In making use of this framework through a contemporary look at a set of relatively isolated rural and small town places, our case studies focus specifically on the stages of economic decline and movement into a period of Alternative Futures for communities.

The eleven case studies were used to illustrate how the framework could be applied to develop a better understanding of how an individual community has changed over time. In particular the framework strikes a balance between understanding the characteristics of community change during a period of Decline into a new future, and the context within which the community's future is shaped. Each of the case studies experienced a period of Decline and transition in slightly different ways. For some, the period of Decline was short, and for others it was long. For some, the dominant economic activity changed over time, while for others the period of Decline and change did not include transformation of the dominant local economic activity.

Collectively, the case studies showed reasonable consistency in terms of how changes to specific socio-economic characteristics over time behaved much like those identified in the framework. In other words, the direction of change among socio-economic characteristics at the individual community level was much like that described in the framework for the collective group of communities within the same economic sector. There were, however, some variables in each case study example which moved in the opposite direction, or showed no change, relative to expectations. This is not surprising, given that we know from other studies that each individual community is unique even though it may share some or many features in common with others. Within a general framework we still need to recognize the importance of context and the uniqueness of place.

Notwithstanding the relatively strong adherence to the direction of change among most characteristics in each case study, these statistical measures of change over time do not in and of themselves fully describe or illustrate the changes in a community. More importantly, the regional and economic context within which communities function has significant impacts on the nature of decline and the type of future the communities confront. The significant value of the case studies is the illustration of the importance of context.

The framework, as illustrated by the preceding case studies, was applied primarily in the creation of an historical portrait of change. This allowed us to test the framework by comparing expectations with evidence 'on the ground'. Looking forward, the framework can be applied to

any contemporary situation providing that the community of interest fits within the framework's parameters. The framework allows an observer to categorize a community of less than 5,000 population with a Weak or No MIZ status into one of eleven different types of economic sectors. A preliminary assessment based on population decline may suggest that a community is experiencing Decline and moving into a transition period to an Alternative Future. One can determine if a community is in fact in a period of Decline and moving into an Alternative Future by checking a number of recent and current socio-economic characteristics against expectations from the framework to understand how the community is changing and by answering a number contextual questions to learn more about the opportunities and constraints facing the community.

7.0 Conclusion

This purpose of this report was to outline and explore the usefulness and limitations of using predictive indicators within a community development framework for showing the trajectory of relatively isolated rural and small town places over time. In Canada, as elsewhere in the developed world, relatively isolated rural and small town places are facing ongoing and significant economic and social restructuring. Most of these places, collectively defined for this study as involving those with less than 5,000 people and having a Weak or No MIZ status, have experienced population loss between 1991 and 2001. In our analysis we did not include First Nations communities, or communities which have had municipal boundary changes between 1991 and 2001.

Using labour force activity by industry as a measure of the type of economic activity, the largest number of these communities have a dual specialization (with at least 25% of the labour force working in two or more economic sectors, or in one industry plus having at least 25% of the population age 65 and over), or have non-market services (government, health, and education related employment), or agriculture as their primary economic driver. There are also close to 200 communities which could be classified as being non-specialized (no single industry sector having at least 25% of the labour force), and more than 100 which are manufacturing communities. There are 63 dynamic services communities (with at least 25% of the labour force in communications, transportation, wholesale trade, business services, financial services, and real estate). There are fewer than 50 each of retirement, mining, fishing, tourism, and forestry communities.

More than 70% of the relatively isolated rural and small town places in this study were in a period of Decline between 1991 and 2001 (defined as having population loss). For some, this period of Decline began before 1991. Many of the rest are in a period of relative stability or in a Plateau stage associated with their economic development activity.

In conceptualizing a community development framework, rural and small town places can be thought of as moving through a trajectory of different stages of economic activity. These stages include Startup, Growth, Plateau, Decline, and Alternative Futures. The Alternative Futures stages can be thought of as including a transformation into another economic activity to create new local community development conditions. Alternative Futures may include new growth, decline to a new but lower stable population plateau, transforming into another economic activity but continuing to decline, remaining in the same economic activity but halting the decline and functioning at a lower level, and decommissioning or closure. Many communities in our study were found to have experienced a ‘reclassification’ of economic activity based on changes in the distribution of their labour force over time. In fact, of the 952 places which experienced population loss between 1991 and 2001, 48% had a different classification of economic activity in 2001 compared to 1991.

An examination of socio-economic characteristics of these places in decline showed that there were significant differences among different types of economic clusters in terms of the absolute and relative ‘value’ of the characteristics. It also showed that the way in which their values change (increasing or decreasing) over time in a period of population loss varies from one type

of economic activity to the next. Our analysis suggested that the identification of 'thresholds' or values which can be used to measure, quantify, or predict when a community is moving between stages or into a period of Decline is not suited to the complexity of rural and small town Canada. Instead, we found that local, regional, and global context matters a great deal to shaping the economic trajectory of these small and relatively isolated places. Thus, while the framework has its limitations in terms of offering quantifiable measures related to change, the framework is most helpful for situating contextual issues such as the strength of local leadership, impact of outside economic forces, and the regional settlement and development activity and patterns. In other words, we have been able to identify the direction of change (positive or negative) for many of the variables that might be associated with transition between stages. When tested on a sample of places across each of the economic sectors used in the study, the predictions from the framework generally reflected local results. That said, there were always variations which spoke to the continued importance of paying attention to local context.

This research on small and relatively isolated places in Canada builds on a wide body of previous research by academics and government researchers and makes an important new contribution to rural development research because it provides:

- A categorization / differentiation of relatively isolated rural and small town places from all other such places by using a population threshold of less than 5,000 and by using Weak and No MIZ status. This allows for a closer examination of those places most vulnerable to population decline and economic restructuring.

