

MOVING TOWARDS SUSTAINABILITY IN THE CLARENVILLE- BONAVISTA RURAL SECRETARIAT REGION

A REPORT CARD FOR REGIONAL SUSTAINABILITY AND COMMUNITY MOBILIZATION

PHASE III FINAL REPORT



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Executive Summary

The primary mandate of the Rural Secretariat Regional Councils is to provide advice for public policy on critical social, economic, cultural, and environmental issues that impact the sustainability of rural communities in Newfoundland and Labrador. The Regional Council of the Clarenville-Bonavista Rural Secretariat region serves over 109 communities in the Clarenville area, the Bonavista Peninsula, and the Isthmus of Avalon, serving as a regional governance institution for over 28,000 residents.

The vision of Regional Council is to create a “sustainable [region] with healthy, educated, prosperous people living in safe, inclusive communities”.¹ In support of this vision, Regional Council has collaborated with Memorial University, with support from the Office of Public Engagement, in two phases of community-based research to identify the factors that impact sustainability in the region. This Phase 3 project has produced a sustainability Report Card which assesses the region’s progress towards sustainability in a concise decision-support tool and public document. This project also provides recommendations for using this Report Card as a means to initiate a long-term regional planning process in support of long-term regional governance outcomes through the shared measurement, monitoring, and coordination of sustainability efforts.

In order to produce these outputs, this project employed a mixed-methods approach of both public engagement efforts and research on best practices from existing sustainability monitoring methodologies. The project conducted a literature review of existing case studies from rural regions in Canada and abroad where Report Card and indicator-based community monitoring tools have been applied. We also developed a system for evaluating the region’s sustainability indicators using quantitative benchmarks that compare the region to other communities and regions in the province. Several phases of public consultation took place, including a series of regular meetings with Regional Council, individual informational meetings with key stakeholders in the region from different sectors, public workshops to incorporate residents’ perspectives into the Report Card, and community presentations to share the results of the project.

The overall findings of this Report Card indicate that the Clarenville-Bonavista Rural Secretariat Region is experiencing a relatively sustainable pattern in a number of key regional priorities, with a handful of areas showing considerable strengths and challenges. A handful of indicators, such as air quality and health, employment opportunities, and active and healthy lifestyles, ranked highly in our evaluation and in some cases have begun to improve in recent years. Conversely, the region faces considerable challenges in indicators such as affordable housing, waste reduction, and sustainable fisheries management. Both these successes and challenges highlight opportunities where local leaders could target existing and new community

¹ Clarenville-Bonavista Rural Secretariat Regional Council, “Clarenville-Bonavista Regional Council Vision Development,” February 15, 2008, p. 2

development initiatives with enhanced coordination and collaboration. They also highlight areas where provincial and federal partners are able to provide support to local initiatives through regulatory, institutional, and funding mechanisms.

This project has provided a number of benefits to regional and provincial stakeholders. Firstly, the Report Card project has supported the Clarenville-Bonavista Regional Council's mandate by offering a tool that assesses and communicates the status of important regional sustainability issues, thus furthering its ability to provide advice to the provincial government. The project has also deepened public understanding of and participation in the region's sustainability vision through its use of public engagement and by offering recommendations for collaboration between Regional Council and community actors in support of an eventual action plan for regional sustainability. The information-based tools that were created have also furthered public access to community data by improving transparency and providing an accessible format for community members to view public data about their region. Finally, the community-based monitoring tools developed in this project have relevance for other rural regions within Newfoundland and Labrador that could be explored by other communities with support from provincial government.

We recommend that the findings of this project be applied to future planning efforts within the Clarenville-Bonavista region in support of more effective rural governance. A strong network of local leaders exists in this region, many of whom are leading initiatives in multiple areas of community life. Stakeholders operating at the regional level could benefit greatly from new mechanisms to coordinate rural governance in a way that draws on their existing work and assets while tracking regional progress over time. There is also an opportunity for provincial government partners to enter into dialogue with regional stakeholders about the creation of a region-wide development strategy that can incorporate both existing local initiatives and include a community-based monitoring process. Given the pronounced sub-regional differences within this region, it is best to approach this objective at the level of sub-regions (i.e. Clarenville area, Isthmus, and Bonavista Peninsula). Finally, we recommend that provincial agencies consider how processes and tools such as the ones utilized in this project could be incorporated in a participatory manner into new institutional supports to facilitate more effective regional governance in rural Newfoundland and Labrador.

I. Project Background

The primary mandate of the Rural Secretariat Regional Councils is to provide advice for public policy on critical social, economic, cultural, and environmental issues that impact the sustainability of the nine Rural Secretariat regions of Newfoundland and Labrador. The Regional Council of the Clarenville-Bonavista Rural Secretariat Region serves 109 communities in the Clarenville area, the Bonavista Peninsula, and the Isthmus of Avalon, serving as a regional governance institution for over 28,000 residents.

The vision of Regional Council is to create a “sustainable [region] with healthy, educated, prosperous people living in safe, inclusive communities”.² In support of this vision, Regional Council has collaborated with Memorial University, with support from the Office of Public Engagement, in two years of community-based research to identify the factors that impact sustainability in the region. Beginning in Fall 2013, this research was carried out in two phases and has resulted in a set of indicators that measure the region's progress towards Regional Council’s vision for the region.³ One of the recommendations of the Phase 2 study was the need to communicate the primary output of this previous research – the regional sustainability indicator framework – to the public in an accessible manner.

The third phase of this project, on which this document reports, has produced a sustainability Report Card for the Clarenville-Bonavista Rural Secretariat Region and provides recommendations for initiating an ongoing process to mobilize regional stakeholders for strategic planning and monitoring of sustainability outcomes in the region.

Overview of Phase 1-2 Research

As previously stated, this project is a continuation of two years of community-based research that has taken place in the region. Based on a partnership between the Regional Council of the Clarenville-Bonavista Region and Memorial University’s Environmental Policy Institute, Phase 1 and 2 of this project set out to identify and assess the critical factors that contribute to sustainable development in the region. This objective emerged from Regional Council’s desire to understand the important elements of a strategy to sustain the people and communities of their region, as well as defining the barriers to regional sustainability. Phase 1-2 had the following research questions:

² Clarenville-Bonavista Rural Secretariat Regional Council, “Clarenville-Bonavista Regional Council Vision Development,” February 15, 2008, 2.

³ Holisko, S., Parrill, E., White, K., & Vodden, K., “Assessing the Factors Impacting the Sustainability of the Clarenville-Bonavista Rural Secretariat Region”, Memorial University of Newfoundland, 2014, 24.; Holisko, S. & Vodden, K., “Assessing the Factors Impacting the Sustainability of the Clarenville-Bonavista Rural Secretariat Region: Phase Two Final Report”, Memorial University of Newfoundland, 2015, 12.

1. What is our definition of sustainability and what outcomes would tell us we are there (or moving in the right direction)?
2. What are the key factors or characteristics necessary for sustainability in the Clarendville-Bonavista region? What barriers exist?
3. How can the Regional Council best proceed with determining which of these core sustainability factors currently exist in the Clarendville-Bonavista Region and what are the gaps?
4. Based on public input and research results, what priorities, strategies and/or policy support are necessary to assist in moving towards sustainability assessment and ultimately sustainability in the Clarendville-Bonavista Region?

The Phase 1 study was primarily a literature review on sustainable development including case studies from initiatives in other regions and jurisdictions, and the development of an initial set of indicators for the region. In so doing, the Phase 1 report focused on answering research questions 1-3. Phase 1 also offered a working definition of sustainable development for the region, expressed as *“an integrated response to economic, social and environmental imperatives, while emphasizing intergenerational equity with regard to resource use and future opportunities.”*⁴ This work was done in consultation and collaboration with the Regional Council.

The Phase 2 study focused on finalizing and interpreting the regional indicator framework, as well as identifying priorities, strategies, and/or policy support necessary to assist in moving towards a comprehensive sustainability assessment. Phase 2 consisted of three primary components:

- A. Refining the set of sustainability indicators proposed in Phase 1 and measuring the region’s current status in these indicators using a wide range of publicly available data
- B. Conducting a public survey with 299 residents of the region to establish a baseline for a number of social, environmental, and economic indicators
- C. Engaging residents of the region in developing the indicator framework through a series of public engagement sessions

The final output of this research was a set of 22 indicators with recent data used to measure their current status in the Clarendville-Bonavista Rural Secretariat Region, as well as a series of recommendations for building on the Phase 1-2 work. The set of indicators organized its regional sustainability assessment using a taxonomy based primarily in five critical factors, or regional priorities, which have subsequent indicators and specific measures (measurable data points used to assess the indicators). Figure 1 below depicts this taxonomy with a concrete example from our indicator framework:

⁴ Holisko et al., “Assessing the Factors Impacting the Sustainability of the Clarendville-Bonavista Rural Secretariat Region,” 38.

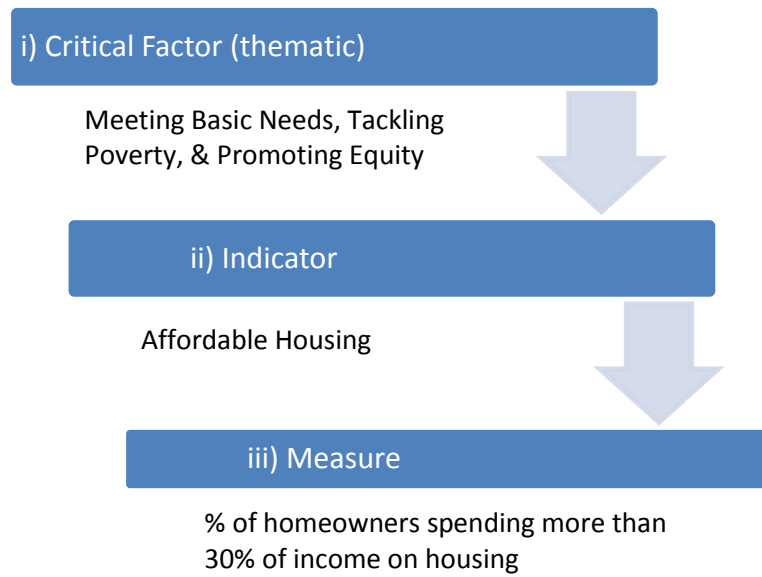


Figure 1. Indicators Taxonomy

During the Phase 1-2 research conducted in the region, the project partners adopted the following set of guiding principles for a sustainable development monitoring strategy.

Common Framework for Action

The first role of a strategy should be to construct a guiding vision for sustainable development within the region. The Regional Council has produced such a document, entitled *Vision 2020*, which provides a rationale for the project as well as a basis for how to proceed with sustainable development goals in the region.⁵ This document sets a precedent for developing an action framework.

Consistency of Definition and Appraisal

Sustainability and sustainable development can be bulky concepts. That is why it is important to identify and articulate common principles of sustainable development in order to underpin the necessary actions of the involved institutions. For this reason, Regional Council identified a working definition of sustainable development, as previously stated.

Opportunities, Strengths, and Concerns for the Region

The third role of a strategy is to explain why action is needed and how the strategy will build on the needs of the region. The steps that must be taken to pursue sustainable development will differ greatly between regions depending on characteristics and circumstances – that is one of the reasons why action at the regional level is so vital. Setting the vision in a clear regional context ensures that the vision is relevant, and that

⁵ Clarendville-Bonavista Rural Secretariat Regional Council, “Clarendville-Bonavista Regional Council Vision Development,” 2.

institutions and the public will understand how it relates to their goals, needs, and expectations.

Common Indicators and Measures

The fourth role of a strategy should involve a basis for measuring progress and appraising policies for their impact on sustainable development. Indicators of progress are crucial for measuring the effectiveness of relevant policies and programs.

Phase 2 Recommendations

The Phase 2 final report made three recommendations for building on its findings. Firstly, it recommended to continue to utilize and revisit the indicator framework presented in its findings. Framing the region's indicators as a "snapshot in time" of the region, the report urged regional stakeholders to return to it and build on it as a living document so that the indicators identified may change to match the region and its communities over time. The second recommendation was to make the results of the Phase 1-2 research publicly available. This recommendation was the impetus for the Phase 3 project, advising on the creation of an accessible public-facing pamphlet or brochure to distribute to the general public. Finally, the Phase 2 study recommended that the Clarendville-Bonavista region develop an action plan for regional sustainability, using the region's indicator framework as a mechanism to engage stakeholders in identifying ideas and strategies for regional planning.

Objectives of Phase 3 Project

This third phase was primarily a public engagement project aimed at delivering on the second and third recommendations from the Phase 2 study. The primary objective of Phase 3 was to create a resource that community members and decision-makers in the Clarendville-Bonavista region could use to learn about the region's progress towards sustainability in a simple and understandable "Report Card" tool. This Report Card, which took the form of a pamphlet (in two different designs for the casual reader as well as local leaders) and a website, was designed using a co-creation process in which community members, Regional Council, and Memorial University researchers collaborated in building the document using a participatory process, which is described further in Section III of this report. This Report Card was aimed at knowledge mobilization and ensuring that the research conducted in Phase 1 and 2 was marshalled for impact on regional governance outcomes through the means of a simple and understandable decision-support tool. The second objective, taking a more long-term view, was to offer recommendations on how regional stakeholders could use the Report Card as an opportunity to initiate a broader process of stakeholder engagement aimed at generating solutions to common challenges and monitoring progress towards the region's sustainability priorities. This objective corresponds to the third recommendation of the Phase 2 Final Report, which called for an Action Plan for sustainable development in the region.

The objectives and specific steps carried out in Phase 3 are as follows:

1. Create a **Report Card** that depicts the sustainability performance of the Clarenville-Bonavista region based on the indicator framework from previous research in the region.
 - a. Review and synthesize the regional indicator framework from Phases 1 and 2 of previous study in light of existing community and regional sustainability monitoring frameworks
 - b. Build a Report Card tool based on Regional Council recommendations and present in print, pamphlet, and web format
2. Provide **recommendations** for utilizing sustainability monitoring approaches to improve policy and planning outcomes at the regional and provincial level

This report describes the process used to create this Report Card and includes the Report Card as an appendix. It also offers a series of recommendations for local and provincial leaders regarding the use of the Report Card as part of a more long-term regional planning process. We also demonstrate how this resource could serve as a means for linking other tools and resources available at the provincial level to increase the use and availability of public data, and suggest potential ways that other rural regions in Newfoundland and Labrador could learn from or adapt the process carried out here. The recommendations for regional planning and monitoring are proposed in light of the region's specific context, successes, and challenges as highlighted by the region's sustainability indicator framework.

