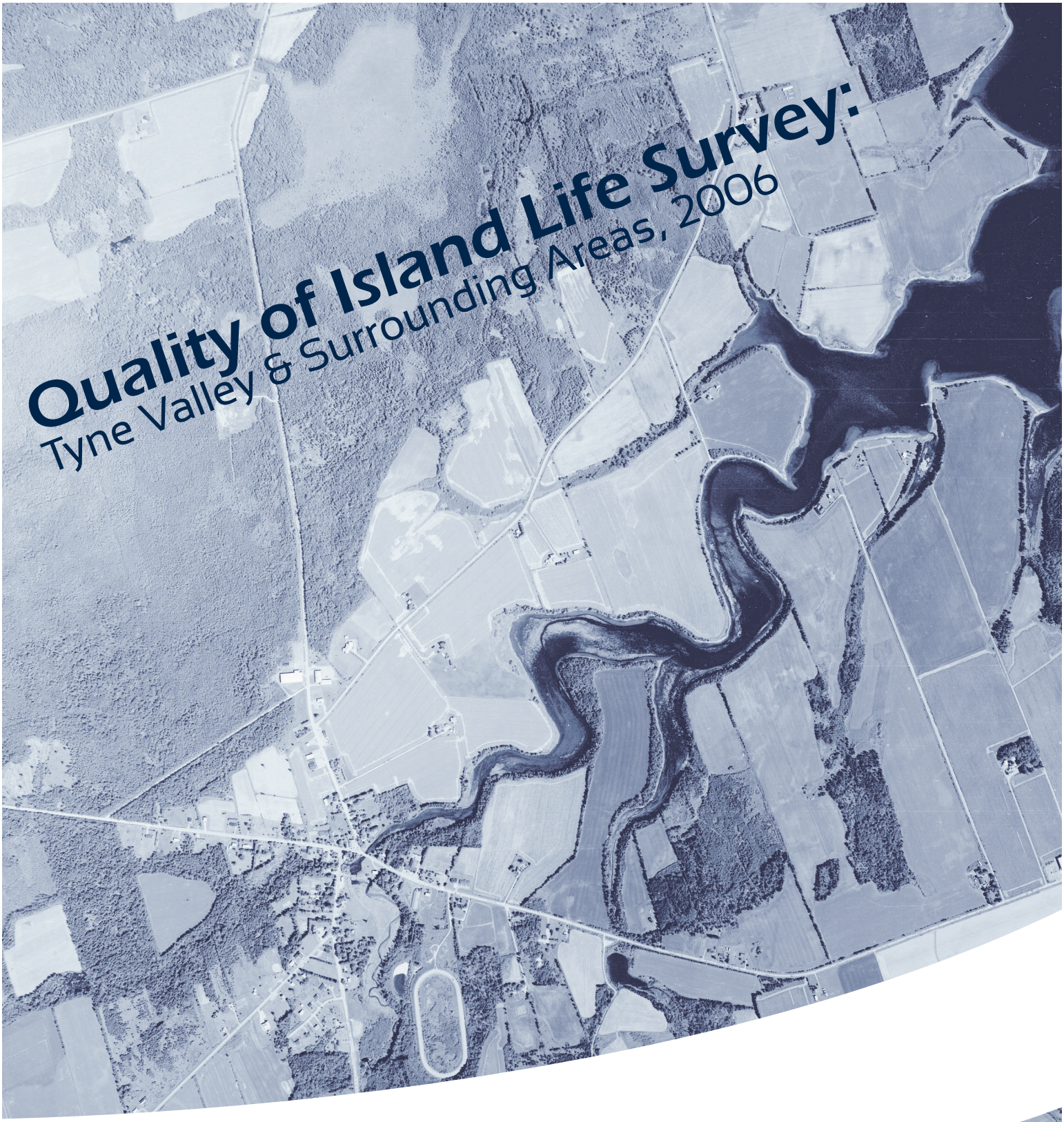

Quality of Island Life Survey:
Tyne Valley & Surrounding Areas, 2006

Social Economy and Sustainability Research Network
Partenariat sur l'économie sociale et la durabilité
Bridging, Bonding, and Building / Renforcement des liens et des capacités

UPEI University of Prince Edward Island

Quality of Island Life Survey:

Tyne Valley & Surrounding Areas, 2006

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Quality of Island Life Cooperative • March 2009

Design: Zoe Novaczek

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The Social Economy and Sustainability Research Network is comprised of researchers from community organizations, universities and government agencies across Atlantic Canada. The Research network is based at Mount Saint Vincent University, under the direction of Dr Leslie Brown, and is funded by the Social Sciences and Humanities Research Council of Canada. www.msvu.ca/socialeconomyatlantic/

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Summary

Members of the Quality of Island Life Co-operative (QoIL Co-op) recognize that on Prince Edward Island, people enjoy a quality of life that is both special and vulnerable. The purpose of the Co-op is to engage other Islanders in conversations around what wellbeing and Quality of Life mean; to promote the development of indicators that describe Quality of Life as defined by Prince Edward Islanders; and to promote these indicators as tools that can help people to understand how our Island society is progressing, and to plan where we want to go in the future.

The study described in this report is a contribution to the development of Community Accounts for Prince Edward Island — an open access, online tool that provides information to and about individual communities, to facilitate local decision-making. Community Accounts could be used to track changes in the factors that contribute to Quality of Life as experienced on Prince Edward Island, provided that the appropriate data are included in the system. Quality of Life factors may or may not be adequately described by existing statistics developed from census and other data.

In this report we explore the meaning of "Quality of Life" as expressed by residents of Tyne Valley and surrounding villages in 2006; we document the extent to which valued aspects of the community are correlated with Quality of Life; and we identify whether changes noted in recent years could be threatening or enhancing Quality of Life.

The Islanders surveyed consistently recognized factors belonging to the domain *Community Social Wellbeing* as being very important to Quality of Life. This domain included such things as security, mutual support, community spirit, and a sense of belonging. In describing why they liked living in the area, *Community Social Wellbeing* was again prominent. A consistent domain of concern relevant to changing conditions was that of *Community Services and Infrastructure*. Factors belonging to this domain had in some ways improved, and in other ways declined over recent years, but *Community Social Wellbeing* had remained strong. Differences among age groups and genders suggested a need for follow-up research, using disaggregated data. Findings from this preliminary study need to be tested and refined using other approaches and methods.

Based on this research we recommend the construction of Quality of Life indicators for PEI that are attuned to local values. These overlap but are also distinct from indicators commonly drawn from available statistics. The collection of new types of data to populate such indicators will be necessary. If made available through Community Accounts, these indicators will allow communities to track positive and negative trends in the facets of Quality of Life that make this Island special, and to take action where necessary to protect what Islanders value.