- A classification of communities by economic type based on labour force activity in each sector. Although this is an imperfect approach and has its limitations because it may not fully capture other employment which is directly or indirectly related, this approach uses widely available data from the Census which can be used by observers to make a quick assessment of the types of important local economic activities and how they may have changed over time.

- Recognition that communities may have different types of economic drivers over time, and that this is influenced by a complex process of labour force expansion and contraction which may contribute to increasing or decreasing specialization in rural and small town communities.

- A framework for understanding how different types communities change over time, with a particular emphasis on what is happening in communities as they move stages in a community development model. Case studies were then used to explore examples of rural and small town places as they move through a period of population decline and explore alternative economic and community development futures.

- A way to incorporate and acknowledge the importance of local, regional, and global contexts which significantly shape and influence the economic trajectory of our relatively isolated rural and small town places.

This research project contributes to several bodies of literature, including that related to community and economic development, single industry communities, economic geography, population and demography, rural development, small town studies, and more.

For public policy and program decision-makers, this research provides important new information about the evolution and economic trajectory of relatively isolated rural and small town places. Decisions made about policies and programs which may affect the future viability of these places must be taken with care, caution, and appropriate information. Our research shows that not all of these places are alike, and that there are also large differences among those which have the same economic orientation. Our framework points to the importance of understanding context in order to fully understand how an individual community is moving through a period of Decline and how it might proceed with an alternative future. In other words, 'place matters'.

Further Research

This research project raises other important research questions which need to be explored, including:

- There is a need for detailed case studies which develop a greater understanding for the local and regional capacity for managing change and planning for the future. In this study, we relied on census data and a brief review of secondary information sources. The case studies could be enhanced with further primary research, especially key informant interviews with local and regional stakeholders and decision-makers. This would provide detailed information about the recent evolution of each community, explanations for changes over time, details on specific influences and constraints which have contributed to change and which may shape future directions, insights into passive or proactive responses to change, and plans for the short, medium, and long term future. Our collective understanding of *how* individual communities change over time, and their *ability* and *capacity* to plan for and implement positive alternative futures, would be greatly enhanced.

- A need for understanding the driving force(s) behind changes in the economic classification of an individual community over time. In some cases, there may have been proactive efforts on the part of the local government or regional agencies to further diversify or to specialize the local economic base. In other cases, there may have been other forces at work beyond the control of individual communities.

- A need for developing new insights into community decision-making processes (and the information these processes require) when places are faced with a need to decide how to react to a sudden downsizing, closure, or similar challenge.

- A need for developing more explicit linkages and understanding about the impacts of change on local and regional housing markets, and the capacity of those markets to respond to changes in the local economy.

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Appendix A – Summary of Key Socio-Economic Census Characteristics Which Indicate Stage of Economic Development Activity

Table A-1 Percent Change in Socio-Economic Characteristics, 1991-2001, All Communities with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=886)	SD
% Pop'n change	-290.1	.0	-18.1	18.5
% Pop'n 0-14	-24.6	19.0	-4.7	4.4
% Pop'n 15-24	-16.2	23.0	-1.0	4.2
% Pop'n 25-44	-24.0	16.0	-3.1	4.1
% Pop'n 45-64	-13.2	26.4	6.6	5.1
% Pop'n 65+	-16.9	23.7	2.1	4.0
% Pop'n Male	-13.3	11.6	-0.5	2.2
% Lone parent families	-33.3	55.6	2.8	8.5
% One-person households	-21.2	33.3	4.0	5.2
% families with children	-55.6	54.5	-2.7	12.1
Youth dependency ratio	-50.0	36.4	-8.6	8.8
Elderly dependency ratio	-62.1	56.0	2.0	8.9
% 5-year mover	-68.3	54.5	-0.7	13.3
% Youth Out-migration	-250.0	100.0	33.1	28.3
% Employment income	-89.1	84.7	-2.0	23.2
% Gov't transfer payments	-57.9	50.2	-0.1	11.3
% Other income	-44.3	24.6	-1.2	7.8
% Agriculture	-81.4	81.1	-1.6	15.0
% Fishing	-57.1	100.0	-0.1	9.2
% Forestry	-36.9	37.5	-0.7	5.5
% Mining	-50.0	44.4	-0.1	6.7
% Tourism	-100.0	55.6	0.4	7.5
% Manufacturing	-66.8	54.5	-0.4	11.8
% Dynamic Services	-63.6	100.0	3.0	12.9
% Non-market Services	-66.7	87.5	1.7	13.9
LF Participation rate 15+	-48.2	62.1	-0.1	12.4
LF Participation rate 15-24	-100.0	100.0	-5.0	29.7
LF Participation rate Females 15+	-63.8	84.4	1.9	15.6
% Commute Outside CSD	-100.0	100.0	-1.1	21.3
% Built Last 5 Years	-38.9	33.3	-3.2	7.7
Change in Average Dwelling Value $	-175000	227324	8494	24620

Source: Statistics Canada 2001, 1991.

Note: Percent Youth Out-Migration is defined as the percent change in the number of people age 15-24 in 1991 compared to the number of people age 25-34 in 2001.