II. Project Rationale

Rural communities and regions across Newfoundland and Labrador are facing threats to their long-term sustainability. Challenges such as out-migration, market volatility, restructuring and government retrenchment, and environmental threats such as climate change pose significant challenges to rural communities and regions that often have limited capacity to address these issues.⁶ Numerous actors and agencies are working to implement sustainable development in rural regions, but both the desired future state that the term represents and specific paths to its implementation are unclear. Adding to this challenge, much of the research and practice on sustainable development has had a strongly urban bias, focusing mostly on building sustainable cities while ignoring what sustainability means for a rural community or region.⁷

⁶ Kelly Vodden, "Governing Sustainable Coastal Development: The Promise and Challenge of Collaborative Governance in Canadian Coastal Watersheds," *The Canadian Geographer* 59, no. 2 (2015): 168; MacKendrick, N.A. & Parkins, J.R., "Frameworks for Assessing Community Sustainability: A Synthesis of Current Research in British Columbia," Natural Resources Canada, Canadian Forest Service, Northern Forestry Centre, 2004, 1; Sean Markey, Sean Connelly, & Mark Roseland, "'Back of the Envelope': Pragmatic Planning for Sustainable Rural Community Development," *Planning Practice & Research* 25, no. 1 (2010): 6.

⁷ Markey et al., "Back of the Envelope," 5.

This project approaches sustainable development from a holistic and participatory perspective. In this lens, regional development must be driven by the values and aspirations of community members by engaging stakeholders from a wide range of interests and sectors to create an inclusive vision of sustainability.⁸ Sustainable community development, in this vision, aims at identifying local strategies to ensure social, economic, cultural, infrastructural, and institutional dimensions of development in a manner that respects ecological limits and considers the welfare of current and future generations.⁹

The need for a holistic approach to sustainable development is well established in both theory and practice. Although there is no single agreed-upon definition of sustainable development, the integration of multiple criteria of well-being is a common marker, most commonly discussed as the triple bottom line of environmental, economic, and social sustainability, with some emphasizing the importance of ecological well-being as a foundation for human welfare.¹⁰ This integration of priorities, including considerations such as cultural heritage, community infrastructure, gender equity, and other priorities, serves to broaden the criteria of decision-making beyond the pursuit of GDP growth or other narrow, often economically-centred indicators of progress.¹¹ This approach can benefit rural communities in many ways, such as in Craik, Saskatchewan, a town of 400 people that, by constructing an ecological interpretation centre for local residents and visitors, created employment, boosted the morale of community leaders and volunteers, and helped attract a new wave of eco-tourism to the community while raising awareness about the local ecosystem and sustainable building practices.¹²

A related question is how stakeholders in rural communities can build more effective forms of regional governance. There are a wide range of actors operating in different sectors and at community, regional, provincial, and federal scales who are affected by and affect decisions made about rural regions. Some rural regions are beginning to explore shared decision-making models for more collaborative forms of governance that devolve policy development and planning across a wider array of municipal, provincial, federal, non-profit, and for-profit stakeholders.¹³ Central to collaborative governance

⁸ Mark S. Reed, Evan D.G. Fraser, & Andrew J. Dougill, "An Adaptive Learning Process for Developing and Applying Sustainability Indicators with Local Communities," *Ecological Economics* 59, no. 4 (2006): 407; Frans L.P. Hermans, Wim M.F. Haarmann, & John F.L.L.M. Dagevos, "Evaluation of Stakeholder Participation in Monitoring Regional Sustainable Development," *Regional Environmental Change* 11 (2011): 807; Vodden, "Governing Sustainable Coastal Development," 168.

⁹ Mark Roseland, *Towards Sustainable Communities: Solutions for Citizens and Their Governments*, (Gabriola Island, B.C.: New Society Publishers, 2012), 31-35. ; Robert W. Kates, Thomas M. Parris, & Anthony A. Leiserowitz, "What is Sustainable Development? Goals, Indicators, Values, and Practice," *Environment: Science and Policy for Sustainable Development* 47, no. 3 (2005): 11.

¹⁰ Roseland, *Towards Sustainable Communities*, 31.

¹¹ Joan Martinez-Alier, "Ecological Distribution Conflicts and Indicators of Sustainability," *International Journal of Political Economy* 354, no. 1 (2004): 14.

¹² Markey et al., "Back of the Envelope," 19.

¹³ Vodden, "Governing Sustainable Coastal Development," 168; Ryan Gibson, "A Primer on Collaborative Multi-Level Governance," *Canadian Regional Development: A Critical Review of Theory, Practice, and Potentials*. St. John's, NL (2011), 5.

arrangements is an important role for local actors and shared decision-making across multiple levels and scales of stakeholder groups and institutions.¹⁴ A collaborative governance model of regional public policy may be the most effective way to ensure that decisions are made in a way that embodies the holistic set of goals in a sustainable development agenda defined by local stakeholders. We suggest that sustainability indicators and monitoring processes are tools that can be employed in setting such an agenda.

Community-Based Monitoring for Rural Sustainability

Regional sustainability planning efforts usually focus on identifying a common vision, goals, and strategies to address a wide range of ecological, social, cultural, economic, and institutional priorities. Local data can be used to improve and inform decision-making.¹⁵ When community members from multiple sectors and interests are engaged, this can initiate a process of participatory sustainability monitoring that can serve as an agenda-setting tool and provide a baseline to track the region's progress over time.¹⁶ Participatory sustainability monitoring can take on one or more forms such as sustainability indicator frameworks, asset-based community development (ABCD), or community-based project evaluation and assessment methodologies.¹⁷

The use of sustainability indicators (SI) as a community-based sustainability monitoring tool is widespread. Although early SI approaches introduced in the 1980s and '90s were highly technical and expert-driven, contemporary methodologies often incorporate a high level of citizen participation into the identification of local priorities and indicators to ensure the resulting framework is locally appropriate as well as scientifically robust.¹⁸ SI frameworks have been associated with numerous benefits for communities, such as capacity building, social learning, empowerment and the preservation of traditional and local knowledge, and relationship and trust building among stakeholders with differing interests.¹⁹ The Phase 1 Final Report from this project gives a more in-depth literature

¹⁴ Vodden, "Governing Sustainable Coastal Development," 169; Gibson, "A Primer on Collaborative Governance," 6.

¹⁵ Reed et al., "An Adaptive Learning Process," 415.

¹⁶ Hermans et al., "Evaluation of Stakeholder Participation," 806.

¹⁷ Ibid., 806; Nancy Holman, "Incorporating Local Sustainability Indicators into Structures of Local Governance: A Review of the Literature," *Local Environment*, 13, no. 4 (2009): 365; Mathie, A. & Cunningham, G., "Who is Driving Development? Reflections on the Transformative Potential of Asset-based Community Development," *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 26, no. 1 (2005): 175-186; John Kretzmann, and John McKnight, "Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community's Assets," (Center for Urban Affairs and Policy Research, 1993); Centre for Sustainable Community Development, "Community Capital Tool," accessed March 23, 2016, <https://www.sfu.ca/cscd/community-capital-tool-launched.html>.

¹⁸ Holman, "Incorporating Local Sustainability Indicators," 367; Reed et al., "An Adaptive Learning Process," 408; Fraser, E., Dougill, A., Mabee, W., Reed, M., & McAlpine, P., "Bottom-Up and Top-Down: Analysis of Participatory Processes for Sustainability Indicator Identification as a Pathway to Community Empowerment and Sustainable Environmental Management," *Journal of Environmental Management* 78 (2006): 114.

¹⁹ Holman, "Incorporating Local Sustainability Indicators," 376; Reed et al., "An Adaptive Learning Process," 407., Natcher, D. C., & Hickey, C. G., "Putting the Community Back into Community-Based Resource Management: A Criteria and Indicators Approach to Sustainability," *Human Organization* 61, no. 4 (2002):361.

review on sustainability indicators.²⁰

Despite these benefits, however, many communities that have used SIs have struggled to ensure measurable impacts of these efforts on local sustainable development outcomes.²¹ Too many community-based SI initiatives have led to indicators that ‘sit on the shelf’ with no implementation in the form of specific policies or projects to address identified issues or opportunities. In order to bridge this implementation gap, local stakeholders must find a way for indicator-based projects to serve as a tool of regional governance. Holman (2009) posits that SI initiatives must create a common space between stakeholders, or a ‘portal’ for new forms of communication and network formation to foster channels for shared decision-making and action. Similarly, Holden (2013) identifies the potential for SIs to serve as ‘boundary objects’ - new interfaces between actors and governance areas that create opportunities for diverse stakeholder groups to create new knowledge and decision-making processes. This function is closely related to the concept of collaborative governance, a new vision for public policy that relies on a broad base of stakeholders at multiple levels for shared regional decision-making.²² As a tool of collaborative, multi-level regional governance, sustainability indicators may be able to serve as “part of a wider process of shared strategic agenda building [that] starts from the question: ‘where are we now, and where would we like to go in the future?’”²³

Case Studies of Regional Sustainability Monitoring

A handful of regions around the world have used sustainability indicators as part of an agenda-setting process for more collaborative regional governance. The Dutch province of Noord-Brabant has used sustainability indicators in regional planning and policymaking since 2001.²⁴ Beginning with a participatory process that engaged hundreds of residents in creating a “sustainability Balance Sheet”, the process undertaken in the region has led to the creation of a sustainability monitoring methodology that has been applied in several other Dutch provinces and beyond.²⁵ The creation and reiteration of this Balance Sheet has had a direct input into provincial government decision-making in Noord-Brabant, with the revised indicator set released before each provincial election and a number of new policy initiatives that have borne

²⁰ Holisko et al., “Assessing the Factors Impacting the Sustainability of the Clarendville-Bonavista Rural Secretariat Region,” 13-19.

²¹ Meg Holden, “Sustainability Indicator Systems Within Urban Governance: Usability Analysis of Sustainability Indicator Systems as Boundary Objects,” *Ecological Indicators* 32 (2013), 90; Holman, “Incorporating Local Sustainability Indicators,” 367.

²² Vodden, “Governing Sustainable Coastal Development,” 168; Gibson, “A Primer on Collaborative Governance,” 3.

²³ Hermans et al., “Evaluation of Stakeholder Participation,” 806.

²⁴ Ibid., 810.

²⁵ Ibid, 809.

out of their findings in renewable energy, industrial development, agriculture, and other key regional sectors.²⁶

Another example of effective participatory indicator development occurred within the Little Red River Cree Nation in Alberta, in which a rural Aboriginal community built a set of sustainability indicators informed by Cree knowledge and values.²⁷ The nation, faced with pressure to adopt federal forest management indicators from the Canadian Council of Forest Ministers, decided instead to design their own indicators based on traditional ecological knowledge and a holistic Cree worldview.²⁸ This ‘sustainability matrix’ was eventually used by Band leaders to evaluate management decisions and created a feedback loop that fostered social learning among decision-makers.²⁹

Finally, the Fraser Basin Council in British Columbia has produced a management tool called a ‘sustainability snapshot’ – a report card of the sustainability of the Fraser Basin watershed – that has been conducted regularly at 2-3 year intervals.³⁰ The Council is composed of representatives from four levels of government (federal, provincial, municipal, and Aboriginal) as well as civil society and the private sector. In producing these “sustainability snapshot” reports, the Council has become recognized as an independent authority and important actor in regional watershed governance. The Fraser Basin Council’s work is described in greater detail in the Phase 1 Final Report.³¹

Sustainability & Well-Being Monitoring Efforts in Newfoundland & Labrador

A handful of provincial and community-based initiatives in Newfoundland and Labrador offer innovative examples of participatory monitoring tools for rural sustainability and well-being. The following section presents a brief overview of recent tools and initiatives (excluding the Clarenville-Bonavista indicators project itself), that serve as examples of participatory sustainability monitoring or provide resources that could support or improve monitoring efforts in rural regions.

Community Accounts

At the provincial level, Community Accounts is perhaps the most valuable resource available to aid in constructing sustainability indicator-based tools. Informed by a holistic framework of well-being rooted in welfare economics and individual and collective capabilities, Community Accounts houses public data on a wide array of social, economic, demographic, cultural, and environmental indicators on every municipality

²⁶ John F.L.L.M. Dagevos, “Creating Sustainable Communities and Regions: Experiences from the Netherlands,” PowerPoint Presentation, Liminus Festival, Woody Point, NL, June 22nd, 2016.

²⁷ Natcher & Hickey, “Putting the Community Back into Community-Based Resource Management,” 351.

²⁸ Ibid., 354.

²⁹ Ibid., 355.

³⁰ Fraser Basin Council, “Sustainability Snapshot 2010: Working Together in the Lower Mainland,” A report of the Fraser Basin Council, Vancouver, B.C., 2010, 2.

³¹ Holisko et al., “Assessing the Factors,” 16.

and region in the province.³² Maintained by the Newfoundland and Labrador Statistics Agency, Community Accounts is the first online public data retrieval system in Canada that provides detailed data at the community level for a holistic set of indicators of well-being.³³ The indicators developed in the Clarendville-Bonavista Rural Secretariat Region relied heavily on Community Accounts for data to measure the region's current performance and provide benchmarks from similar regions.

