Sustaining Our Communities:

Understanding

Integrated Community Sustainability Plans

in

Atlantic Canada






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Executive Summary

An integrated community sustainability plan is a comprehensive, long-term community plan based on consultation with various stakeholders. The plan provides direction for planning for integrated community sustainability initiatives (Prince Edward Island, 2007). Through federal and provincial transfer agreements, funding is allocated to sustainable planning projects, capacity building and infrastructure initiatives (Chess, 2013). Submitting an ICSP is fundamental to receiving gas tax fund transfers in most Canadian provinces.

According to the federal and provincial funding agreement, ICSPs should include stakeholder consultation, regional collaboration, and an in-depth community assessment to inform the overall vision, goals and actions of the plan. Format and content is determined by the federal and provincial agreement and can vary depending on provincial objectives (Nova Scotia, 2007).

Each document should include goals and projects outlining sustainability objectives in each of the four pillars of sustainability (social, environmental, economic and cultural) with infrastructure and capacity building projects that contribute to cleaner air, cleaner water and reduced greenhouse gas emissions (Newfoundland and Labrador, 2009).

Using an analytical framework derived from key literature and the requirements of the federal and provincial guidelines, this research project was conducted through analyzing 170 Integrated community sustainability plans throughout Atlantic Canada.

Although each plan varied depending on local contexts, a number of interesting trends emerged.

- 49% of municipalities used a consulting firm to prepare their ICSP.

- 13% of municipalities collaborated with regional neighbours to complete their ICSPs

- 67% of municipalities submitted stand-alone ICSPs.

- 55% of municipalities did not cite or reference any specific definition of sustainability.

- Plan timelines range from 3 to 150 years. 57% of ICSPs had timelines between 5 and 10 years.

- Environmental objectives led in 38% of all ICSPs while social initiatives came in second leading in 27% of ICSPs. The cultural pillar was omitted in 10% of all submitted ICSPs.

- Proposed projects included clean air in 213 initiatives, clean water in 319 initiatives and reduced greenhouse gas emission in 289 initiatives.

ICSP creation in Atlantic Canada involved hundreds of communities and thousands of local stakeholders. Objectives were established regarding improving sustainability pillars and reducing negative impacts of development on the environment. Although gaps are present in the current plans concerning cultural sustainability, cleaner air, and increased local governance capacity, these plans have contributed in many meaningful ways to sustainability in Atlantic Canada.

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Introduction: Rationale and Objectives

Integrated Community Sustainability Plans (ICSPs) are meant as long-term, comprehensive and integrated planning documents submitted by Canadian communities. ICSPs should address the key areas of cultural, social, environmental and economic sustainability while contributing to cleaner air, cleaner water and reduced greenhouse gas emissions.

To date millions of dollars have been dedicated through the Federal Gas Tax agreement under the New Deal for Canadian Cities and Communities since its signing in 2005 (Service Nova Scotia, 2007). The deal was recently extended with dedicated funding guaranteed until at least 2019. The funds transferred through the agreement are integral to the short and long-term operations of communities throughout Atlantic Canada.

A fundamental requirement of the gas tax transfer agreement was the creation of Integrated Community Sustainability Plans (ICSPs) by municipalities throughout the country. Cities, towns villages, and municipalities in all four provinces participated in extensive consultation, assessment and strategic planning processes to create and begin to implement integrated sustainability planning in their jurisdiction.

The process was a first of its kind in Atlantic Canada and provided the opportunity for many communities to embark on a planning process unique in scope and magnitude. The broad range of communities that participated in the process and the various geographical, demographic, social, cultural and economic similarities and differences at play undoubtedly shaped the formation of the plans in many ways. However, little research has been conducted regarding the content, design and characteristics of ICSPs in Atlantic Canada.

The purpose of this research was to examine and describe the design, characteristics and content of Integrated Community Sustainability Plans in municipalities throughout Atlantic Canada and provide a summary and overview to identify trends in practice. Furthermore, this project is intended to clarify the current state of sustainability planning and to compare and contrast approaches used throughout the region.

This research is intended for future use by community members, planners and municipal staff when constructing and implementing sustainable planning strategies in the future. Ideally the results of the research will lead to a better understanding of the process and improvements in the form and function of ICSPs throughout Atlantic Canada.

Method

Using a multiple document analysis design (Creswell, 2013), I examined ICSPs and other supporting documents from the four Atlantic Provinces. The multiple document design was used to investigate ICSPs throughout Atlantic Canada to improve insight in plan design and content.

Research Questions:

Five key research questions were examined during the research process:

1. Who is responsible for producing ICSPs?
2. How are ICSPs integrated with the municipal plans and policies?
3. What are key themes included in ICSPs?
4. What kind of approaches do ICSPs take?
5. How do ICSPs address objectives established in the provincial agreements on gas tax transfers?

To understand the range, design and nature of ICSPs and associated documents I conducted a detailed document content review. Through this process I identified key themes, objectives and concerns throughout the ICSPs (Creswell, 2013). This research project was also used to determine if ICSPs across the region include similar themes and objectives concerning infrastructure, funding, municipal accountability, and sustainable community development (Hatch, 2010).

The study was conducted as a census of all available ICSPs throughout the Atlantic Provinces. The research quantitatively categorized a range of broad content within each ICSP such as:

- Plan timeline
- Mandatory vs. voluntary provincial requirement
- Approach (stand alone, collaborative, Municipal Planning Strategy addition)
- Total amount of ICSPs produced (per province and in total)
- Who prepared the ICSP (municipality or consulting firm)?

This information was documented within a detailed content frequency table, and then the data was described and explained as much as possible.

This portion of the analysis provide information concerning:

- What are the key themes and defining characteristics evident throughout the ICSPs?
- How do the ICSPs reflect the Federal Gas Tax Transfer goals and objectives?
- What kinds of deliverables are required within the ICSPs?
- To what extent are the ICSPs utilizing established best practice for sustainable infrastructure?
- What gaps are present in submitted ICSPs?
- What specific timelines for objectives are provided?

An analytical framework was established based on a review of the relevant literature and guidelines established by the federal and provincial agreements. This has helped to guarantee a consistent and accurate approach to the examination of each ICSP.

The 12 categories below were used to evaluate each ICSP:

- Population:
- Created by:
- Format:
- Collaborative:
- Vision Statement:
- Objectives:
    I. Environmental
    II. Economic:
    III. Social:
    IV. Cultural:
    V. Governance:
- Timeline:
- Definition of sustainability:
- Outcomes are quantitative or qualitative in nature:
- Financial ramifications provided:
- Direct reference to SPI:
- Direct Reference to Sustainable outcomes (cleaner air, water and reduced greenhouse gases).

The research used conventional qualitative document content analysis techniques, where categories were garnered directly from the raw document content. To understand and analyze the content and characteristics of ICSP a simple form of content categorization was implemented.

During this process, a uniform approach was used to ensure the themes and categories were applied in the same manner throughout the entire process. The method involves a similar process to that Creswell (2013) describes:

1. Initial read through of relevant data. This will involve reading through large quantities of text.

2. Divide text into segments of information. In this stage, there will be a large number of segments, which have been derived from the wider text.

3. Label segments of information with themes/categories. In this stage, there will be many specific themes, many of which may be similar to other themes.

4. Reduce overlap and redundancy of themes. Creswell (2013) recommends reducing the redundant categories and creating broader themes to arrive at 10 key themes or categories.

Once the ICSPs and relevant supporting documents were documented and categorized the next step involved summarizing and analyzing the findings. This portion of the research relied on a strong, in-depth understanding of the source material, local context, relevant literature and themes (Creswell, 2013).

Thick rich description was used to provide detailed and thorough descriptions of each of the municipalities (Creswell, 2013). During the document description portion of this research project, the content was analyzed to identify:

- Similarity
- Difference
- Frequency
- Sequence
- Correspondence (Hatch, 2002, p. 155).

The themes, categories and analysis was evaluated on an ongoing basis to ensure consistency and accuracy throughout the entire process.

Relevant Literature

Sustainable development became a prominent theme in urban planning in North America in the 1990s, “When planning historians reflect on the system of the 1990s, they may well classify it as the 'sustainable development' phase”. (Selman, p. 288, 1995). In the decade following the

Brundtland Commission report of 1987, Selman (1995) claims a shift occurred moving planning from superficial sustainable planning initiatives of the 1970s and 1980s towards planning initiatives that began to think deeply about the long-term consequences of urban development and resource depletion.

The difficulty arises as communities begin to reconcile two seemingly competing objectives at the local level. Selman (1995) notes that most communities attempt to develop healthy and productive economic and financial systems first and foremost. This objective is closely associated with providing high-quality of life for citizens and ensuring economic and population growth in the future. These economic and social objectives often arise simultaneously in many communities while attempting to manage and protect local environmental features and amenities “now and for their children.” (Selman, p. 289, 1995).

Therefore, Selman (1995) states that the role of the planner in local, regional and national government is to attempt to facilitate a healthy relationship between the two apparently competing objectives. Conroy and Berke (2004) note that in a holistic sustainable development processes, goals concerning the economic, social and environmental sustainability of a community are not discussed as competing goals but rather and complimentary and crucial building blocks towards a comprehensive sustainable community.

Sustainability itself can be difficult to define. The most common definition as provided by the Brundtland Commission report, states that, "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, p. 43, 1987).

A second common definition of sustainability is provided by the Natural Step Framework. The framework defines sustainability as, “A state in which society does not systematically undermine natural or social systems within the biosphere.” (Natural Steps, 2014). The Natural Step Framework also outlines a strategy for planning for and achieving long-term sustainability objectives and aligns well with the ICSP process in many key areas such as community engagement, regional cooperation and long-term integration with all sectors of society.

Although primarily discussing the sustainability planning process in the United States, Conroy and Berke (2004) provide a number of recommendations that may be relevant to the Canadian context and aim to help communities and regions achieve sustainability objectives.

The implementation of high-level planning legislation at the state or federal level can help to facilitate planning for sustainable development at the local level (Conroy & Berke, 2004). High-

level mandates such as the gas tax agreements throughout Canada and ICSPs guidelines in the Atlantic Provinces can have an important impact on community sustainability planning and initiatives (Conroy & Berke, 2004).

Conroy & Berke (2004) also discuss the importance of developing tools and mechanisms at the local government level to ensure long-term and successful sustainability planning. Laurian & Shaw (2009) go on to note the important role of ongoing and meaningful public consultation in the sustainable planning process. They stress that engagement with a wide range of stakeholders must be inclusive and instill confidence in those involved. Laurian & Shaw state participants must feel assured that the concerns raised are considered and acted on during the plan writing process. Furthermore, providing access to critical training and information based resources for planners, council and other stakeholders will aid sustainable plan creation and lead to appropriate and successful sustainable objectives (Conroy & Berke, 2004).

As planning for sustainable development can be difficult at the community level, Berke and Conroy (2004) have attempted to analyze certain variables, which may lead to greater success when planners implement sustainable development strategies. Speaking of the United States, they mention federal government guidelines and mandates and increased public participation by a wide selection of citizens as the most important consideration when constructing such plans (Berke & Conroy, 2004). Similarly, ICSPs mostly follow provincial mandates and include public participation as a key factor in the development stage. Further analysis will determine the influence these two factors had in the Atlantic Canadian context.

Staley (2006) notes that sustainable development objectives are now prevalent in the majority of town planning strategies throughout the United States but few towns have truly committed to the concept. Those which have are facing obstacles while experiencing limited success implementing their objectives (Staley, 2006). Furthermore, systemic flaws are present in the framework many towns apply to sustainable development in practice (Staley, 2006). The failure to integrate market forces, include community consultation, incorporate technological advances into sustainable planning strategies and a lack of understanding of the inherent complexity of modern urban areas leads to inadequate sustainable development planning.

Selman (1995) states that numerous key factors contribute to successful sustainability planning, these include:

- Ensuring natural resources are managed efficiently;
- Local discussions and decision-making is in accord with broader jurisdictional decisions;

- Consideration of all members of the community;
- Pragmatic and cautious planning, avoids reckless, short-sighted decisions or actions;
- Consideration provide for future generations in a long term approach;
- Planning for environmental benefits with as little negative consequences as possible;
- Ongoing Protection of natural resources and amenities; and
- Understanding that community engagement and the implementation process in ongoing and as crucial as the final objectives.

In line with Berke and Conroy's findings , many provinces recognize that producing an ICSP is often not enough to ensure sustainable infrastructure development in future years (Lindberg, Craig, Russell, Purkis, 2013). Therefore, provinces, including Nova Scotia and Newfoundland and Labrador also encourage municipalities to follow an official detailed framework to ensure successful implementation. This framework is available to those municipalities starting out, those in the process of implementing their plans and finally those with years of implementation behind them and a dedicated staff for such projects (Lindberg et al., 2013).

As ICSPs rely on community engagement and participation in the creation process, municipalities must ensure that adequate avenues are available to encourage active participation by the public (Robinson, 1997). In discussing community based planning strategies, Robinson notes that as programs become established more people become aware of and begin participating in and benefiting from community planning initiatives (Robinson, 1997).

In general, sustainable development includes ensuring policy addresses, "compact urban form, reductions in automobile use, protection of ecosystems, and improved equity" (Wheeler, pg. 1, 2000). Sustainable planning can be difficult for communities to understand and implement. The term, although prevalent in planning literature, is sometimes vague and key concepts seemingly too abstract to apply at the community level (Wheeler, 2009). However, Wheeler states that a few key categories are essential to the process and if adhered to can lead to greater success at the community level.

The key elements of a successful sustainability plan include, vision statements, cooperation among community stakeholders, intergovernmental collaboration, community engagement, capacity building and educational programming (Wheeler, 2009).

Considering many of the key elements of a sustainable society are not locally specific, Wheeler (2000) goes on to state that issues regarding economic, social, and environmental sustainability are most appropriately discusses and the regional scale. In this way, issues regarding

watershed planning, air pollution, regional transportation, social services and economic growth will be addressed in a regional comprehensive manner. Unfortunately, Wheeler claims that regional planning, especially in rural areas which lack governance capacity can often prove difficult to achieve.

Barriers to sustainability in Atlantic Canada

Planning for sustainable communities is a complex and multifaceted endeavor. Various factors can affect each town moving forward. Furthermore, making plans and establishing strategies will work best only when these factors are truly considered and addressed.

Sahely, Kennedy and Adams (2005) have studied techniques for measuring sustainability of infrastructure in urban settings. Traditionally infrastructure has undermined urban environmental systems. Measuring the sustainability of infrastructure throughout its lifetime is becoming a growing concern. Communities creating and submitting ICSPs could benefit from understanding the appropriate criteria to use and how to accurately measure sustainable outcomes.

Infrastructure investment in Canada has not kept pace with the growing population and economy and therefore the nation is currently experiencing an infrastructure deficit (Harchaoui, Tarkhani & Warren. 2004). Harchaoui et al. claim inadequate infrastructure investment over the past five decades could lead to detrimental economic consequences on a national level and provides justification for increased focus on infrastructure funding for Canadian municipalities (Harchaoui, et all. 2004). ICSPs are part of a complex framework to respond to the increased focus on infrastructure projects and funding for Canadian municipalities.

Local and regional demographic issues can greatly impact the success if sustainability planning in a community. Properly addressing the local socio-economic context can be an important step in the planning process. Conroy and Berke state, “The economic, social, and physical development factors making up the local community context can influence local planning for sustainable development” (Conroy & Berke, p. 1393, 2004).

Murray and Greer (1997) state that as traditional community structures begin to shift and sometimes fail, particularly in rural areas, local planning initiatives become more relevant. Local community leaders begin to realize the importance of formal planning mechanisms and understand that these processes may be necessary to ensure long-term health of their regions. Speaking of the United Kingdom planning context, Murray and Greer suggest that the move towards an official planning strategy provides an opportunity to begin to include a broader

sample of the community in the plan making process. The plans will then be better able to address the numerous and complex issues facing a community. (Murray & Greer, 1997).

The many issues facing Canadian municipalities are wide-ranging and impact all five pillars of sustainability. Although multifaceted and often difficult to define and categorize, listed below are many of the essential issues affecting Atlantic Canadians.

Key Sustainability Issues in Atlantic Canada (Statistics Canada, 2014):

Table 1 Atlantic Canadian Provinces by Population

Population (2010)
Nova Scotia - 942, 100
New Brunswick - 753,000
Prince Edward Island - 141,700
Newfoundland and Labrador - 522,000

- Four smallest provinces by size.

Table 2 Population Growth by Province

Population Growth Rate (percent)
Nova Scotia - 0.9%
New Brunswick - 2.9%
Prince Edward Island - 3.2%
Newfoundland and Labrador - 1.8%

- *Four lowest growth rates by province.*

Table 3 Percentage of population classified as rural

Rural Population
Nova Scotia – 406,537 (44.5%)
New Brunswick – 357,072 (48.9%)
Prince Edward Island – 74,683 (55%)
Newfoundland – 213,370 (42.2%)
Canada – 20%

- *Four highest by province in the country and well above the national average.*

Table 4 Unemployment rate by province

Unemployment Rate
Nova Scotia – 8.6%
New Brunswick- 9.3%
Prince Edward Island – 9.2%
Newfoundland and Labrador – 12.0%

- *Four highest rates by province in the country, only Nunavut has a higher unemployment rate.*

Table 5 Median household Income by province

Median Household Income (2008)
Nova Scotia – $61,980
New Brunswick- $59,790
Prince Edward Island – $61,010
Newfoundland and Labrador – $59,320
Canada – $68, 860

- *Four lowest by province in the country, only Nunavut has lower median income.*

Table 6 Average home cost by province

Average Housing Price
Nova Scotia – $214,241
New Brunswick- $158,837
Prince Edward Island – $174,871
Newfoundland and Labrador – $275,927
Canada – $419,699

- *The Maritime Provinces have the lowest residential household price in the country. The Newfoundland and Labrador average is higher but still well below the national average.*

Table 7 Percentage senior population by province

Population Over 65 years of Age (percent):
Nova Scotia – 16.5
New Brunswick- 16.2%
Prince Edward Island – 15.8%
Newfoundland and Labrador – 15.8%
Canada – 14.4%

- *Four highest by province in the country. Nova Scotia has the oldest population in the country.*

Table 8 GDP by Province

GDP by Province (millions)
Nova Scotia – 31,199
New Brunswick- 24,716
Prince Edward Island – 4,096
Newfoundland and Labrador – 21,960

- *The four lowest by province in the country, only the Yukon and Nunavut have a lower GDP.*

(Statistics Canada, 2014)

Table 9 below highlights some of the main sustainably issues facing Atlantic Canadian communities sorted by the five pillars of sustainable development.