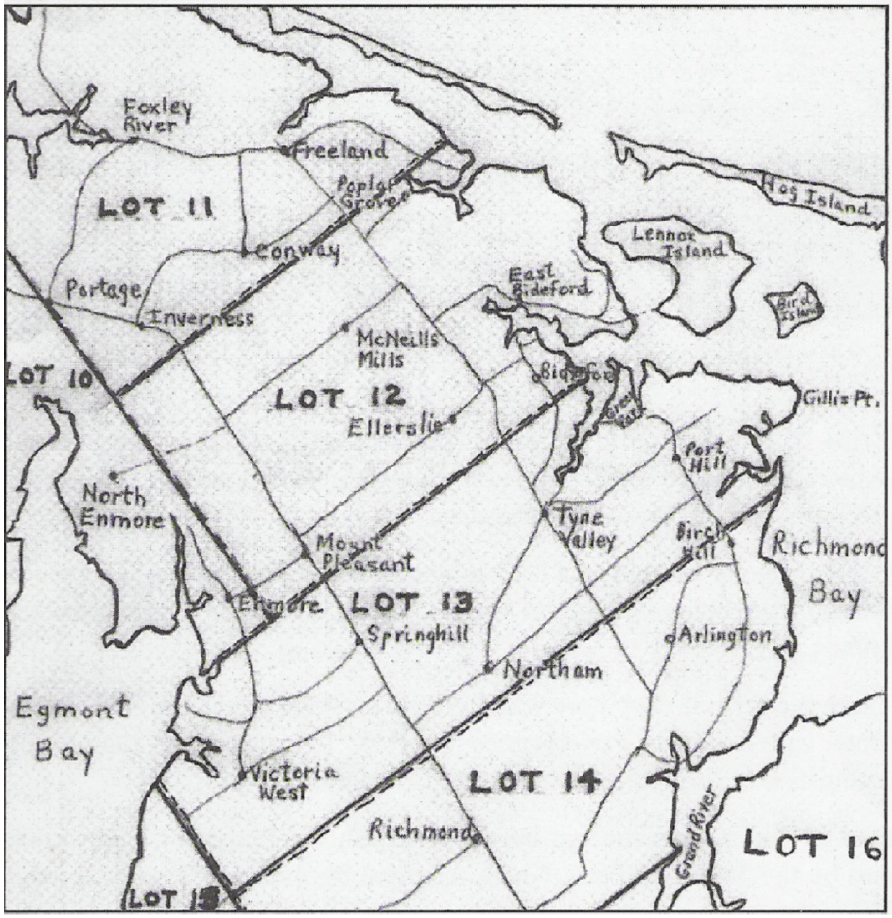


Figure 1. Tyne Valley and surrounding communities, Prince Edward Island.

Introduction

The Quality of Island Life Co-operative and Community Accounts

The Quality of Island Life Co-operative (QoIL Co-op) is a non-partisan, secular group of Prince Edward Island residents who are united by a deep appreciation for Prince Edward Island (PEI) and a commitment to maintaining and improving the Quality of Life that it affords. It was established to develop and promote Quality of Life indicators that would provide a more complete and accurate picture of the state of Prince Edward Island: its land and sea, plants and animals, and human society and culture. QoIL's mission has two components: to seek out and document the Island public's views as to what constitutes wellbeing and Quality of Life, and to undertake rigorous research on social, economic, cultural, and environmental indicators, inspired by community values.

Why should we bother measuring the quality of Island life? Aren't we drowning in statistics already? The Quality of Island Life Cooperative believes that we need to capture the less tangible qualities of Island life in a way that can be incorporated into community decision making because, as Islanders, we have an uneasy feeling that some of the essential qualities of Island life are not being considered when public policy, programs and plans are developed. We need to understand the components of well being and Quality of Life particular to PEI, as these factors may not be captured by the conventional socio-economic and environmental indicators used by governments to develop and assess their policies, plans and programs.

With the above in mind, a Quality of Life survey was conducted in the Tyne Valley area(Figure 1) in the summer of 2006. Local community leaders had expressed interest in identifying what residents believed was important to Quality of Life (QoL) and how local QoL was improving or declining. The data collection was carried out by researcher Stacey Enman, under the supervision of the Quality of Island Life Co-op and Tyne Valley Municipality.

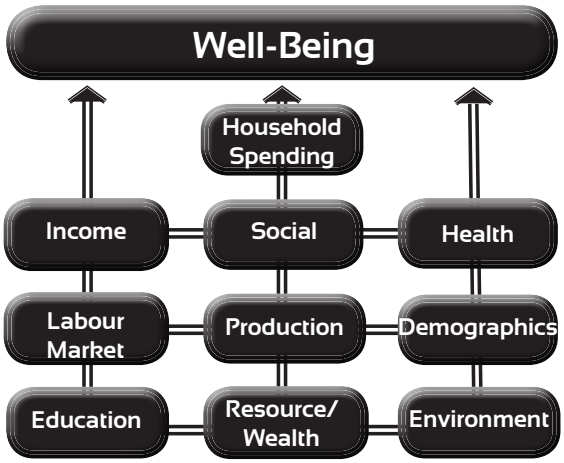
In addition to meeting local information needs, the survey was designed to provide insight into what data should be included in Community Accounts for PEI communities. Community Accounts is a tool that can facilitate decision making to protect and improve Quality of Life. The move to establish PEI Community Accounts was inspired by the Newfoundland and Labrador Community Accounts, which contains data and statistics on 590 communities in that province. The Accounts describe an array of domains (Figure 2) using statistics that are organized and available on one easy-to-understand web page. The data, which can be used to support planning and decision making, are available at no cost to anyone who has access to the internet, and there is no need to sign up.

The possibility of developing Community Accounts for PEI was first publically discussed at the 2005 Annual General Meeting of the PEI Quality of Island Life Co-op. Since then, interest has increased, and in the throne speech of 2008, the PEI government declared its intention to pursue development of Community Accounts.

The research conducted in the Tyne Valley area provides the communities with some preliminary data on the factors that their residents feel are important to Quality of Life, and on how these are related to their attachment to the area. The data also provide insights into how Community Accounts could be shaped so as to be an appropriate tool for local decision-making in communities such as Tyne Valley.

Figure 2. Domains of well being in Newfoundland and Labrador's Community Accounts

Source: http://www.communityaccounts.ca /communityaccounts/onlinedata/default.asp



It is very important that data that will be made available through the PEI Community Accounts includes information on those factors that Islanders actually identify as being important to a desirable Quality of Life, rather than being based only on values held by persons who live elsewhere. This is because, as people living on a small island, we naturally experience our society and environment in ways that are somewhat distinctive. The phenomenon of "islandness", and the diverse ways that this is shaped on the world's islands — each of which is a unique blend of geography, ecology, and human culture — has given rise to the academic discipline of Island Studies (Baldacchino, 2007).

Quality of Life, and Indicators

What exactly does Quality of Life mean, and does it mean the same to people everywhere? Does it matter which indicators are used to measure Quality of Life (QoL), or are there ones that are especially well suited to our ways of living on Prince Edward Island? There are no quick and easy answers to these questions. In this report we consider what Islanders in one specific area of PEI consider to be QoL, in order to demonstrate how indicators for monitoring and reporting on QoL can be developed, based on input from the community level.

Quality of Life (QoL) is a phrase that dates back to the 1960s. It has been described as a state of living that supplies the basic needs to survive with a level of comfort and ease. Chamber and Swain (2006: 269) feel that when we talk about a good QoL it is "the opportunity to fulfill most of our basic needs and to reach our full potential as human beings. And, in looking to the future, we may infer the sustainability of this QoL for future generations". Despite the undeniable gains made in the past century in meeting basic human needs, more recent "progress" in industrial society does not seem to have significantly improved human wellbeing. Indeed, many aspects of modern life are viewed as having a negative impact on QoL. Researchers have therefore called for "an index of social wellbeing" (McCall, 2005: 117) that can be used to measure progress in more than economic terms.