Regional Economic Capacity Index

The Regional Economic Capacity Index (RECI) was developed by the Regional Analysis Laboratory of Memorial University as a decision support tool for assessing the suitability of a given community or region in the province to various economic development projects.³⁴ Based on a holistic set of regional economic indicators, the index is a composite of factors rating the *quality* of features such as public services, industries, resources, and retail services within a community or region.³⁵ The main inputs of the RECI are the demographic *characteristics* of the region, economic structure, service level, governance, and spatial location.³⁶ The RECI can be viewed for multiple jurisdictional scales, including Rural Secretariat regions, Economic Zones, and the recently developed Functional Economic Regions which have also been identified by the Regional Analysis Lab.³⁷ These regional boundaries, informed by a similar quantitative basis as the RECI, identify a scale for economic cooperation and development in the province that is based in everyday economic relationships such as commuting, purchasing, and other key activities.³⁸

Vital Signs

Another recent initiative that has taken a provincial focus is Vital Signs. Co-authored by the Harris Centre of Regional Policy and Development and the Community Foundation of Newfoundland and Labrador, Vital Signs is based on a national initiative focused on developing sustainability indicators at the provincial and regional level.³⁹ With the

³² May, D. & Hollett, A., "The system of Community Accounts: An application to Newfoundland and Labrador," *Paper presented for the 30th General Conference of the International Association for Research in Income and Wealth, Organization for Economic Cooperation and Development*, Portoroz, Slovenia, August 24-30, 2008; Newfoundland & Labrador Community Accounts, "About The Project," accessed March 21, 2016, http://nl.communityaccounts.ca/about_us.asp.

³³ Newfoundland & Labrador Community Accounts.

³⁴ Simms A., Freshwater, D., & Ward, J., "The Rural Economic Capacity Index (RECI): A Benchmarking Tool to Support Community-Based Economic Development," *Economic Development Quarterly* 28 (2014).

³⁵ Regional Economic Capacity Index, "About RECI," accessed March 27th, 2016, <http://reci.ucs.mun.ca/about.php>

³⁶ Regional Economic Capacity Index.

³⁷ Simms, A., Freshwater, D., & Ward, J., "A Methodology to Delineate and Classify Functional Economic Regions for Regional Planning and Development for the Atlantic Provinces," *Paper Presented to the 52nd Southern Regional Science Association Meeting*, April 4-6, 2013.

³⁸ Simms, Freshwater, & Ward, "A Methodology to Delineate and Classify Functional Economic Regions," (2013).

³⁹ Community Foundation of Newfoundland & Labrador & The Leslie Harris Centre of Regional Policy and Development, "Newfoundland & Labrador's Vital Signs: A Province-Wide Check-up of the Quality of Life in Newfoundland & Labrador's Communities for 2014," St. John's, NL, 2014; Vital Signs, "About Vital Signs," accessed January 12, 2016, <http://www.vitalsignscanada.ca/en/about>.

second edition released in Fall 2015, Vital Signs has been distributed across the province in a newspaper insert that provides a snapshot of the province's social, environmental, and economic well-being.⁴⁰ Vital Signs uses accessible language and user-friendly graphics to communicate the status of a large number of provincial indicators to the public with the help of stories and case studies from around the province.

Newfoundland & Labrador Cultural Heritage Inventory

An initiative has recently been completed that employs an Asset-Based Community Development (ABCD) approach, commonly known as asset mapping.⁴¹ Focused on cultural sustainability, the Newfoundland and Labrador Cultural Heritage Inventory project has engaged residents in two communities in identifying their cultural heritage assets.⁴² Completed in the communities of Branch on the Avalon Peninsula and Tilting on Fogo Island, this process has led to the preservation and cataloguing of a wide variety of local cultural knowledge such as stories, poems, songs, recipes, and other anecdotal information describing and documenting cultural heritage assets.⁴³ Local stakeholders on Fogo Island in particular are interested in building on this process by expanding the scope out to all 11 communities on the island and/or broadening the scope of the assets included to other social, ecological, and economic factors to guide local governance.

The Need for Integration of Existing Resources

These initiatives demonstrate that there is substantial momentum at different levels for engaging in regional and provincial sustainability monitoring processes. Community Accounts and Vital Signs in particular have brought province-wide attention to informed decision-making through better use of public data and indicators of progress. Other work, such as the recently identified Functional Economic Regions work advanced by the Regional Analytics Laboratory at Memorial University, has brought attention to the need for regional governance that takes into account the way that people live and work in their regions.⁴⁴ However, no single tool exists that integrates the knowledge provided in these resources for use by people in rural regions. Local stakeholders such as municipal governments, local service districts, Regional Councils, non-profit organizations, and business development associations could benefit from a tool or process aimed at integrating these different resources. By making resources available at the regional level more easily accessible by members of rural communities and rural decision-makers, and presenting this information in a more user-friendly format, this kind of approach could improve public access to data for informed decision-making and more inclusive and effective forms of regional governance.

⁴⁰ The Leslie Harris Centre of Regional Policy & Development, "Vital Signs," accessed March 29, 2016, <http://www.mun.ca/harriscentre/vitalsigns/>.

⁴¹ Kretzmann & KcKnight, 1993.

⁴² Newfoundland & Labrador Cultural Heritage Inventory, "Newfoundland & Labrador Cultural Heritage Inventory: A Systematic Approach to Organizing a Community's Cultural Resources," accessed January 31, 2016, <http://www.culturalheritageresources.ca/>.

⁴³ Newfoundland & Labrador Cultural Heritage Inventory.

⁴⁴ Simms, Freshwater, & Ward, J, "A Methodology to Delineate and Classify Functional Economic Regions, 2013.

III. Methods of Project

The project employed a mixed-methods approach consisting of a literature review of regional sustainability monitoring practices, public engagement techniques, and data collection, analysis, and integration in an iterative co-creation process. The project's methods were based on collaboration between Regional Council members and the research team, taking an approach informed by a human-centred design process.⁴⁵ This approach allowed for a flexible and iterative approach through techniques such as the use of rapid prototyping of the Report Card document.

Literature Review

The project began with a review of the Phase 1 and 2 studies and case studies of regional sustainability monitoring initiatives. This included both examples where sustainability indicator-based processes resulted in effective governance outcomes, as reviewed in Section II, and less successful examples. The primary focus of the Phase 1-2 review was to examine the set of sustainability indicators defined and highlight opportunities for evaluating and presenting the results of these data in a participatory manner.

Public Engagement Methods

Participatory methods were integrated into the project at every possible opportunity. The identification of the project's goals and methods were based on extensive consultations with Regional Council members, informational meetings with key stakeholders in the region, and a series of public workshops and presentations.

After several meetings with Regional Council, a series of public workshops held in the region in February and early March 2016. During three workshops, held in Port Union, Clarenville, and Arnold's Cove, community members were engaged in a participatory evaluation process and gave feedback on a set of prototypes of the Report Card document. The purpose of these workshops was to gather a collective sense of how different communities in the region are doing in terms of the 22 sustainability indicators, drawing on examples from participants' daily lives and comparisons with the official data used to measure the indicators with anecdotal evidence from residents. The Report Card prototypes were evaluated through verbal feedback as well as direct input through written comments on the physical printed samples using markers, stickers, and Post-it™ notes. A total of 18 community members attended these three workshops. The workshops were promoted using online invitation via email, which targeted known community leaders such as local business owners, non-profit organizations, and other active local stakeholders in the region.

⁴⁵ IDEO, *Human-centered design toolkit* (Ashland, Ohio, US, Atlas Books, 2011), www.ideo.com.

Data Collection & Integration

Concurrent to this process was the integration of data on the region's sustainability indicators from previously collected data with participant perspectives. Following practices identified by Fraser et al. (2005) and Reed et al. (2006), calling for the need to integrate bottom-up and top-down methods in community sustainability indicators, we used feedback from the workshops to inform how we evaluated the region's indicators. With the data already in hand from Phase 2, telling us "where we are" in terms of current indicator status, the next step was to use additional local perspectives and existing public data to evaluate these indicators in reference to "where we want to go" as a region.

The primary method for evaluating the region's indicators was the assigning of benchmarks for each specific measure. We applied a benchmarking approach adapted from the "Telos Method", a sustainability indicator identification and evaluation approach developed by the Telos Brabant Centre for Sustainable Development in Dutch sustainability monitoring work.⁴⁶ In this approach, for every measure associated with the region's indicators, a set of benchmarks, or "norms" are identified from comparable regions or communities, national and provincial averages, or the region's own performance from a previous timeframe. A set of preliminary benchmarks had been identified in the Phase 2 report (e.g. provincial average), which we expanded in order to create a set of *targets* and *limits* for every measure in the framework. Following the Telos Method, we identified these targets and limits in order to create four *ranges* to correspond to *excellent*, *good*, *moderate*, or *poor* performance. An example of these ranges and benchmarks is shown in Figure 2 below.

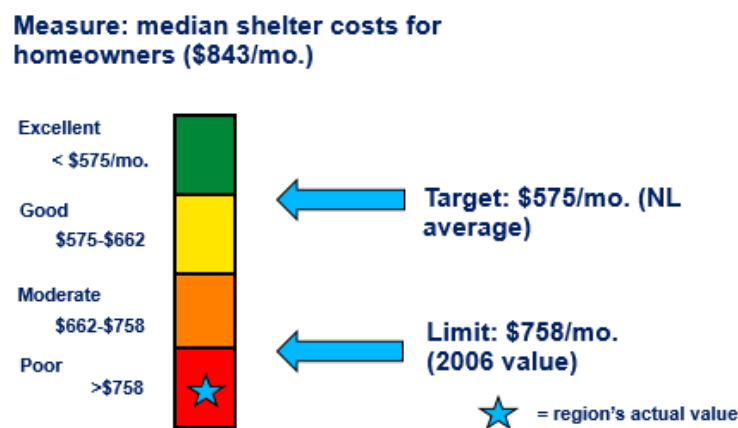


Figure 2. Benchmarks for the Region's Measures and Indicators

⁴⁶ Hermans et. Al., "Evaluation of Stakeholder Participation," 810; Telos Brabant Centre for Sustainable Development, *Telos*, accessed February 12, 2016, <http://www.telos.nl/english/default.aspx>; John F.L.L.M. Dagevos, "Monitoring and Assessing Sustainable Development at the Regional Level: The Telos Method," (presentation, Simon Fraser University, Vancouver, B.C., November 2, 2011).

In the example above, the region's median shelter costs for homeowners falls above what was chosen as the limit – the region's shelter costs in 2006⁴⁷, and far above the target – the provincial average shelter costs. Another *intermediate target* was also assigned that creates the threshold between good and moderate performance.

During discussions with Regional Council, we assigned a draft set of benchmarks to give an example of how the indicators could be evaluated. We considered the option of using the workshops to incorporate public input into the benchmarks themselves through live polling, but members of Regional Council advised that this process may be overly technical to present to community members, and that a better use of participants' time would be to engage people in a more open-ended discussion around the indicators. After conducting the workshops, we adjusted the draft benchmarks to ensure that the scores aligned with the assessment given by community members. To do this, we analyzed notes from the workshops and assigned an overall status of the indicators according to each workshop based on the ranges shown above. In addition to the status itself, we also collected participant perceptions of any recent trends (improving, getting worse, or otherwise). The trends were compared to a series of trends previously identified in the Phase 2 research referred to as Temporal Indicator Performance Signs (TIPS), which showed recent changes in the data used to measure the indicators.

One challenge presented in this process was a considerable amount of variation in many indicators at the level of *sub-regions*, which were identified during the project as the Clarendville area, the Bonavista Peninsula, and the Isthmus of Avalon. For example, access to primary healthcare was perceived to be much higher in the Clarendville area than on the Bonavista Peninsula. In some cases, the three sub-regions were in relative agreement about the status and recent trends of a particular indicator across the region (e.g. concerns about affordable housing), but for many indicators, the sub-regional variations led to an inconclusive portrait across the region. Overall, the lumping of the three sub-regions, with such widely varying sub-regional variations, masked many important differences that can only be observed at a scale smaller than the Rural Secretariat regional boundaries. This variation points to a need for a better understanding of the specific sustainability assets and challenges within each sub-region, the boundaries of which must be identified by residents and empirical analysis of meaningful patterns of interaction and cooperation.

Finally, the measures and indicators were tabulated and scored using a simple indexing formula that averaged the values of each indicator across each of the five priority areas. Using the benchmarks arrived at in light of public feedback, we scored each measure on a scale between 1 and 4 (1 signifying poor, 4 excellent, etc.), and aggregated the scores to present an overall picture of well-being and sustainability within each of the five areas. The full matrix of data used to measure and benchmark the region's indicators are included in Appendix B.

⁴⁷ The regional figure for median shelter costs (for homeowners and renters) is based on data from Clarendville only, due to the unavailability of data on these figures from the Rural Secretariat region level.

Presentation & Dissemination Methods

Finally, we presented this assessment in a draft Report Card to community members. As previously stated, the Vital Signs reports recently published at the provincial level provided this project with inspiration in considering the content, format, and tone of our own regional sustainability Report Card. A series of successive prototypes were reviewed by Regional Council and refined to create a draft Report Card. A substantial portion of this document was the inclusion of local “Good News Stories” that featured local initiatives that were mentioned by Regional Council as having a positive impact on regional sustainability. We held individual meetings with leaders of 13 local organizations from municipal, non-profit, and for-profit backgrounds to gather information and photos for these stories, which also served as a preliminary scan of the types of stakeholders in the region working on different sustainability priorities.

Using printed drafts and a presentation with our assessment results, we conveyed these findings to 14 community members in two public presentations in Clarendville and Port Union. The Report Card, consisting of an 8-page pamphlet with tables showing the status and trend of each indicator, as well as graphs and stories related to the key priorities for the region, were reviewed and given final feedback by residents in attendance. According to public input from the workshops, we prepared two versions of the Report Card: one smaller pamphlet for a general audience, and a larger report-style document for distribution to municipal and provincial government leaders, public service providers, key non-profit organizations, and local business owners in the region.

An emergent process that came directly from the desire of participants in workshops was the creation of a map of the region that showed the boundaries of the three sub-regions. During public consultations, it became clear that stakeholders felt that many sustainability issues would be best addressed at the sub-regional level, as compared to the Rural Secretariat region level, and many participants felt that the first step in this process was to define the boundaries of the sub-regions themselves. Based on participant recommendations, we consulted the work of the Memorial University Regional Analytics Lab, headed by Dr. Alvin Simms in the Department of Geography, on Functional Economic Regions for the province.⁴⁸ Based on labour market patterns such as commuting, this set of regional delineations is based on how residents live and work in their regions. The Regional Analytics Lab provided a map of the Rural Secretariat region including the three sub-regions, which was then modified by community members to match not only economic conditions but also socio-cultural conceptions of which communities work together commonly at the sub-regional level. A final map was created by the Environmental Policy Institute (Grenfell Campus) using geographic information systems (GIS) which displayed the three sub-regions and the municipalities and local service districts within them.