Environmental	Social	Cultural	Economic	Governance
Climate change and sea level rise.	Declining population	Loss of traditional way of life (language, music, arts)	Globalization of manufacturing and service industry	Downloading of services and responsibilities from provincial and federal governments
Resource depletion.	Aging population	Lack of opportunity to share and showcase traditional skills and arts.	Decreasing opportunity to meet needs through traditional employment avenues	Lack of funding and capacity to address key areas of sustainability.
	Urbanization		Lack of job opportunities for youth.	
	Inability to provide key services vulnerable portions of society.			

Table 9 Sustainability Issues in Atlantic Canada

Due to the prevalence of these issues in Atlantic Canada and the difficulty many municipalities face regarding financial constraints and limited capacity, the continuation of predictable funding from the federal government is crucial for continued sustainability. The gas tax transfer agreement and the ICSPs are integral to this arrangement.

Berke and Conroy (2004) state that numerous negative consequences occur when socio-economic issues such as those listed above are present during the sustainable planning process. A declining and aging population are particularly relevant as they have found that demographic reality can significantly reduce the sustainability of towns.

Integrated Community Sustainability Plans: Background

The Gas Tax Transfer agreement and thus Integrated Community Sustainability plans are a required document of the 2005 Federal Government's New Deal for Cities and Communities administered by Infrastructure Canada, (Service Nova Scotia, 2007). The agreement called for the transfer of the Federal Gas Tax Funds to all Canadian Provinces and Territories in exchange for provincially mandated and municipally organized sustainability plans and relevant

sustainability projects. As a result, ICSPs were developed in all four Atlantic Provinces. The general requirements and objectives of the Gas Tax Agreement and the required ICSPs remain constant throughout the country whereas provincial requirements and overall structure of these plans varies depending on the provincial context.

At their core, ICSPs are meant to contribute to a holistic planning approach towards sustainability where social, cultural and economic sustainability ideals are considered alongside environmental sustainability (Newfoundland & Labrador, 2009).

These plans and the accompanying Capital Investment Projects are meant as long-term integrated planning documents produced by a wide range of stakeholders in a collaborative and comprehensive manner (Service Nova Scotia, 2007).

ICSPs are meant to provide flexibility for Canadian communities to use funding transfers to address a wide range of local needs and objectives while contributing to increased sustainability in one of the four pillars. Eligible projects as described by the federal government agreement include:

1) Rapid Transit
2) Transit Buses
3) Capital Investments
4) Intelligent Transportation Systems Technologies
5) Water
6) Wastewater
7) Solid Waste
8) Community Energy Systems
9) District Heating and Cooling Projects
10) Active Transportation Infrastructure
11) Capacity Building (Service Nova Scotia,2007)

Under the initial agreement the federal government provided a set of criteria for the content and intent of ICSPs throughout the country. Submitted ICSPs should attempt where possible and relevant to include goals and objectives relating to the four pillars of sustainability; cultural, social, environmental and economic (Prince Edward Island, 2007). Furthermore, where applicable, ICSPs should utilize comprehensive public engagement procedures and ensure inter-municipal collaboration to guarantee high-level input from various stakeholders and a broad and representative set of ideals of a regional scope. Plans should also attempt to ensure proposed projects address sustainability outcomes (Service Nova Scotia, 2007).

To qualify for funding, eligible ICSP projects must directly contribute to the desired outcomes established in the Gas Tax Agreements:

- Cleaner air,
- Cleaner water,
- Reduced greenhouse gas emissions (Newfoundland & Labrador, 2009).

Following the initial Gas Tax Agreement, each province was then permitted the flexibility to create its own framework and specific requirements for the plans produced within its jurisdiction. The Federal Government provided the overall framework and requirements while the provinces specified adjustments to objectives and goals, mandatory vs. voluntary submission, potential document format, and specific funding transfer procedures (Service Nova Scotia, 2007).

The flow-chart below from the Town of Kentville ICSP demonstrates the basic flow of objectives and funding from the federal government to municipalities under the agreement.

Figure 1 Gas Tax Agreement Process - Town of Kentville ICSP (2010)

The Pillars of Sustainability

Sustainability has proven a complex and nuanced term that is misused and sometimes poorly understood. Commonly, the concept is used solely for environmental objectives leading to a dilution of the values of the notion. The most common definition of sustainable development comes from the Brundtland Commission Report, (World Commission on Environment and Development, 1987). The report states that sustainable development should address the three pillars of sustainability which include social, economic and environmental objectives. Following recent trends towards the inclusion of culture in the definition of sustainable community development and to ensure comprehensive planning documents, a fourth pillar of cultural sustainability was added to the requirement for ICSPs throughout Canada (New Brunswick,

20140. In Newfoundland and Labrador, a fifth pillar of governance sustainability was included (Newfoundland & Labrador, 2009a). This pillar although not officially present in the three other provinces was a common theme throughout.

Below is a description of the rationale that informed the inclusion of each sustainability pillar and their associated objectives throughout Atlantic Canada.

Figure 2 Five Pillars of Sustainability *(Newfoundland and Labrador, 2009)*

Environmental

Environmental sustainability can prove difficult to achieve for small towns with little capacity to influence broader trends in deforestation, destructive resource extraction, climate change and sea level rise.

Environmental sustainability in communities throughout Atlantic Canada should include a long-term vision that ensures local environments can support the community today and will be able to provide similarly for future generations. This can be achieved through protecting natural and

vital ecosystems and regulating industry to ensure sustainable and realistic resource use (Brundtland Report, 1986).

To achieve this goal, communities must consider the manner in which they interact with their water, air, forests and all other natural resources. Through sustainable actions and strategies these towns should aim to reduce pollution, limit greenhouse gas emissions, efficiently utilize natural resources and reduce solid waste production (Service Nova Scotia, 2007). Furthermore, environmental sustainability should consider protecting environmental integrity and biodiversity for its intrinsic value.

The federal framework provided to assist municipal decision making includes potential topic areas and project categories that could lead to environmental sustainability:

1. Municipal energy use
2. Sewage treatment
3. Storm water management and control
4. Solid waste management
5. Drinking water supplies
6. Municipal road and transit infrastructure
7. Protection of biodiversity
8. Storm-surge and flood-risk areas (NFLD & Labrador, 2009).

Cultural

Cultural sustainability can be an important yet abstract aspect of sustainable community planning. The concept is often difficult to understand and is less prevalent in daily decision making processes compared with the other pillars. Along with governance, cultural sustainability is not present in the initial definition of sustainability provided in the Brundtland Report (Hawkes, 2005).

Nonetheless, culture and heritage can play a vital role within a community and region and offer a sense of pride of place and a communal morale among residents. Local culture can provide opportunity to socialize, encourage more tourist visits and provide a window into the community's past accomplishments (Halle, Naja &, Beaton, 2013).

Research suggests that community cultural assets when properly supported can lead to increased social and economic benefits. Furthermore, initiatives that encourage youth to become engaged in local cultural projects can help foster a connection and appreciation for the past, their ancestors, and the cultural currents that have shaped communities (Jeanotte, & Duxbury, 2012),

Social

Social sustainability is a complex and nuanced concept that can have long lasting positive effects on a community. A socially sustainable community provides services, facilities and infrastructure that lead to long-lasting improvements in quality of life for community members. This can include health care, employment services, housing opportunities and recreational and social services for youth, seniors and other vulnerable groups (NFLD & Labrador, 2009).

Social sustainability is often prominent in the discussions of decision makers, community leaders and various levels of government. However, it can prove one of the more difficult pillars to adequately address, considering the complex and pervasive problems often at the heart of social concerns. For this reason, research often suggests that social sustainability is best addressed through both a proactive and reactive process, a system that provides ample opportunity to lead healthy and engaging lives while also understanding that key services should be readily available if needed (Alberta Association of Municipal Districts, 2008).

Economic

Economic sustainability is often a central theme of community planning objectives and strategies. Measured through employment rates, income levels and tax revenues the financial health of a community is a top priority of local decision makers (Service Nova Scotia, 2007). Frequently, it is assumed that economic sustainability can directly impact the success or failure of planning for the other pillars. However, sustainable economic activity can be extremely difficult to achieve, especially with the increasing global reality of economic activity. This is particularly true for small and isolated communities with little control over the economic activity of the larger stakeholders necessary to spur growth and ensure long-term employment (Newfoundland & Labrador, 2009a).

For communities throughout Canada, economic sustainability means creating opportunities for small, medium and large business success and ensuring community members have the ability to meet their financial needs. Economic sustainability also means ensuring an adequate revenue flow to support and enhance municipal operations (Alberta Association of Municipal District, 2008).

Governance

Governance was included in the Newfoundland and Labrador guidebook. As ICSPs are a planning document providing guidance to local government on day to day decisions regarding municipal operations as well as long term infrastructure and capacity building projects, a well-

functioning local governance system is crucial. Without a healthy and sustainable governance base all other pillars may suffer (NFLD & Labrador, 2009).

Sustainable governance means the ability to operate and manage municipal operations in a fiscally efficient and adequate manner while using legislative measures to plan proactively for future challenges and needs (Van-Corvers, Kemp & Martens, 2008). Sustainable governance also involves adequate levels of participation in decision making at the local council level, while ensuring that decisions are made in a democratic and fair manner (Van, Corvers, Kemp, & Martens, 2008). Furthermore, many municipalities may understand sustainable governance as having strong citizen engagement and participation in all levels of community decision making while continuously experiencing interest in local elections and other processes of local government (Van, Corvers, Kemp, & Martens, 2008).

Governance sustainability in Newfoundland and Labrador is described as the "ability to manage and operate a municipality" (Newfoundland & Labrador, p. 7, 2009). The Province included governance as the fifth sustainability pillar for various reasons. To foster capacity of municipal administration, strengthen committee capabilities and to ensure adequate planning tools, legislative compliance and fiscal responsibility. The province believes that the four original pillars of sustainability require high levels of governance sustainability and therefore the pillar must be addressed in cooperation with each other pillar (Newfoundland & Labrador, 2009).

The provincial guidebook in Newfoundland and Labrador provides a set of examples for some of the suggested action areas for the economic, cultural, and social and governance sustainability pillars:

1. Economic development
2. Tourism
3. Centres, downtown districts, commercial/industrial districts
4. Affordable housing
5. Public safety
6. Municipal road and transit infrastructure
7. Institutional buildings
8. Festivals and events
9. Heritage buildings
10. Recreation: parks, arenas, playgrounds, sports facilities, etc.
11. Emergency measures: facilities and equipment
12. Protective services: police buildings and equipment

(Newfoundland and Labrador, p. 8 2009)

Integrated Community Sustainability Plans by Province

Each province had the ability and authority to shape the specific approach to ICSPs within their jurisdiction. Changes and adjustments from the federal framework were made in areas such as format, mandatory requirements, funding transfer mechanisms and provincially specific goals and objectives. Many provinces also provided templates to assist each municipality while navigating the complex process. The provincial adaptations have led to noticeable differences in ICSPs outputs which will be discussed in the next section of this report.

Many trends and themes have emerged from the ICSPs in Atlantic Canada. Some trends are common among each province whereas many are regionally specific and do not transcend geographic boundaries. With millions of dollars transferred annually under the gas tax agreement a better understanding of trends and themes within the ICSPs will ideally help to progress sustainable municipal planning throughout Atlantic Canada.

Listed below are the provincial guidelines established and the key findings from the high-level analysis of Integrated Community Sustainability Plans from each province.

Integrated Community Sustainability Plans in Nova Scotia

In Nova Scotia each municipality receiving federal gas tax transfers under the Canada- Nova Scotia Gas Tax Agreement and the Municipal Funding Agreement is required to prepare and submit an Integrated Community Sustainability Plan (Service Nova Scotia, 2007). As of the deadline in 2009 all 54 Nova Scotian municipalities completed and submitted their ICSP.

To facilitate the process, Service Nova Scotia and Municipal Relations entered into individual funding agreements with each municipality within the province. The Municipal Funding Agreements were meant to formalize the gas tax funding transfer terms and conditions and establish the requirements of this funding. Integrated Community Sustainability Plans for every municipality were a requirement of the agreement (Service Nova Scotia, 2007).

Funding for Capital Investment Projects (CIP) which are integrally linked to ICPS was an important portion of the agreement. The agreement stipulates that CIPs should be linked, cross-referenced and integrated with the ICSP, the Gas Tax Agreement established a set of criteria for appropriate and applicable capital expenditures. Sustainable infrastructure development as defined by the Municipal Funding Agreement for Nova Scotia is infrastructure construction,

repair or maintenance that ensures the use of resources and the environment today does not damage prospects for use by future generations (Service Nova Scotia, 2007).

As noted in the agreement, gas tax projects must also address cleaner air, water and reduced greenhouse gases and should also make good use of available brownfield sites and attempt to reduce urban sprawl through policy and land use decisions. Furthermore, ICSPs and CIPs should include projects that will increase availability of public transit and therefore reduce volume of private vehicle trips and improve air quality (Service Nova Scotia, 2007).

The requirements of CIP projects linked to ICSPs are as follows:

- Funds must result in net incremental capital spending on environmentally sustainable municipal infrastructure from April 1, 2005, to March 31, 2010.
- Municipalities will submit a capital investment plan the third year of the agreement.
- Municipalities will develop, over the terms of the agreement, an Integrated Community Sustainability Plan (ICSP), which is required during 2009/2010.
- Municipalities will provide access to records related to funded projects, if requested (Service Nova Scotia and Municipal Relations, 2007).

Funding Allocation to Nova Scotian Municipalities:

FISCAL YEAR	CANADA'S CONTRIBUTIONS
2005-2006	$17,419,000
2006-2007	$17,419,000
2007-2008	$23,225,000
2008-2009	$29,032,000
2009-2010	$58,064,000
2010-2014	$224,000,000
TOTAL	$369,159,000

Table 10 (Service Nova Scotia, 2007)

Through the extension of the funding agreement and crucial to the Integrated Communality Sustainability Planning context, $224 million dollar was pledged by the federal government for the four years between 2010 and 2014 (Government of Nova Scotia, 2009).

To provide guidance to each municipality embarking on the ICSP process the Province established a set of requirements and criteria for submitted ICSPs. The communities were allowed to select the format and approach of their plans while ensuring nine key elements were included (Service Nova Scotia, 2007).

Nova Scotia established nine ICSP Requirements:

- Extensive public participation process (summary required)
- Community vision statement included

- Description of current sustainability issues and topics for the community
- Summary of the community's goals for sustainability
- Description of actions and/or strategies
- Summary of capital infrastructure investments
- Description of sustainable outcomes and other community benefits
- Summary of partnerships and collaborations
- Demonstrated consistency with Statements of Provincial Interest

(Service Nova Scotia, 2007).

ICSPS Format

Understanding that each municipality may have varying abilities and levels of capacity, three possible templates were provided regarding the approach and format of the documents. The three options were meant to provide flexibility and ample opportunity for each municipality to select an approach that best suits their local context and capabilities.

The three choices are outlined below:

1) Existing Municipal Planning Strategy

   For the first option, an existing municipal planning strategy (MPS) may meet the provincial ICSP requirements. Along with the submitted document the municipality must indicate the degree and manner to which the current documents satisfies sustainable planning goals and objectives. In this scenario, the MPS acts as the ICSP and is submitted as such.

2) Single Issue Planning Document

   The second option provides the opportunity to update or adapt a current official planning document that is less comprehensive than the official plan. The document will be amended to address the goals and objectives required for ICSPs and subsequently submitted as the official ICSP.

3) Stand-Alone ICSP

   The third option for Nova Scotian municipalities is to create and submit a new document that will act as a Stand-Alone ICSP specifically created to fulfill the Gas Tax Agreement requirements. This approach can be utilized even in the presence of an existing

RECYCLING

In Clare an old lumber mill building was refurbished to create a waste diversion facility. The first of its kind in the region this project, funded in part by Gas Tax Funds will help the county reduce the amount of material going to their landfill and contribute to a more sustainable community.

(Infrastructure Canada, 2014)

> MPS or if an MPS does not exist. The new document can be adapted as an MPS and in that way flows in a similar yet opposite trajectory to option #1. (Service Nova Scotia, 2007)

In Nova Scotia 54 municipalities have created Integrated Community Sustainability Plans using the framework. Each plan was established through extensive levels of consultation, community assessment and visioning. As a result, each ICSP contains unique goals, objectives and action items that are discussed in more detail in the results section below.

Trends and Themes: Nova Scotia

In total, integrated community sustainability plans were submitted by all 54 municipalities within Nova Scotia. The submitted plans had numerous similarities and differences. Categories such as community context profiles, including all four pillars and writing stand-alone ICSPs without the help of consulting firms were the most common trends across the province. Significant gaps were evident in the objectives and actions regarding cleaner air, cultural sustainability and capacity building.

The typical plan in Nova Scotia was created by a community with between 1,000 to 5,000 residents. Most commonly, ICSPs were stand-alone documents created by the community without consultant assistance. In the majority of ICSPs in Nova Scotia, a detailed community profile and current context description was provided.

Most ICSP submissions throughout the province referenced reducing greenhouse gas emissions most often but actually provided more specific projects related to creating cleaner water. Most commonly, objectives and plans referenced the environmental and social pillars with least attention overall provided to the sustainable cultural pillar.