An index, or indicator, is a statistic that can be measured quantitatively to provide "pieces of information that reflect the status of important problems or issues...Indicators are one way of measuring whether or not we are making progress" (Chamber and Swain, 2006: 293). The standard indicators used traditionally to measure progress are Gross National Product (GNP) or Gross Domestic Product (GDP), which measure economic activity. These indicators count many negative activities as progress, simply because they stimulate some degree of economic activity, for example, "the production of guns and weapons, the sales of alcoholic beverages and tobacco, and pollution clean-up efforts" (Chamber and Swain, 2006: 270). On the other hand, many useful contributions to well being are not counted when calculating GNP, including "the unpaid labor of housewives, the value of natural resources, and infrastructure" (Chamber and Swain, 2006: 270). Especially for those who live on islands around the world, GDP has been shown to be a poor indication of wellbeing. Although the GDP of islands may be comparable to the world average, many islands have "higher life satisfaction, higher life expectancy and marginally lower ecological footprints than other states" (Marks, Abdallah, Simms and Thompson, 2006: 3).

The term social indicators, like the concept Quality of Life, dates back to the 1960s and arose from a need "to develop a system of social indicators to detect and anticipate social change as well as evaluate the impact of specific programs and policies" (Sharpe, 2000: 7). There is much debate about the value of various indicators. To be legitimate, "societal indicators should reflect what matters most to the members of a community or a nation" (Michalski, 2002: 9).

MacDonald and Associates (2003) reported on Prince Edward Island's involvement with social indicators in the context of the global history of the social indicator movement. They note that in PEI, "this trend has only been evident in the past several years, and then largely within the public sector, in response to external stimuli and pressures". The need for social indicators on PEI is apparent, for the province faces many challenges, such as:

> ...attaining the opportunities of knowledge based development while sustaining and restoring its environment, enhancing social wellbeing, and preserving PEI's distinctive and valued social fabric, culture and communities. These challenges can only be fully met through consensus on the goals and directions, commitment to strategic action, and knowledge of progress and impacts. Development and monitoring of a comprehensive and representative set of indicators of quality of life and sustainability can contribute to these outcomes. (MacDonald, 2003: 2)

A Canadian think tank, Canadian Policy Research Networks (CPRN), created a prototype set of national Quality of Life Indicators in 1999. One of their reports states that the "ability to track how Canadians feel about their Quality of Life is seriously constrained by the available data" (Mendelsohn, 2000: ii). CPRN is just one example of the many indicator initiatives that have developed across North America since the 1990s.

We conclude from the above that research is needed on Quality of Life (QoL) on PEI. Because what makes up QoL can be so intimate and so localised, we are faced with two challenges: to define what QoL means on Prince Edward Island, and to determine what types of indicators one should use to measure it. If the information used to design QoL indicators comes directly from Island communities, and Community Accounts allows for these indicators to be monitored over time and incorporated into decision-making, it increases the chances that core factors of QoL will be maintained and enhanced into the future.

Tyne Valley and Surrounding Area

Tyne Valley is located in the West Prince region of Prince Edward Island. It falls within the boundaries of Lot 13 (Fig. 1), which also includes Lennox Island First Nation, Northam, Springhill, Victoria West and Port Hill. Other villages just outside of Lot 12 include Birch Hill, Enmore, Poplar Grove and Bideford. The names for these communities originated from Devonshire, England. During the Colonial period the area was mostly settled by the English, and these settlers worked together as a community, creating log cabins and cutting wood.

Tyne Valley, the largest community in Lot 13 today, was known as "The Landing" in the 1700s because of the lumber that travelled along the Trout River, which runs through the village. It became known as Tyne Valley in 1868 and "when shipbuilding ended at nearby Port Hill in the late 1800s, Tyne Valley became the heart of activity in this area. The railway passed through here and fox farming, carriage shops, lumber mills and a cheese factory thrived" (Ferguson Funeral Home, n.d.).

Census data shows that by 1996 the population of Lot 13 numbered 758, of whom 231 were concentrated in Tyne Valley (Statistics Canada n.d.). Ten years later, in 2006, the population of Lot 13 had dropped to 721. The proportion of residents aged 15-24 is higher than the average for the rest of the province (Federation of PEI Municipalities, n.d.), and the labour force is occupied in "fishing and trapping industries; accommodation, food and beverage service industries; other service industries; agricultural and related service industries; transportation and storage industries; retail trade industries; government service industries; and education service industries" (Federation of PEI Municipalities, n.d.: 4). Tyne Valley has been described as "a compact village that packs in its small cluster of buildings a remarkable amount of charm" (Tourism PEI, 2009). It was a study site for recent research into attachment to landscape, and landscape preferences (Horne, 2007).

Quality of Life in Tyne Valley Area, 1996: the Atlas of Canada Data

QoL as Defined in the Atlas of Canada

The Atlas of Canada (2004) uses the term *Quality of Life* to describe wellbeing; it then goes on to define wellbeing as "how well people feel about their environment", including the social, economic and physical aspects of environment. In 1996 the Atlas of Canada compiled, transformed and analyzed data from across the country and created Quality of Life maps. One of the limitations of this approach is that the indicators of Quality of Life (QoL) that were created and applied, which "represent the most important aspects of a person's life", were the same across the entire country (Atlas of Canada, 2004). The Atlas of Canada authors do realize that there are regional and local differences that could affect QoL, and they also recognise that their indicators may not reveal the full diversity of QoL in the communities under study.

From the Atlas of Canada data, we can see how Tyne Valley area (Lot 13 excluding Lennox Island First Nation) measured up in 1996 under the following QoL Categories: Economic Environment; Physical Environment; and Social Environment. For each category, a rating was devised based on various indicators that were clustered into Quality of Life domains. The Atlas of Canada (2004) also produced an overall Quality of Life map, based on eleven of the domains in the social, economic and physical environment categories (Table 1). Tyne Valley had a combined rating of "High" for Overall QoL.

The rating for each category and domain was determined by considering the individual ratings of a number of indicators. The numerical value for an indicator can be either inverse or direct; if direct, a high value signifies a high Quality of Life; if inverse, then a high value means a lower Quality of Life. In the following tables we provide relative ratings for the indicators (first, second, third etc.), where first is the most desirable condition for that category and fifth is the least desirable. This ranking is used to show how Tyne Valley compares to the rest of the province and country.

Table 1: Domains that were combined to develop the overall Quality of Life rating for Tyne Valley, 1996

Household Finances	**Accessibility to Services**	**Environmental Quality**
Employment/Paid Work	**Education**	**Social Stability**
Housing	**Participation in Democratic Processes**	**Social Opportunity & Mobility**
Access to Health Resources	**Leisure and Recreation**	

Indicators of Economic Environment

According to the Atlas of Canada (2004), the economic environment "*represents the external conditions under which people are engaged in, and benefit from, economic activity*" and it includes two domains, Household Finances and Employment, each of which involves a number of numerical indicators. Four indicators of Household Finances and three indicators of Employment were used to assess the quality of the economic environment in the Tyne Valley area (Table 2). For each indicator, we note the relative rank assigned (first, second, third etc), and the range of actual values into which the Tyne Valley area data fit.