⁴⁸ Simms, Freshwater, & Ward, “A Methodology to Delineate and Classify Functional Economic Regions,” 26.

Finally, the finished Report Card pamphlet was printed and distributed to community stakeholders throughout the region. Copies were provided to municipal staff and councils, local service districts, non-profit organizations, and business development associations in the region. Copies were also circulated to key provincial government staff and the Members of the House of Assembly. To further spread awareness about the project, a news story was published on the Canadian Broadcast Service's website on March 6th, 2016.⁴⁹

IV. Project Outcomes

The project realized multiple benefits for stakeholders in the Clarenville-Bonavista Rural Secretariat Region and at the provincial level. These take the form of both tangible outputs and more intangible outcomes that emerged during the process of conducting the project.

Outputs

As this project was primarily a co-creation exercise among regional stakeholders, there was a strong emphasis on tangible outputs. These include a map of the Rural Secretariat region with tentative boundaries of the three sub-regions identified, the Report Card in pamphlet form and shown in a website created for the project, and a preliminary scan of important regional stakeholders for future regional planning efforts.

Sub-Regional Map

A significant output of this project which was conducted during the creation of the Report Card is a map of the Clarenville-Bonavista Rural Secretariat Region with the three sub-regions defined. This component, as described previously, was an emergent goal of the project that was spurred by participant feedback during workshops. Loosely based on the Functional Economic Regions map for the region, the map included in the Report Card is a product of a basic participatory mapping exercise conducted electronically and in person. After initial feedback on the boundaries of the three sub-regions was collected during meetings with Regional Council, a draft map created by the Environmental Policy Institute was circulated to individuals who had been involved in the project. Comments were provided by email with any adjustments that participants believed should be made and, after one week of collecting comments, a revised map was sent out and final comments were collected and incorporated.

This sub-regional map is an important step in defining the scale at which residents perceive many sustainability issues should be addressed. Some of these issues, which were elaborated on in workshops and the public presentations, include the provision of

⁴⁹ Katherine Hobbs, "MUN Studying Economic Options for Clarenville-Bonavista Region," *CBC News* (Gander, NL), Mar. 6, 2016, <http://www.cbc.ca/news/canada/newfoundland-labrador/bonavista-clarenville-1.3472939>.

basic services like waste management, fire protection, water treatment, tourism planning, recreation, business development and entrepreneurship, and post-secondary education. Many participants asserted that solutions in these domains were best implemented at the sub-regional level, citing differences between sub-regional assets and challenges (e.g. residents in the Bonavista Peninsula sub-region felt that access to healthcare was much more of a concern in their communities than participants in Clarenville, where most of the region’s healthcare infrastructure and physicians are located).

This mapping exercise, like the stakeholder scan, was also very preliminary and could be expanded with a more in-depth participatory mapping exercise, particularly at the sub-regional level. This mapping could also inform the design of new initiatives or sub-regional working groups on some of these issues. For example, a regional workshop on improving food security on the Isthmus could invite identified leaders and key stakeholders in that sub-region and incorporate exercises where residents draw out the sub-regional boundaries, adjusting the boundaries identified in this project, and identify important features such as grocery stores, community gardens, sites for berry picking and other foraging activities, and other important assets and stakeholders related to improving food security.

Report Card

The most significant output of the project was the Report Card itself. In addition to displaying the region’s set of sustainability indicators and the results of the assessment from the Phase 1 and 2 research, the Report Card aims to be accessible and understandable to a general audience and reading level. We incorporated a variety of graphs and photos to enliven the content of the indicators, as well as the Good News Stories of local organizations in the region that are making a positive impact in their communities. At the recommendation of Regional Council, we also included an adapted definition of sustainability for a more general audience, as shown on the Report Card document in Appendix A. Another adaptation, made at the request of workshop participants, was to refer to the region as the “Clarenville-Bonavista-Isthmus Region” to reflect the three sub-regions identified. Refer to Appendix A for the Report Card pamphlet.

Pamphlet

The main format we used to disseminate the Report Card’s results was a physical pamphlet which was printed and distributed across the region. Key to the production of the Report Card was the consideration of the user groups, or audiences that would be targeted. To that end, we initially prototyped the Report Card in three formats (3-fold pamphlet, small booklet, and newspaper insert), hoping to engage potential readers with differing levels of interest. Following participant feedback, we adjusted these formats to a 7 x 8.5-inch pamphlet and an 8.5 x 11-inch report-style document, both 8 pages, front and back, aimed at a general audience and local government, respectively.

The pamphlets feature five Good News Stories from communities across the region. A total of 1,500 copies of the Report Card were printed and distributed to Town Councils, local service districts, non-profit organizations, doctors' offices, community centres, and other public facilities. Copies were also sent to elected officials and staff in the provincial government.

Website

Parallel to the Report Card document was the creation of a website about the project. This was important both in order to reach a broader provincial audience and in order to connect to the various public data resources that this project incorporated, such as Community Accounts and Vital Signs. On the site, additional Good News Stories are displayed that were not included in the Report Card pamphlet due to space limitations. Hosted by the *Rural Resilience* research group of Memorial University, the site has a province-wide focus and eventually intends to feature additional case studies of similar rural initiatives that use public data such as indicators for regional development. The website is available at <http://regionalsustainability.ruralresilience.ca/case-studies/clareville-bonavista-region/>.

Preliminary Stakeholder Scan

Another significant output from the project was a scan of some of the stakeholder groups that are working on regional sustainability issues. In order to apply the Report Card's findings to future regional planning and governance efforts, we sought to identify a preliminary list of regional leaders in a number of sectors that could be consulted and expanded on in future stakeholder engagement. A limited number of resources exist that provide directories or lists of local organizations, namely the Community Sector Council's Directory of Non-Profit and Voluntary Organizations.⁵⁰ However, in order to support future regional planning efforts, a concise and comprehensive list of regional stakeholders from non-profit, private, and public sectors must be compiled.

During the process of identifying and collecting the Good News Stories, the research team met with 12 individuals representing 13 local initiatives with a mission of improving community or regional well-being across the region. This process was by no means exhaustive and was aimed primarily at gathering information to create brief descriptions of these organizations for use in the Report Card. However, these meetings also served as an initial sample of the variety of regional stakeholders who are leading community development efforts across the region. The information collected about these organizations serves as a preliminary scan of regional stakeholder groups that could be expanded on in a more in-depth stakeholder analysis to support an Action Plan or regional governance pilot study. These 13 initiatives represent three sectors (public, private, and non-profit) and are working on issues related to all five of the region's sustainability priorities. These stakeholders are listed below according to the sector to

⁵⁰ Community Sector Council of Newfoundland and Labrador, "Cabot Loop Voluntary Clusters Project: Directory of Non-Profit and Voluntary Organizations," St. John's, NL, 2010.

which they belong. The results of this preliminary stakeholder scan are displayed in Table 1 below.

Table 1: Regional Stakeholders Consulted in Preliminary Stakeholder Scan

Organization	Regional Sustainability Priorities*				
	1	2	3	4	5
<i>Public Sector</i>					
Town of Come-by-Chance Department of Recreation	✓			✓	✓
Town of Sunnyside	✓				✓
Tourism Elliston	✓	✓	✓	✓	✓
<i>Private Sector</i>					
Bonavista Living	✓	✓	✓	✓	✓
Fisher's Loft	✓	✓			✓
<i>Non-Profit Sector</i>					
Ability Employment Corporation	✓	✓			
Champney's West Aquarium		✓	✓		✓
Sir William Ford Coaker Historical Foundation	✓	✓	✓	✓	✓
Computers for Seniors, Clarenville		✓	✓	✓	
Clarenville Region Extended Seniors' Transportation	✓			✓	✓
Elder Care Housing Co-operative	✓	✓			
Home From the Sea Sealers' Memorial	✓	✓		✓	
Trinity Historical Society	✓	✓	✓	✓	

**Columns refer to the five priorities from the Report Card (1 = Meeting Basic Needs, Tackling Poverty, and Promoting Equity; 2 = Maintaining Sense of Place, Physical, and Cultural Identity; 3 = Intergenerational Equity; 4 = Governance and Participation; 5 = Integration of Environmental, Social, and Economic Factors)*

This stakeholder scan, although preliminary, will be used to further identify relevant groups for in-depth stakeholder analysis at the sub-regional or regional level. This stakeholder analysis will be a substantial outcome of an accompanying project funded through the Memorial University Office of Public Engagement. During the project, the research team collected a long list of individuals and organizations that will be further consulted in stakeholder analysis to identify opportunities for cross-sector collaboration in regional governance.

Outcomes

While the above outputs represent the tangible products of this project, the most significant benefits of the project lie in the more intangible outcomes realized. Overall, the methods undertaken to create the Report Card constituted a participatory process that deepened public participation in and understanding of key regional sustainability issues. This process also facilitated the ability of Regional Council to provide advice on these issues as part of its mandate. The Report Card further serves as a form of

knowledge mobilization that provides a decision-support tool for local stakeholders in future regional planning and project implementation. In addition, the project demonstrates the value of collaborative approaches to regional governance that other rural regions in Newfoundland and Labrador could potentially learn from and adapt to their own purposes.

Support of Regional Council's Mandate

The mandate of Regional Council is to provide policy advice to the provincial government regarding key social, economic, cultural, and environmental issues that impact the sustainability of the Clarenville-Bonavista Rural Secretariat Region. Its seven members engage in public engagement activities to ensure that this advice reflects the interests, values, and needs of residents of the region, while creating a forum to promote collaborative approaches to regional development.⁵¹

This project directly supports the ability of Regional Council to fulfil its mandate in several ways. Firstly, the holistic nature of the indicator framework developed in the Phase 1-2 research, and now disseminated to community members throughout the region, began a dynamic dialogue among regional stakeholders about what the specific social, environmental, and economic priorities are that comprise regional sustainability. In the Phase 3 project, the participatory evaluation process and benchmarking methods created a snapshot of where the region stands in reference to meeting those priorities. In this assessment role, the Report Card highlighted a key set of successes and challenges that can inform how specific projects and policies can be targeted. The indicators and the clear evaluation of regional priority areas offered in the Report Card offers a framework to organize and prioritize issue-specific policy advice and highlight existing regional initiatives and organizations in need of support.

The Report Card can also facilitate regional organizations in seeking support for their ongoing efforts that work towards community and regional development. Regional Council, which serves in a facilitation role among different stakeholders leading such regional initiatives, can connect local organizations working in different priority areas to information that can help local leaders advocate for their communities. Much of the data used in the Report Card highlights the needs of the region which community-based organizations, ranging from historic preservation societies to Chambers of Commerce and arts groups, could use to demonstrate the need for their work to continue and receive support. Many of these organizations do not have core funding and rely on grants from government and other sources for their basic operations. In this way, Regional Council could provide the Report Card and data sources used in it as a tool to support local organizations in communicating the importance of their work to communities in the region and the need to support it.

⁵¹ Office of Public Engagement, "Regional Councils", accessed March 30 2016, http://ope.gov.nl.ca/pe/regional_councils/index.html.

Knowledge Mobilization

This project also served as a key form of knowledge mobilization between the research community and residents of the region. By creating and distributing the Report Card pamphlet, the results of the Phase 1-2 research were brought to community members in a format and language that is understandable and accessible. This outcome fulfilled the second recommendation of the Phase 2 final report while ensuring equitable access to this information in different communities in the region. The locations where the Report Card pamphlet was distributed were chosen based on local recommendations about the places where community members are most likely to pick up and read the document, such as doctors' offices or community centres. This strategy created a direct flow of information to the general public in the region.

The Report Card also represents a form of knowledge mobilization between public data and local stakeholders that could help to stimulate informed decision-making. The data used to measure the region's sustainability indicators, gathered during the Phase 1-2 research, mostly originates from publicly managed data sources such as Community Accounts and Statistics Canada. The indicator framework developed in this previous research synthesized these sources of data into a holistic assessment of the region, which this project has communicated to the public and local decision-makers. This project has also incorporated public data into the development of benchmarks for the region's indicators that were the primary means for evaluating the region's progress. It is our intention that the regional sustainability assessment and the public data used to complete it can lead to more informed decision-making by local stakeholders in public, private, and non-profit sectors. This decision-support role was our motivation to distribute the Report Card to local governments and local community development organizations, who now have the opportunity to use its findings to enhance informed and multi-dimensional decision-making. Additionally, with all project materials available online, the Report Card and information included therein can be reached by a broader audience provincially and beyond.

Promotion of Collaborative Approaches to Regional Governance

Finally, this project has undertaken a process for participatory regional sustainability monitoring that serves as a tool for current and future regional governance and provides an example for other regions in rural Newfoundland and Labrador. The process used to create the Report Card, as well as the community-based research on which the project built, embody collaboration between different communities and sectors while employing participatory methods at all possible steps. Its culmination in the Report Card represents how regional stakeholders from all sectors can use a community-based monitoring approach as a tool for collaborative planning. In the process, we engaged a wide range of regional stakeholders and framed the project in action-oriented terms, aiming to spark dialogue about how the region's sustainability indicators, communicated through the Report Card, could form the basis of a common agenda for action among different local leaders and key stakeholders. This dialogue is still ongoing.

In this way, the ultimate impact of the project is yet to be fully realized. The full exploration of the Report Card's relevance for regional planning and governance, through the creation of an action agenda and other means, is not in the scope of the present project. However, there is considerable interest among regional stakeholders, especially on the Bonavista Peninsula, in building on the project through more in-depth sub-regional analysis and collaborative research. This project has served to facilitate this dialogue and provided the scaffolding upon which to build a common agenda. As such, this project and the research that precedes it has promoted more collaborative approaches to regional governance and serves as a pilot for regional sustainability planning. Its process could serve as an example of regional sustainability planning that other regions in rural Newfoundland and Labrador could look to and adapt to their local realities and current priorities. Especially given many stakeholders' desire for a more involved collaborative planning exercise, there is strong potential for the process underway now to serve as a model for rural sustainability planning.