Outcomes were predominantly qualitative in nature with funding and timeline estimates provided in few ICSPs. The most common definition of sustainability used in Nova Scotia was the Brundtland Commission Report, with the Natural Steps Framework a close second. Slightly more than 16% of documents included direct reference to the sustainability outcomes (clean air, clean water, and reduced ghg) and almost all documents include some indirect reference to both cleaner water and reduced greenhouse gases. The cleaner air outcome is far less common.

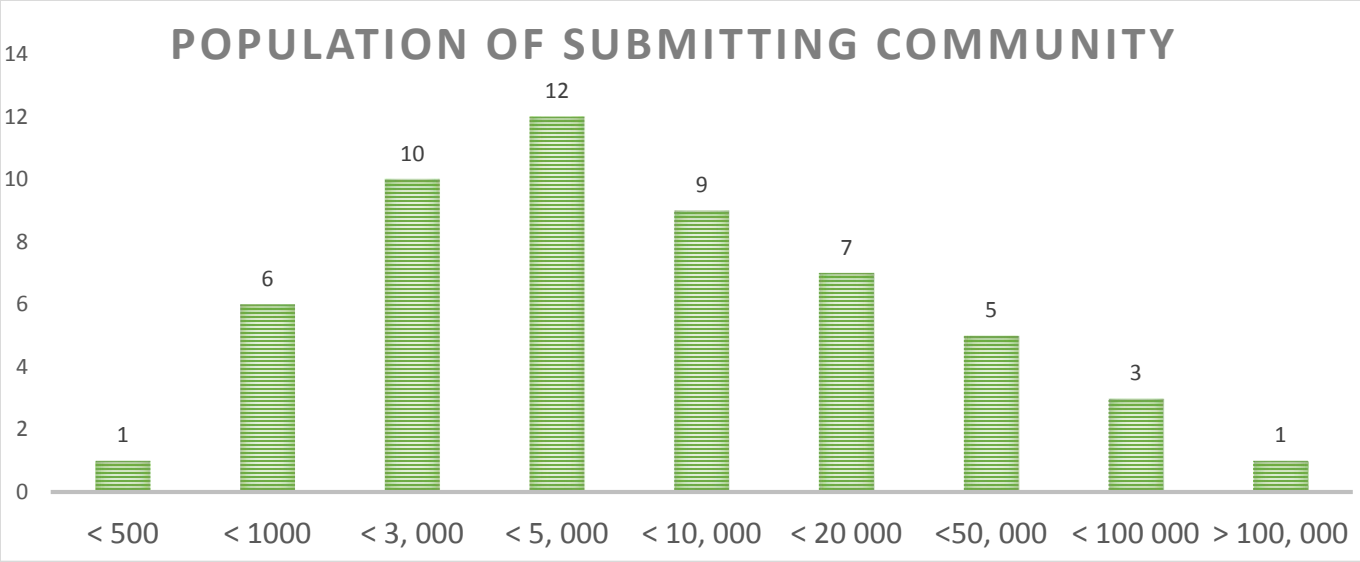

Figure 3

Figure 3 shows population totals in Nova Scotia where 54% of submitting communities had a population below 5,000 people, the smallest reporting community was Annapolis Royal with 444 residents and the largest community was Halifax Regional Municipality with 372,680.

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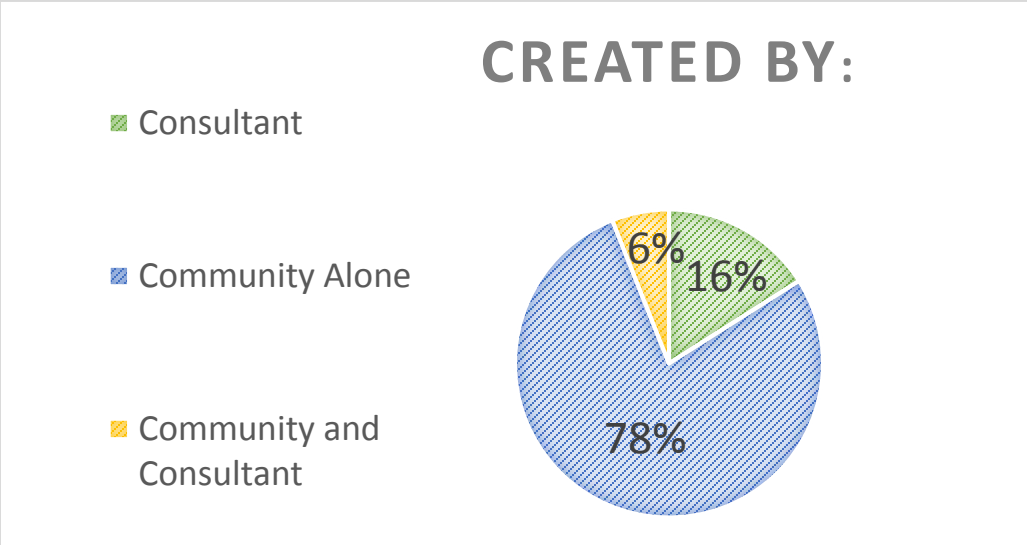


Figure 5

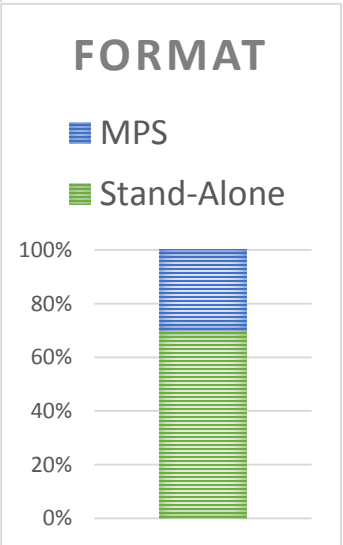


Figure 4

FORMAT

In Nova Scotia only twelve (22%) of communities used a consultant in some capacity. The most common consultants were Stantec with four plans and the Institute of Planning and Design with two plans. Forty-two plans (78%) were submitted by towns without the assistance of a consultant. Furthermore, thirty-six (67%) communities (Figure 4) submitted stand-alone documents while the remaining eighteen (33%) provided an ICSP integrated in some way with their municipal planning strategy.

SUSTAINABILITY OUTCOMES & PILLARS

Regarding the four pillars of sustainability in Figure 4 and the infrastructure and capacity building projects in Figure 5, 57 % of plans provide only qualitative outcome measures with 37% including funding estimates. In total 10% of plans did not directly reference the sustainability pillars and only 16% of plans included direct reference to the outcomes of cleaner air, water and reduced greenhouse gas emissions.

In those plans that did mention the pillars, environmental and economic sustainability led in the majority of plan objectives. Objectives under the cultural pillar were by far the least commonly included. In fact cultural sustainability did not lead any plans with 10% of plans combining culture with another pillar or excluded it all together.

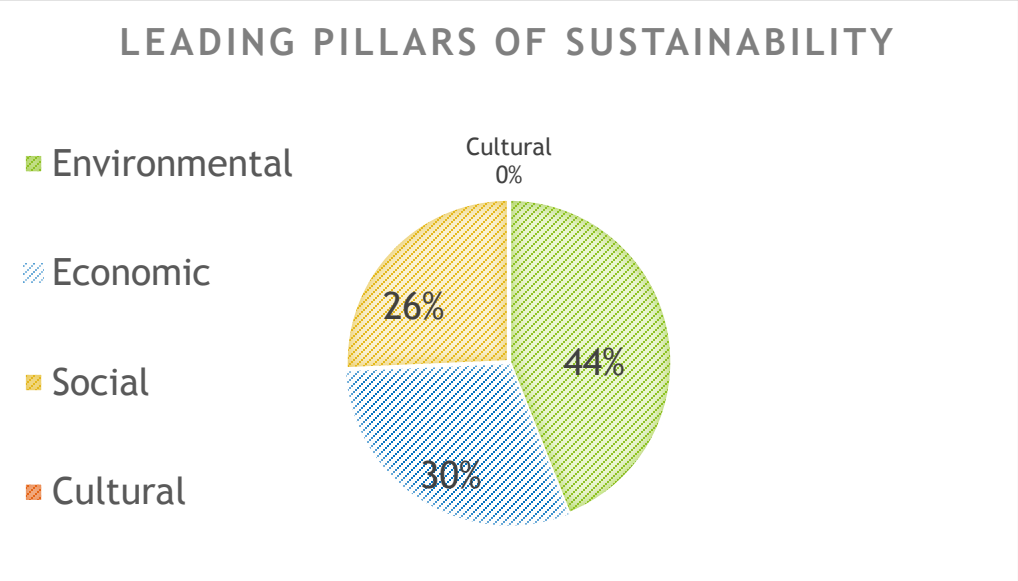


Figure 6

As mentioned previously, cleaner water objects are included in some manner in almost all ICSPs. In terms of proposed projects cleaner water is also the leader (Figure 5). Reduced greenhouse gas emissions is also fairly well represented throughout the province. The cleaner air outcome, however, is far less commonly discussed.

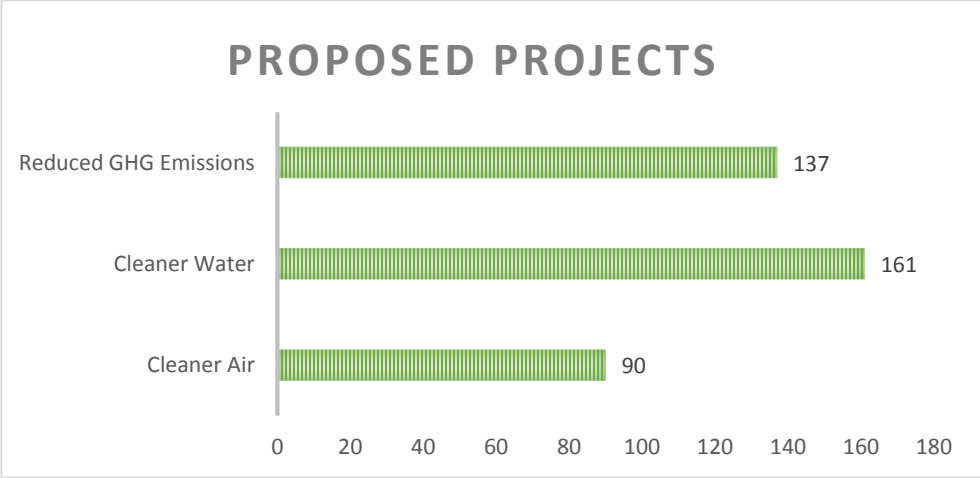


Figure 7

Timeline

As illustrated in Figure 8 below, projects range from 4 to 150 years, with 20 years as the most common time frame.

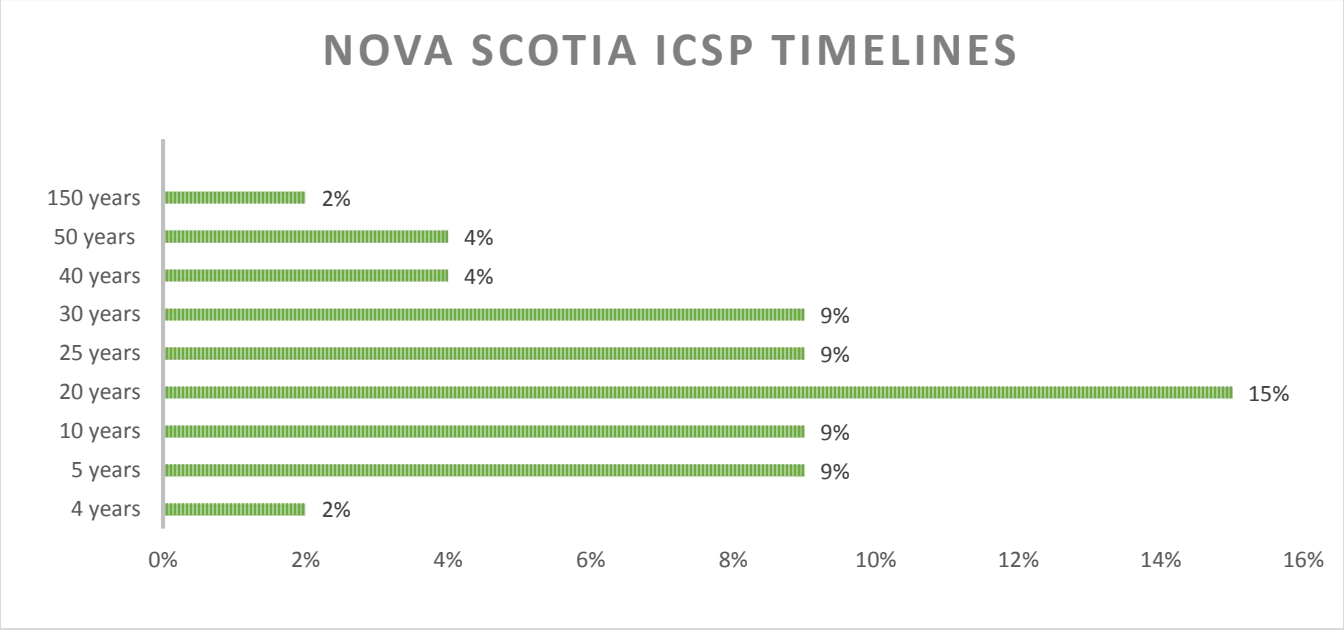


Figure 8

Integrated Community Sustainability Plans in Newfoundland and Labrador

In Newfoundland and Labrador the province through the Department of Municipal Affairs requires that each municipality sign a Local Government Tax Funding Agreement and submit an ICSP detailing its strategic plans (Newfoundland and Labrador, 2009a). Many smaller or rural communities did not previously have official community plans and therefore ICSPs in Newfoundland and Labrador were required to have five-year timelines to better align with the official municipal planning strategy process (Newfoundland and Labrador, 2009a).

Newfoundland experienced issues with low participation rates and ultimately extended their deadline numerous times to allow municipalities more time to complete and submit ICSPs. With 99 plans submitted from communities ranging in size and capacity, the government is currently evaluating the process to determine what steps could be taken to assist municipalities in submitting planning documents in the future (Newfoundland and Labrador, 2009b).

There are 9 general requirements in the agreement between the province and each municipality (Newfoundland and Labrador, 2009b). Although the municipalities are given flexibility to determine the approach and content of their plans the province provided the guidelines to ensure key elements are met. The Municipal Funding Agreement to transfer gas tax funding to each municipality states that Integrated Community Sustainability Plans should include:

- Public participation in the decision making process.
- Consideration for the five Pillars
- Consideration of any relevant land use plans or policies in the appropriate jurisdiction.
- Integration with or consideration of any relevant existing community or regional plans.
- Identified goals and specific actions to accomplish required outcomes over a five year timeline.
- Recognition and identification of the fiscal requirements and realities
- Collaboration with neighbouring municipalities, communities or regional entities where appropriate.
- Description of the sustainable infrastructure projects that will be developed with Gas Tax funding, as well as those projects that impact ICSP goals and actions.
- Some kind of monitoring and evaluation process to ensure the document is always relevant (Newfoundland and Labrador, 2009a).

The funding transfer amounts for Newfoundland and Labrador were originally established in the 2005 agreement and subsequently renewed and updated as part of the agreement extension.

This renewed funding commitment is crucial in ensuring reliable funding to towns and communities across the provinces. A basic breakdown of the funding is provided below.

Funding Estimate 2006 to 2014 for Newfoundland and Labrador:

FISCAL YEAR	CANADA'S CONTRIBUTION
2006-2007	$19,740,000
2007-2008	$13,160,000
2008-2009	$16,450,000
2009-2010	$32,900,000
2011-2014	$124,000,000
TOTAL	$206,250,000

Table 11 (Newfoundland and Labrador, 2009a)

Newfoundland and Labrador provided three separate options for ICSP format and approach for each municipality. These three options are meant to ensure flexibility for the municipalities to approach the process in a way that best meets their current planning framework and available capacity (Newfoundland and Labrador, 2009b).

The three potential options include:

1) Official Municipal Plan

    In this option the municipality can either submit their existing Municipal Plan as the ICSP or can create an ICSP that will be formalized as a statutory Municipal Plan as part of the process. The provincial framework notes that this options although most costly also ensures the most comprehensive planning document and one that is legally binding, unlike other forms of ICSPs ((Newfoundland and Labrador, 2009b).

2) Stand-Alone ICSP

    Creating a stand-alone ICSP allows the community to specifically and thoroughly address the five pillars of sustainability in a comprehensive manner. This approach is less costly but will serve as a guiding document rather than official, statutory plan (Newfoundland and Labrador, 2009b).

3) Collaborative ICSP

    - Newfoundland and Labrador also allowed communities to join forces and collaborate on their ICSP. This process is regionally comprehensive which ensures a broader range of issues to be addressed. The most cost effective path, this option was particularly applicable for smaller communities who could collaborate and best utilize community resources (Newfoundland and Labrador, 2009b).

4) Although not specifically mentioned as an option within the guidebook, some municipalities in Newfoundland and Labrador submitted ICSPs as amendments or explanations of previously existing MPS.

Similar to other provinces, Newfoundland & Labrador requires each ICSP to include citizen engagement and participation in the overall direction of the plan. These decisions and actions should consider each of the four key sustainability pillars while also providing guidance for sustainability in the community's local governance procedures. If possible, the planning process should collaborate, communicate and align with the other regional and provincial sustainable objectives in the province (Newfoundland and Labrador, 2009a).

Furthermore, where relevant and applicable, each community should ensure its ICSP is generally in accord with current official community policy and land use bylaws and plans. As mentioned previously, the province also recommends each ICSP plan for a five year timeframe to align best with the official planning process (Newfoundland and Labrador, 2009a).

Regarding the goals and projects within community ICSPs, the provincial framework requires each project and objective is explained in a comprehensive and realistic manner, considering both fiscal and temporal realities.

Finally, to ensure ICSPs are easily adapted to changing realities, the plans should include monitoring and evaluation processes that will help to ensure a level of flexibility moving forward (Newfoundland and Labrador, 2009b).