**Calculated by authors from Statistics Canada (2001 and 1991).

Table A-2 Percent Change in Socio-Economic Characteristics, 1991-2001, All Communities with 2001 Population 100-2,499 and 2,500-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Population 100-2,499 (n=814)				Population 2,500-4,999 (n=72)			
	Min	Max	Mean	SD	Min	Max	Mean	SD
% Pop'n change	-290.1	.0	-18.7	18.4	-151.2	-.1	-11.6	18.5
% Pop'n 0-14	-24.6	19.0	-4.7	4.5	-10.0	.4	-3.9	2.2
% Pop'n 15-24	-16.2	23.0	-1.0	4.4	-7.0	3.1	-1.5	2.3
% Pop'n 25-44	-24.0	16.0	-3.0	4.2	-15.0	1.5	-3.9	2.6
% Pop'n 45-64	-13.2	26.4	6.6	5.2	-.4	20.9	6.9	3.7
% Pop'n 65+	-16.9	23.7	2.0	4.1	-1.6	9.0	2.5	1.9
% Pop'n Male	-13.3	11.6	-0.5	2.3	-2.1	1.2	-0.6	0.8
% Lone parent families	-33.3	55.6	2.8	8.8	-3.0	11.1	3.4	3.0
% One-person households	-21.2	33.3	4.0	5.4	-1.1	9.1	4.2	2.4
% families with children	-55.6	54.5	-2.9	12.5	-14.6	14.8	-0.4	5.8
Youth dependency ratio	-50.0	36.4	-8.8	9.1	-16.8	.8	-6.7	4.1
Elderly dependency ratio	-62.1	56.0	1.9	9.2	-4.5	16.6	3.5	3.4
% 5-year mover	-68.3	54.5	-0.5	13.7	-37.4	13.4	-2.6	8.0
% Youth Out-migration	-250.0	100.0	33.6	29.2	-8.5	75.8	27.6	14.8
% Employment income	-89.1	84.7	-2.1	23.9	-23.3	77.4	-0.1	11.2
% Gov't transfer payments	-57.9	50.2	-0.2	11.7	-22.6	20.0	0.5	5.3
% Other income	-44.3	24.6	-1.4	8.0	-8.7	10.7	1.0	3.8
% Agriculture	-81.4	81.1	-1.7	15.6	-13.6	10.8	-1.1	4.3
% Fishing	-57.1	100.0	-0.1	9.6	-22.2	12.8	0.1	3.9
% Forestry	-36.9	37.5	-0.7	5.7	-10.7	7.7	-0.9	2.6
% Mining	-50.0	44.4	0.0	6.7	-41.5	12.8	-1.1	6.9
% Tourism	-100.0	55.6	0.4	7.7	-10.1	10.8	0.1	3.4
% Manufacturing	-66.8	54.5	-0.5	12.1	-14.5	33.5	1.0	7.0
% Dynamic Services	-63.6	100.0	3.1	13.4	-9.4	15.0	1.8	4.8
% Non-market Services	-66.7	87.5	1.6	14.4	-11.3	29.3	2.0	6.2
LF Participation rate 15+	-48.2	62.1	0.1	12.9	-15.7	12.9	-2.4	5.2
LF Participation rate 15-24	-100.0	100.0	-5.2	30.8	-34.9	30.4	-3.7	11.4
LF Participation rate Females 15+	-63.8	84.4	2.1	16.1	-22.8	17.2	-0.4	6.6
% Commute Outside CSD	-100.0	100.0	-0.7	21.7	-63.9	25.1	-5.3	16.3
% Built Last 5 Years	-38.9	33.3	-3.1	7.8	-33.4	7.0	-4.0	6.3
Change in Average Dwelling Value $	-175000	227324	7575	24827	-22377	98777	18875	19444

**Calculated by authors from Statistics Canada (2001 and 1991).

Table A-3 Percent Change in Socio-Economic Characteristics, 1991-2001, by Weak and No MIZ Status for All Communities with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Weak MIZ (n=526)				No MIZ (n=360)			
	Min	Max	Mean	SD	Min	Max	Mean	SD
% Pop'n change	-290.1	.0	-16.8	20.2	-127.5	-.1	-19.9	15.5
% Pop'n 0-14	-14.9	6.4	-4.6	3.4	-24.6	19.0	-4.7	5.4
% Pop'n 15-24	-12.0	10.3	-0.9	3.3	-16.2	23.0	-1.1	5.3
% Pop'n 25-44	-15.6	10.9	-3.6	3.3	-24.0	16.0	-2.4	5.1
% Pop'n 45-64	-11.7	20.9	6.7	4.3	-13.2	26.4	6.5	6.0
% Pop'n 65+	-9.5	17.2	2.4	3.1	-16.9	23.7	1.6	5.0
% Pop'n Male	-8.4	6.8	-0.5	1.7	-13.3	11.6	-0.4	2.7
% Lone parent families	-28.6	28.6	2.7	6.1	-33.3	55.6	3.0	11.1
% One-person households	-11.8	30.0	4.1	4.0	-21.2	33.3	3.9	6.5
% families with children	-45.5	54.5	-2.4	9.6	-55.6	44.9	-3.0	15.1
Youth dependency ratio	-38.6	17.2	-8.3	6.8	-50.0	36.4	-9.1	11.1
Elderly dependency ratio	-47.1	56.0	2.9	6.8	-62.1	41.5	0.7	11.1
% 5-year mover	-49.5	35.1	-0.8	11.3	-68.3	54.5	-0.5	15.9
% Youth Out-migration	-75.0	94.6	34.3	20.3	-250.0	100.0	31.4	37.0
% Employment income	-87.4	84.7	0.4	18.5	-89.1	83.8	-5.5	28.3
% Gov't transfer payments	-33.6	45.3	1.2	9.0	-57.9	50.2	-2.1	13.9
% Other income	-43.0	21.7	-0.7	7.1	-44.3	24.6	-1.9	8.6
% Agriculture	-61.1	81.1	-1.5	12.8	-81.4	80.0	-1.8	17.8
% Fishing	-50.7	52.6	-0.1	7.0	-57.1	100.0	-0.2	11.7
% Forestry	-36.4	18.2	-0.7	4.2	-36.9	37.5	-0.8	7.0
% Mining	-41.5	25.0	0.0	5.1	-50.0	44.4	-0.3	8.6
% Tourism	-100.0	31.0	0.4	6.7	-25.0	55.6	0.5	8.5
% Manufacturing	-66.8	38.3	-0.5	10.6	-64.7	54.5	-0.3	13.4
% Dynamic Services	-37.5	35.7	2.7	9.2	-63.6	100.0	3.6	16.9
% Non-market Services	-34.1	45.1	1.9	9.9	-66.7	87.5	1.4	18.3
LF Participation rate 15+	-39.2	62.1	-1.2	10.3	-48.2	56.6	1.6	14.9
LF Participation rate 15-24	-94.4	100.0	-3.3	24.4	-100.0	100.0	-7.6	36.0
LF Participation rate Females 15+	-45.0	84.4	0.6	12.9	-63.8	77.8	3.8	18.7
% Commute Outside CSD	-90.7	82.9	-2.3	18.1	-100.0	100.0	0.8	25.2
% Built Last 5 Years	-35.9	16.7	-3.4	7.0	-38.9	33.3	-2.8	8.6
Change in Average Dwelling Value $	-175000	227324	9900	26025	-71190	103465	6438	22284