V. Recommendations for Regional Policy & Planning

The outcomes of this project point to a number of ways that regional and provincial stakeholders can work towards better regional governance. Here we present three specific recommendations for next steps: namely, to use the Report Card's findings for creating a regional agenda for action, to conduct a sub-regional analysis on regional planning and governance on the Bonavista Peninsula, and to further explore linkages to other community-based monitoring initiatives in rural Newfoundland and Labrador.

Translate the Report Card into a Common Agenda for Action

The results of the Report Card must be used to build a common agenda for collective action among regional stakeholders. The successes and challenges highlighted in our assessment point to specific realms of sustainability and regional governance that could be targeted for planning and project development. This project has identified a handful of preliminary planning areas that could be targeted, listed below. However, we recommend that a more in-depth process be undertaken to identify specific strategies that should be supported and/or implemented in future research and public engagement.

There are many ways to approach the identification of planning areas and sustainability strategies, but one potential starting place would be to focus on the region's best and worse-ranked indicators. The table below highlights eight indicators that were ranked either as a.) excellent, b.) good and improving, c.) poor, or d.) moderate and getting worse. These indicators represent the upper and lower margins of the region's sustainability profile that could be particularly salient regional planning topics. We also have highlighted a handful of more specific issues associated with these indicators that

stood out during public consultations and the benchmarking process. More exhaustive information about these indicators is included in Appendices A and B.

Table 2. Top Successes and Challenges from Report Card Assessment

Opportunity	Indicators	Status	Trend	Assets and Challenges
Successes	Air Quality & Health	Excellent	Getting Worse	<ul style="list-style-type: none"> Few sources of air contaminants Increases in some source contaminants (i.e. sulfur dioxide, particulates) around North Atlantic Refinery on the Isthmus⁵²
	Active & Healthy Lifestyles	Good	Improving	<ul style="list-style-type: none"> Improving self-perceived personal health⁵³
	Youth Unemployment	Good	Improving	<ul style="list-style-type: none"> Many entry-level job opportunities for youth, especially in employment centres like Clarenville, Bonavista, and industry on the Isthmus
Challenges	Affordable Housing	Poor	Getting Worse	<ul style="list-style-type: none"> Rising housing costs⁵⁴ Vulnerability for seniors and single-parent families
	Waste Reduction Strategies	Poor	Inconclusive	<ul style="list-style-type: none"> Uneven access to recycling services High provincial waste generation per capita⁵⁵
	Access to Primary Healthcare	Moderate	Getting Worse	<ul style="list-style-type: none"> Decreasing access to medical care outside of Clarenville Long wait times Doctors retiring in several communities
	Public Debt	Moderate	Getting Worse	<ul style="list-style-type: none"> Rising provincial deficit and concerns over potential cutbacks in 2016-2017 budget
	Sustainable Fisheries Management	Moderate	Getting Worse	<ul style="list-style-type: none"> Groundfish stocks still far below healthy levels⁵⁶ Decreasing fisheries-based workforce

There are several reasons that it may be particularly useful to focus on these indicators in future regional planning and project development. First, building on Asset-Based

⁵² Newfoundland and Labrador Department of Environment and Conservation, *2014 Ambient Air Monitoring Report*, (St. John's, Government of Newfoundland and Labrador, 2015).

⁵³ Community Accounts, "Community Accounts indicators of well-being," accessed March 26, 2016, http://nl.communityaccounts.ca/indicators.asp?_vb7En4WVgbWy0nc_

⁵⁴ Statistics Canada, "NHS Profile, Clarenville, T, Newfoundland and Labrador, 2011", accessed March 14th, 2016, <http://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=1007013&Data=Count&SearchText=clarenville&SearchType=Begins&SearchPR=10&A1=All&B1=All&Custom=&TABID=1>

⁵⁵ Statistics Canada, "Municipal Solid Waste", accessed March 16th, 2016, <http://www.statcan.gc.ca/pub/16-201-x/2012000/part-partie3-eng.htm>

⁵⁶ Fisheries and Oceans Canada, "Short-Term Stock Prospects for Cod, Crab and Shrimp in the Newfoundland and Labrador Region," accessed 23 March 2016, <http://www.dfo-mpo.gc.ca>

Community Development models, often communities can respond positively to focusing on assets as opposed to deficiencies.⁵⁷ Community leaders, especially in small communities, may become fatigued by development approaches that consistently focus on deficiencies; by beginning planning discussions with the positive areas of the region’s sustainability it may be possible to boost the morale of local stakeholders who must also attend to the weaknesses highlighted. This was our rationale in featuring the Good News Stories in the Report Card, a choice that was affirmed by many community members who were glad to see a positive focus on their communities and were eager to tell the stories of their organizations.

With respect to the indicators that did not show positive results in our assessment, there are many ways to approach collaborative planning for solutions. In future dialogues and consultations, it may be useful to brainstorm potential strategies, policies, and projects and then rank them by their feasibility to identify the “low-hanging fruit” as a starting point for creating change and building momentum to tackle more complex challenges. Another method, which the second recommendation we offer will explain in detail, is to conduct a more in-depth stakeholder analysis to understand what is already being done and by whom to address these challenges. This kind of analysis can ensure that work already being done is recognized as well as reduce the tendency to double efforts. The parallel project funded through Memorial University, which complements and expands on this project, has begun to conduct this stakeholder analysis. A wide variety of consultation methods are available for eliciting specific strategies and actions to move forward in building an action plan on these and other issues, such as SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis, participatory mapping exercises to highlight gaps in access to necessary services, or human-centred design approaches to project brainstorming and testing.⁵⁸

Conduct a Sub-Regional Analysis on the Bonavista Peninsula

Despite the need for collaborative planning across the region, it may be most effective to focus on the sub-regional level for a targeted agenda-building process. There are considerable geographic, economic, and cultural distinctions between the three sub-regions that point to the need for many regional sustainability issues to be better addressed at the sub-regional level. For example, the issues affecting affordable housing highlighted by the Report Card are more severe in the Clarenville area than on the Bonavista Peninsula, while the cultural heritage assets, and the tourism activity that they attract, are much more pronounced in the Peninsula sub-region than in Clarenville. A resulting set of strategies designed at the local level to improve these indicators would most likely look very different between the two sub-regions. In addition, preliminary feedback during the final presentations identified that many participants feel that many

⁵⁷ Kretzmann & McKnight, “Building Communities from the Inside Out”, 1993.

⁵⁸ IDEO.

indicators, from waste management to health, education, and fisheries, would be best addressed at the sub-regional scale.

Participants on the Bonavista Peninsula in general expressed a high level of interest in building on this project with a more in-depth collaborative planning process. Participants cited a pre-existing network of strong relationships between the communities in this sub-region and organizations in different sectors that already has led to multiple region-wide initiatives. Examples of these include the Discovery Regional Joint Council, in which the six municipalities of Bonavista, Elliston, Trinity Bay North, Trinity, King's Cove, and Port Rexton have begun to pool resources in key municipal services,⁵⁹ as well as non-profit initiative Alliances for Community Engagement (ACE) of the Community Sector Council.⁶⁰ For the private sector, the Bonavista Area Chamber of Commerce serves a catchment area that is roughly analogous to the sub-region identified in this project and acts as the primary advocacy voice for the business community.⁶¹ In each of these sectoral initiatives, there is a reflection of a prevailing mindset that there must be a collaborative and regionally-based approach to community development on the Bonavista Peninsula.

This partnership-based approach to regional development highlights tremendous assets of social capital and existing networks of cooperation among stakeholders on the Bonavista Peninsula. Citing these assets, representatives of public, private, and non-profit sectors in this sub-region have expressed a desire to build on this project by exploring the potential for the Report Card to be a tool for regional planning and governance. Participants cited the unique assets and challenges of the Bonavista Peninsula sub-region and strong working relationships between these groups as a rationale for building on this project with more solutions-oriented collaborative work in the region. Regional stakeholders are also interested in developing a set of sustainability indicators specifically for the Bonavista Peninsula sub-region to establish a baseline of regional well-being and support collaborative approaches to regional governance among different stakeholder groups. The aforementioned Memorial University-funded project done in conjunction with this one will make revisions to the indicators presented in the Report Card for use in a future monitoring tool on the Bonavista Peninsula.

Stakeholder Analysis and Engagement

In light of these findings, we recommend that in-depth community-based research be conducted in the Bonavista Peninsula sub-region to identify the necessary strategies for a common sustainability agenda. Given the potential for such agenda-building work to lead to long-term regional governance outcomes, it is crucial that this kind of research recognize the multi-stakeholder and multi-level forms of collaboration that often

⁵⁹ Town of Bonavista, "Minutes of Council Meeting, February 16, 2015," (Meeting Minutes, Bonavista, NL, 2015), 2.

⁶⁰ Community Sector Council of Newfoundland and Labrador, "ACE: On the Ground in the Clarenville-Lethbridge-Bonavista Region," accessed March 30, 2016, <http://communitysector.nl.ca/ace>.

⁶¹ Bonavista Area Chamber of Commerce, "Our Region," accessed March 28, 2016, <http://www.bacc.ca/3or/bbay.html>.

underpin effective regional governance processes.⁶² In addition, as previously stated, strategic planning must begin with a full account of what initiatives are already underway in the region. For these reasons, we recommend a thorough stakeholder analysis of regional sustainability actors on the Bonavista Peninsula.

There are multiple frameworks available for conducting stakeholder analysis at the regional level. For example, Mitchell, Agle, and Wood (1997) introduce a matrix for stakeholder identification based the urgency of various stakeholders' demands, their legitimacy in the community, and the power stakeholders possess.⁶³ In the context of regional sustainability monitoring, Hermans et al. (2011) identify two primary roles for local stakeholders: Type 1 stakeholders, who are engaged to represent a certain segment of a regional population or a particular issue that affects particular groups; and Type 2 stakeholders, who are local experts in various fields related to regional sustainability.⁶⁴ This kind of stakeholder analysis can lead to the identification of a broad base of individuals and organizations who can speak to a wide range of regional sustainability issues. The five priority areas and 22 sustainability indicators in the Report Card can serve as a scaffold for thematic stakeholder identification, with an emphasis on effectively engaging the public, private, and non-profit sectors and different levels of government. Methods such as semi-structured interviews, workshops with specific thematic groups, and attendance meetings held by thematically based local organizations can elicit the interests, visions for progress, and desired actions and strategies of stakeholders across the region. More introductory stakeholder identification and classification can be done prior to these in-depth methods to create a draft list of regional actors to consult in later research.

This identification and analysis stage could flow into a more targeted multi-stakeholder engagement process to create a regional sustainability planning agenda. Once identified, the networks of regional stakeholders may reveal a coalition of diverse interests with the potential to take up some of the identified strategies to make tangible impact on the region's sustainability outcomes. At this point, if there is interest at the local level, the formation of a targeted working group could have multiple benefits. This working group would have to be guided by the priorities of local stakeholders, but would ideally incorporate actors from multiple issue areas and sectors, including multiple levels of government. This group could act as a steering committee for regional sustainability planning to coordinate and provide support to existing and new projects, policies, and initiatives. It would also give an institutional presence to the variety of efforts already underway on the Bonavista Peninsula. Such a group could look to effective shared decision-making processes marked by deliberative and consensus-based approaches, as well as collaborative governance arrangements underway in

⁶² Vodden, "Governing Sustainable Coastal Development," 169; Gibson, "A Primer on Collaborative Governance," 6.

⁶³ Ronald K. Mitchell, Bradley R. Agle, & Donna J. Wood, "Towards a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts," *The Academy of Management Review* 22, no. 4 (1997), 865-867.

⁶⁴ Hermans et al., "Evaluation of Stakeholder Participation," 806.

Newfoundland and elsewhere.⁶⁵ Participatory monitoring of sustainability outcomes is crucial in this long-term view, with the tangible improvements in regional sustainability indicators representing the measurable impact of regional governance. To that end, we recommend future research engagement in the region to focus on developing a set of indicators and/or a Report Card with stakeholders in the Bonavista Peninsula that drills down to the sub-regional level.

Study of Existing Regional Capacity

A second recommendation for sub-regional research is to conduct a more targeted pilot study of one or more regional institutions or assets that represent existing capacity and opportunity for the region. Participants in the engagement sessions identified a need to sustain local capacity in key areas like public education, fisheries, and healthcare. Initial analysis from stakeholder consultations have generated a number of pilot study ideas. For example, interest was expressed by several participants in identifying ways to create new linkages between fisheries and culinary-based tourism in the region. Another salient opportunity for a pilot study would be to catalogue built heritage in communities across the region. Other stakeholders have suggested an opportunity for a field school based in regionally relevant research on topics such as geology, architecture, or fisheries. Additional investigation is needed to expand and refine these ideas. In identifying an institution or regional asset for potential pilot studies, it is important to identify relevant stakeholders that could be involved in implementing the project in question.

One local institution that has been identified as a potential partner in a pilot study is the Bonavista Campus of the College of the North Atlantic. The campus is the only public post-secondary institution in the Bonavista Peninsula sub-region and plays a key role in skills development and support for tourism and culinary trades. The campus' culinary school is a major contributor to workforce development in the hospitality sector as well as one of the main sponsors of festivals such as Roots, Rants, and Roars, a nationally acclaimed festival held annually in Elliston.⁶⁶ Local stakeholders have expressed an interest in understanding the various positive impacts that the Bonavista Campus has across communities in the region, including College staff. We recommend that future research explore opportunities for conducting a holistic impact study that can capture the various ways that the Campus helps sustain social, cultural, economic, and human capital in the region. Such a study could demonstrate how the Campus and its activities are essential to sustain the regional priority areas identified in the Report Card and suggest ways for research outcomes to be used to advocate for continuing and expanding the curriculum and programming at the Campus.