Trends and Themes: Newfoundland and Labrador

ICSPs were submitted by 99 towns, villages and cities in Newfoundland and Labrador. The average population of the communities submitting ICSPs in the province was low with 59% of

ICSPs submitted by communities with less than 1,000 people and 90% of ICSPs from communities with less than 5,000 residents in total (Figure 7).

In Newfoundland and Labrador, the smallest town submitting an ICSP was Little Bay Island with 97 people and the largest was St. John's with 100,645.

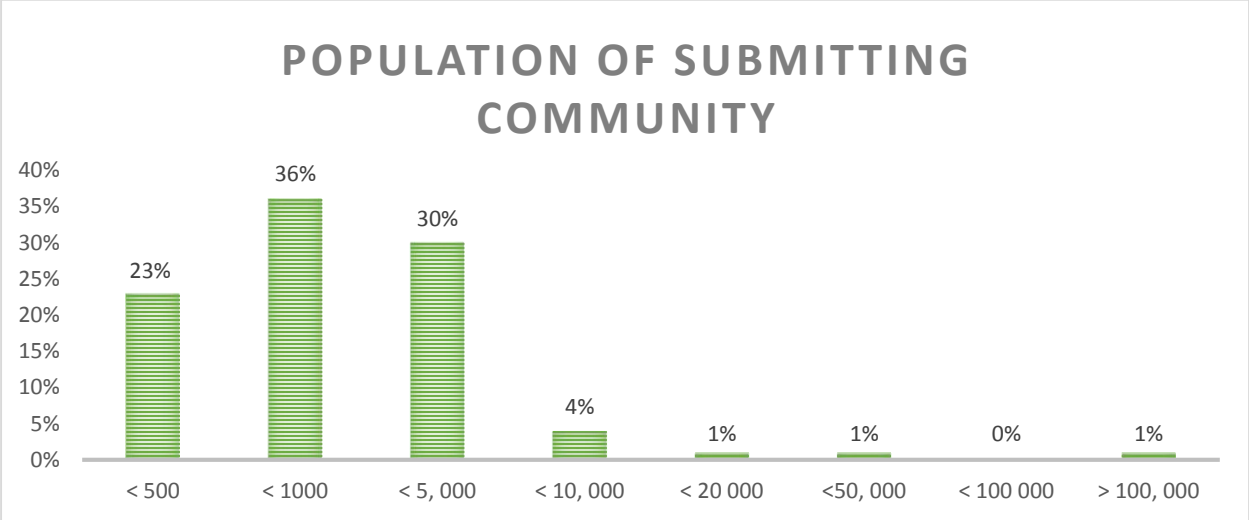


Figure 9

There were also 21% of plans submitted in Newfoundland and Labrador with collaborative efforts between two or more communities. Collaborative ICSPs were submitted most often by small communities. 71% of all collaborative ICSPs in Newfoundland and Labrador were submitted by communities with collective population below 2,000 people. The largest total population of a collaborative plan was 6,404 resident from four towns.

Throughout the province, 90% of communities included a comprehensive town profile and visions statement to help ensure adequate context and understanding was provided when embarking on long-term planning for sustainability issues.

In Newfoundland and Labrador 49 (49%) of ICSPs were created solely by a consulting firm and 11 (11%) were created in partnership between a community, consultant and regional economic board. Only 33 (33%) of documents were created solely by the submitting

DRINKING WATER

Harbour Grace has used a portion of their Gas Tax Funding allocation to improve drinking water quality in town. Due to an outdated treatment system leading to poor water quality, the town decided to move forward with plans to replace their water chlorination system to ensure clean drinking water for town residents for years to come.

(Infrastructure Canada, 2014)

community (Figure 11).The list of consultants hired throughout the province to create ICSPs contains over 23 different firms with CBCL (13%), Edwards & Associates (9%) and Plan-Tech (9%) creating the most documents throughout the province.

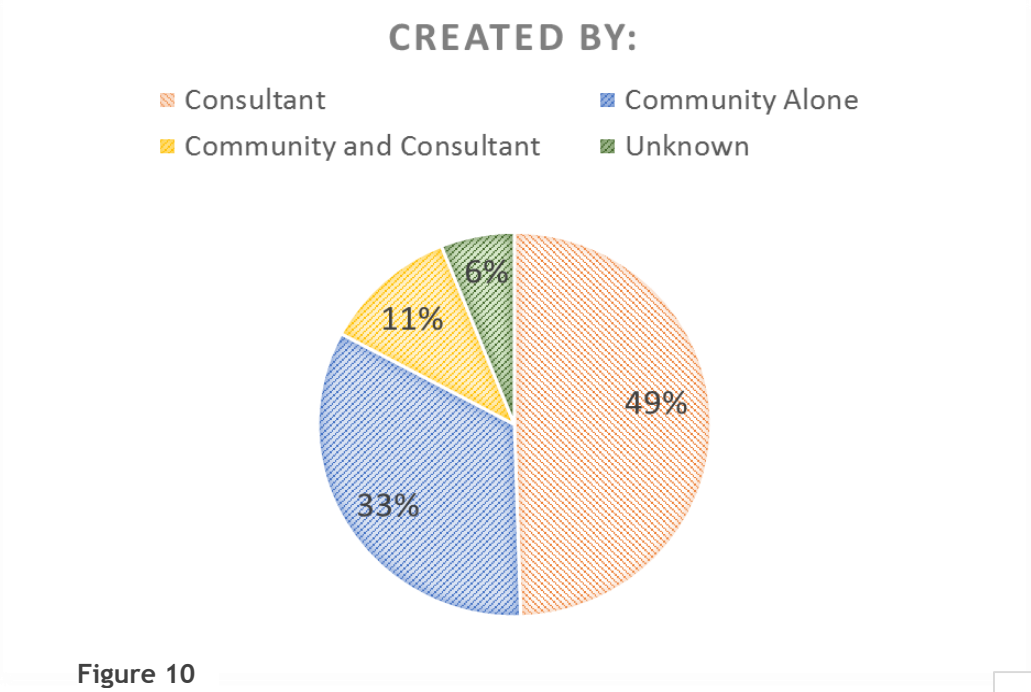


Figure 10

As seen in Figure 12 almost 20 (20%) of municipalities in the province used the ICSP process to either create a new municipal planning strategy or highlight/update an existing document. The remaining 80% created stand-alone ICSPs to fulfill the requirement under the gas tax funding agreement.

Direct financial ramifications of the proposed projects were provided in 67% of ICSPS. Of the projects, actions, objectives and goals stated within the ICSPs only 37% of all document included direct reference to the three mandated sustainability outcomes. Furthermore, 72% of documents in Newfoundland and Labrador provide only qualitative measures of their objectives. Meaning most plans have yet to establish empirical evaluation benchmarks for their sustainable outcomes.

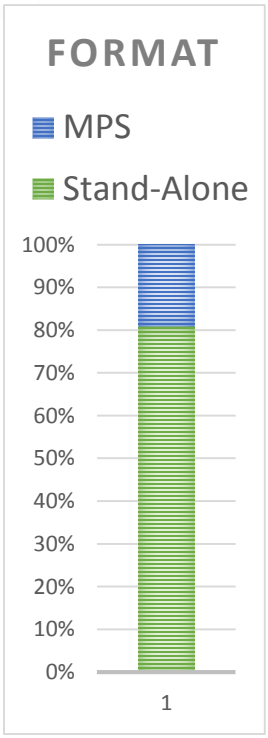


Figure 11

In the province 69% of municipalities do not provide a clear explanations of sustainability for their town and of those that did, the Brundtland Commission's Report was most often cited. Furthermore, 12% of plans did not provide a timeline for implementation of evaluation of the goals and actions established in their plans.

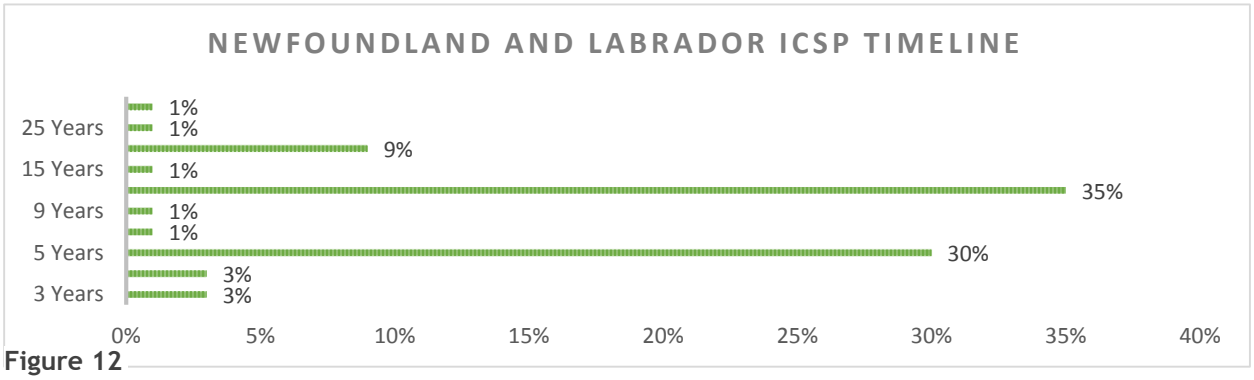


Figure 12

Of those communities that did provide a timeline, 40% were for a period of five years or less and 75% were ten years of fewer (Figure 13).

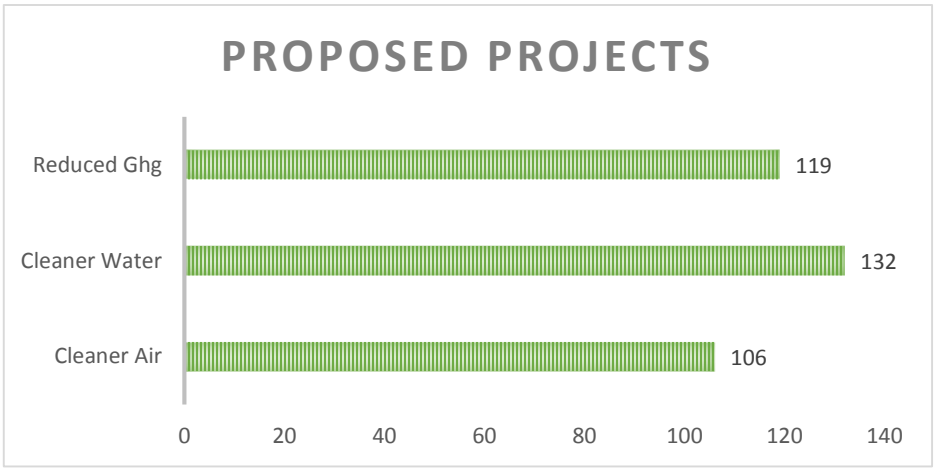


Figure 13

WASTE MANAGEMENT

A central waste management system was constructed in Norris Arm to provide administration , maintenance , drop-off and weigh scale services to over 100 towns in the region. This state of the art facility was constructed using technology to reduce air and water contamination and expand to recycling and compost services in the future.

(Infrastructure Canada, 2014)

Without a clear definition of what sustainability means to these small towns, and with shorter timelines, obstacles could occur in successful implementation of some of the more ambitious objectives.

Of the three sustainable outcomes required of infrastructure and capacity building projects (Figure 13) cleaner water and reduced greenhouse gas emissions were both referenced consistently within the submitted plans. As in the other provinces, cleaner air was referenced in fewer plans and had fewer projects associated with it.

Newfoundland and Labrador decided to include governance as a fifth pillar of sustainability for ICSPs created within the province. Several trends emerge following the initial documentation of the pillars in all 99 plans. To begin, 9% of plans did not include any direct reference to the required five pillars. In some cases the communities selected their own unique set of themes and objectives to address and in others the plan lacked any specific reference to sustainability intentions.

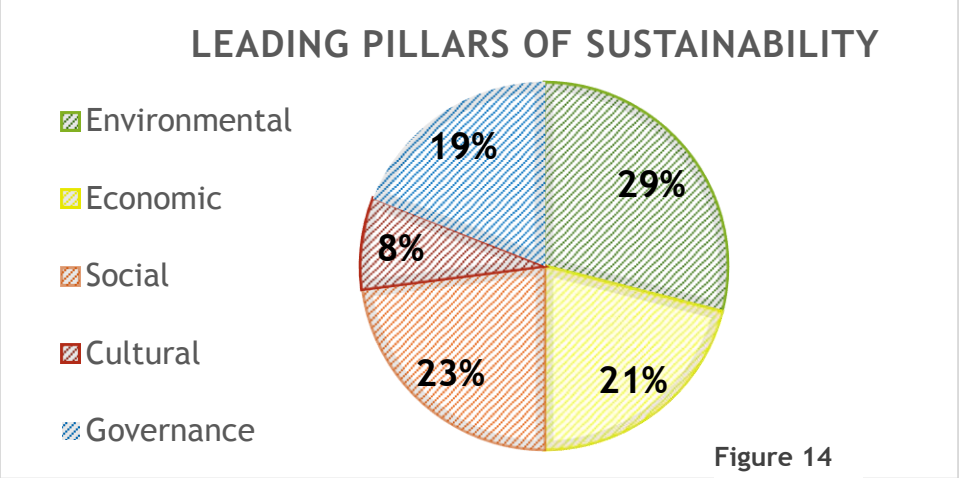


Figure 14

Cultural and governance sustainability were not mentioned in six plans whereas social sustainability was omitted four times. Cultural sustainability was combined with the social pillar on two occasions with most of the new section focusing on social issues. Environmental sustainability led all pillars but was missing in one plan. No plans excluded economic sustainability (Figure 14).

Integrated Community Sustainability Plans in Prince Edward Island

Under the Capital Investment Plan Funding Agreement (CIPFA), the province has requested 9 municipalities complete and submit ICSPs while other smaller towns or unincorporated regions will be included in a provincially prepared ICSP (Prince Edward Island, 2011).

The nine communities that must prepare an ICSP are:

- Charlottetown
- Summerside
- Stratford
- Alberton
- Cornwall
- Georgetown
- Montague
- Kensington

- Souris

In the first five years of the Agreement, the Federal Government pledged 37.5 million gas tax dollars to Prince Edward Island. This deal was recently extended with an additional 60 million dollar pledged (Prince Edward Island, 2011).

For Prince Edward Island, the Gas Tax Transfer allocation per year was:

FISCAL YEAR	CANADA'S CONTRIBUTION
2005-2006	$4,500,000
2006-2007	$4,500,000
2007-2008	$6,000,000
2008-2009	$7,500,000
2009-2010	$15,000,000
2010-2015	$60.000.000
TOTAL	$97,500,000

Table 12 (Prince Edward Island, 2011)

Prince Edward Island has not established mandatory formats for ICSP creation. Rather, the province has allowed flexibility regarding the approach each community may use. Communities with an established and comprehensive Official Plan (OP) are permitted to submit that document as their official ICSP, providing it adequately covers the mandated categories. If an OP does not completely address these items, a community may amend its document in a way that ensures the requirements of the CIPFA are met. In communities that currently do not have an Official Plan, a Stand-Alone ICSP is permitted. Such newly created documents can later become Official Plans if town council and stakeholders decide on that course of action. Of course, Stand-Alone ICSPs must also adhere to the objectives and requirements of the gas tax transfer agreement (Prince Edward Island, 2007).

By allowing a level of flexibility, the province hoped to enable a comprehensive and valuable document that can aide in increased government and town capability and through this planning process, greater capacity to address issues of economic, social, cultural and environmental sustainability in the future (Prince Edward Island, 2007).

PUBLIC TRANSIT

Cornwall recently invested in a new 35 person public transit bus to improve transportation linkages between Charlottetown and Cornwall. As Charlottetown is a major hub for the region this initiative will assist workers, shoppers, seniors and all users make the commute between the two communities. Partially funded under the Gas Tax Agreement, this project will contribute to increased mobility, cleaner air and reduced greenhouse gas emissions.

(Infrastructure Canada, 2014)

Similar to the other Atlantic Provinces, Prince Edward Island provided a series guidelines for the nine communities to follow when creating its ICSPs:

- Outline the ICSP process.
- Create a shared understanding of sustainable community success.
- Determine and analyze strategic areas of community success and developing actions/strategies.
- Establish procedures for ongoing monitoring and implementation.
- Establish ongoing partnerships and collaboration methods (Prince Edward Island, 2007).

As part of the agreement with municipalities throughout the Island, the province has mandated that Integrated Community Sustainability Plans produced under the Gas Tax Agreement must adhere to a number of broad requirements. Prince Edward Island has decided on five key categories that must be comprehensively addressed within the ICSP. Each plan must address the four pillars as in other provinces. Also, the plans should utilize extensive public participation processes and aim to maximize the community benefits of the infrastructure produced through the agreement. Finally, ICSPs in Prince Edward Island should demonstrate efforts made to facilitate collaboration with other municipalities to achieve sustainable initiatives (Prince Edward Island, 2007).

Although the province has provided guidance regarding the development and structure of ICSPs, it is the communities, their councils, businesses, citizens and other stakeholders that must deliberate and determine the direction the document will take.

ICSPs in Prince Edward Island, as in the other Atlantic Provinces are not statutory plans and do not hold legal weight regarding accountability. As the planning process in Prince Edward Island is not mandatory, many communities do not have Official Plans or Land Use Bylaws. ICSPs plans are simply meant to allow communities to undertake a comprehensive planning process (maybe their first) and begin to plan for more sustainable futures (Prince Edward Island, 2007).