**Calculated by authors from Statistics Canada (2001 and 1991).

Appendix B - Summary Tables Showing Change in Percent Values for Each Socio-Economic Characteristic for Each Economic Sector

Based on 1991 designation and looking forward to what happened in these communities over the past 10 years, we gain insights into what characteristics move in what direction.

Table B-1 Percent Change in Socio-Economic Characteristics, 1991-2001, Agricultural Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=236)	SD
% Pop'n change	-65.8	-.3	-20.3	12.5
% Pop'n 0-14	-20.8	6.0	-5.5	4.2
% Pop'n 15-24	-10.4	23.0	0.6	3.8
% Pop'n 25-44	-21.2	10.9	-4.1	3.6
% Pop'n 45-64	-8.0	21.9	6.2	4.5
% Pop'n 65+	-9.5	21.7	2.7	3.4
% Pop'n Male	-8.1	11.6	-0.4	2.2
% Lone parent families	-28.6	33.3	1.1	7.2
% One-person households	-21.2	21.2	3.0	4.5
% families with children	-45.5	32.9	-6.2	10.4
Youth dependency ratio	-46.5	19.6	-10.0	8.8
Elderly dependency ratio	-21.4	41.5	3.4	6.8
% 5-year mover	-49.5	54.5	0.9	12.7
% Youth Out-migration	-318.2	100.0	38.9	36.5
% Employment income	-89.1	81.9	-3.4	22.3
% Gov't transfer payments	-32.4	19.7	0.8	7.8
% Other income	-44.3	24.6	-4.6	9.4
% Agriculture	-81.4	42.5	-6.4	15.6
LF Participation rate 15+	-48.2	56.6	0.0	12.1
LF Participation rate 15-24	-100.0	100.0	-8.1	27.3
LF Participation rate Females 15+	-63.8	84.4	2.0	16.8
% Commute Outside CSD	-46.6	51.9	1.5	15.0
% Built Last 5 Years	-20.0	16.7	-1.1	6.0
Change in Average Dwelling Value $	-175000	227324	7972	33713

**Calculated by authors from Statistics Canada (2001 and 1991).

Agricultural communities (from the 1991 classification) collectively experienced a 20.3% decline in population over the 10-year period. This is largely attributed to declines in people age 0-14 and 25-44. There was an average increase in youth out-migration for these communities. There was an increase in the relative share of the population age 45-64 and also 65 and over, through this time period. As a result, youth dependency ratios declined and elderly dependency ratios increased. There was a decrease in the share of income from employment and from other sources. The average decline in the share of the labour force working in agriculture was 6.4%. Labour force participation rates declined significantly among those aged 15-24. There was a small increase in the percent of the labour force commuting to other communities for work.

Table B-2 Percent Change in Socio-Economic Characteristics, 1991-2001, Fishing Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=21)	SD
% Pop'n change	-65.1	-1.4	-30.1	18.1
% Pop'n 0-14	-15.5	1.1	-6.3	3.9
% Pop'n 15-24	-12.4	.2	-5.3	3.4
% Pop'n 25-44	-24.2	8.5	-3.0	7.6
% Pop'n 45-64	-.7	28.8	11.6	7.5
% Pop'n 65+	-.5	13.5	2.8	3.0
% Pop'n Male	-4.3	2.9	-1.3	1.9
% Lone parent families	-12.5	23.1	2.4	9.2
% One-person households	-14.3	18.2	4.6	7.0
% families with children	-60.0	18.3	-10.9	16.8
Youth dependency ratio	-27.6	6.7	-10.3	7.1
Elderly dependency ratio	-2.9	26.7	3.6	6.0
% 5-year mover	-14.8	25.0	1.5	10.8
% Youth Out-migration	27.2	75.0	48.5	14.9
% Employment income	-63.1	61.4	-2.3	32.0
% Gov't transfer payments	-49.9	41.1	-9.4	23.0
% Other income	-11.5	12.0	2.1	6.1
% Fishing	-60.0	68.2	-23.1	30.4
LF Participation rate 15+	-44.2	24.2	-6.0	15.4
LF Participation rate 15-24	-100.0	6.6	-24.0	28.2
LF Participation rate Females 15+	-46.4	37.1	-2.7	21.4
% Commute Outside CSD	-52.9	100.0	6.5	39.1
% Built Last 5 Years	-66.7	33.3	-8.3	18.9
Change in Average Dwelling Value $	-40633	107883	7290	29763

**Calculated by authors from Statistics Canada (2001 and 1991).

Fishing communities (from the 1991 classification) collectively experienced a 30.1% decline in population over the 10-year period. There were large declines in the relative share of the population in all age groups under 45 years, and a large increase in the share of the population in the older age groups. As a result, youth dependency ratios declined and elderly dependency ratios increased. The share of families with children declined 10.9% on average. There was very little change in the percent of the population new to the community (5-year movers), but there was a substantial average increase in youth out-migration. The share of income from government transfer payments declined significantly. The average decline in the share of the labour force working in fishing was 23.1%. This may be a reflection of the many areas affected by groundfish closures in the 1990s. Labour force participation rates declined significantly among those aged 15-24, and also declined for the entire labour force, and for females. There was an increase in the percent of the labour force commuting to other communities for work. The percent of dwellings constructed in the five years prior to the census had declined on average by 8.3% compared to the situation in 1991.