⁶⁵ Lawrence Susskind, Mieke van der Wansem, & Armand Ciccarelli, "Mediating Land Use Disputes in the United States: Pros and Cons," *Environments* 31, no. 2 (2003), 44; Kelly Vodden, *New Spaces, Ancient Places: Collaborative Governance and Sustainable Development in Canada's Coastal Regions*, (doctoral dissertation, Simon Fraser University, 2009), 260.

⁶⁶ Tourism Elliston, "The Roots, Rants, & Roars Festival," accessed March 30, 2016, <http://www.rootcellars.ca/festivals/the-roots-rants-roars-festival/>.

Explore Linkages to Other Community-Based Monitoring Initiatives in Rural NL

The final recommendation from this project is that the Report Card be consulted in future community-based initiatives in rural Newfoundland and Labrador as an example of the use of public data and monitoring approaches to regional development. There are a wide range of initiatives, discussed in detail in Section 2, that have developed tools and case studies at the local and provincial level. These include locally-based projects such as the Cultural Heritage Inventory research in Tilting as well as province-wide frameworks such as Vital Signs and Community Accounts.⁶⁷ The ongoing need for strong regional governance has also been communicated by the recently identified Functional Economic Regions, which should inform the appropriate scale of future regional monitoring and governance initiatives.⁶⁸ There are also sustainability monitoring tools at the national and international level that have parallels to the Report Card project, such as the Canadian Index of Well-Being and the OECD Better Life Index.⁶⁹

We recommend that potential linkages be further explored between the sustainability indicators process in the Clarenville-Bonavista region and these monitoring tools at different scales. The process undertaken in this region, which has culminated in the Report Card, could serve as a pilot for bottom-up methods to begin regional monitoring of sustainable development based on locally defined priorities. Other regions within the province and beyond can learn from the process used in the region while consulting with established monitoring frameworks. During the course of this project, we have borrowed from key provincial resources such as Community Accounts and Vital Signs, as well as discussed potential linkages to the NL Cultural Heritage Inventory. These tools could inform future regional sustainability measurement and monitoring tools in a manner that blends bottom-up and top-down methods, using local priorities to guide a discussion of how to monitor regional sustainability, but making use of practices that have already proven effective elsewhere. The methods developed by the Telos Brabant Centre for Sustainable Development, as previously discussed, are a valuable set of practices that have led to more sustainable regional development in the Netherlands, and have heavily influenced a similar Canadian project known as the Community Capital Tool.⁷⁰ We recommend that methodologies such as these, as well as resources available at the provincial level, be marshalled to the fullest extent in future regional sustainability monitoring work. The methods used to create the Report Card in the Clarenville-Bonavista region serves as a pilot of how future monitoring processes could

⁶⁷ Newfoundland and Labrador Cultural Heritage Inventory; Leslie Harris Centre, “Newfoundland and Labrador’s Vital Signs”; Community Accounts.

⁶⁸ Simms, Freshwater, & Ward, “A Methodology to Delineate and Classify Functional Economic Regions,” 26.

⁶⁹ Canadian Index of Wellbeing, “About the Canadian Index of Wellbeing,” accessed March 29, 2016, <https://uwaterloo.ca/canadian-index-wellbeing/about-canadian-index-wellbeing>; Organization for Economic Cooperation and Development, “OECD Better Life Index,” accessed March 29, 2016, <http://www.oecdbetterlifeindex.org/about/better-life-initiative/>.

⁷⁰ Telos Brabant Centre for Sustainable Development; Centre for Sustainable Community Development.

be approached, which we hope will lead to reiterations and improvements of the approach taken in the region for the benefit of communities across the province.

Conclusion

This project has produced a Report Card that communicates the Clarendville-Bonavista region's progress towards sustainable development. It has also proposed a set of recommendations for how stakeholders at various scales can build on this public engagement process in a solutions-oriented regional planning process. These outcomes are undergirded by a participatory process that demonstrates the potential for collaborative approaches to regional governance to engender long-term benefits for stakeholders within the region. A major benefit to residents and local leaders is the various forms of knowledge mobilization that this project used to inform and encourage dialogue among local stakeholders. This project, as well as the previous research on which it builds, serves as a pilot for regional sustainability monitoring and agenda-building that has potential benefits for stakeholders in other rural regions across the province and beyond.

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Appendix A – Regional Sustainability Report Card Pamphlet



Sustainability Report Card: Clarenville-Bonavista-Isthmus Region*



Map adapted from work on Functional Economic Regions by A. Simms and J. Ward,
Department of Geography and Harris Centre Regional Analysis Lab, Memorial University,
St. John's NL.
Map includes municipalities and local service districts only.

Regional Fast Facts

Population	28,255
Number of Communities**	109

Source: Community Accounts, 2016.

**Includes incorporated and unincorporated communities

*Sustainability means
keeping our communities
alive and supporting them
into the future.*

What is a Sustainability Report Card?

A sustainability report card is a check-up on the well-being of a community or region based on a common vision for the future. This Report Card is a snapshot in time of the region, which includes 3 distinct smaller regions shown to the left. This Report Card is meant to lead to strategic planning and collaboration across communities to take action on these findings. The top identified priorities for regional sustainability are shown below.

Top Sustainability Priorities

- Meeting basic needs, tackling poverty, and promoting equity
- Maintaining sense of place, physical & cultural identity
- Intergenerational equity
- Governance and participation
- Integration of environmental, social, and economic factors

Photo credit: homeaway.ca (bottom left), College of the North Atlantic (top left), Robert Berdan (upper right), Maurice Barry (bottom centre), Random Age-Friendly Communities (top centre), Town of Sunnyside (bottom right).

*Regional boundaries correspond with Clarenville-Bonavista Rural Secretariat Region as defined by the NL Office of Public Engagement

Regional Overview

The Clarenville-Bonavista-Isthmus Region extends from Bonavista to Port Blandford, Swift Current, and Long Harbour. The region has a rich cultural heritage and unique identity found in 3 distinct sub-regions: the Bonavista Peninsula, the Clarenville region, and the Isthmus of Avalon. These smaller regions each have their own unique cultural and economic character, but remain interdependent. The regional economy, based historically in fishing and fish processing, now boasts a diversified mix of services, manufacturing, primary industries, office professions, and other sectors. Much economic growth has occurred around services, tourism, and mineral processing and energy sectors in recent years. At the same time, communities are working hard to preserve their rich history and the culture of outport communities and fishing.

Top 5 Sectors of the Regional Economy

Sector	No. of Employees	% of Workforce	% Change
Services	3,535	24%	+2.9%
Construction	3,115	21%	+4.5%
Fisheries*	2,070	14%	-25.1%
Office	1,585	11%	+36.6%
Manufacturing	875	6%	+5.4%

Source: Community Accounts 2016

Reference years 2001-2006 due to change in Census data.

*Fisheries employment includes both harvesters and fish processing workers.

A Common Vision for the Region

Sustainable development for the Clarenville-Bonavista-Isthmus region must be rooted in a holistic and attainable vision for the future that people across the region can believe in. This should include a wide range of social, environmental, and economic goals shaped by the values of the region's residents in order to guide a common agenda for action. The Regional Council has expressed a holistic sustainability vision, shown

below, that this Report Card uses as its compass for measuring the region's progress.

The vision of the Clarenville-Bonavista-Isthmus Region is of a sustainable region with healthy, educated, prosperous people living in safe, inclusive communities.

How We Measure Progress

In this Report Card, we use 22 indicators shaped by a two-year public engagement process to show how well the region is doing in achieving its sustainability vision. We have rated each of these indicators on a scale shown below, using both public perspectives and data from a wide range of sources. Each indicator has benchmarks, including a target for how much we hope it will improve, and a limit that warns us that we need to work harder to improve it. Recent trends are shown by arrows. To the right are images showing how we are doing in each of the region's 5 sustainability priority areas. The figure below shows the scale we have used to evaluate the region's indicators, ranging from excellent (green) to poor (red).



Image credit: Telos Brabant Centre for Sustainable Development, Netherlands. Benchmarks adapted from methods developed by Telos.

Where We Are Now



Meeting Basic Needs, Tackling Poverty, & Promoting Equity

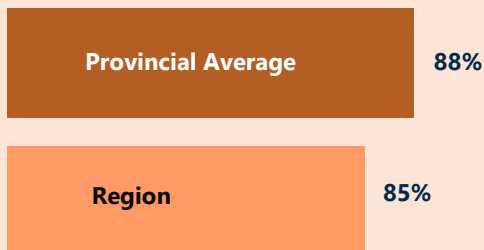
Status: Moderate

In order to become a sustainable region, we must first ensure a good quality of life for everyone. A public survey conducted in 2015, in which 299 residents of the region participated, identified that residents' top concerns included things like employment, affordable housing, access to healthy and affordable food, and healthcare services. As economic growth transforms many communities, we must ensure that people benefit equitably and can meet their needs.



The Come-by-Chance Community Garden. Photo credit: Roger Goobie.

Residents with Regular Access to a Doctor



Source: Community Accounts, 2016

Median Housing Costs for Clarenville



Source: Community Accounts, 2016



The CREST Bus. Photo credit: Brenda Reid.

Clarenville Region Extended Seniors' Transportation (CREST)

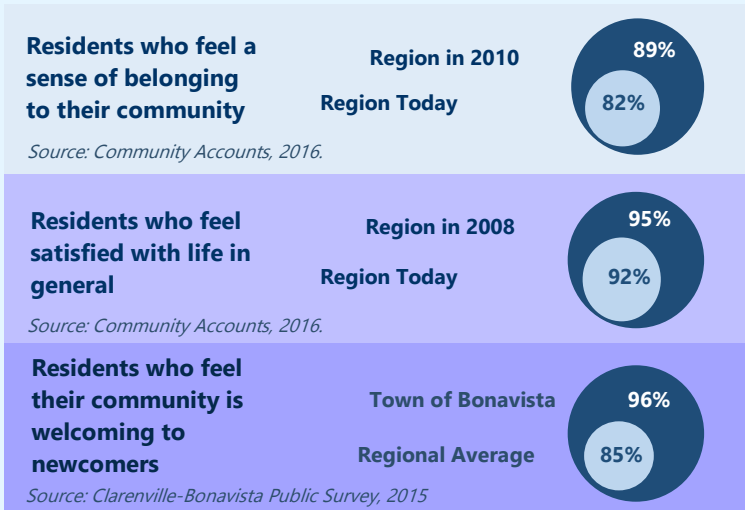
In 2013, the provincial government chose Clarenville for one of five pilot projects for age-friendly transportation. A group of local partners including the Town

of Clarenville and Random Age-Friendly Communities came together to create a public bus service for seniors. Clarenville Region Extended Seniors' Transportation (CREST) began operating on July 14th, 2014. The CREST bus, operated entirely by volunteers, provides affordable transportation to seniors aged 60+ and people confined to a wheelchair aged 25+. Covering a 20 km radius, the bus serves 12 communities including Clarenville, Milton, George's Brook, Harcourt, Random Heights, Elliott's Cove, Snook's Harbour, Deep Bight, Adeytown, Hillview, North West Brook, and Queen's Cove. The service costs \$2 per ride. CREST relies on the hard work of over 90 volunteers and the support of partners like Co-op 50/50, the Clarenville Lions' Club, Bell Aliant Pioneers, Odd Fellows, the Royal Canadian Legion, and the Rotary Club. Call 466 1114 to book a ride or for more information.

Indicators	Status & Trends	Examples	Data Sources
Affordable Housing	↓	In 2006, average rent in Clarenville was \$500/month, which has increased by 30% while housing costs for homeowners have increased by 11%. Especially in the Clarenville area and the Isthmus, renters, seniors, and students are struggling to afford rising housing costs.	National Household Survey, 2011
Employment Opportunities	↑	Since 2006, the employment rate has increased from 75% to 78%, but many businesses and organizations report that they are struggling to fill vacant positions and attract job seekers.	Community Accounts, 2016
Access to Primary Healthcare	↓	In 2012 91% of residents had regular access to a doctor, while only 85% had access as of 2013. Several communities have had doctors recently retire, and residents outside of the Clarenville area have limited healthcare services within their communities.	Community Accounts, 2016
Access to Transportation	↓	For every one of the region's residents, there is 1.1 vehicles on average, although many seniors must depend on friends and family for rides and most communities have no public transportation options.	Statistics Canada, 2016
Access to Good Food and Nutrition	↑	Since 2011, the proportion of individuals with a healthy body weight increased from 23% to 32%. However, many residents struggle to afford fresh, healthy food which often must be purchased a considerable distance away from their communities.	Community Accounts, 2016



The Sir William Ford Coaker Historical District, Port Union. Image credit: Jerry Moulard.



Indicators	Status & Trends	Examples	Data Sources
Stabilizing Population		The region's total population has decreased 1.6% since 2006 and the average age has grown from 40 to 44 since 2001. However, population decline is less severe than in several other rural regions, and some communities are starting to see new residents moving to the region and an increase in children and young families.	Community Accounts, 2016
Community Connectedness	↓	In 2010, 89% of residents felt a strong sense of belonging to their community. As of 2013, only 82% feel this way.	Community Accounts, 2016
Preservation of Cultural Heritage & Local Identity		There are 18 heritage sites and museums within the region, and during the tourism season over 69,000 visitors come to the region, which is 18.7% of the province's total annual visitors.	Department of Tourism, Culture, & Recreation, 2011; Community Infrastructure Mapping System, n.d.
Social Inclusion & Diversity		85% of residents perceive that communities are welcoming to newcomers, while the region's immigrant population is 1.04%.	Community Accounts; Clarenville-Bonavista Public Survey
Active & Healthy Lifestyles	↑	In 2011, only 54% of residents reported very good or excellent personal health, which has increased to 64%.	Community Accounts, 2016

Maintaining Sense of Place, Physical & Cultural Identity

Status: Good

The Clarenville-Bonavista-Isthmus region boasts a rich cultural heritage and identity. From Cape Bonavista, where John Cabot first landed in 1497, to a thriving contemporary arts community, to the rugged coastline dotted with traditional outport communities, the region's heritage is a tremendous asset which has been the centrepiece of a strong cultural tourism industry. However, continuing out-migration and an aging population mean that we must find ways to preserve the region's unique identity while promoting opportunities that will attract young people to stay in the region.