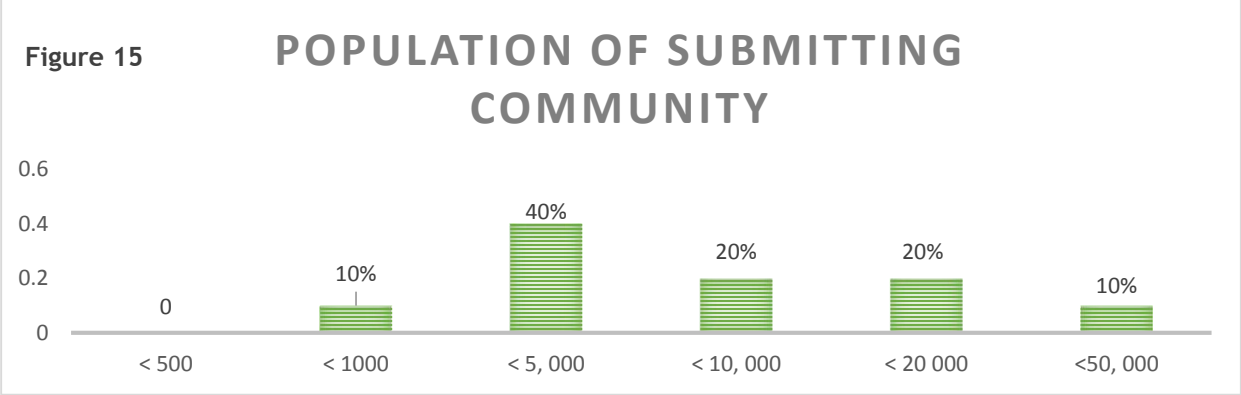
CAPACITY BUILDING

Summerside, Cornwall, Stratford and Montague choose to pool funding to finance a capacity building project on local infrastructure assets. Using aerial imagery and GIS programming the towns created an inventory of infrastructure such as parks, waterways, roads, buildings, sidewalks and fire hydrants. This new information was used to better plan for maintenance and upgrades for each town.

(Infrastructure Canada, 2014)

Trends and Themes: Prince Edward Island

In Prince Edward Island, a total of 10 ICSPs were produced. Most communities submitting ICSPs had populations between 1000 and 5000 residents. The smallest reporting town was Georgetown with a population of 634 and the largest Charlottetown with 32,174 (Figure 15).



Only 40% of plans submitted in the province included some form of community context analysis and 60% did not define sustainability within the plan. Furthermore, 50% of documents did not include reference to the sustainability outcomes for their projects and did not provide funding estimates. The majority of proposed timelines for the ICSPs from Prince Edward Island were less than 7 years and all plans had proposed timelines of 20 years of less (Figure 16).

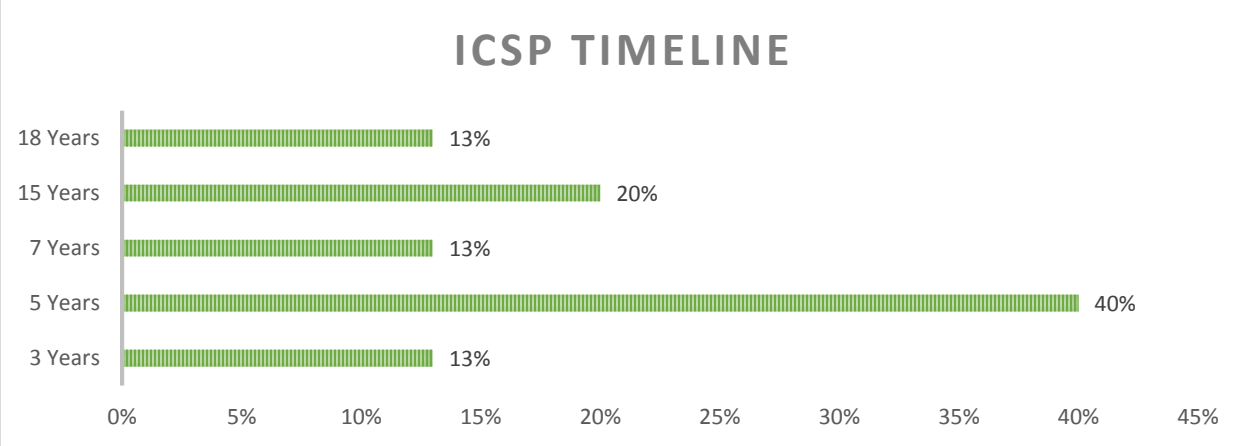


Figure 16

Six (60%) of ICSPs were created by only a consultant while one (10%) plan included both community and consultant and 3 (30%) were created by the community alone (Figure 17). The most common consultant was P. Woods and Associates with involvement in 40% of the plans.

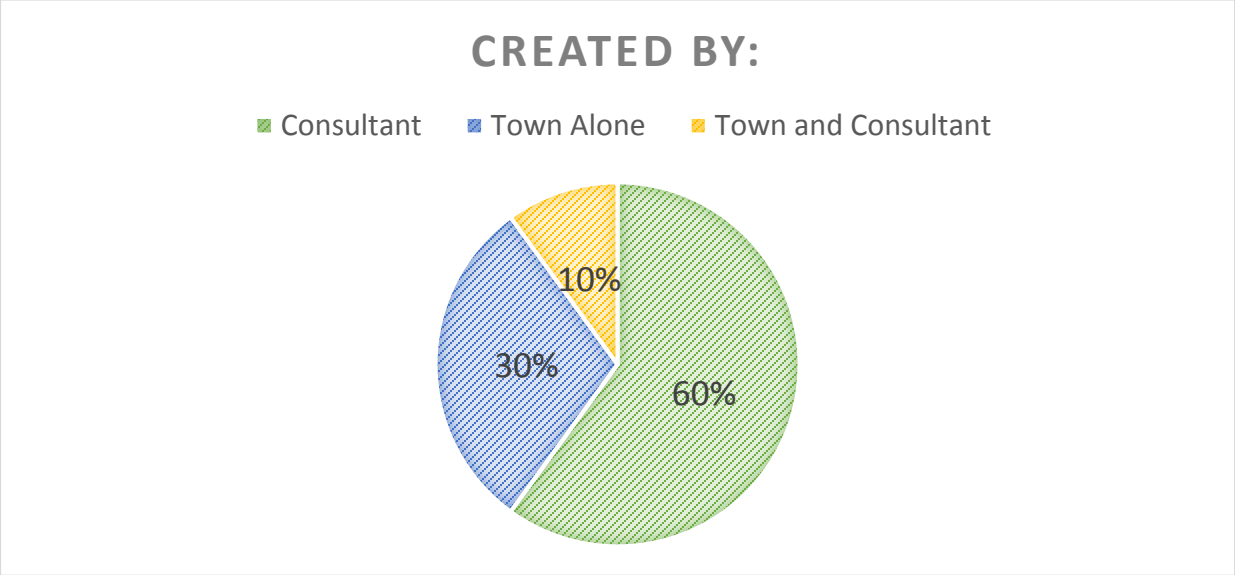


Figure 17

Of plans that referenced the sustainable outcomes, reduced greenhouse gas emissions received the most projects and cleaner air the least, with only half as many proposed projects (Figure 18).

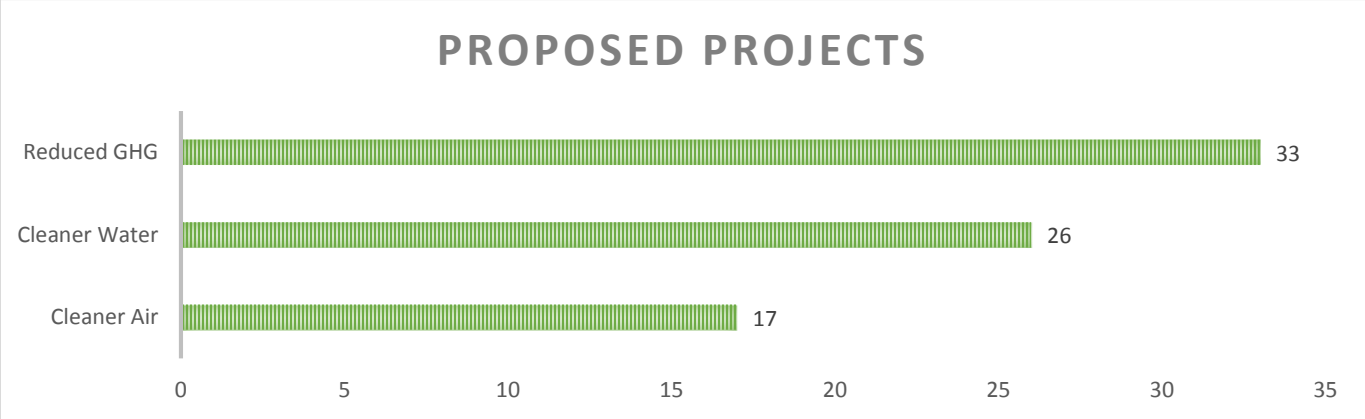


Figure 18

Leading in 33% of ICSPS, Environmental and Social sustainability were the most referenced pillars in the 10 plans submitted, Cultural and Economic led 17% of plans. The Governance pillar was added in five of the plans but was not the leading priority when referenced. As in the other provinces, cultural sustainability was omitted or combined in 40% of plans submitted on the island (Figure 19).

Considering the format of ICSPs on the island in Figure 20, six (60%) were MPS amendments and revisions and four (40%) plans were submitted as stand-alone documents.

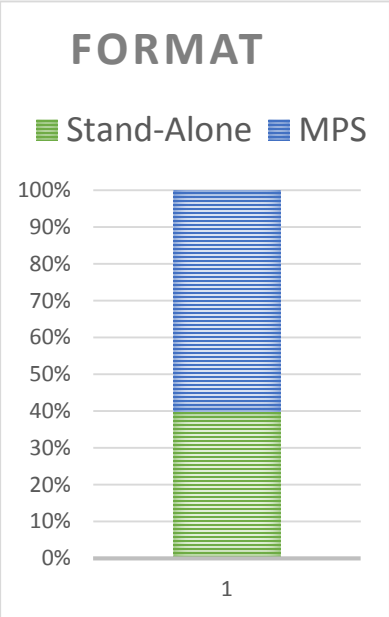


Figure 20

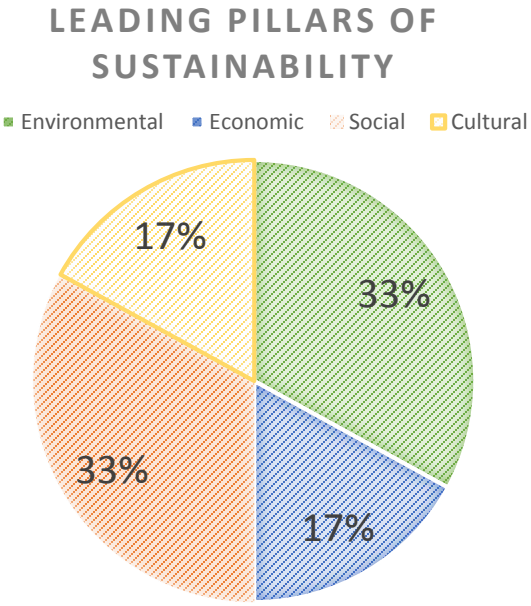


Figure 19

Integrated Community Sustainability Plans in New Brunswick

The province of New Brunswick has incorporated the strategic implementation of ICSPs within the mandate of the Community Economic Development Agencies. These 15 agencies are responsible for economic growth and financial matters throughout the province and are now responsible for the oversight of ICSPs. However, individual towns are also permitted to submit ICSPs and no publicly available database exists for the total number of ICSPs created within New Brunswick (Province of New Brunswick, 2013).

The provincial websites states that a guidebook exists to assist towns when creating a sustainability plan. However these guidelines are currently not posted online and no response was received from the provincial government department responsible.

Multi-Use Trails

Fredericton has allocated a portion of their gas tax funding to assist in the creation of a series of recreational trails throughout the town. This project included converting unused railway lines into over 14.8km of trails for various recreational and transportation used. This projects helps increase regional tourism numbers and reduce air pollution in the area.

(Infrastructure Canada, 2014)

Furthermore, the website for the Community Economic Development Agencies does not provide any information regarding the creation of ICSPs for their jurisdictions (New Brunswick, 2014).

Although the guidebook was not available, a government website briefly describes the provincial objectives for sustainability plans. New Brunswick describes a sustainability plan as a "community management plan that aims for environmental, social and economic sustainability in a livable community. It is integrated and inclusive and action oriented" (New Brunswick, n.p., 2013). Cultural sustainability is noticeably absent from the description but was included in the 2014 gas tax funding agreement (New Brunswick, 2014).

Sustainability plans in New Brunswick should include community vision statements and goals and objectives that will lead to more sustainable operations of each community. In New Brunswick a sustainability plan should also incorporate extensive community consultation and engagement processes to ensure a significant portion of community stakeholders are given the opportunity to contribute to the overall outcome. The plans should also be reasonably consistent with current and future planning strategies and provide actions and initiatives that are "specific, measurable, achievable, relevant and time-bound" (New Brunswick, n.p. 2013).

Similar to other provinces in Atlantic Canada, New Brunswick states that capital investment projects included in sustainability plans should either contribute to environmentally sustainable infrastructure projects or initiatives contributing to local governance capacity. The government defines sustainable infrastructure projects as those that improve drinking and waste water, reduce solid waste, improve energy efficiency and build local roads and bridges. The requirement for cleaner air, cleaner water and reduced greenhouse gas emissions projects specifically are not present within the provincial guidelines (New Brunswick, 2013).

The gas tax funding transferred from the federal government to New Brunswick is as follows.

Table 13 (New Brunswick, 2013)

FISCAL YEAR	CANADA'S CONTRIBUTION
2005 – 2009	$116,000,000
2010 – 2014	$178,000,000
TOTAL	294,000,000

Trends and Themes: New Brunswick

A total of seven ICSPs were analyzed from New Brunswick, difficulty locating the remaining documents and an uncertainty of the final total count of plans submitted created difficulties in this process.

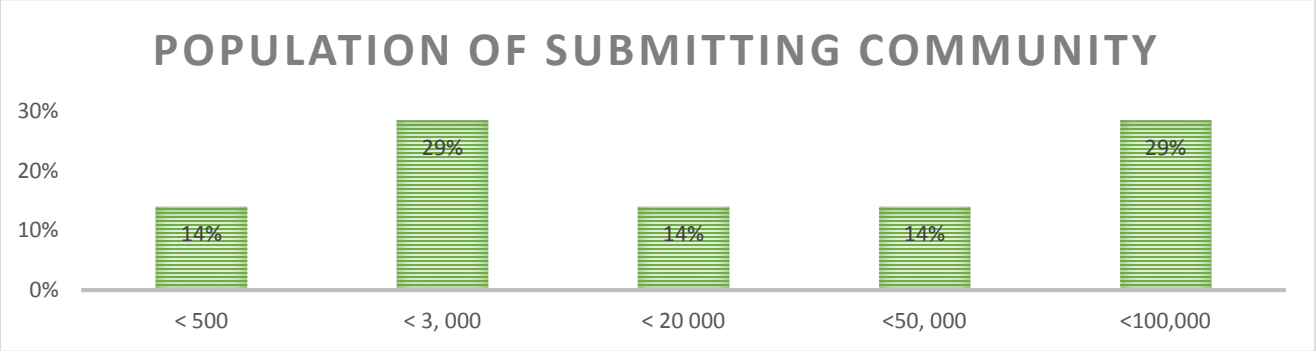


Figure 21

The smallest reporting town in the province was Port Elgin with 451 residents and the largest was Moncton with 64,128 citizens at the time of submissions (Figure 21).

All of the plans analyzed in the province were stand-alone with 86% of documents created with some level of consultant involvement (Figure 22). The most common firm used throughout the province was Dillon Consulting.

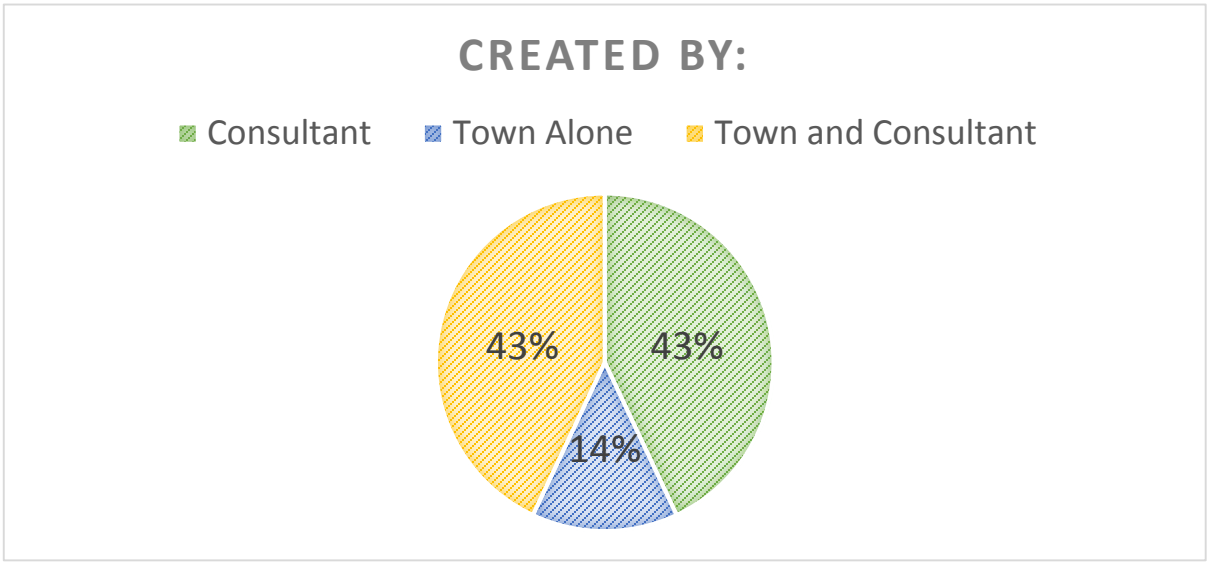


Figure 22

Only one community provided direct reference to sustainable infrastructure and capacity building outcomes; reduced greenhouse gas emissions. Other towns referenced projects regarding economic growth and water main extensions but refrained from connecting specific projects to sustainability goals.

Many communities included themes and categories without referencing the sustainability pillars. In fact, 57% of ICSPs in New Brunswick did not mention the four pillars of sustainability at all but decided to include other themes and categories. Of the three plans that did include objectives and goals referencing the sustainability pillars, environmental and social objectives were the most common.

While 57% of plans provided quantitative measures for the success of their projects, funding estimates were only provided in one plan.