Table B-3 Percent Change in Socio-Economic Characteristics, 1991-2001, Forestry Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=9)	SD
% Pop'n change	-28.2	-4.2	-16.0	8.7
% Pop'n 0-14	-14.2	.1	-5.6	4.9
% Pop'n 15-24	-7.2	5.5	-0.5	4.2
% Pop'n 25-44	-14.1	10.4	-3.2	6.7
% Pop'n 45-64	-13.2	19.0	6.1	9.2
% Pop'n 65+	-3.6	10.0	3.7	4.7
% Pop'n Male	-3.2	1.1	-0.8	1.3
% Lone parent families	-.4	7.9	2.6	3.3
% One-person households	-1.5	10.6	5.6	4.2
% families with children	-14.0	19.3	-0.1	11.9
Youth dependency ratio	-25.9	.0	-10.0	8.8
Elderly dependency ratio	-6.4	16.7	5.1	7.5
% 5-year mover	-14.8	13.5	1.8	10.2
% Youth Out-migration	0.0	78.3	40.7	23.6
% Employment income	-63.9	25.7	2.2	26.5
% Gov't transfer payments	-33.3	.0	-13.0	12.1
% Other income	-4.5	5.3	-0.2	3.0
% Forestry	-36.9	9.4	-22.1	14.8
LF Participation rate 15+	-16.7	20.5	2.1	12.9
LF Participation rate 15-24	-66.7	36.7	-7.5	37.0
LF Participation rate Females 15+	-7.4	27.5	5.7	12.1
% Commute Outside CSD	-24.6	49.4	4.3	25.1
% Built Last 5 Years	-28.1	9.5	-6.4	11.7
Change in Average Dwelling Value $	-437	26416	9573	8385

**Calculated by authors from Statistics Canada (2001 and 1991).

Forestry communities (from the 1991 classification) collectively experienced a 16% decline in population over the following 10-year period. This is largely attributed to declines in people aged 0-14 and 25-44. There was an increase in the relative share of the population aged 45-64 and also 65 years and over, through this time period. As a result, youth dependency ratios declined and elderly dependency ratios increased. The share of households classified as one-person households increased, on average, by 5.6%. The share of family households which are lone parent families increased by 2.6% over the 10-year period. There were slightly more people, on average, moving into forestry communities in the 5 years prior to the 2001 census, compared to the same period prior to the 1991 census. There was a modest increase in the share of income from employment, while there was a large decline in the average share of income from government transfer payments. The average decline in the share of the labour force working in forestry was 22.1%. Labour force participation rates declined among those aged 15-24, but increased among females aged 15 and over. There was a small increase in the percent of the labour force commuting to other communities. The percent of dwellings constructed in the five years prior to the census had declined on average by 6.4% compared to the situation in 1991.

Table B-4 Percent Change in Socio-Economic Characteristics, 1991-2001, Mining Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=23)	SD
% Pop'n change	-290.1	-2.7	-55.1	81.0
% Pop'n 0-14	-13.9	10.3	-5.2	4.6
% Pop'n 15-24	-14.1	5.7	-2.0	4.5
% Pop'n 25-44	-24.0	2.1	-6.9	5.5
% Pop'n 45-64	-5.3	29.3	10.8	7.2
% Pop'n 65+	-9.0	23.7	3.4	5.5
% Pop'n Male	-3.3	3.7	-0.7	1.5
% Lone parent families	-7.7	13.5	3.2	4.8
% One-person households	-5.1	9.7	3.5	3.3
% families with children	-34.6	43.8	-1.7	14.7
Youth dependency ratio	-17.9	16.2	-8.5	7.1
Elderly dependency ratio	-13.2	38.5	4.8	8.9
% 5-year mover	-37.4	17.5	-8.8	11.9
% Youth Out-migration	0.0	94.6	38.2	23.9
% Employment income	-94.9	2.6	-8.5	20.1
% Gov't transfer payments	-3.4	18.2	2.4	4.6
% Other income	-3.0	14.5	1.7	4.0
% Forestry	-46.0	11.0	-14.0	15.5
LF Participation rate 15+	-31.4	24.6	-1.8	11.2
LF Participation rate 15-24	-72.7	10.5	-12.5	20.8
LF Participation rate Females 15+	-33.3	38.0	1.1	14.4
% Commute Outside CSD	-34.8	23.6	1.7	13.3
% Built Last 5 Years	-33.4	6.2	-4.6	9.3
Change in Average Dwelling Value $	-22377	98777	8369	25430

**Calculated by authors from Statistics Canada (2001 and 1991).

Mining communities (from the 1991 classification) collectively experienced a 55% decline in population over the 10-year period (largely driven by significant declines in Tumbler Ridge, B.C. and Faro, Yukon). This is largely attributed to declines in age 0-14 and 25-44 groups. There was an increase in the relative share of the population aged 45-64, and also 65 years and over, through this time period. As a result, youth dependency ratios declined and elderly dependency ratios increased. The share of households classified as one-person households increased, on average, by 3.5%. The share of family households which are lone parent families increased by 3.2% over the 10-year period. There were fewer people, on average, moving into mining communities in the 5 years prior to the 2001 census, compared to the same period prior to the 1991 census (8.8% fewer). There was a large decline in the average share of income from employment, while there was a small increase in the average share of income from government transfer payments. The average decline in the share of the labour force working in forestry was 14%. Labour force participation rates declined among those aged 15-24, but increased among females aged 15 and over. There was a small increase in the percent of the labour force commuting to other communities for employment, as people attempted to stay in their home communities while seeking working elsewhere. The percent of dwellings constructed in the five years prior to the census had declined on average by 4.6% compared to the situation in 1991.