The new aquarium in Champney's West. Photo credit: Champney's West Heritage Group.



Historical demonstrations at Trinity. Photo credit: Trinity Historical Society.

Trinity Historical Society

Trinity Historical Society Inc. was established in 1964 to preserve the unique built heritage of Trinity. With a year-round population of 137 (2011), Trinity was one of the first communities on the Bonavista Peninsula to develop its tourism sector. Today, Trinity Historical Society is a major contributor to the town's cultural and economic life. The organization manages six historic buildings, including Green Family Forge and the Trinity Museum, which attracts 6,500 visitors per year. The Society is the second largest employer in Trinity, employing upwards of 35 people seasonally. In addition, the Society is a firm believer in regional cooperation and is working with several other heritage not-for-profit organizations across the Bonavista Peninsula in collaborative partnerships. Learn about the work of the Society at <http://www.trinityhistoricalsociety.com/>.

Intergenerational Equity

Status: Good

A key aspect of sustainable development is to take a long-term view to making decisions. We must consider how the decisions we make at the community and regional level will affect the next generation, while improving opportunities for our children. In a time of fiscal uncertainty, it is more important than ever to reduce the burden of debt we leave for future generations to pay, while making investments in public education that ensure people in the region will have new opportunities to lead fulfilling lives and careers in their communities for years to come.

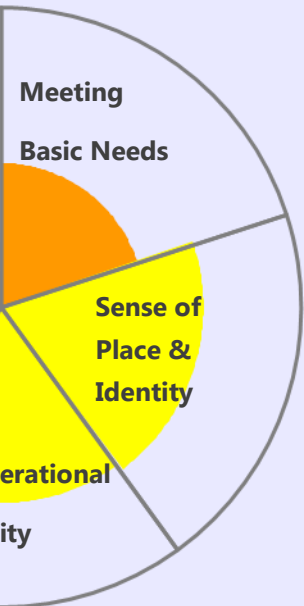
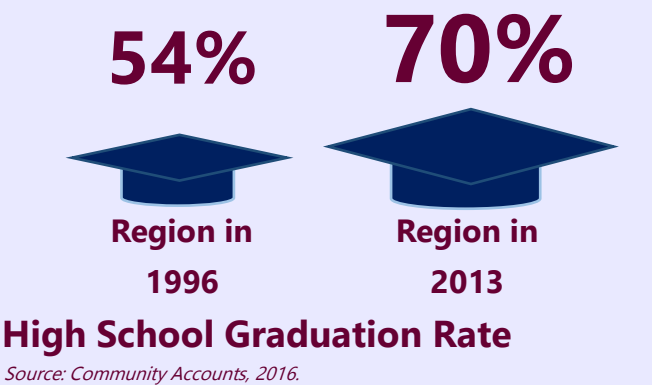
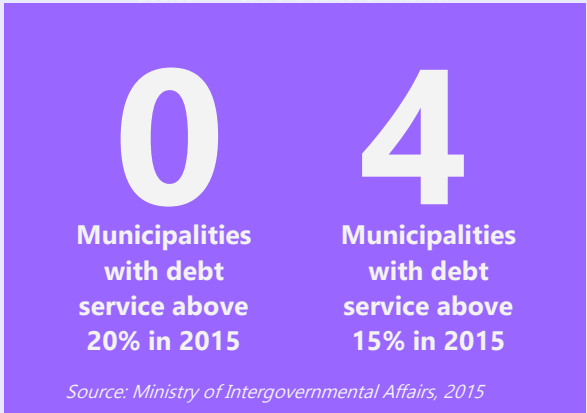


Photo credit: Today's Parent.



The College of the North Atlantic Bonavista Campus. Photo credit: Brennan Lowery.

Public Debt-Service Ratio



Bonavista Living

Bonavista's cultural heritage stands at the heart of its economic and population growth. Boasting the largest inventory of built heritage in rural Newfoundland, the town's heritage is also the foundation of Bonavista Living, a social enterprise that has been a major force in the community's revitalization. This real estate company, which started with five houses in 2011 and a vision for positive impact, is now actively restoring 41 residential and commercial properties throughout Bonavista. Its core goals are to preserve and restore the town's built heritage in a way that both protects and capitalizes on these cultural resources in order to create a more livable community for all. Furthering this vision are its sister companies: Bonavista Creative, which leases commercial space for new businesses, and Bonavista Creative Workshop, a producer of craft doors and windows. Together, the 3 companies have created over 60 jobs and are bringing 7 new businesses into the community along with 24 new full-time residents. Bonavista Living demonstrates how community development can preserve local character and identity through creative and mission-driven enterprise. Learn more at <https://www.bonavistaliving.com/>.



Jubilee House, a historic bed and breakfast restored by Bonavista Living (Photo credit: Bonavista Living).

Indicators	Status & Trends	Examples	Data Sources
Public Debt	↓	There are no municipalities in the region with a debt-service ratio exceeding 20%, but 4 with a ratio greater than 15%. Individuals, families, and communities alike expect to be affected by cuts in the 2016-2017 provincial budget aimed at addressing the provincial government deficit, which has grown from 23.4% of GDP in 2011-12 to a projected 35.9% in 2015-16.	Ministry of Intergovernmental Affairs, 2015; Fraser Institute, 2016
Youth Unemployment	↑	In 2010 the provincial youth unemployment rate was 23.1%, which has decreased to 16.4%.	Statistics Canada, 2016
Investment in Education	↑	In 2013, 70% of the region's adults have a high school diploma or higher, up from 54% in 1996. Residents are concerned that reduced funding at the College of the North Atlantic will affect local educational opportunities, especially at the Bonavista campus.	Community Accounts, 2016

Governance and Participation

Status: Good

Good governance is more than just good government – it takes teamwork and collaboration from citizens, organizations, businesses, local and provincial government sharing in the task of solving common challenges for the region. The Clarenville-Bonavista-Isthmus region has many highly engaged communities where people are willing to participate in public decisions and local governments want to involve the public. As we think about how to become a sustainable region, we must work together with other communities and with people in every sector to find new strategies that benefit people across the region and in which community members are effectively engaged.



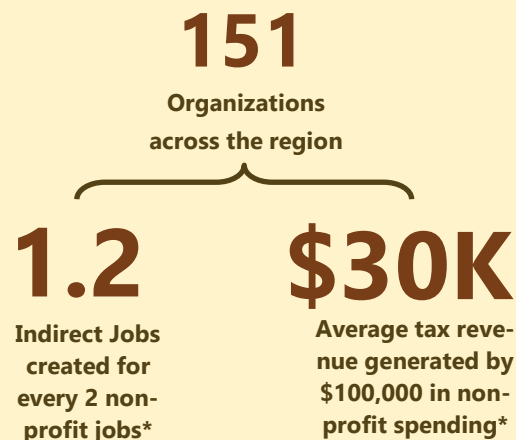
Photo credit: Alliances for Community Engagement.

Alliances for Community Engagement (ACE)

Alliances for Community Engagement (ACE) is a pilot project being led by the Community Sector Council NL (CSC). The goal is to create shared spaces where people (individuals, community organizations, businesses, institutions, and governments) from across the Clarenville-Bonavista region can come together to strengthen their connections and their communities. A "shared space" could be a meeting, an event, an online connection, or many other things – a big part of the project will be discovering which methods work best on the ground. This project emerges from the former federal rural secretariat's work in the area and through CSC's extensive contact with local people and organizations like the Voluntary Clusters Initiative. The ACE project is funded by the Government of Canada's Social Development Partnerships Program. The Government of Newfoundland and Labrador is also a partner, and a portion of the project is being funded through a grant from the Co-operators. CSC's will also be engaging the support and partnership of many organizations around the region, including the College of the North Atlantic, The Sir William Ford Coaker Heritage Foundation, the Trinity Historical Society, and more. Text credit: Community Sector Council - <http://communitysector.nl.ca/ace>

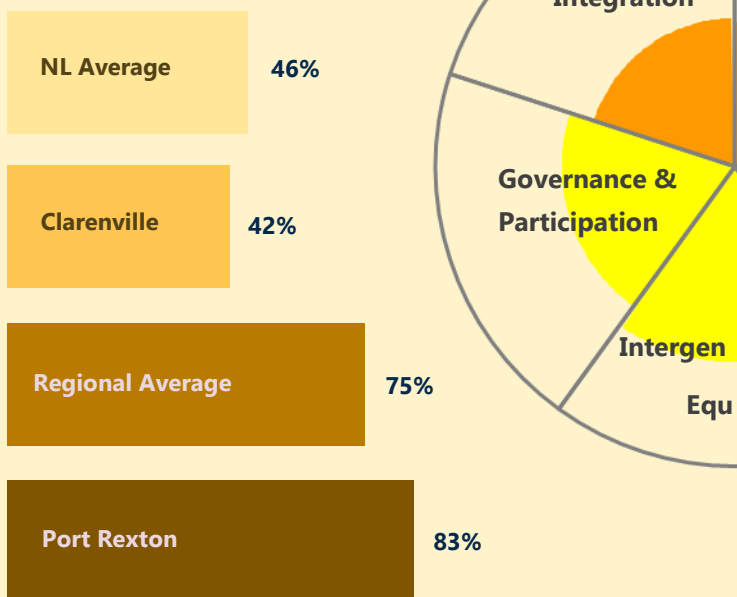
Indicators	Status & Trends	Examples	Data Sources
Commitment to Governance and Local Autonomy		Within the region's 48 municipalities and local service districts, 76% of residents were satisfied with local government. However, residents wish to see more locally controlled decision making and more regionally-based forms of governance.	Clarenville-Bonavista Public Survey, 2015
Citizen Engagement, Vibrancy of Non-Recorded Activities		75% of residents in the region do volunteering activities, compared with 46% at the provincial level. Local government takes effort to do meaningful public engagement, and citizens in general participate actively in decision-making.	Clarenville-Bonavista Public Survey, 2015; Community Accounts, 2016

Impact of the Non-Profit Sector



*Based on 2015 study of the non-profit sector in St. John's
Source: Community Sector Council, 2015

Volunteering Rates



Source: Clarenville-Bonavista Public Survey, 2015



Clarenville youth volunteer to help teach a computer skills class for seniors.
Photo credit: Brenda Reid.

Integration of Environmental, Social, and Economic Factors

Status: Moderate

At its core, sustainable development means learning to live within the limits of our planet and ensuring healthy local ecosystems. The Clarenville-Bonavista-Isthmus region is still recovering from the 1992 ground-fish moratorium and is redefining its relationship with the ocean. We face a common challenge to protect both the land and the sea and related livelihoods – like agriculture and fishing – that depend on them, while reducing waste and fighting climate change.

Green Depots



Clarenville
& Bonavista



St. Anthony-
Port Aux
Choix
Region

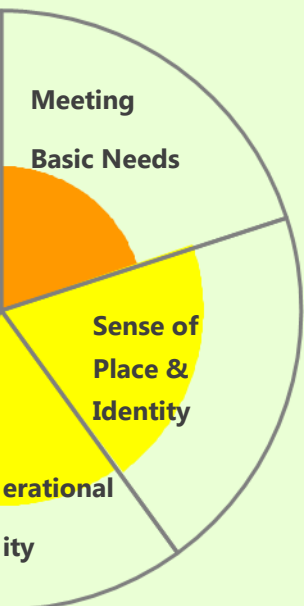


Stephenville
-Port Aux
Basques
Region

Source: Multi-Materials Stewardship Board, 2014.



Ocean View Trail in King's Cove. Photo credit: Keith and Heather Nicol.



Sunnyside Water Treatment Pilot

Sunnyside, like many communities in the region, has struggled with water quality for a long time. Using chlorine to treat the water supply, the community was exposed to potentially harmful compounds such as trihalomethanes (THMs), at levels 2-4 times above safe levels. In September 2015, the municipal government found a new way to make tapwater safer for residents. This 90-day pilot project, which uses a hydrogen-peroxide-based process, brought down THMs from over 300 parts per billion to 45 in a matter of days, well below federal guidelines. Residents saw immediate improvements, reporting that tapwater was

softer on skin and hair. In addition to these public health benefits, the pilot's installation cost was much cheaper than that of conventional systems and the Town expects that, if approved for long-term use, it will reduce municipal water treatment costs every year. Several communities have already approached the Town of Sunnyside for more information and the Town presented at the Municipalities NL Drinking Water Workshop in Gander on March 22nd, 2016. Learn more at <http://www.sunnysidenl.ca/index.htm>.



Sunnyside's new hydrogen peroxide-based water treatment system. Photo credit: Robert Snook.

Indicators	Status & Trends	Examples	Data Sources
Viability of the Agricultural Sector		In 2008, there were 400 people employed in agriculture in the region with a farm gate value of \$20 million annually. However, residents report a decrease in the number of farms in the region and there is a strong desire for more control over local food systems through community gardens, new farm businesses, and other initiatives.	Discovery Regional Development Board, 2008; Skeard, Holloway, & Vodden, 2011
Waste Reduction Strategies		There are 2 Green Depots in the region. However, most communities have no recycling service. In addition, Newfoundlanders produce more garbage on average per year than people in any other province in Canada.	Multi-Materials Stewardship Board, n.d.; Environment Canada, 2016
Air Quality & Health	↓	The Air Quality Index ranks as Low Risk (2-3) in the region. However, air monitoring conducted by North Atlantic observed recent increases in sulfur dioxide at Arnold's Cove and 7 instances of dangerously high particulate matter levels in Sunnyside in 2014.	Environment Canada 2016; NL Dept. of Environment & Conservation, 2015
Water Quality and Treatment	↑	10 local service districts and 2 municipalities have long-term boil water advisories in place, and many communities have high levels of water contaminants.	Minnes, Vodden, & Team, 2014
Energy Use and GHG Reduction Measures	↑	Newfoundlanders on average emit 16.6 tons of greenhouse gases per year, 6 tons less than in 2002. However, this must decrease by 10% to meet the provincial "Turning Back the Tide" GHG reduction target.	Environment Canada, 2016; Government of NL, n.d.
Ecological Protection		The region has 1 ecological reserve and 2 provincial parks, and vast forestland and marine ecosystems.	Community Accounts, 2016
Sustainable Fisheries Management	↓	Several communities have strong employment in fishing and fish processing plants. However, cod stocks are still 85% below healthy levels and shrimp biomass has decreased since 2007, while fisheries-based employment has decreased by 25%.	Discovery Regional Development Board, 2008; DFO, 2014; Community Accounts

About Regional Council

The Regional Council of the Clarenville-Bonavista Rural Secretariat Region is a voluntary body made up of 7 residents of the region. Regional Council's mandate is to provide advice to the provincial government regarding the sustainable development of the region and its communities. Regional Council fulfills this mission by working with the Office of Public Engagement and other partners within the region in doing public consultation, community-based research, creating citizen-based policy advice, and fostering collaboration between different people, organizations, and communities in the region.