Improving Water Services

Grand Falls has used a portion of their gas tax funds to support construction of new water mains. These projects have increased the ability of Grand Falls to provide reliable and adequate water service to portions of the town previously underserved. These improvements ensure disruptions in service are minimal and help to improve water quality for all residents.

(Infrastructure Canada, 2014)

The Brundtland Commission's definition of sustainability was referenced most often, with 48% of ICSPs from New Brunswick, in fact, this was the only definition used in the province.

In New Brunswick, 71% of plans provided timelines that were 20 years or longer. This is by far the highest number of plans with an extended timeline of any of the four provinces.

The Findings: Trends and Gaps

Trends: Atlantic Canada

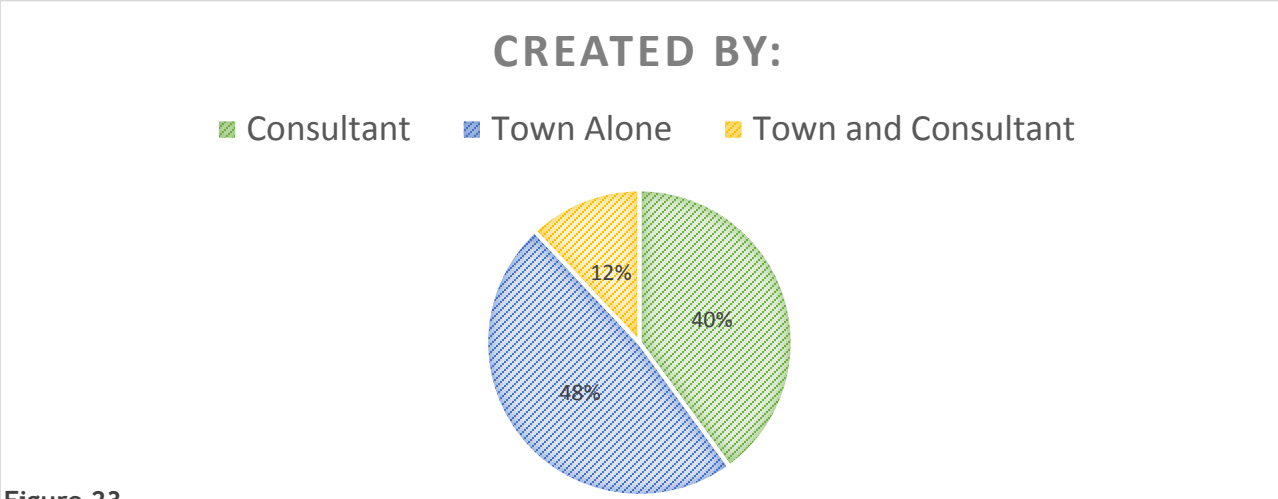


Figure 23

In total, 180 ICSPs were submitted throughout Atlantic Canada. Of those, 170 were located and analyzed.

The typical ICSP across Atlantic Canada was created for a community between 1,000 and 5,000 residents as a stand-alone document (Figure 24).

Furthermore, Atlantic Canadian ICSPs were most often created by a consultant with 52% of all ICSPs written either entirely or in part by a contracted consulting firm (Figure 24).

Although a definition of sustainability was included in less than 25% of ICSPs, most addressed all four pillars in a fairly comprehensive manner. Only 15% of plans did not include any reference of the required sustainability pillars.

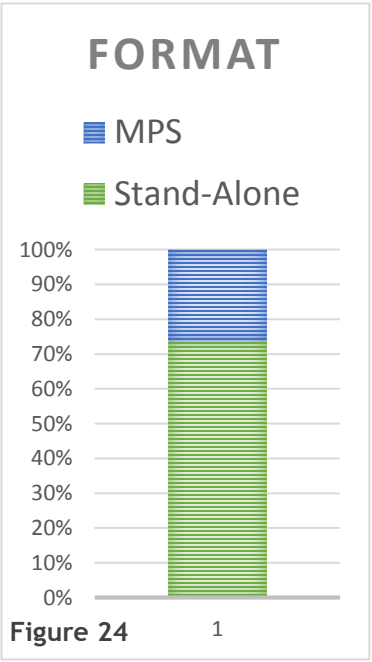


Figure 24

Environmental sustainability was the leading pillar in the most plans, followed by social and economic sustainability respectively (Figure 29). Leading in only 6% of plans, cultural sustainability was the least common pillar. Furthermore, cultural sustainability was excluded or combined with another pillar in 10% of plans.

The sustainability outcomes required under the federal gas tax transfer agreement were included in only 34% of plans. Throughout Atlantic Canada, there were 213 cleaner air projects, 290 reduced greenhouse gas emission projects and 319 cleaner water projects (Figure 27). Project timelines ranged from 3 to 150 years with over 60% of timelines for less than 10 years.

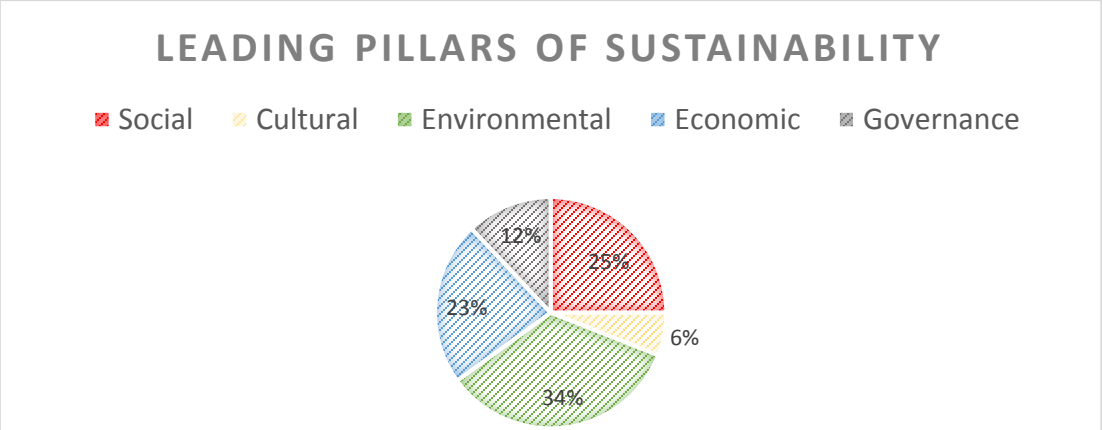


Figure 25

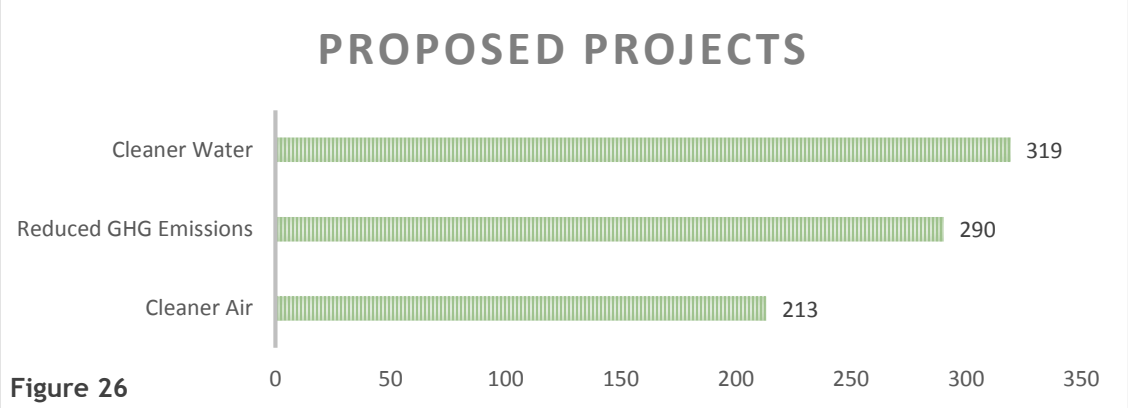


Figure 26

Although each community addressed sustainable development in their own specific manner, many common goals and objectives emerged throughout ICSPs in Atlantic Canada. Table 13 on the following page describes many of these projects with the corresponding pillar.

Common Themes and Objectives

Table 14

Economic	Environmental	Social	Cultural	Governance
Promote economic prosperity	Adaptation to climate change	Increased educational opportunity	Promote heritage preservation	Open communication with citizens
Local energy production	Reduction of GHG emissions	Labour development	Encourage cultural diversity	Increased interest in municipal politics
Technological innovation	Water quality protection	Adequate social services	Historical interpretation and preservation	Increased interest in candidacy for municipal politics
Farmland protection	Municipal and community energy efficiency	Adequate health Services	Support museums and arts centres	Inter-departmental cooperation
Resource Sector development	Protection of local wilderness and wildlife	Employment opportunities	Cultural education opportunities.	Inter-municipal cooperation
Downtown revitalization	Public Knowledge and Awareness	Provision of recreational activities for youth and seniors	Funding for cultural and recreation spaces	Completion of municipal planning strategies and land use bylaws.
Food Security	Land Use Planning	Housing availability		Responsible and efficient municipal operations
Support local business development	Regional environmental planning cooperation	Adequate provision of essential services		Fiscally responsible municipal budgeting
Create sustainable local tax base	Clearer air	Food security		
Attract new businesses to locate in town	Cleaner water	Trail construction and maintenance		
Encourage increased employment	Formal protected area designation	Increased transit and other transportation options		

When proposing specific projects to address one of the three sustainable outcomes, many municipalities used a similar approach. As noted in the list below, infrastructure related to improving water conditions, reducing waste and repair, maintenance and construction of roadways were most commonly proposed across all four provinces.

Common projects and actions

1) Drinking water treatment plants.
2) Wastewater/sewage treatment plants.
3) Solid waste management.
4) Transportation and roadway infrastructure construction and maintenance.
5) Clean energy infrastructure construction.
6) Recreational trail construction.
7) Community hall construction.
8) Downtown revitalization.
9) Municipal operation capacity building.
10) Greening municipal operations (energy audit and improvements).

The projects listed above aimed to contribute to creating more healthy local environments while ensuring each community could better function and provide essential services moving forward. The table below shows the total funding amounts in the past decade for each province. This funding is essential as communities begin work on the proposed projects.

Provincial Funding Amounts for each province over the past decade are as follows:

PROVINCE	CANADA'S TOTAL CONTRIBUTION
NOVA SCOTIA	$369,159,000
NEW BRUNSWICK	$294,000,000
PRINCE EDWARD ISLAND	$97,500,000
NEWFOUNDLAND AND LABRADOR	$206,250,000

Table 15 (Infrastructure Canada, 2014)

Although each plan varied depending on local contexts, several interesting trends emerged.

- 67% of municipalities submitted stand-alone ICSPs.
- 49% of municipalities used a consulting firm to produce the ICSP.
- 13% of municipalities submitted collaborative ICSPs (All but one of them was in NFLD).
- 55% of municipalities did not cite a specific definition of sustainability.
- 57% of ICSPs had timelines between 5 and 10 years.
- Plan timelines range from 3 to 150 years.
- Environmental objectives led in 38% of all ICSPs while social initiatives came in second leading 27% of ICSPs. The cultural pillar was omitted in 10% of submitted ICSPs.
- Proposed projects included clean air in 213 initiatives, clean water in 319 and reduced greenhouse gas emission in 289.

Similar to Conroy and Berke's (2004) finding regarding high-level mandates for sustainable development, the presence of federal and provincial legislation to create comprehensive sustainability plans was crucial in the success of this process. With over 170 ICSPs submitted in Atlantic Canada alone, government objectives of increased sustainability in all five pillars have been implemented extensively.

Creating comprehensive vision statements, ensuring collaboration among community stakeholders, inter-municipal cooperation, capacity building and educational programming are all crucial aspects of successful sustainability planning (Wheeler, 2009). These categories have been well addressed in the majority of plans submitted in Atlantic Canada.

Almost 99% of ICSPs included various levels of community engagement and self-assessment procedures. Vision statements with goals, objectives and actions were included within most plans in each province. An important outcome from this process seems to be the increased discussions and awareness among various community members, business owners, municipal councilors and others towards the importance of long-term planning for a healthy community (Chess, 2013).

Wheeler (2000) notes that economic, cultural, social, and environmental sustainability are most appropriately discussed at the regional scale. However, only 13% of ICSPs were submitted as collaborative efforts and of these most were from Newfoundland and Labrador. Furthermore, the collaborative effort was most appealing to small municipalities that pooled resources to increase capacity and ensure a quality plan was produced. In communities with larger populations, a

collaborative approach that included cooperation among regional governments was not as common. Many issues facing communities extend beyond political boundaries and for this reason Conroy & Berke (2004) and Wheeler (2000) state that collaboration on a regional scale may help ensure common issues are properly addressed. In the future more guidance and assistance in the collaborative process may help municipalities in Atlantic Canada better address this issue.

Newfoundland and Labrador included Governance as a potential category for ICSP objectives and goals. Although Governance is not specifically mentioned in the three other provincial ICSP guidelines it was still recognized as an important aspect of local sustainability and was addressed at the municipal level under the other four pillars of sustainability. Increased capacity is key, especially for smaller and more remote municipalities, (Van-Zeijil-Rozema et al. 2008). Including the Governance Pillar in the Maritime provinces in future iterations of ICSPS could lead to improved municipal capacity.

Sustainability at the municipal level can be difficult to define and comprehend. In fact a definition of sustainability and its key concepts was not included in the majority of ICSPs. However this may not prove as problematic as it may seem, Conroy and Berke (2004) note that including overt definitions and reference to sustainability themes and concepts does not necessarily determine the success of a planning project. They claim that most good planning coincides with the objectives of sustainable planning regardless of the terminology used.

Due to the unclear definition of the term several definitions of sustainability were used in the numerous ICSPs in Atlantic Canada. When defined, the two most common definitions were the Brundtland Commission and the Natural Step definition.

Long-term thinking is crucial for success in sustainable development planning (Natural Step Framework, 2014). In Atlantic Canada plan timelines ranged widely from only a few short years to decades or even centuries. More guidance for communities regarding the scope and timeline of these plans could help ensure that plans are given the time they need to succeed in their objectives and goals.

Gaps in Sustainability

A Gap in Clean Air projects

Due to a reduction in air borne pollutants, Canadian communities have experienced significant and continuous improvements in air quality over the past four decades (Fraser Institute, 2012). This move towards cleaner air has been achieved through a multi-governmental regulatory framework that has led to improving technologies, a reduction in coal based power generation and increased awareness of the human health problems caused by poor air quality (Fraser Institute, 2012).

To ensure high air quality and reduce health effects for Canadians the federal government has contributed almost one billion dollars in funding to the Clean Air Regulatory Agenda in recent decades. Over this time period collaboration occurred between various levels of government, industry leaders and community stakeholders to establish the air quality management system and ensure improved air quality and stringent regulations throughout the country (Healthy Canada, 2010).

A 2001 Health Canada Study found that Canadians considered poor air quality caused by pollution to be the most pressing environmental issue facing Canadians on a daily basis. In this same study, 85% of respondents felt that air quality was not improving and that further steps should be taken to address the issue (Fraser Institute, 2012).

Health Canada states that prolonged exposure to certain types of air pollution can have serious, long-lasting health outcomes for those exposed. Symptoms can include irritation of the eyes, nose and throat leading to coughing and difficulty breathing. For the elderly or those with pre-existing lung and heart problems such as asthma, high levels of air pollution can lead to the worsening of their condition and possible hospitalization (Health Canada, 2010).

Despite the public concern and medical evidence indicating the importance of the matter, cleaner air projects were consistently underrepresented in ICSPs throughout each province. In many cases the outcome was either mentioned only briefly or left out of the ICSP process entirely. Where cleaner water and reduced greenhouse gas emission projects were mostly well represented, cleaner air received far less attention.

That being said, there were still several communities throughout Atlantic Canada where cleaner air received significant attention with numerous projects cited contributing to this sustainable objective.

Cleaner Air was extensively referenced in:

Nova Scotia

- Bridgetown
    - Bylaw to restrict installation of outdoor furnaces within town limits.
    - Encourage active transportation through providing easy pedestrian connections, bike lanes and bike racks at important town amenities.

- County of Inverness
    - Explore options originally presented in the Regional Green Action plan regarding biomass and methane capture options.
    - Implement zoning to restrict certain industrial uses within town limits.

- Municipality of St. Mary's
    - Advocate for environmentally sustainable timber harvesting practices and replanting within town limits where applicable
    - Construct and maintain sidewalks to encourage walking in town core.

- Town of Wolfville
    - Installation of bus shelters at key stops throughout town to encourage increased ridership and decrease private vehicle trips.
    - Installation of new heating systems in town buildings to reduce emissions.

Prince Edward Island

- Charlottetown
    - Establish municipal energy audit procedures and identify opportunities for municipal energy efficiency and costs savings.
    - Review development policy to promote more dense, walkable and complete communities to decrease vehicle usage and infrastructure needs.
- Georgetown
    - Restrict the burning of leaves, grass, and other refuse within Town.

- Evaluate all development applications for their potential emissions of criteria air contaminants.

Newfoundland and Labrador

- Bay L'Argent, St. Bernard's – Jacques Fontaine, Little Bay East St. Jacques – Coombs
  - Implement programs to ensure town equipment efficiency to decrease emissions and waste.
  - Promote a buy local campaign to reduce emissions for long distance product shipments and restrict types of heavy equipment vehicles operating in town limits.
- St. John's
  - Encourage compact development forms to reduce travel distances for residents.
  - Capture and utilize methane gas from town landfill.

New Brunswick

- Projects contributing to cleaner air were not specifically referenced in the ICSPs analyzed from New Brunswick.

The clean air initiatives included in these and other ICSPs from Atlantic Canada can provide guidance for other communities throughout the region. Communities can learn from the initiatives currently underway by their neighbours and could better take advantage of federal government programs aimed at improving air quality.

A Gap in Cultural Sustainability?

Cultural sustainability was consistently underrepresented in ICSPs throughout communities in Atlantic Canada. However, some notable exceptions may help provide guidance for other communities that wish to fully integrate cultural sustainability in their established planning framework.