Table B-5 Percent Change in Socio-Economic Characteristics, 1991-2001, Tourism Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=6)	SD
% Pop'n change	-40.0	-6.2	-22.8	12.9
% Pop'n 0-14	-15.0	2.0	-7.2	5.8
% Pop'n 15-24	-12.6	.2	-6.6	4.2
% Pop'n 25-44	-8.3	3.0	-2.9	4.3
% Pop'n 45-64	-6.9	14.9	4.6	8.8
% Pop'n 65+	-.5	43.8	13.2	15.6
% Pop'n Male	-4.5	.6	-1.7	1.7
% Lone parent families	.0	50.0	10.8	19.7
% One-person households	-1.7	19.4	8.9	6.8
% families with children	-5.3	85.7	23.7	35.0
Youth dependency ratio	-25.0	3.3	-10.3	9.4
Elderly dependency ratio	.0	100.0	26.2	36.8
% 5-year mover	-16.1	17.7	-1.0	12.3
% Youth Out-migration	19.0	75.0	55.7	22.0
% Employment income	-10.9	75.4	10.4	32.1
% Gov't transfer payments	.0	14.8	4.3	6.1
% Other income	-.2	10.0	2.3	4.1
% Tourism	-100.0	1.5	-28.7	37.7
LF Participation rate 15+	-22.9	62.1	8.1	30.0
LF Participation rate 15-24	-100.0	77.8	-17.3	69.6
LF Participation rate Females 15+	-72.7	31.8	-4.2	36.0
% Commute Outside CSD	-62.5	11.5	-27.8	25.8
% Built Last 5 Years	-7.7	7.4	0.0	4.8
Change in Average Dwelling Value $	-1449	40880	14926	14500

**Calculated by authors from Statistics Canada (2001 and 1991).

Tourism communities (from the 1991 classification) collectively experienced a 22.8% decline in population over the following 10-year period. There were declines all age groups under 44, but very large increases in the relative share of the population aged 45-64 and 65 years and over, through this time period. As a result, youth dependency ratios declined while elderly dependency ratios increased. The share of households classified as one-person households increased, on average by 8.9%, while the share of families with children increased by 23.7% on average. The share of family households which are lone parent families increased by 10.8% over the 10-year period. There were fewer people, on average, moving into tourism communities in the 5 years prior to the 2001 census, compared to the period prior to the 1991 census (1.0% fewer). There were modest increases in the average share of income from employment, the average share of income from government transfer payments, and the average share of income from other sources. The average decline in the share of the labour force working in tourism was 28.7%. Many of the communities which were originally tourism communities in 1991 shifted to other sectors in terms of share of the labour force working in other sectors. Labour force participation rates declined among those aged 15-24, but increased among the labour force as a whole. There was a large decrease in the percent of the labour force commuting to other communities, as the economy diversified and expanded in many of these tourism communities. The average value of dwellings rose sharply relative to that in most other types of communities.

Table B-6 Percent Change in Socio-Economic Characteristics, 1991-2001, Manufacturing Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=90)	SD
% Pop'n change	-86.5	.0	-18.7	17.2
% Pop'n 0-14	-24.6	3.5	-5.4	4.4
% Pop'n 15-24	-15.9	14.6	-2.7	4.7
% Pop'n 25-44	-12.5	5.9	-3.1	3.5
% Pop'n 45-64	-5.2	23.2	8.5	4.9
% Pop'n 65+	-10.7	10.0	2.3	3.5
% Pop'n Male	-6.6	6.0	0.0	2.2
% Lone parent families	-14.3	44.6	3.5	8.6
% One-person households	-2.5	30.0	6.0	5.1
% families with children	-60.0	50.0	-3.2	14.4
Youth dependency ratio	-45.6	12.5	-9.1	8.0
Elderly dependency ratio	-16.9	17.5	2.8	5.8
% 5-year mover	-31.7	52.5	-0.9	11.8
% Youth Out-migration	-7.1	87.5	36.0	19.8
% Employment income	-79.5	64.4	-1.7	21.2
% Gov't transfer payments	-41.3	45.3	1.0	12.6
% Other income	-11.5	10.2	1.8	3.9
% Manufacturing	-66.8	45.5	-11.7	19.6
LF Participation rate 15+	-58.3	31.8	-1.7	11.7
LF Participation rate 15-24	-75.0	75.0	-5.4	23.4
LF Participation rate Females 15+	-100.0	43.1	-0.6	16.0
% Commute Outside CSD	-81.6	49.9	-6.0	23.9
% Built Last 5 Years	-38.9	13.3	-3.8	8.2
Change in Average Dwelling Value $	-46421	60370	8893	17381

**Calculated by authors from Statistics Canada (2001 and 1991).

Manufacturing communities (from the 1991 classification) collectively experienced a 18.7% decline in population over the 10-year period. This is not surprising given that many of these are tied to primary sector production such as fish processing(where closures occurred) and forestry (where automation to improve competitiveness resulted in job losses in existing mills). There were declines in the relative share of the population in all age groups under 44, but a large increase in the relative share of the population aged 45-64 and some increase in the 65 years and over age group, through this time period. As a result, youth dependency ratios declined and elderly dependency ratios increased. The share of households classified as one-person households increased, on average by 6.0%, while the share of families with children decreased. The share family households which are lone parent families increased by 3.5% over the 10-year period. There were modest increases in the average share of income from government transfer payments and from other sources. The average decline in the share of the labour force working in manufacturing was 11.7%. Labour force participation rates declined for most classes of workers. There was an average decrease of 6.0% in the percent of the labour force commuting to other communities as there were likely few employment opportunities in these neighbouring communities.