Table 2. Domains and indicators included in Economic Environment

Domain: Household Finances	**Type of indicator**	**Range of values**	**Rank**
Average owner's major payments	inverse	$352 - $491	2nd
Percentage of income from government transfer payments	inverse	20.8% - 28.9%	3rd
Ratio of percentage of households in lowest income category to that of households in highest income category	inverse	0.1 - 0.8	1st
Percentage incidence of low income families	inverse	17.5% - 22.8%	4th
Domain: Employment/Paid Work			
Ratio of individuals working part year, part time to individuals working full year, full time	inverse	1.80 - 10	4th
Unemployment rate	inverse	9.1 - 14.4 %	3rd
Average employment income	direct	$6,596 - $16,851	5th

Overall, Tyne Valley was rated "fair" for economic environment. As we can see from the indicators above, this relatively low rank can be accounted for by the limited average employment income and frequent dependence on seasonal and part time employment, which contributed to a high incidence of families living below Canada's poverty line. On the other hand, there is a great degree of equity in the community as measured by the relative proportions of low and high income households; payments on housing are modest; and income supports from government (considered undesirable by the Atlas researchers) helped to ease financial stress in many households.

Indicators of Physical Environment

Physical environment, as defined in the Atlas of Canada, includes the domains of housing, access to services, environmental quality and personal security (Tables 3).

Table 3. Domains and Indicators included in Physical Environment

Domain: Housing	**Type of Indicator**	**Range of values**	**Rank**
Percentage of population living in housing requiring major repairs	inverse	not available	
Average number of persons per room	inverse	0.40 - 0.42	2nd
Percentage of household incomes with owner's major payments (or gross rent) for shelter being greater than or equal to 30 per cent of household income	inverse	1.18 - 11.93	1st
Domain: Access to Services	**Type of Indicator**	**Range of values**	**Rank**
Distance from centre of census subdivision to nearest hospital	inverse	20.37km - 31.46km	4th
Domain: Environmental Quality			
Density of dwellings requiring major repairs	inverse	0.01 - 0.72	1st
Air quality: measured as total pollutant particulate matter emissions	inverse	6.21 - 6675.66	1st
Domain: Personal Security			
Incidence of personal crime	inverse	0 - 0.57	1st
Incidence of property crime	inverse	Insufficient data	

Tyne Valley rated 1st or 2nd in all of the physical environment indicators, with the exception of proximity to a full service hospital. From these data, we get a picture of a safe and secure community where people maintain their homes and enjoy excellent air quality. Note, however, that recent Environment Canada data show that PEI air is tainted with a mixture of pesticides throughout the agricultural season (White et al., 2006). Pesticide levels were not included in the air quality indicator.

Indicators of Social Environment

Social environment is defined in the Atlas as the "external conditions under which people engage in social activity within their community" and includes the domains of: leisure and recreation; social opportunity and mobility; participation in democratic processes; social stability; education; and access to health resources. The indicators making up these domains are described below (Table 4).

Table 4. Domains and Indicators included in Social Environment.

Domain: Leisure and Recreation	**Type**	**Range of values**	**Rank**
Number of leisure-related commercial activities per thousand people	direct	0.395 - 0.688	3rd
Number of libraries per thousand people	direct	0.128 - 1.207	1st
Domain: Social Opportunity and Mobility			
Ratio of female median income to male median income	direct	58.36 - 75.14	3rd
Male participation rate in workforce	direct	69.73 - 84.86	2nd
Female participation rate in workforce	direct	67.4 - 98.20	1st
Domain: Participation in Democratic Processes			
Percentage of the population that participated in the 1997 federal elections	direct	62.03% - 70.55%	2nd
Domain: Social Stability			
Ratio of % of population living in owned housing to % of population living in rental housing	direct	5.03 - 10.79	3rd
% of population living at the same address they lived at five years earlier	direct	72.85% – 100%	1st
% of population living at a different address than the one they lived at five years earlier	inverse	0% - 20.13%	1st

Domain: Education	Type	Range of values	Rank
Ratio of percentage of population with trade/college or university education to percentage of population less than Grade 9 education	direct	1.09 - 2.93	4th
Domain: Access to Health Resources			
Number of physician specialists per thousand people	direct	0 - 0.098	5th
Number of family physicians per thousand people	direct	1.752 - 3.756	2nd

Tyne Valley was rated high in terms of the social environment. There are a moderate number of opportunities to indulge in commercial recreational activities, and a library. Although medical specialists are rare in the area, people have excellent access to doctors. The social environment is stable, in that most residents have lived in their homes in the Tyne Valley area for at least 5 years and the vast majority own their homes. Like most Prince Edward Islanders, Tyne Valley people engage heavily in the democratic process of voting. When it comes to gender equity, women are paid much less than men, but have as good or better chances of finding employment of some sort. Relatively few residents have education or training beyond high school.

In the following section, we will see how people in Tyne Valley defined Quality of Life in 2006, when given the opportunity to do so without any exposure to pre-conceived notions of what this might mean. We will then discuss the Atlas of Canada approach to measuring Quality of Life, in light of our own research findings.

Quality of Life in the Tyne Valley Area, 2006

Research Methods

Meetings were held with local leaders from various communities in Lot 13, in advance of sending the researcher into the communities, in order to answer any questions they had, ensure that the research would be useful to them as community leaders, and to enlist their help in informing residents that a survey would be performed. As a way of familiarizing the research team with the area, information was compiled and reviewed concerning the history of Lot 13, together with available statistics and relevant literature such as the Atlas of Canada study described above.

A brochure and a bulletin were developed and distributed around Lot 13 to build public awareness of the research project. The researchers developed a survey to gather information on Quality of Life parameters, along with participant recruitment and consent forms.

People living in Tyne Valley and surrounding villages, including Indigenous people, were targeted to participate in this project. In most cases, the researcher looked up names in a Prince Edward Island phonebook that were identified as living in one of the communities of Lot 13. A haphazard sample of these individuals were contacted by phone, provided with standard information on what the research was about, and asked if they would like to participate. Some people (including a few in Lots 12 and 14) volunteered to participate in response to bulletins that were placed at various businesses in and around Tyne Valley. The participants were given the choice of completing a written questionnaire which would be mailed out to them, or partaking in a phone interview.

Every effort was made to recruit an inclusive sample that included both men and women in a variety of age groups. It was hypothesized that what contributes to Quality of Life would be perceived differently according to gender and age. Other research on rural PEI suggests that, whereas males tend to focus on livelihood and meeting the immediate needs of their family, women tend to be more oriented towards long term sustainability and maintenance of good social relations at both family and community levels (Novaczek et al., 2009). Also, it was expected that what people valued in a place to live would change according to whether or not they were in their childrearing or employment intensive phase of life.

Because the researcher was a native of the area, she was well accepted by community members and found it easy to engage people in the project. In total there were 57 participants (Table 5), amounting to about 8% of the population of Lot 13. Males, especially those in the youngest age category, proved more difficult to recruit than females. Although efforts were made, via the Lennox Island First Nation's community development officer, to recruit participants from that village, these efforts were not successful. Participants came from the villages listed in Table 6.

Table 5. Number of male and female participants, by age group.