In ICSPs where the cultural pillar was well represented, towns either established cultural sustainability as their primary focus or dedicated substantial resources through goals, projects, policy and actions to ensure that cultural sustainability was approached in a comprehensive and appropriate manner. No evident similarities appeared among these towns. The unique priority placed on cultural sustainability may be a result of council and stakeholder individual priorities.

Goals, Objectives and Actions in Support of Cultural Sustainability

Although many ICSPs emphasize social, economic, environmental and governance objectives, seven communities have approached cultural sustainability in a significant way. These communities could provide guidance for others in Atlantic Canada in the future.

Cultural sustainability projects included:

Windsor, NS

- Provide support for collaborative initiatives where local artisans share studio space and other resources in a manner that contributes to the Town‘s creative economy.
- Assert the position of Windsor as the Birthplace of Hockey.
- Assess opportunities to enhance and grow the cultural economy through the Mayor's Task Force on Arts, Culture and Heritage.

Chester, NS

- Host municipal wide celebratory events involving local skills and talents.
- Catalogue heritage and arts resources including buildings and cultural landscapes, artists and crafters and the town’s oral history.
- Establish a virtual arts and culture center for marketing, resources, grant writing assistance.

Stratford, PEI

- Identify, protect and preserve the Town’s built natural and cultural heritage.
- Identify and provide cultural infrastructure and spaces such as a library, studio space, art gallery, public art and outdoor meeting spaces.
- Build partnerships with local businesses, institutions and organization to develop and promote cultural activities.

Appleton, NFLD

- Create story boards around the community that depict the history of the community.
- Assess feasibility of a cultural exhibit, showcasing local artists, crafters, and aboriginal culture.
- Plan activities for the year 2012 celebrating the 50th anniversary of the town.

Cow Head, NFLD

- Re-establish crafters guild.
- Support interpretation, signage trail and amphitheater development.
- Developed storytelling and oral history project.

Harbour Breton, NFLD

- Support traditional music workshops.
- Designate/employ local historian.
- Support annual theatre festival.

Irish Loop, NFLD

- Assess regional cultural capacity and cultural capital.
- Maintain a list of cultural groups and their contact information.
- Sponsor cultural activities and events.

While many communities throughout Atlantic Canada have not addressed all aspects of sustainability in equal measure, the communities noted above have included sustainable cultural goals, objectives and actions in their official ICSPs. This has been accomplished while simultaneously addressing the other pillars of sustainability with similarly comprehensive objectives.

Benefits of Cultural Sustainability

Planning for cultural sustainability can have several long-lasting benefits for a community and region (Creative City, 2010). However, appropriate strategies and objectives can prove difficult for decision makers to comprehend compared to the other more tangible aspects of sustainable communities. Although possibly more indefinable, cultural sustainability could lead to various beneficial outcomes for communities throughout Atlantic Canada.

Research suggests that increased focus on the cultural health of a community can:

1) Mitigate community isolation and exclusion.

2) Support local pride in a shared cultural and historical background.

3) Improve access to and visibility of arts and cultural activities and events to a larger community base.

4) Improve tourism and financial viability of art and culture industries.

5) Increase recreational activities for youth and seniors.

6) Strengthen regional connections based on a shared cultural heritage.

(Creative City, 2010).

Attaining Cultural Sustainability

Planning for cultural sustainability can take various forms and as with all strategic planning, a comprehensive and regionally specific approach will have the most success. Three main themes for providing the proper context for cultural sustainability have emerged in the literature.

An official strategic approach looks to harness the long-term planning capacity of official plans and strategies. This can mean a stand-alone cultural plan, the inclusion of culture within municipal planning strategies or the addition of culture in other comprehensive planning documents like ICSPs. These types of plans are often completed with extensive public and stakeholder consultation and attempt to offer comprehensive approach to cultural planning (Jeannotte, Duxbury, 2012).

Communities can provide formal mechanisms for community outreach and support programs which are vital when planning for cultural sustainability. A strong community network can occur in the absence of established planning strategies and can offer an interim solution if creating an official plan is not immediately feasible. This approach can provide official avenues for community participation in cultural planning and encourage increased discussion on the importance of cultural sustainability (Hawkes, 2005).

Finally, increased funding for events, workshops, training and facilities can provide the ability to easily access funds and resources (Creative City, 2010).

The specific approach selected by each municipality will depend on interest and capacity but also on the current cultural context and level of interest among local stakeholders (Jeannotte, Duxbury, 2012). Regardless of the selected strategy there are numerous key aspects that policy makers should consider when developing actions aimed at contributing to cultural sustainability (Jeannotte, Duxbury, 2012).

Developing a community specific definition of culture and heritage will help to identify the strategy and approach that will best suit the local context (Hawkes, 2005). Community input and research on historical context will help planners move beyond initial and limited notions of culture towards a more inclusive and holistic approach (Creative City, 2010).

The literature notes that it is important to fully understand the current role that culture, arts and heritage plays and the artistic values inherent in the community at large. Many residents participate in informal art and culture activities and understanding this could be helpful in policy discussions. Cultural planning works best when relationship between various groups and organization are officially encouraged and supported (Jeannotte, Duxbury, 2012).

An Argument for Governance and Capacity Building

The Gas Tax Agreement for each province included the option for capacity building initiatives alongside more traditional infrastructure projects funded through the capital investment funding stream (Service Nova Scotia, 2007). Similar to hard infrastructure projects, capacity building is meant to promote one of the three sustainability outcomes included in the ICSP and CIP frameworks (cleaner air, cleaner water and reduced greenhouse gas emissions) (Service Nova Scotia, 2007). This option for funding was established to help municipalities improve planning capacity for future community needs. In this funding category, projects include public consultation, staff and stakeholder training, plan making and other policy and legislative exercises, including the creation of an Integrated Community Sustainability Plan. Capacity building projects can often help municipalities expand their current planning and strategic framework and address a more comprehensive set of issues and concerns (Newfoundland and Labrador, 2009).

Eligible capacity-building initiatives include:

- Training and workshops
- Building local and regional partnerships and agreements
- Investing in new technology to increase ability to plan, build, research, and evaluate community sustainable objectives.
- Planning, policy and strategy coordination to ensure established policies work in a complementary manner to achieve common goals (Newfoundland & Labrador, 2009)

Gaps in Capacity Building and Good Governance

Capacity building has proven a difficult and elusive concept for many municipalities throughout Atlantic Canada. Where traditional infrastructure projects often generate direct and tangible linkages to sustainable outcomes, capacity building, although valuable, is frequently overlooked in the ICSPs. The review of ICSPs in Atlantic Canada indicates that capacity building projects are rarely referenced or budgeted for in the capital investment project section.

Furthermore, sustainable governance was not an official option for communities in Prince Edward Island, New Brunswick and Nova Scotia. Communities in these provinces were left to place their governance goals and objectives in one of the four remaining pillars. In Prince Edward Island, for example, five of ten ICSPs included the governance pillar as an addition. There were many instances where goals and objectives which may have better suited the governance pillar were placed under a pillar less appropriate or possibly even excluded from the planning processes.

Lacy (2001) suggests that creating appropriate and effective strategies that address areas of concern regarding climate change, aging populations, increasing unemployment and lack of services for youth and seniors involves ensuring communities have healthy governance structures with the appropriate levels of capacity, knowledge and tools.

In instances throughout the Atlantic Provinces and especially Newfoundland and Labrador, the ICSP process contributed greatly to local governance capacity and sustainability. Many towns, especially those smaller and more remote, used the opportunity to hold formal engagement and visioning workshops and produce ICSPs that would address a wide range of complex and nuanced planning issues. This process may have been the first opportunity for many communities to plan beyond daily operations and in many instances communities ultimately used the ICSPs as official planning strategies.

The lack of formalized capacity building and good governance objectives is particularly acute in small and remote towns in rural Nova Scotia, New Brunswick and Prince Edward Island that were not given the option of using the sustainable governance pillar. Including this pillar in the official provincial requirements and guidebooks while providing guidance to municipalities regarding the importance of sustainable governance could be a helpful and well used tool in future sustainable planning initiatives or updates to the current ICSPs requirements.

Planning for Good Governance and Increased Local Capacity

Sustainable governance is not simply the responsibility of elected officials or municipal public employees but a comprehensive approach to decision making that involves participation by community members and stakeholders on a long-term and continuous basis (Alston, 2002). Sustainable governance also includes regional and national communication and collaboration to ensure efficiency and sound decision making (Dabson, 2006).

Dabson (2006) states that good governance follows 8 principles:

1) Cooperation and collaboration among various local and regional authorities, non-governmental organizations and community groups.
2) Ongoing public participation, engagement, consultation and citizen engagement
3) Encouraging community lead initiatives and projects.
4) Established and healthy interest and participation in local government.
5) Support, promote and enforce local resources and assets
6) Facilitate growth of local capabilities and economic opportunity.
7) Long-term planning to appropriately address the extended nature of sustainability issues and concerns.
8) Reflexivity and adaptability in strategies and approaches.

Following Newfoundland and Labrador's lead, municipalities throughout the Atlantic Provinces would be well served including governance as an official pillar of sustainability. For many communities, good governance and capacity building are difficult and complex issues that if addressed appropriately could serve as a solid foundation for the successful approach to the remaining pillars. Providing guidance to municipalities on the importance of these objectives could help ensure increased success of similar sustainable development funding agreements in the future.

Obstacles

Due to time constraints and limited access to municipal data, certain limitations were present in this research project. All attempts were made to ensure a high level of accuracy and relevancy was obtained during the research process. Document analysis is largely based on themes, codes and categories assigned by the researcher. For this reason transparency and integrity was vital during the interpretation and analysis process.

Locating and obtaining the ICSPs for each of the 180 communities proved time consuming. Aside from Newfoundland and Labrador, the other provinces do not maintain a publicly accessible database of submitted plans. The process in New Brunswick was specifically unclear and for this reason, numerous plans in New Brunswick could not be located and have not been included in the analysis.

Conclusion

The integrated sustainability planning process progressed differently depending on provincial requirements and local capacity. However, many of the trends and themes from each province have been alike across Atlantic Canada. Throughout each province goals and objectives regarding water treatment facilities, road construction and repair and greenhouse gas reduction were commonly referenced. In contrast, projects contributing to cleaner air, capacity building, and cultural sustainability did not received as much attention.

The majority of ICSPs included comprehensive community consultation sessions and asset evaluations processes. Furthermore, three of the four required pillars were well addressed in a comprehensive and holistic manner; environmental, social and economic. However, gaps are present in planning for cleaner air, cultural sustainability and increased capacity of local governance. The submitted plans provide relatively short timelines overall and contain little in the way of quantitative and defined measures of success.

The findings suggest that cleaner air outcomes are frequently paired with projects relating to reduced greenhouse gas emissions. This could indicate a level of ambiguity between the two desired outcomes. If cleaner air is a top priority for federal and provincial authorities, further assistance and explanation could be provided to ensure this outcome in properly addressed in the future.

Alternatively, future gas tax funding agreements could look at adding other outcomes that may be relevant to Canadian municipalities. Reduced waste shipped to landfill for example, appeared throughout each province and may benefit from increased funding and guidance through similar funding agreements.

Noting the importance of reliable and sustained funding, the Government of Canada has signed extension agreements with each of the Canadian provinces. This funding will help progress sustainable planning initiatives throughout the country. Table 16 below illustrates the funding allocated to each Atlantic province in the next five years.

Gas Tax Funding Allocation 2014 – 2018 (millions).

JURISDICTION	2014-15	2015-16	2016-17	2017-18	2018-19	TOTAL
NEWFOUNDLAND AND LABRADOR	$29.865	$29.865	$31.358	$31.358	$32.852	$155.298
PRINCE EDWARD ISLAND	$15.000	$15.000	$15.750	$15.750	$16.500	$78.000
NOVA SCOTIA	$53.226	$53.226	$55.887	$55.887	$58.549	$276.776
NEW BRUNSWICK	$43.322	$43.322	$45.488	$45.488	$47.655	$225.276

Table 16 (Infrastructure Canada, 2014)

This renewed commitment will ensure communities have the proper funding to move forward with infrastructure and capacity building projects contributing to sustainability targets. It will prove important, however, for ongoing evaluation and monitoring at all levels of government to ensure the proposed goals, objectives and projects from the Integrated Community Sustainability Plans are completed and adequately contribute to sustainable and healthy communities.

For many communities throughout Atlantic Canada, the process of creating and submitting an Integrated Community Sustainability Plan was the first opportunity to engage in comprehensive and inclusive discussions regarding a proposed future for their community. Through the various stages of visioning, asset mapping, goal setting and plan writing, government and citizens were able to interact in a meaningful way as they shaped their plan.

Planning for sustainability in terms of economic, cultural, social, environmental, and governance issues can help to link and integrate seemingly unrelated topics and ensure comprehensive planning. This process provided the unique opportunity to better understand how a broad, multi-provincial process unfolds.

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Appendix A – List of Analyzed Communities

Nova Scotia

All 54 municipal ICSPs were located and analyzed.

1. Cape Breton Regional Municipality
2. County of Antigonish
3. Halifax Regional Municipality
4. Municipality of the County of Annapolis
5. Municipality of the County of Colchester

6. Municipality of the County of Cumberland
7. Municipality of the County of Inverness
8. Municipality of the County of Kings
9. Municipality of the County of Pictou
10. Municipality of the County of Richmond
11. Municipality of the County of Victoria
12. Municipality of the District of Argyle
13. Municipality of the District of Barrington
14. Municipality of the District of Chester
15. Municipality of the District of Clare
16. Municipality of the District of Digby
17. Municipality of the District of East Hants
18. Municipality of the District of Guysborough
19. Municipality of the District of Lunenburg
20. Municipality of the District of Shelburne
21. Municipality of the District of St. Mary's
22. Municipality of the District of West Hants
23. Municipality of the District of Yarmouth
24. Region of Queens Municipality
25. Town of Amherst - emailed
26. Town of Annapolis Royal
27. Town of Antigonish
28. Town of Berwick
29. Town of Bridgetown
30. Town of Bridgewater
31. Town of Clark's Harbour
32. Town of Digby
33. Town of Hantsport
34. Town of Kentville – emailed
35. Town of Lockeport
36. Town of Lunenburg - emailed
37. Town of Mahone Bay
38. Town of Middleton - Emailed
39. Town of Mulgrave

40. Town of New Glasgow
41. Town of Oxford
42. Town of Parrsboro
43. Town of Pictou
44. Town of Port Hawkesbury
45. Town of Shelburne
46. Town of Springhill
47. Town of Stellarton
48. Town of Stewiacke
49. Town of Trenton – May have not participated in the process
50. Town of Truro
51. Town of Westville
52. Town of Windsor
53. Town of Wolfville
54. Town of Yarmouth

Newfoundland and Labrador

All 99 ICSPs created within the province were located and analyzed.

1. Appleton
2. Aquaforte, Cape Broyle, Ferryland - Collaborative ICSP
3. Baie Verte
4. Bauline, Flatrock, Pouch Cove - Collaborative ICSP
5. Bay Bulls and Witless Bay - Collaborative ICSP
6. Bay L'Argent, St. Bernard's-Jaques Fontaine, and Little Bay East - Collaborative ICSP
7. Bay Roberts
8. Birchy Bay
9. Bird Cove, Anchor Point, Flower's Cove - Collaborative ICSP
10. Bishop's Falls
11. Bonavista
12. Branch
13. Brigus
14. Burgeo
15. Burin
16. Burlington
17. Carmanville
18. Centreville-Wareham-Trinity/Indian Bay - Collaborative ICSP
19. Channel-Port aux Basques
20. Colliers
21. Come By Chance
22. Cow Head
23. Cupids

24. Deer Lake, Cormack, Reidville, Howley - Collaborative ICSP
25. Eastport
26. Fleur de Lys
27. Fortune
28. Fox Harbour
29. Gambo
30. Garnish
31. Gaultois
32. Glovertown
33. Grand Bank
34. Happy Valley-Goose Bay
35. Harbour Breton
36. Heart's Desire
37. Hopedale, Postville, Rigolet Innuit Community Governments - Collaborative ICSP
38. Hughes Brook, Irishtown-Summerside, Meadows, Gillams, McIvers - Collaborative ICSP
39. Isle aux Morts, Burnt Islands, Rose Blanche - Collaborative ICSP
40. Kippens
41. La Scie
42. Leading Tickles
43. Lewin's Cove
44. Little Bay Island
45. Marystown
46. Massey Drive
47. Miles Cove, Port Anson, Pilley's Island, Brighton, Lushes Bight-Beaumont-Beaumont North - Collaborative ICSP
48. Millertown
49. Milltown-Head of Bay D'Espoir
50. Ming's Bight
51. Mount Moriah
52. Mount Pearl
53. Musgravetown
54. Norman's Cove-Long Cove
55. Norris Point
56. North River
57. North West River
58. Northern Arm
59. Old Perlican
60. Pacquet
61. Paradise
62. Pasadena
63. Peterview
64. Petty Harbour Maddox Cove
65. Point Leamington
66. Point of Bay
67. Port au Port Area: Port au Port East, Port au Port West-Aguathuna-Felix Cove, Lourdes, Cape St. George - Collaborative ICSP
68. Raleigh
69. Ramea
70. Rencontre East
71. Renews-Cappahayden, Fermeuse, Port Kirwan - Collaborative ICSP
72. Rocky Harbour

73. Roddickton-Bide Arm, Englee, Main Brook - Collaborative ICSP
74. Rushoon
75. Salmon Cove
76. Sandringham
77. Small Point-Adams Cove
78. South Brook
79. South East Labrador: Mary's Harbour, St. Lewis, Port Hope Simpson, and Charlottetown - Collaborative ICSP
80. South River
81. Spaniard's Bay
82. Springdale
83. St. Alban's
84. St. Anthony
85. St. Brides, Point Lance - Collaborative ICSP
86. St. Jacques-Coombs Cove
87. St. John's
88. St. Lawrence
89. St. Mary's Bay Centre: St. Vincent's-St. Stephen's-Peter's River, Gaskiers-Point La Haye, St. Mary's and Riverhead - Collaborative ICSP
90. St. Paul's, Parson's Pond, Daniel's Harbour - Collaborative ICSP
91. St. Shott's-Trepassey-Portugal Cove South - Collaborative ICSP
92. Steady Brook
93. Terrenceville, English Harbour East, Grand le Pierre - Collaborative ICSP
94. Triton
95. Twillingate
96. Upper Island Cove
97. Victoria
98. Whiteway
99. Woodstock

Prince Edward Island

All ten ICSPs created in Prince Edward Island were located and analyzed.