Table B-7 Percent Change in Socio-Economic Characteristics, 1991-2001, Dynamic Services Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=27)	SD
% Pop'n change	-60.7	-1.5	-23.4	16.1
% Pop'n 0-14	-12.5	6.1	-4.7	4.2
% Pop'n 15-24	-7.4	10.3	0.2	4.4
% Pop'n 25-44	-10.5	5.5	-3.8	4.3
% Pop'n 45-64	-6.1	15.1	5.8	4.9
% Pop'n 65+	-12.0	28.8	1.6	7.4
% Pop'n Male	-10.3	18.3	-0.2	4.4
% Lone parent families	-8.3	18.9	1.9	6.1
% One-person households	-8.3	14.4	4.1	5.8
% families with children	-25.5	30.0	-2.7	13.0
Youth dependency ratio	-21.0	10.8	-8.8	7.7
Elderly dependency ratio	-24.3	58.3	1.9	14.7
% 5-year mover	-47.1	19.6	-6.8	16.2
% Youth Out-migration	-50.0	76.9	31.1	29.2
% Employment income	-80.4	83.8	0.4	37.2
% Gov't transfer payments	-19.3	20.1	-1.0	9.2
% Other income	-14.9	16.4	0.7	6.9
% Dynamic Services	-66.7	9.1	-15.4	19.5
LF Participation rate 15+	-23.3	30.9	5.0	11.4
LF Participation rate 15-24	-100.0	100.0	-0.7	41.1
LF Participation rate Females 15+	-28.6	62.5	11.2	19.1
% Commute Outside CSD	-78.4	100.0	5.3	27.9
% Built Last 5 Years	-20.0	15.4	-3.9	7.8
Change in Average Dwelling Value $	-41172	34172	5183	16482

**Calculated by authors from Statistics Canada (2001 and 1991).

Dynamic services communities (from the 1991 classification) collectively experienced a 23.4% decline in population over the 10-year period. There were declines in the relative share of the population aged 0-14 and 25-44, but an increase in the relative share of the population aged 45-64, through this time period. As a result, youth dependency ratios declined considerably. There were fewer people, on average, who moved into these communities in the 5 years prior to the 2001 census, compared to those in the same period prior to the 1991 census. The average decline in the share of the labour force working in dynamic services was 15.4%, reflective of the fact that many of these communities shifted over the 10-year period to be something other than dynamic services communities, based on the distribution of the labour force across all sectors. Labour force participation rates increased for all classes of workers. There was a decline in the share of the housing stock built in the five years prior to each census period. Average dwelling values did not increase much when compared to other sectors.

Table B-8 Percent Change in Socio-Economic Characteristics, 1991-2001, Non-Market Services Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=143)	SD
% Pop'n change	-158.7	.0	-15.3	18.6
% Pop'n 0-14	-21.4	13.0	-4.1	4.0
% Pop'n 15-24	-16.2	7.5	-1.8	3.8
% Pop'n 25-44	-28.0	16.7	-2.7	5.3
% Pop'n 45-64	-6.8	20.8	6.4	5.0
% Pop'n 65+	-6.3	15.1	2.2	3.7
% Pop'n Male	-17.1	8.8	-0.9	2.9
% Lone parent families	-33.3	43.3	3.3	10.7
% One-person households	-12.5	52.4	4.5	6.9
% families with children	-80.0	54.5	0.7	15.6
Youth dependency ratio	-32.1	35.7	-7.2	8.4
Elderly dependency ratio	-15.1	27.2	2.7	6.8
% 5-year mover	-48.9	35.1	-4.6	12.9
% Youth Out-migration	-50.0	93.8	28.5	20.8
% Employment income	-87.4	64.9	-5.5	21.4
% Gov't transfer payments	-47.3	26.1	-1.7	10.6
% Other income	-20.1	16.9	0.3	5.9
% Non-Market Services	-66.7	60.1	-4.7	14.9
LF Participation rate 15+	-24.0	37.1	-0.6	10.8
LF Participation rate 15-24	-100.0	100.0	-4.9	29.5
LF Participation rate Females 15+	-24.4	50.0	2.3	12.2
% Commute Outside CSD	-100.0	80.0	-3.7	23.7
% Built Last 5 Years	-50.0	33.3	-6.8	10.3
Change in Average Dwelling Value $	-150000	103465	12091	25684

**Calculated by authors from Statistics Canada (2001 and 1991).

Non-market services communities (from the 1991 classification) experienced an average decline of 15.3 of their population over the 10-year period. The average declines in the relative share of the population among those less than 45 years of age, and the average increases in the relative share of the population aged 45-64 were much smaller than in most other communities. The relative share of lone parent family households increased by 3.3% over the 10-year period. The youth dependency ratios did decline on average by 7.2%, and there was an increase in the elderly dependency ratios. There were fewer people, on average, who moved into these communities in the 5 years prior to the 2001 census, compared to the same period prior to the 1991 census. The average decline in the share of the labour force working in non-market services was 4.7%. Labour force participation rates increased for females but declined for all those aged 15-24. There was, however, a large average decline of 6.8% in the share of the housing stock built in the five years prior to each census period. Average dwelling values rose more sharply compared to those in most other sectors.

Table B-9 Percent Change in Socio-Economic Characteristics, 1991-2001, Retirement Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=30)	SD
% Pop'n change	-80.5	-.1	-15.6	16.3
% Pop'n 0-14	-12.6	14.3	-2.3	5.6
% Pop'n 15-24	-10.3	5.9	-0.1	3.6
% Pop'n 25-44	-6.0	7.8	-0.9	3.7
% Pop'n 45-64	-18.5	15.0	1.5	6.9
% Pop'n 65+	-16.9	26.7	1.3	8.1
% Pop'n Male	-5.3	3.8	-0.3	2.2
% Lone parent families	-20.0	42.9	2.1	11.1
% One-person households	-8.6	30.0	3.1	7.3
% families with children	-66.7	32.1	-1.9	17.9
Youth dependency ratio	-26.0	62.6	-4.2	15.3
Elderly dependency ratio	-62.1	115.7	4.1	31.2
% 5-year mover	-20.9	26.2	0.9	11.2
% Youth Out-migration	-84.6	75.0	9.6	32.7
% Employment income	-56.4	25.4	0.1	17.4
% Gov't transfer payments	-20.6	9.7	-1.7	7.0
% Other income	-29.4	6.4	-5.1	7.9
LF Participation rate 15+	-13.2	46.7	6.0	11.9
LF Participation rate 15-24	-100.0	100.0	-9.3	49.1
LF Participation rate Females 15+	-14.4	60.0	7.4	15.2
% Commute Outside CSD	-27.7	32.3	4.1	15.4
% Built Last 5 Years	-13.3	6.1	-3.5	4.6
Change in Average Dwelling Value $	-23078	27703	5032	11955