Age group	Male	Female	Total
18–39 years of age	2	18	20
40–59 years of age	10	14	24
60 years and older	4	9	13
Total number of participants	16	41	57

Table 6. Place of residence of survey participants.

Village	**Number of participants**
Tyne Valley	22
Birch Hill	8
Northam	8
Springhill	6
Victoria West	5
Port Hill	4
Enmore	2
Poplar Grove	1
Bideford	1

After providing verbal or written informed consent, each person was asked to respond to the survey questions. Participants could refuse to answer any question, or stop the survey and remove their information from the database at any point.

The participants were asked for demographic information to ensure that they resided in the target area, and to establish their age, gender, and length of attachment to the community. Only a quarter of the participants were "new" to the area, having lived there for fewer than 10 years. Almost half had resided in the area for 10–30 years, and the remainder were very long term or life-long residents.

The survey included the following open ended questions on Quality of Life:

1) What does the term Quality of Life mean to you?

2) What do you value the most about living in your community?

3) Please explain how you think your community has changed for the better or worse in recent years?

The reason for asking these open ended questions was to collect a wide and unprompted view of the meaning of Quality of Life according to the participants in the Tyne Valley area. There was no right or wrong answer to any of the questions asked. Most respondents were very willing to talk about their community and their Quality of Life.

Each answer to the question "What does Quality of Life mean to you?" was treated as a data point. People could name as many different factors contributing to Quality of Life as they liked. From the 57 participants, 322 individual data points were recorded. On average, therefore, each person mentioned 5.6 different factors. Women tended to contribute more data points (avg 5.9) as compared to men (avg 5.1).

In all, 29 different factors contributing to Quality of Life (QoL) were identified. The process of analysis involved first, deciding which answers were essentially the same, even when expressed in different ways. For example, some people said that peace and quiet was important to QoL. Others said tranquility, or calm. All these were treated as being essentially the same factor. The next step involved clustering these factors into thematic categories, or domains, and counting the frequency with which each factor and domain was mentioned. The frequencies are reported because they are believed to reflect the relative importance of the QoL domains to the participants. However, determining to what extent this is true requires further research.

The relative ranking of various domains was compared between genders and among age groups to see whether any trends were evident that might point to a) hypotheses that could be tested by further research, or b) the need to collect and report data separately for the different demographic groups.

Responses to the question "What do you value most about your community?" were categorized into domains following the system established for QoL factors. We then considered whether factors deemed important to QoL were consistent with factors that the participants valued in their own communities, and to what extent the Tyne Valley area provides a favourable QoL as defined by the participants.

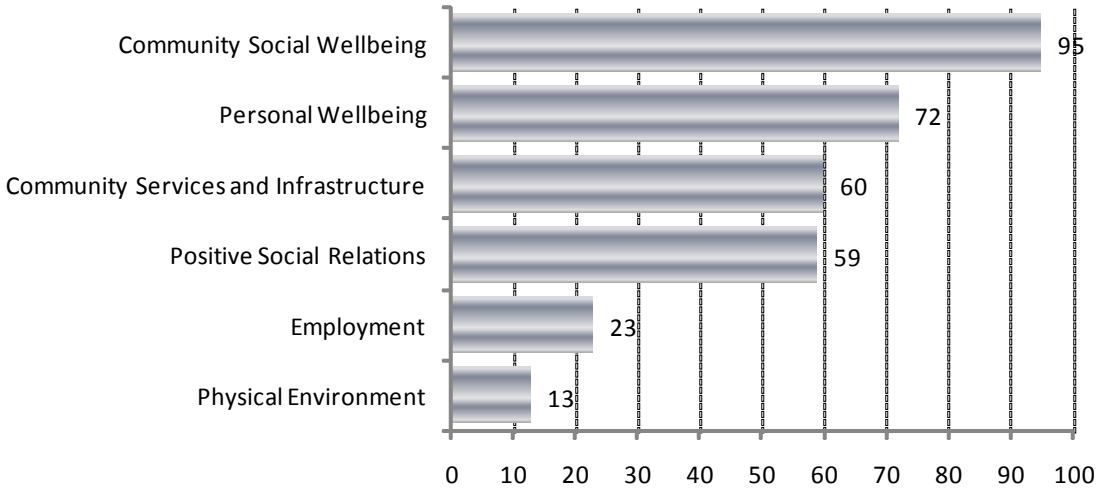
The answers to the question about what was getting better or worse at the community level were tallied and categorised in a similar manner, to see whether any conclusions could be drawn about the ongoing erosion or enhancement of the various QoL factors and domains identified by residents of the Tyne Valley area.

Factors Contributing to Quality of Life

In response to the question "What does the term Quality of Life mean to you?", people provided 322 answers, or data points, covering 29 different factors. The 29 factors were clustered into six domains: *Personal Wellbeing*; *Positive Social Relations*; *Physical Environment* (excluding built environment); *Community Social Wellbeing*; *Livelihood/Cost of Living*; and *Community Services and Infrastructure*. The individual factors included in each domain, and their relative frequencies, are enumerated below.

Figure 3 provides an overall impression of the relative ranking of the domains. Factors belonging to *Community Social Wellbeing* were mentioned most frequently, making up 30% of all data points. *Personal Wellbeing, Community Services and Infrastructure* and *Positive Social Relations* were all mentioned with a moderately high frequency, whereas factors relating to *Livelihood/Cost of Living* and *Physical Environment* were mentioned much less often.

Figure 3 - Frequencies with which factors belonging to each domain were mentioned.



1) *Community Social Wellbeing*. The factors included in this domain involve social relations beyond immediate family and friends. These six factors were mentioned 95 times, and are listed in order of frequency.

Knowing everyone / Community attachment / Sense of belonging – 25

Safety / Security – 24

Calmness / Quiet /Tranquility / Peacefulness – 18

Mutual support / Community involvement/ volunteerism – 11

Community pride / Spirit / Celebrations and communal activities – 9

A pleasant place to live / Happiness in community – 8

2) *Personal Wellbeing.* The Quality of Life domain Personal Wellbeing, as constructed here, includes physical, emotional, spiritual, and mental factors that are appreciated by individual persons without reference to the wider social or physical environment. The full list of factors included in this domain follows. These eight factors were mentioned 72 times.

Enjoyment of everyday living / Comfort / Contentment / Thankfulness – 31

Health – 12

Free time / freedom – 11

Hobbies / Activities – 5

Privacy / Solitude – 5

Mental health / Emotional health/ Spirituality – 3

Accomplishing personal goals –3

Job satisfaction – 2

3) *Community Services & Infrastructure*. This domain includes factors that describe man-made physical infrastructure; and government, community and business services that are locally available. These eight factors were mentioned 60 times.

Availability of local amenities (seniors housing, fire department, waste pickup, recreation infrastructure, gas station, bank, drug store, shopping) – 22

Health services – 17

Aesthetic infrastructure (renovations, walking area) – 6

Community organizations' programs – 6

Roads – 4

Educational facilities (schools, daycare) – 3

Entertainment – 1

Proximity to urban centre services – 1

4) *Positive Social Relations*. This domain refers to the positive personal relationships and time spent with family and friends, as distinct from neighbourly relationships that are based only on geographic proximity. These two factors were mentioned 59 times.