1. Charlottetown
2. Summerside
3. Stratford
4. Alberton
5. Cornwall
6. Georgetown
7. Montague
8. Kensington
9. Souris
10. Provincial ICSP

New Brunswick

Only 7 ICSPs were located and analyzed in New Brunswick. It is unclear how many are remaining, however it appears about ten more many exist.

1. Petitcodiac (Havelock, Elgin and Salisbury)
2. Moncton
3. Fredericton
4. Sackville
5. Saint John
6. Port Elgin
7. Grand Falls

Appendix B - Explanation of Analytical Framework

1. **Submission Date**

   This indicates the date the plan was submitted. All plans were required by March 2010

2. **Type of Jurisdiction**

   Those jurisdiction required to submit ICSPs varies depending on provincial requirements. ICSPs in Nova Scotia could be submitted by Municipalities, counties, cities, towns or a cooperative of the following. This choice seems to have depended on the capacity of the body and whether their goals were congruent with those in their region.

3. **Town size**

   This category was included to gain information regarding the role town size plays in the form and function of the submitted document. Specifically were there any themes which were constant among certain sizes.

4. **Proposed Time Frame**

   This category is meant to measure the proposed timeline of the actions, themes and objectives proposed. Integrated sustainable planning is a long term and proposed projects must be forward looking. The literature suggests that specific timelines can help ensure project completion and success.

5. **Author (Municipality/Consultant)**

   ICSPs can are either prepared by the municipality, a hired consultant or a combination of the two. The initial analysis will examine this to identify key commonalties and difference among ICSPs based on the author. The research will also document the name of the consultant to indicate if certain consulting companies were more active than others in this process.

6. **Creation Process**

Determining which of the three approaches used in the creation of the ICSP will help to highlight the process range and scope. In Nova Scotia municipalities were given the option of producing an ICSP in collaboration with an existing MPS, producing an ICSP in collaboration with a single issue planning document or producing a stand-alone ICPS. This decision informs the formation, form and function of the ICSP.

7. **Reference to other municipal objectives/plans**

   The ICSP is meant to be a comprehensive planning document. Often strategic plans and municipal offices operate in isolation of one another, by documenting if other municipal objectives are reference in the ICSP the research will be able to better understand the comprehensively of the ICSP.

8. **Inter-municipal cooperation**

   This category is meant to measure the level of inter-municipal cooperation documented in the creation and objectives of the ICSP. Especially in small, underpopulated regions where political ability is limited, the cooperation of community groups, local businesses and neighbouring communities can be hugely beneficial.

9. **Collaboration with other jurisdiction on ICSP**

   Of the ICSPs submitted the majority were from small and somewhat isolated towns and municipalities. The capacity of these areas is often limited while the geographic scope is vast. Furthermore, issues of economic, social, cultural and environmental sustainability often cross political boundaries and inter-municipal cooperation can prove beneficial in the ICSP process.

10. **Public Participation**

    Public participation is a crucial requirement of all ICSPs. This category is simply to document if municipalities adequately consulted the public in the plan formation process.

11. **Community Vision Statement**

    A community vision statement is also a required piece of the ICSP. In the initial analysis the sheer presence of a vision statement was noted. In the second phase of evaluation that content and form was also analyzed.

12. **Deliverables Included (specific Projects)**

    Depending on the ICSP deliverables may come in vague statements and objectives or in the form of concrete projects and initiatives. This information may speak to the value of the document and the potential of future successful implementation.

13. **Sustainability definition**

Sustainability is a term that is widely used and can mean various things depending on context

14. **Budget Implications Included for proposed projects**

    Providing proposed budgeting and financial ramifications of eligible projects is required under the Capital Investment Project agreement. Including these figures within the ICSP provides a level of clarity and commitment to the follow-through of the goals and objectives.

Appendix C – Analytical Framework Results

Nova Scotia

Total ICSPs: 54

POPULATION:

Population of reporting entities (with collaborative populations included):

1 of 54 below 500 residents

6 of 54 between 501 and 1000 residents

10 of 54 between 1001 and 3, 000 residents

12 of 54 between 3, 001 and 5, 000 residents

9 of 54 between 5, 001 and 10, 000 residents

7 of 54 between 10001 and 20, 000 residents

5 of 54 above 20, 000 residents

3 of 54 above 50, 000 residents

1 of 54 above 100, 000 residents

Total population of reporting jurisdictions (Individual):

1 below 500 residents

Smallest single reporting town: Annapolis Royal - 444

Largest Reporting Town: Halifax Regional Municipality – 372, 680

Collaborative ICSP: 1

CREATED BY:

Created by Consultant: 9

Created by both town and Consultant: 3

Created by town alone: 42

Most Common Consultants:

4Site: 1

Institute of Planning and Design: 2

Stantec: 4

Rural and Small Town program: 1

CBCL: 1

Unknown: 1

Size of Towns Using Consultants:

FORMAT (DESIGN)

Stand-Alone: 36

MPS Explanations: 5

Added to existing MPS: 9

Revisions or New MPS: 4

S.W.O.T Matrix Used: 10

Town Profile Included: 37

SUSTAINABILITY OUTCOMES & PILLARS

Outcomes Included: 16 (%) of documents included direct reference to the sustainability outcomes (clean air, clean water, reduced ghg).

*(*Almost all documents include indirect reference to both cleaner water and reduced greenhouse gases. Cleaner Air is far less common.)*

Cleaner Air: Leads in 0 plans and ties in 1 (mentioned in 11)

Cleaner Water: Leads in 5 plans and ties in 1 (mentioned in 14)

Reduced GHG: Leads in 10 and is tied in 0 (mentioned in 15)

# of Projects:

Cleaner Air: 90

Cleaner Water: 161

Reduced GHG: 137

Funding Estimates for projects included: 20

Outcomes are Qualitative: 31

Outcomes are Quantitative: 1

Outcomes are both: Both

Outcomes not provided: 4

Direct Reference to Statements of Provincial Interest: 14

Pillars;

Environmental Sustainability: Leads or tied in 26

Economic Sustainability: Leads of tied in 18

Social Sustainability: Leads or tied in 15

Cultural Sustainability: Leads or tied in 0

Governance Sustainability: N/A

No Pillars not included: 10

Cultural combined with Social: 3 plans

Specific Pillars Omitted: Cultural (2)

Timeline:

Not Provided: 20

3 years: 0

4 Years: 1

5 Years: 5

6 years: 0

7 Years: 0

8 years: 0

9 years: 0

10 Years: 5

11 years: 0

15 Years: 0

20 Years: 8

25 Years: 5

30 Years: 5

40 years: 2

50 years: 2

150 years: 1

Definition of Sustainability:

Brundtland: 11

The Natural Steps Framework: 10

Union of Nova Scotian Municipalities: 2

NS ICSP Handbook: 1

Service Nova Scotia: 1

Town's Own Reference: 1

Capitalism – as if the World Matters Forum for the Future report: 2

Not provided: 19

New Brunswick

Total ICSPs Analyzed: 7

POPULATION:

Population of reporting entities (with collaborative populations included):

Below 500 residents: 1

501 and 1000 residents: 0

1001 and 3, 000 residents: 2

3, 001 and 5, 000 residents: 0

5, 001 and 10, 000 residents: 0

1001 and 20, 000 residents: 1

Above 20, 000 residents: 1

Above 50, 000 residents: 2

Above 100, 000 residents: 0

Smallest single reporting town: Port Elgin - 451

Largest Reporting Town: Moncton 64, 128

Collaborative ICSP: 0

CREATED BY:

Created by Consultant: 3

Created by both town and Consultant: 3

Created by town alone: 1

Most Common Consultants:

Dillon Consulting: 2

Tantramar Planning Commissions: 2

Stantec: 1

Mount Allision: 1

FORMAT (DESIGN)

Stand-Alone: 7

S.W.O.T Matrix Used: 1

Town Profile Included: 1

SUSTAINABILITY OUTCOMES & PILLARS

Outcomes Included: 1 document included direct reference to the sustainability outcomes (clean air, clean water, reduced ghg).

*(*Almost all documents include indirect reference to both cleaner water and reduced greenhouse gases. Cleaner Air is far less common.)*

Cleaner Air: 0

Cleaner Water: 0

Reduced GHG: 1

Funding Estimates for projects included: 1

Outcomes are Qualitative: 1

Outcomes are Quantitative: 4

Outcomes are both: 1

Outcomes not provided: 0

Pillars

Environmental Sustainability: 1

Economic Sustainability: 0

Social Sustainability: 2

Cultural Sustainability: 0

Governance Sustainability: 0

No Pillars not included: 4

Timeline

Not Provided: 0

3 years: 0

4 Years: 1

5 Years: 1

6 years: 0

7 Years: 0

8 years: 0

9 years: 0

10 Years: 0

11 years: 0

15 Years: 0

20 Years: 2

25 Years: 1

30 Years: 1

40 years: 1

50 years: 0

150 years: 0

Definition of Sustainability

Brundtland: 3

Prince Edward Island

Total ICSPs Produced: 10

POPULATION:

Population of individual towns:

0-500: 0

501-1000: 1

1001- 3000: 3

1, 501 – 5000: 1

5, 000 – 10, 000: 2

Greater than 10, 000: 3

Collaborative efforts: Only collaborative effort is the provincial effort with greater than 10, 000 people.

Smallest reporting town: 634

Largest single reporting town: 32, 174

CREATED BY:

Created by Consultant: 6

Created by both town and Consultant: 1

Created by town alone: 3

Most Common Consultants:

Stantec Consulting: 2

ADI Consulting: 2

P. Woods and Associates: 4

Baker Consulting INC: 1

Format (design):

Stand-Alone: 4

MPS (policy) Explanations: 3

Added to existing MPS: 2

Revisions or New MPS: 1

S.W.O.T Matrix Used: 1

Town Profile Included: In 4 plans.

SUSTAINABILITY OUTCOMES

Outcomes Included: 5 documents included direct reference to the sustainability outcomes.

Cleaner Air: Leads or tied in 0 plans (mentioned in 3)

Cleaner Water: Leads or tied in 3 plans (mentioned in 4)

Reduced GHG: Leads or tied in 2 (mentioned in 5)

Gas Tax Projects:

Cleaner Air: 17 projects

Cleaner Water: 26 projects

Reduced GHG: 33 projects

Outcomes are qualitative: 4

Outcomes are Quantitative: 0

Outcomes are both: 4

Outcomes not provided: 1

Project funding estimates included: 5

Funding estimates for projects not included: 5

Pillars

Environmental Sustainability: Leads or tied in 4

Economic Sustainability: Leads or tied in 2

Social Sustainability: Leads or tied in 4

Cultural Sustainability: Leads or tied in 2

Governance Sustainability: Leads in 0

Pillars not mentioned in: 2 plans

Social and Cultural Pillars were combined in 3 plans

Governance sustainability was added in 5 plans

Cultural sustainability was omitted in: 1 plan

TIMELINE

Not Provided: 1

3 years: 1plan

4 Years: 0

5 Years: 4 plans

6 years: 0

7 Years: 1 plan

8 years: 0

9 years: 0

10 Years: 0

11 years: 0

15 Years: 2 plans

18 Years: 1 plan

20 Years: 0

25 Years: 0

30 Years: 0

Definition of Sustainability

No definition: 6 plans do not include a definition of sustainability.

Brundtland: 1

Natural Steps: 1

Provincial Government: 1

Included but not referenced: 1

Newfoundland and Labrador

Total ICSPs: 99

POPULATION:

Population of individual towns (all):

38 of 99 above 1000 residents

45 of 99 above 500 residents

Population of reporting entities (with collaborative populations included):

23 of 99 below 500 residents

36 of 99 between 501 and 1000 residents

30 of 99 between 1001 and 5000 residents

7 above 5000 residents

(*3 towns with no population counts)

Total population of reporting jurisdictions (Individual):

55 below 500 residents

Smallest single reporting town:

Little Bay Island – 97

Smallest population of collaborative effort:

491 (St. Brides, Point Lance)

Largest Town in collaborative ICSPs: Town Name:

6, 404 (Deer Lake, Cormack, Reidville, Howley)

Average Size of Collaborative ICSPs:

<u>Collaborative Efforts (21 total)</u>

0 plans with population below 500 people

5 plans with population below 1000 people

6 plans with population between 1000 and 1, 500 people

4 plans with population between 1, 500 and 2, 000 people

2 plan with population between 2, 000 and 3, 000 people

2 plans with between 3, 000 and 4, 000 people

0 plans with population between 4, 000 and 5, 000 people

0 plans with population between 5, 000 and 6, 000 people

1 plan with population at 6, 404 people

CREATED BY:

Created by Consultant: 49

Created by both town and Consultant: 11

Created by town alone: 33

Unknown: 6

Most Common Consultants:

Regional Economic Board: 11

CBCL: 8

Edwards & Associates: 6

Plan-Tech: 6

Unknown: 6

Graham Letto (GMLC): 5

Atlantic Engineering Consulting LTD: 5

Coast of bays Corporation: 2

Whey Consulting: 2

Tract & Baye Newplan Group: 2

Connections Research Consulting: 2

Enfor consulting: 3

HMJ Consulting ltd: 3

KeyStone Sustainable Community Solutions: 2

Anderson ENGINEERING consultant: 1

Opal Consulting: 1

Metrics EFC Inc.: 1

Avro McMillan: 1

Michael Mooney Consulting: 1

Darren Simms: 1

Mobilewords ltd: 1

Planning Resources Inc.: 1

ADI LTD: 1

FORMAT (DESIGN)

Stand-Alone: 79

MPS Explanations: 2

Added to existing MPS: 12

Revisions or New MPS: 5

Unclear: 1

S.W.O.T Matrix Used: 16 plans (16 %)

Town Profile Included: 90 (10 without)

SUSTAINABILITY OUTCOMES

Outcomes Included: 37 documents included direct reference to the sustainability outcomes.

Cleaner Air: Leads in 4 plans and ties in 5 (mentioned in 20)

Cleaner Water: Leads in 14 plans and ties in 6 (mentioned in 29)

Reduced GHG: Leads in 12 and is tied in 5 (mentioned in 30)

Gas Tax Projects:

Cleaner Air: 106 projects and actions

Cleaner Water 132 projects and actions

Reduced GHG: 119 projects and actions

Outcomes are qualitative: 72

Outcomes are Quantitative: 1

Outcomes are both: 10

Outcomes not provided: 16

Pillars:

Environmental Sustainability: Leads in 35

Economic Sustainability: Leads in 25

Social Sustainability: Leads in 28

Cultural Sustainability: Leads in 9

Governance Sustainability: Leads in 23

No Pillars mentioned in: 9 plans

Social and Cultural Pillars were combined in 2 plans

Missing from ICSPS:

Governance: 6 Plans

Culture: 6 plans

Social: 4 plans

Environmental: 1 plan

Economic: 0

Cultural and Governance sustainability were not mentioned in **6** separate plans whereas social sustainability was omitted 4 times, environmental sustainability was missing in 1 plan and no plans excluded economic sustainability.

Timeline:

Not Provided: 15 plans

3 years: 3 Plans

4 Years: 3 plan

5 Years: 30 plans

6 years: 0

7 Years: 1

8 years: 1

9 years: 0

10 Years: 35 plans

11 years: 0

15 Years: 1 plan

20 Years: 9 plans

25 Years: 1 plan

30 Years: 1 plan

More: 0

Definition of Sustainability

Brundtland: 20 plans

Rio Earth Summit: 3

Wikipedia: 2

Environment Canada: 1

Government of NFLD: 1

Not provided: 69

Cost Provided

Funding Estimates for projects included: 67

Funding Estimates for Projects Not included: 29

Regional Trends

Total: 170

Format:

Stand-Alone: 126 (74%)

MPS Addition, amendment or explanations: 43(25%)

Unclear: 1

Collaborative: 22 (21 from Newfoundland)

Created By:

Created by Consultant: 68 (40%)

Created by both town and Consultant: 21 (12%)

Created by town alone: 82 (48%)

Goals, objectives and outcomes:

Social leads or tied: 49 (25%)

Cultural leads or tied: 11 (6%)

Environmental leads or tied: 66 (34%)

Economic leads or tied: 45 (23%)

Governance leads or tied: 23 (12%)

Pillars not included in: 25 plans (15%)

Social and Cultural Combined in: 8 plans(5%)

Specific Pillars Missing from ICSPS:

Governance: 6 Plans (6%)

Culture: 9 plans (5%)

Social: 6 plans (4%)

Environmental: 1 plan (0.5%)

Economic: 0

Outcomes:

Outcomes Included in: 58 (34%)

Cleaner Air: Leads or tied in 10 (mentioned in 34)

Cleaner Water: Leads or tied in 23 (mentioned in 48)

Reduced GHG: Leads or tied in 29 (mentioned in 50)

Projects:

Cleaner Air: 213

Cleaner Water: 319

Reduced GHG: 290

Timelines:

Not Provided: 28 (16%)

3 years: 5 (3%)

4 Years: 4 (2%)

5 Years: 54 (31%)

7 Years: 2 (1%)

9 years: 1 (.5%)

10 Years: 39 (23%)

11 years: 1 (.5%)

15 Years: 3 (1%)

18 years: 1 (.5%)

20 Years: 17 (10%)

25 Years: 7 (4%)

30 Years: 7 (4%)

40 years: 3 (1%)

50 years: 2 (1%)

150 years: 1 (.5%)