**Calculated by authors from Statistics Canada (2001 and 1991).

Retirement communities (from the 1991 classification) experienced a 15.6% decline in population from 1991 to 2001. On average there were almost no changes in the average share of population in each of the age groups. The youth dependency ratios did decline on average by 4.2%, and there was a small increase in the elderly dependency ratios. There was a decline in the share of income from government transfer payments and from other income. Labour force participation rates increased significantly for females (7.4%) but declined on average by almost 9.3% for all those aged 15-24. Average dwelling values rose more modestly compared to those in most other sectors.

Table B-10 Percent Change in Socio-Economic Characteristics, 1991-2001, Dual Specialization Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=217)	SD
% Pop'n change	-169.1	-.2	-21.5	20.5
% Pop'n 0-14	-23.5	20.6	-3.6	6.0
% Pop'n 15-24	-16.7	20.8	-0.6	5.6
% Pop'n 25-44	-27.0	20.0	-2.2	6.2
% Pop'n 45-64	-19.1	33.3	5.1	7.2
% Pop'n 65+	-26.7	30.9	0.8	6.2
% Pop'n Male	-13.3	17.5	-0.1	3.7
% Lone parent families	-22.2	55.6	2.8	11.2
% One-person households	-30.8	40.5	3.6	8.0
% families with children	-80.0	57.1	-0.8	19.0
Youth dependency ratio	-75.0	50.0	-7.6	13.3
Elderly dependency ratio	-47.2	129.2	-0.1	19.4
% 5-year mover	-68.3	74.7	1.1	18.1
% Youth Out-migration	-250.0	100.0	23.8	46.4
% Employment income	-82.1	84.7	0.4	26.1
% Gov't transfer payments	-57.9	50.2	0.6	13.7
% Other income	-38.2	18.7	-1.9	8.0
LF Participation rate 15+	-60.0	52.4	1.0	17.4
LF Participation rate 15-24	-100.0	100.0	-8.5	38.9
LF Participation rate Females 15+	-100.0	83.3	1.0	23.9
% Commute Outside CSD	-90.5	100.0	-0.2	28.5
% Built Last 5 Years	-40.0	30.0	-2.9	7.9
Change in Average Dwelling Value $	-56179	76019	2763	19242

**Calculated by authors from Statistics Canada (2001 and 1991).

Dual specialization communities (from the 1991 classification) experienced a 21.5% decline in population from 1991 to 2001. There were modest declines in the share of the population aged 0-44, and an increase in the share aged 45 and over. The share of households which are one-person households increased by 3.6% over the 10-year period. The youth dependency ratios decline on average by 7.6%, but the elderly dependency ratios declined on average by 0.1%. There was a modest increase in the number of people moving into dual specialization communities in the five years prior to the 2001 census compared to those in the same period prior to the 1991 census. Labour force participation rates increased marginally for females (1%) but declined on average by almost 8.5% for all those aged 15-24. Average dwelling values rose much more modestly compared to those in most other sectors.

Table B-11 Percent Change in Socio-Economic Characteristics, 1991-2001, Non-Specialized Communities (1991 Classification) with 2001 Population 100-4,999 Which Lost Population 1991-2001

Variable (Change in Percent of... 1991-2001)	Min	Max	Mean (n=144)	SD
% Pop'n change	-122.0	.0	-14.5	16.3
% Pop'n 0-14	-22.4	8.1	-5.3	4.2
% Pop'n 15-24	-26.7	7.3	-2.1	4.4
% Pop'n 25-44	-12.1	11.1	-3.2	3.4
% Pop'n 45-64	-2.3	23.3	7.9	4.3
% Pop'n 65+	-11.1	21.9	3.0	3.3
% Pop'n Male	-11.0	11.7	-0.4	2.2
% Lone parent families	-20.0	23.5	3.0	7.2
% One-person households	-9.5	18.9	5.0	4.9
% families with children	-60.0	30.8	-2.6	12.2
Youth dependency ratio	-68.6	26.2	-9.6	9.4
Elderly dependency ratio	-20.0	48.8	3.9	6.8
% 5-year mover	-29.9	51.5	-1.6	12.6
% Youth Out-migration	-25.0	80.0	33.8	19.1
% Employment income	-84.6	77.4	-3.9	19.8
% Gov't transfer payments	-37.3	44.0	-1.0	9.9
% Other income	-15.9	21.7	1.4	5.2
LF Participation rate 15+	-37.1	52.6	-0.7	11.8
LF Participation rate 15-24	-100.0	100.0	-2.9	27.6
LF Participation rate Females 15+	-27.1	83.3	2.7	13.6
% Commute Outside CSD	-77.9	80.0	-4.0	19.9
% Built Last 5 Years	-23.4	25.0	-2.8	7.3
Change in Average Dwelling Value $	-62554	86128	10489	19329

**Calculated by authors from Statistics Canada (2001 and 1991).

Non-specialized communities (from the 1991 classification) experienced a 14.5% decline in population from 1991 to 2001. There were modest declines in the share of the population in age groups less than 45, but an increase in the share aged 45-64. The share of one-person households increased by 5% over the 10-year period. The youth dependency ratios declined on average by 9.6%, but the elderly dependency ratios increased on average by 3.9%. Labour force participation rates increased for females (2.7%) but declined on average by 2.9% for all those age 15-24. Average dwelling values rose higher in this time period compared to those in most other sectors.