Being close to family – 34

Spending time with friends – 25

5) *Livelihood / Cost of Living*. This domain's cluster of factors relate to economic aspects of Quality of Life. These three factors were mentioned 23 times.

Financial stability / Adequate income – 16

Employment / Labour market – 6

Low cost of living – 1

6) *Physical Environment* (excluding built environment). In order to differentiate natural landscape and environmental values from recent "beautification" of Tyne Valley, this category specifically excluded the built environment. Instead, it focuses on environmental health and beauty. These two factors were mentioned 13 times.

Beautiful surroundings (rural setting, scenic nature, beaches) – 7

Healthy environment (air & water quality) – 6

The Change of Perceptions with Gender and Age

We will now consider how frequently each domain was mentioned by males in comparison with females, and by people in the different age categories.

Given the fact that more females (41) than males (16) participated in the survey and that females on average gave more responses than males, the results are, as a whole, more reflective of the female perspective. It is therefore of interest to view the results through a gender lens to see whether male responses differed from those of females. This provides guidance on the importance of gender balanced sampling and disaggregation of data by gender in future studies.

When comparing the responses of males and females concerning the meaning of Quality of Life, we found that the same suite of factors was mentioned by both men and women. However, there is evidence of a gender difference in terms of the frequency with which factors were mentioned, which would be useful to investigate using a larger set of data (Table 7). Factors in the two domains *Personal Wellbeing* and *Community Social Wellbeing* dominated both male and female responses, but females tended to focus more on aspects of community wellbeing. The rankings for the two domains, *Community Services and Infrastructure* and *Positive Social Relations,* were reversed, with women placing more emphasis on *Positive Social Relations.* Both genders mentioned *Livelihood / Cost of Living* and *Physical Environment* factors much less frequently than any other domains.

In terms of the individual factors within domains, women were as likely as men to mention safety

and roads. Only women mentioned mental health, job satisfaction, sense of accomplishment, the aesthetics of local infrastructure, access to entertainment, the positive influence of community group activities and programmes, educational facilities and cost of living. Men were more than twice as likely as women to mention ecosystem health and the value of free time. The reference to proximity to urban services was made by a man.

Peoples' phase of life, as indicated by their age group, was also expected to affect their perceptions around factors contributing to Quality of Life (Table 8).

For all age groups, the domain *Community Social Wellbeing* ranked first. The frequency with which factors related to *Community Services and Infrastructure* were mentioned tended to increase with the age of the participant, whereas *Personal Wellbeing* and *Positive Social Relations* were most commonly mentioned by the youngest participants. *Physical Environment* factors received relatively few mentions by any group; this was most marked among the youngest respondents. The sample size does not allow for tests of statistical significance, but the results suggest that trends with age should be examined using a larger data set. Considering the individual factors, young parents were most likely to cite safety and proximity to family as a QoL factor; references to local amenities and hobbies increased with age; while attention to privacy, employment, free time and education decreased with age.

Table 7: Emphasis placed on various Quality of Life domains by male and female participants. Rank indicates the relative frequency with which factors in each domain were mentioned.

Domain Rank (by frequency)	Males (% of all data points provided by males)	Females (% of all data points provided by females)
1st	Community social wellbeing (26%)	Community social wellbeing (31%)
2nd	Personal wellbeing (26%)	Personal wellbeing (22%)
3rd	Community services & infrastructure (19%)	Positive social relations (20%)
4th	Positive social relations (15%)	Community services & infrastructure (19%)
5th	Livelihood / Cost of Living (9%)	Livelihood / Cost of Living (7%)
6th	Physical Environment (6%)	Physical Environment (3%)

Table 8: Emphasis placed on the Quality of Life domains by participants in 3 different age groups. Rank indicates the relative frequency with which factors in each domain were mentioned.

Domain Rank	Age 18-39	Age 40-59	Age 60+
1st	Community social wellbeing (30%)	Community social wellbeing (28%)	Community social wellbeing (31%)
2nd	Positive social relations (25%)	Community services and infrastructure	Community services and infrastructure (23%)
3rd	Personal wellbeing (25%)	Personal wellbeing (22%)	Personal wellbeing (19%)
4th	Community services and infrastructure (12%)	Positive social relations (14%)	Positive social relations (15%)
5th	Livelihood / Cost of Living (8%)	Livelihood / Cost of Living (7%)	Livelihood / Cost of Living (7%)
6th	Physical Environment (0.8%)	Physical Environment (6%)	Physical Environment (5%)

Living in the Tyne Valley Area

A variety of answers, amounting to 224 data points, were supplied when the participants were asked what they valued the most about living in their communities. This question was open ended, and participants could provide any number of answers, as with the first question. It was found that all of the data could logically fit within the Quality of Life domains previously constructed (Table 9). Thus, people were consistent in that their reasons for valuing the Tyne Valley area as a place to live meshed with what they felt contributed to a good Quality of Life. Furthermore, the domain into which the greatest proportion of these valued characteristics fit turned out to be Community Social Wellbeing. Tyne Valley was consistently described as a safe, peaceful place where people knew their neighbours and helped one another. Residents also valued being able to live on relatively large lots, that afforded privacy. In terms of Personal Wellbeing, people noted that they valued their relatively relaxed pace of life.

Compared with how the domains for Quality of Life were ranked, there was more focus on *Community Services and Infrastructure* and *Physical Environment* when people described why the Tyne Valley area is a desirable place to live. The attributes most commonly mentioned under *Community Services and Infrastructure* were the many amenities available locally. In describing the area's *Physical Environment* people tended to focus on the beautiful scenery. People rarely mentioned *Livelihood / Cost of Living* but when they did, it was to say that they were content with a modest income that met their basic needs.

Table 9: Answers to "What do you value the most about living in Tyne Valley or a surrounding community?", compiled by domain and ranked according to how frequently traits belonging in each Quality of Life domain were mentioned.

Rank	Quality of Life Domain	% of data points accounted for by the domain
1st	Community Social Wellbeing	48.7%
2nd	Community Services & Infrastructure	19.6%
3rd	Physical Environment	13.8%
4th	Positive Social Relations	9.8%
5th	Personal Wellbeing	6.7%
6th	Livelihood / Cost of Living	1.3%

Table 10: Rank of attributes of Tyne Valley and area that were valued by male and female participants

Domain Rank	% of all data points provided by males	% of all data points provided by females
1st	Community Social Wellbeing (44.6%)	Community Social Wellbeing (50%)
2nd	Community Services & Infrastructure (23.2%)	Community Services & Infrastructure (18.5%)
3rd	Physical Environment (16.1%)	Physical Environment (13.1%)
4th	Positive Social Relations (8.9%)	Positive Social Relations (10.1%)
5th	Personal Wellbeing (5.4%)	Personal Wellbeing (7.1%)
6th	Livelihood / Cost of Living (1.8%)	Livelihood / Cost of Living (1.2%)

Here was no difference between the answers given by males and females to this question (Table 10), but among age groups, there were some interesting differences (Table 11). For example, *Community Social Wellbeing* was the most often mentioned attribute in all three age groups, but was particularly highly valued among the younger participants, for whom having a safe place to raise young children and the support of family members were key considerations. *Positive Social Relations* with family and friends ranked second for these younger participants, whereas among the two older age groups, *Community Services and Infrastructure* made up the second most frequent group of responses.