The historic Bonavista Lighthouse. Photo credit: Bob Brink Photographs.

About This Project

The Clarenville-Bonavista Rural Secretariat Region has a vision for **a sustainable region with healthy, educated, prosperous people living in safe, inclusive communities**. In pursuit of this vision, Regional Council has supported 2 previous phases of collaborative research to identify the factors that determine the sustainability of the region. This research was conducted in consultation with the public through an engagement process that included a survey of 299 residents and 2 public workshops. In this phase, we conducted 3 workshops and spoke with local leaders across the region to make sure community members had a say in the Report Card's format and findings presented. This project, funded by the Memorial University Accelerator Fund, the NL Office of Public Engagement, and the Memorial University Collaborative Applied Research in Economics (CARE) initiative, was carried out by Dr. Kelly Vodden at Memorial University's Environmental Policy Institute and PhD student Brennan Lowery. This project has also

Project Partners

GRENFELL
CAMPUS



Environmental Policy Institute



Global Partnership for Small-Scale Fisheries Research



telos brabant centre for sustainable development



For more information visit our website at:

<http://regionalsustainability.ruralresilience.ca/case-studies/clarenville-bonavista-region/>

received in-kind support from the Leslie Harris Centre of Regional Policy and Development, the College of the North Atlantic, the Memorial University Regional Analysis Laboratory, the Too Big to Ignore research group, and the Telos Brabant Centre for Sustainable Development.

Take Action

Here are some ways you can help make sure this Report Card leads to action for a more sustainable region:

- Participate in upcoming strategic planning discussions or related projects
- Tell us what you are doing to make a difference in your community
- Give us your feedback:

Email: ruralsustainabilityNL@grenfell.mun.ca

Phone: (709) 639-2703

This project was made possible with funding support from the following organizations:



Office of Public Engagement



PUBLIC ENGAGEMENT ACCELERATOR FUND

Appendix B – Indicators Data

Priority	Indicator	Measure	Value	Unit	Year	Geographic Scale	Source
Meeting basic needs, tackling poverty, and promoting equity	Affordable housing	Median shelter costs for homeowners	\$43	\$	2011	Cheriville	http://www12.statcan.gc.ca/hro-eng/2011/eng-ped/prof/details/page.cfm?lang=eng&code1=1007013&code2=Count&searchText=Cheriville&searchType=Begin&searchPr=1064154118&154118Custom=87ABID=1
		Median shelter costs for renters	\$31	\$	2011	Cheriville	http://www12.statcan.gc.ca/hro-eng/2011/eng-ped/prof/details/page.cfm?lang=eng&code1=1007013&code2=Count&searchText=Cheriville&searchType=Begin&searchPr=1064154118&154118Custom=87ABID=1
		Percent of owner households spending 30% or more of household total income on shelter costs in Cheriville	12.2	%	2011	Cheriville	http://www12.statcan.gc.ca/hro-eng/2011/eng-ped/prof/details/page.cfm?lang=eng&code1=1007013&code2=Count&searchText=Cheriville&searchType=Begin&searchPr=1064154118&154118Custom=87ABID=1
		Percent of tenant households spending 30% or more of household total income on shelter costs in Cheriville	41.2	%	2011	Cheriville	http://www12.statcan.gc.ca/hro-eng/2011/eng-ped/prof/details/page.cfm?lang=eng&code1=1007013&code2=Count&searchText=Cheriville&searchType=Begin&searchPr=1064154118&154118Custom=87ABID=1
		Percent of residents with access to vehicular transportation	94	%	2013	Region	
	Access to transportation	Ratio of vehicles to adult aged 15 +	1.1	Ratio	2011	Region	http://www12.statcan.gc.ca/hro-eng/2011/eng-ped/prof/details/page.cfm?lang=eng&code1=1007013&code2=Count&searchText=Cheriville&searchType=Begin&searchPr=1064154118&154118Custom=87ABID=1

Priority	Indicator	Measure	Value	limit value			intermediate target		target value		Measure score	Indicator score	Indicator trend	Priority Score
Meeting basic needs, tackling poverty, and promoting equity	Affordable housing	Median shelter costs for homeowners	843	738	2006 shelter costs	602	Median shelter costs in Musgravetown, NL	573	provincial average	Poor	Poor	Getting Worse	Moderate	
		Median shelter costs for renters	651	595	Marytown NL median rental cost	547.5	30% of housing costs (based on median household income of one-person households)	500	2006 median rent in Clarendville	Poor	Poor	Getting Worse	Moderate	
		Percent of owner households spending 30% or more of household total income on shelter costs in Clarendville	12.2	11.8	provincial average	8.3	Brigus, NL value	5.4	Eastport, NL value	Poor	Poor	Getting Worse	Moderate	
	Access to transportation	Percent of tenant households spending 30% or more of household total income on shelter costs in Clarendville	41.2	39.3	provincial average	30.6	Carbonear value	20	amount of Fortune, NL (community in Newfoundland with the lowest %)	Poor	Poor	Getting Worse	Moderate	
		Percent of residents with access to vehicular transportation	94	80	Goodies value	96	Bonaville value	99		Good	Good	NA	Moderate	
		Ratio of vehicles to adult aged 15 +	1.1	0.9	FEI average	0.96	Nova Scotia average	1.03	provincial average	Good	Good	NA	Moderate	

Priority	Indicator	Measure	Value	limit value	intermediate target	target value	Measure score	Indicator score	Indicator trend	Priority Score			
Priority 1	Access to primary healthcare	Access to a regular medical doctor	84.7	87.5	2010 level for region	89	provincial average	91	2012 level for region	Poor	Moderate	Getting Worse	Moderate
		Average population (no. of residents) per physician	350	369	Central Health Region	787	Eastern Health Region	400	provincial average	Good	Moderate	Getting Worse	Moderate
		Median age of death	79	78	provincial average	81	2008 value	85		Moderate	Moderate	Getting Worse	Moderate
		employment rate	78	76	2006 level for region	79.6	rural average	85.4	provincial average	Moderate	Moderate	improving	Moderate
		self-reliance ratio	74.9	70.9	2009 level for region	76.4	rural average	81.9	provincial average	Moderate	Moderate	improving	Moderate
Priority 2	Access to good food and nutrition	Percent of residents aged 18 + who are overweight or obese	67.6	68.8	provincial average	62.7	Burnt Peninsula RS Region	58.6	Corner Brook-Roady Harbour Rural Secretariat Region	Moderate	Moderate	improving	Moderate
	Stabilizing population	residual net migration	-0.34	0	stable population	0.14	2010 level for region	0.23	Corner Brook-Roady Harbour Rural Secretariat Region	Poor	Moderate	improving	Good

Priority	Indicator	Measure	Value	Unit	Year	Geographic Scale	Source
Sense of place, physical and cultural identity	Community connectdness	total population (percent change)	-1.60%	%	2006-2011	Region	
		median age	44	Years	2006	Provincial	
		Percent of residents who feel very strong or somewhat strong sense of belonging to their community	81.3	%	2013	Region	
		Percent of residents who feel very satisfied or satisfied with life in general	91.6	%	2013	Region	
		self-assessed community safety (% residents who feel safe in communities)	93.6	%	2010	Region	
	Preservation of cultural heritage and local identity	Number of visitors to the region/ percent of total provincial tourism volume	69709	#	2011	Eastern Region (includes Burin Peninsula)	
		Number of heritage sites and museums in the region	18	#	2015	Region	

Priority	Indicator	Measure	Value	limit value		intermediate target	target value	Measure score	Indicator score	Indicator trend	Priority Score	
	Social inclusion and diversity	Percent immigrant population	1.04	1.04	current amount		1.8	provincial average	Good	Good	N/A	Good
		Percent of residents who perceive their community as very welcoming or somewhat welcoming to newcomers	83	60	Goodies	70	59.63	Bonaville	Good	Good	N/A	Good
	Active and healthy lifestyles	self-assessed health as very good or excellent	63.9	53.7	2012 level	39.3	71.9	2001 level for region	Good	Good	improving	Good
		prevalence (percent) of diabetes	8.4	10.4	rural average	8.8	6.6	national average	Good	Good	improving	Good
	Public debt	Number of municipalities with a debt-service ratio above 20%	0	2		1	0		Excellent	Moderate	Unclear	Good
		Number of municipalities with a debt-service ratio above 10%	4	2		1	0		Poor	Moderate	Unclear	Good
	Youth unemployment	provincial net debt as a % of GDP	33.9	23.4			5					
		youth unemployment rate	15.4	23.1	provincial rate in 2010	22	13.2	National youth unemployment rate (15-24 yrs.), 2013	Good	Good	improving	Good
Intergenerational equity	Investment in education	Average student loan burden	14800	35709	provincial average in 2011	26600	13193	Quebec average in 2011	Excellent	Good	Unclear	Good

Priority	Indicator	Measure	Value	Unit	Year	Geographic Scale	Source
		Average undergraduate tuition fees	2,350	\$	2015	Provincial	http://www.univision.ca/universities/index-student-tuitionandfees-by-university/
		Percent of citizens aged 25-64 holding a high school diploma or higher	69.5	%	2011	Region	http://nl.communityaccounts.ca/profiles.asp?_a=07&WWW.GOV.NC_
		Commitment to Governance and local autonomy	number of local service districts number of municipalities	30 18	# #	2015 2015	Region Region
Good governance and participation	Citizen engagement, vibrancy of non-recorded activities	Average satisfaction with town council/local service district	76	%	2015	Region	http://nl.communityaccounts.ca/table.asp?_a=07&WWW.GOV.NC_ProfileURL=nlOH&profileID=xnu-sa&PvDE_
		Self-assessed life stress as extreme or quite a bit	15.3	%	2013	Region	
		Volunteering rate	75	%	2015	Region	
	Visibility of the agricultural sector	number of community gardens in the region	4	#	2016	Region	
		number of community pastures in the region	2	#	2015	Region	

Priority	Indicator	Measure	Value	intermediate target			target value	Measure score	Indicator score	Indicator trend	Priority Score		
		Average undergraduate tuition fees	2,330	2327	Nova Scotia average tuition	3760	Manitoba average tuition	2038	Quebec average tuition	Good	Good	Under	Good
		Percent of citizens aged 25-64 holding a high school diploma or higher	69.3	23.6	1996 value for region	72.4	rural average	79.7	provincial average	Moderate	Good	Under	Good
		Commitment to Governance and local autonomy	number of local service districts: 30 number of municipalities: 18							Good	Good	NA	Good
Good governance and participation	Citizen engagement, vibrancy of non-recorded activities	Average satisfaction with town council/local service district	76	60	Chereville	77.8	Trinity	91.3	Bonaville	Moderate	Good	NA	Good
		Self-assessed life stress as extreme or quite a bit	13.3	13.2	provincial average	13.35	rural average	106	2011 level for region	Poor	Good	NA	Good
		Volunteering rate	73	42	Chereville	46	provincial average	74	Bonaville	Excellent	Good	NA	Good
	Viability of the agricultural sector	number of community gardens in the region	4	10	one in each of 10 largest communities (municipalities above 300 residents)	20	one in each municipality	62	One in each municipality and one for each LSO	Poor	Moderate		Moderate
		number of community pastures in the region	2	1	only one pasture	2	current level	3	one pasture per subregion	Good	Moderate		Moderate

Priority	Indicator	Measure	Value	Unit	Year	Geographic Scale	Source
Integration of environmental, social, and economic factors	Waste reduction strategies	Percent of workers in the agricultural sector	3.90%	%	2008	Region	
		number of green depot in the region	2.00	#	2013	Region	
		waste generation per capita	429.00	Kg	2014	Region	http://www.statcan.gc.ca/pub/16-201-x/2012000/part-partie3-eng.htm
	Air quality and health	Air Quality Index	2-3	Index	2013	Region	http://www.env.gov.nl.ca/env/eng_protection/science/air/air1.htm
	Water quality and treatment	Number of LSOs/municipalities with public water systems	35	#	2014	Region	
		Number of long-term boil water advisories (over 1 year) in the region	12	#	2014	Region	Speed 2014s - Get from Mines, Voodoo, & Team report
		# of public water systems with a Drinking Water Quality Index ranking of "Excellent"	6	#	2014	Region	

Priority	Indicator	Measure	Value	Unit	Year	Geographic Scale	Source
	Energy use and GHG reduction measures	Greenhouse gas emissions per capita	16.6	Tons CO ₂ Equi-valent	2013	Provincial	https://www.ec.gc.ca/indicateurs-indicateurs/default.aspx?lang=eng&n=18F3889C-1-1-https://www.ec.gc.ca/indicateurs-indicateurs/default.aspx?lang=eng&n=798A3699-1-1-https://www.tumbeoethedie.ca/government-action/energy-efficiency-targets-shrime-vir2eE1Rv-c-1https://www.theglobeandmail.com/news/world/canada-targets-better-realities-to-lead-in-sustainable-change-targets/article2742431/
		Number of ecological reserves	1	#	2011	Region	
		Number of provincial parks	2	#	2011	Region	
		Number of municipal stewardship agreements	2	#	2011	Region	
		Number of federal marine conservation/protected areas	0	#	2011	Region	
	Sustainable fisheries management	Percent of workforce working in fisheries	14.20%	%	2010	Region	Community Accounts, 2016 (1996-2006 census data)
		Groundfish relative to conservation limit Reference Point	15	%	2011	Provincial	
		Shrimp fishable biomass	18000	Tons	2013	Provincial	