Attributes fitting into *Physical Environment* were most often valued among middle-aged participants. *Livelihood* was least often mentioned by all age groups.

It is apparent that *Community Social Wellbeing* is what the majority of participants, regardless of age or gender, value most about living in Tyne Valley, and that they value these community attributes because they contribute to a rich Quality of Life.

Table 11: Rank of attributes of Tyne Valley and area that were valued by participants in each age group.

Domain Rank (by frequency)	Age 18-39	Age 40-59	Age 60+
1st	Community Social Wellbeing (64.3%)	Community Social Wellbeing (37.2%)	Community Social Wellbeing (42.6%)
2nd	Positive Social Relations (10.7%)	Community Services and Infrastructure (25.6%)	Community Services and Infrastructure (27.8%)
3rd	Physical Environment (8.3%)	Physical Environment (19.8%)	Physical Environment (13.0%)
4th	Community Services and Infrastructure (8.3%)	Positive Social Relations (9.3%)	Positive Social Relations (9.3%)
5th	Personal Wellbeing (7.1%)	Personal Wellbeing (7.0%)	Personal Wellbeing (5.5%)
6th	Livelihood / Cost of Living (1.2 %)	Livelihood / Cost of Living (1.2%)	Livelihood / Cost of Living (1.8%)

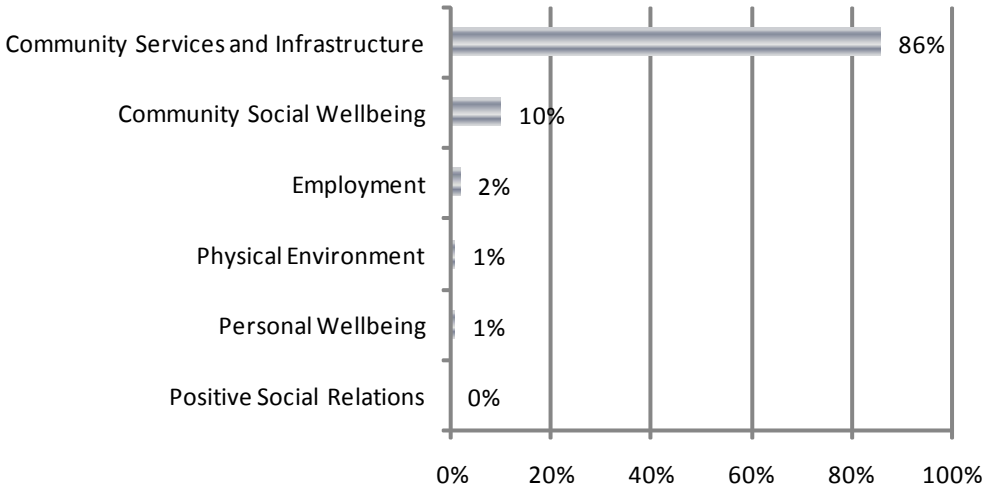
How has the Tyne Valley Area Changed for the Better?

Respondents provided 162 data points that described how their communities had changed for the better in recent years. All the data fit within one or other of the Quality of Life domains that were

previously defined. The percentage of answers belonging in each Quality of Life domain is shown below (Fig. 4). None pertained to *Social Relations*, and very few were related to *Personal Wellbeing, Physical Environment* or *Livelihood / Cost of Living.* Most of the positive changes noted concerned *Community Services and Infrastructure,* with some also fitting the domain *Community Social Wellbeing.*

The dominant domain, *Community Services and Infrastructure*, will now be broken down to explore how exactly the services and infrastructure have changed in Tyne Valley to make it a better place to live. Renovations to the town, often referred to as beautification, were mentioned most often. The renovations included new sidewalks and lights; picnic tables; and renovations to the seniors home, rink, bowling alley, C@P site and fire hall. Other frequent subjects for comment were the new businesses that are opening up and improved services that are being offered (bank, library). New tourist attractions were also mentioned.

Figure 4. The distribution of data concerning positive changes in the community, among Quality of Life domains.



Ten percent of all participants listed positive changes that fit into the C*ommunity Social Wellbeing* category. These referred to increasing levels of support from other members of the community; greater awareness and involvement in community affairs; and evidence of increased pride in the community.

How has the Tyne Valley Area Changed for the Worse?

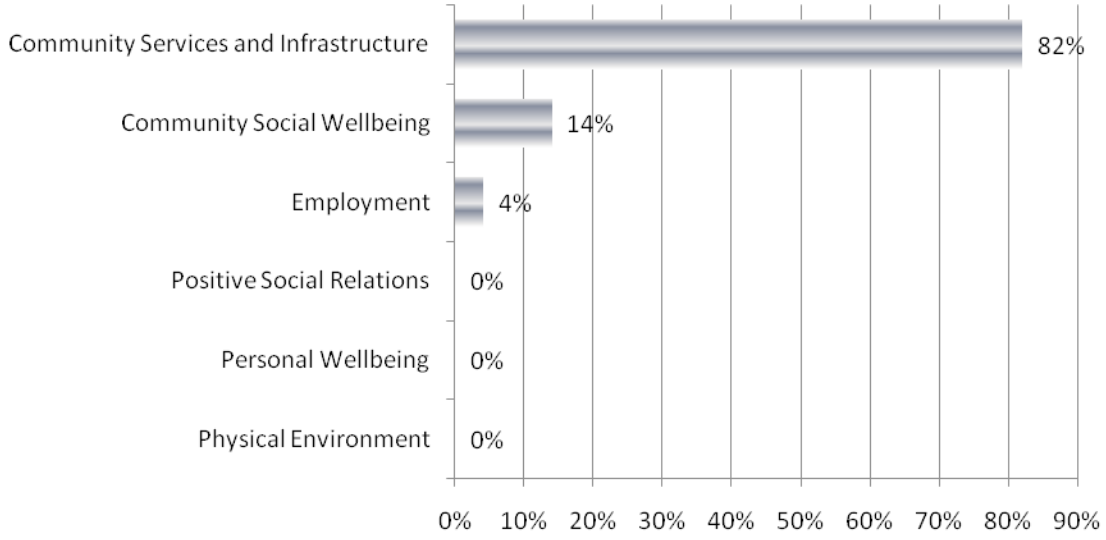
Respondents provided 91 answers describing how the communities had changed for the worse in recent years. In Figure 5 the percentage of these answers falling within each Quality of Life domain are shown. None were related to *Personal Wellbeing*, *Positive Social Relations* or *Physical Environment*. The vast majority of data detailed how aspects of *Community Services and Infrastructure* had deteriorated. The

remaining data spoke about *Community Social Wellbeing* and occasionally, *Livelihood / Cost of Living*.

The themes that arose inside the *Community Services and Infrastructure* domain were: the loss of businesses, especially restaurants; the loss of the hospital emergency service and imminent retirement of a doctor; loss of the gym; the lack of activities for youth; and the poor condition of local roads.

Some participants also felt that there had been some negative changes in the *Community Social Wellbeing* of Tyne Valley and surrounding area. Issues with youth were mentioned more than once, as in: "too many youth hanging around the center of Tyne Valley". Noise and vandalism were also mentioned. Some people were concerned about an apparent lack of pride in heritage properties; others felt that the rural lifestyle was disappearing.

Figure 5. Distribution of data concerning negative changes in the community.



One other concern was raised by a participant who was a relative newcomer to the area, who saw the tightly knit nature of the community as having negative aspects. From the perspective of this person, the community is not overly welcoming to newcomers.

Those concerned about livelihoods noted that job opportunities in Tyne Valley were disappearing and as a consequence, some people had left the area.

Quality of Life Indicators for Prince Edward Island

Comparison of Atlas of Canada Indicators with Locally Generated Indicators

According to the Atlas of Canada (2004) survey conducted in 1996, Tyne Valley has a high overall rating in regards to Quality of Life. Our study also suggests that Tyne Valley residents enjoy an enviable Quality of Life, but in this case, a somewhat different set of factors were documented, to come to that conclusion — factors identified by the residents themselves. When asked to nominate their own Quality of Life indicators, most participants in our study focused on factors related to *Community Social Wellbeing.* A second key group of indicators related to the domain *Personal Wellbeing*. Factors related to *Community Services and Infrastructure* and *Positive Social Relations* were effectively tied for third place ranking.

In the Atlas of Canada study, domains of Quality of Life were predetermined by the researchers, who then populated relevant indicators using available data from Statistics Canada. This is a useful and pragmatic approach for getting a coherent snapshot of selected aspects of Quality of Life across the country. However, it risks missing some critical aspects of Quality of Life in many of our diverse provinces, cities and rural communities.

The Domains of Quality of Life used by Atlas of Canada were a) *Economic Environment*, b) *Physical Environment*, and c) *Social Environment*. The indicators used to construct these domains were, respectively, a) household finances and employment/ paid work; b) housing, accessibility of services, environmental quality and personal security; and c) social opportunity and mobility (defined in terms of income and employment), leisure and recreation, participation in the democratic process, education, social stability, and access to health services. Some of these factors were identified by Tyne Valley area residents as contributing to Quality of Life; other indicators that were used to develop the Atlas of Canada were not mentioned at all or paid scant attention by our participants. This does not necessarily mean that the indicators used in the Atlas are unconnected to Quality of Life on PEI, simply that they are not top of mind when people identify what Quality of Life means to them. Many of the basic economic indicators are just that — basic and virtually invisible in a country where most people take the means to basic subsistence for granted, and express the meaning of Quality of Life in less tangible terms.

From the data collected for this project, the Quality of Life domains that arose from surveying people in the Tyne Valley area were *Community Social Wellbeing, Personal Wellbeing*, *Positive Social Relations*, *Community Service and Infrastructure, Livelihood / Cost of Living* and *Physical Environment*. The domain that came through most strongly as a key component of Quality of Life was *Community Social Wellbeing.* This domain includes the safety and security, peacefulness and calm, the feeling of belonging and attachment, the knowledge that you can depend on other community members for help, community pride and spirit and living in a place that has a pleasant and happy atmosphere. These are not factors that are measured or reported in any comprehensive way by Statistics Canada,

nor do they feature significantly among the indicators used to develop the Atlas of Canada published in 2004. Among 27 indicators used to develop the Atlas of Canada, only the two used to measure "personal security" (incidence of personal and property crimes) and two that relate to "Social stability" (% of populace living in the same or different locations relative to their place of residence 5 years ago) relate to Community Social Wellbeing as defined by the residents of the Tyne Valley area.

For Joseph Michalski (2002), the process of having people construct locally relevant indicators of Quality of Life is especially important. He argues that one needs to receive the input from Canadians to know what to monitor when reporting on Quality of Life in any particular geographic area. It is evident from this research that *Community Social Wellbeing* is a very important aspect of Quality of Life for the residents of the Tyne Valley area, whereas it is not especially relevant that Lot 13 rates only "fair" in terms of the Atlas of Canada's indicators of economic wealth.

Limitations of this Study

As noted above, the various factors that people from Tyne Valley identified as contributing to Quality of Life were clustered into six non-overlapping, coherent domains. The individual factors making up each domain are candidates for development into Quality of Life indicators that could be monitored over time. Before seeking out statistical data that could be used to populate such indicators, however, it is important to follow up this preliminary study with a more in-depth evaluation of factors contributing to Quality of Life.

The core of the present study's methodology was a simple, four question survey administered in most cases over the telephone. While useful for gathering top-of-the-mind responses, the method did not allow for a process of discussion, or contemplation over time. Other methods such as focus group discussions would provide useful complimentary data to enrich and expand the understanding of what Quality of Life means to the people of Prince Edward Island. As one example, Horne (2007) reported on focus group discussions performed with residents of Tyne Valley on the topic of the value of local landscapes. When participants were prompted to discuss landscape — a specific attribute that could conceivably be related to Quality of Life — their discussions revealed a deep emotional connection to the local landscape that clearly contributed to individual feelings of wellbeing and relationship to the local community. In the survey conducted for this study, scenic beauty was rarely identified as a factor contributing to Quality of Life. Landscape was, however, more prominent when people were asked why they liked to live in the Tyne Valley area. The landscape, like being a homeowner, or having a job, or having clean drinking water on tap, can be so much part of the accepted background to daily life that people fail to specifically identify it as important to QoL in the context of a quick survey. Thus, a preliminary survey with a limited number of participants serves only to scratch the surface of the issue and point to potentially fruitful areas for further study.

Recommendations

Because it is apparent that key factors contributing the Quality of Island Life are indeed somewhat different from those for which indicators can be readily constructed using Statistics Canada data, we recommend that further research be pursued in order to make it possible for appropriate data to be included in PEI's Community Accounts — data that will allow Island communities to monitor the erosion, resilience or enhancement of the QoL factors that are most important to them. The factors identified in this study need to be confirmed as being of general importance, through research in other Island communities. Secondly, other methods such as focus group discussion and values mapping need to be employed to compliment surveys, to ensure that as-yet-undetermined facets of Island Quality of Life are not overlooked. Finally, there needs to be a focused effort to devise measurable indicators that allow key facets of the Quality of Island Life to be systematically measured over time, periodically reported and incorporated into the Community Accounts tool. Community Accounts can then be a tool that guides local decision-making so that development choices do not have an unacceptable negative impact on these valuable community attributes. Data collected should be disaggregated by gender and age group, as what people value does appear to depend on these personal attributes, and different communities will vary with respect to their demographics.

Conclusions

While this study had a limited focus on a particular community on PEI, it shows that at least some Islanders place a high degree of importance on *Community Social Wellbeing* as a contributor to Quality of Life. For Chambers and Swain (2006: 269), community-level Quality of Life involves

> "...those factors that affect everyone in the community in a general way. Each factor may have a differing degree of impact on each of us, yet most would agree that these factors are important and that the community has a role in maintaining these factors."

This is in line with the key findings of this study, which indicate that we need to go beyond standard statistics to identify and measure some key Qualities of Island Life that should be incorporated into community decision making. By involving the community of Tyne Valley in creating QoL indicators, we have begun a process of local citizen empowerment through the development of more widespread awareness of what is truly important to Islanders in their own space.

For one traveler who has compared many islands, PEI represents a Quality of Life that one longs for:

> "If I had my way, the whole world would be like Prince Edward island...it has that safe, homey feel that comes from a strong sense of community, old-fashioned values, and it's other-era aura" (Frawley-Holler, 2003: 35).

The people of Tyne Valley area seem to agree.

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