Mount Pearl Integrated Community Sustainability Plan

March 2010











Prepared for the City of Mount Pearl



Prepared by CBCL Limited





Executive Summary

In 2006, the federal and provincial governments signed the Canada – Newfoundland and Labrador Agreement on the Transfer of Federal Gas Tax Revenues (the Gas Tax Agreement). The City of Mount Pearl entered into an agreement with the Provincial Government to receive funding under the Gas Tax Program, and as a condition of this funding is required to prepare an Integrated Community Sustainability Plan (ICSP).

This plan, prepared with funding assistance from the Federation of Canadian Municipalities Green Municipal Fund, is a long-term plan, developed in consultation with the community, which will enable us to realize sustainability objectives for environmental, cultural, social, governance and economic aspects of our city.

The planning process included a scan of our sustainability issues, a review of current programs, policies, plans and initiatives, meetings with Staff and Council. A public consultation process was undertaken that included a visioning workshop, open house, online survey and a public presentation of the Draft Plan. Through this process, we established a vision for the future of our city:

To be a prosperous, progressive and innovative city, where arts and culture flourish, businesses thrive, and citizens are active and engaged. Our urban form is compact, our services efficient, and our natural environment protected. Mount Pearl: proud to call it home.

This vision is supported by sustainability goals for the environment, economy, society, culture and governance of the city. In Section 4 of the Plan, specific actions and ideas for achieving these goals are presented. Priority actions that were identified include:

- Approval and implementation of the Draft Municipal Plan
- · Developing Urban Design Guidelines
- Preparing a Waterford River Watershed Management Plan
- Completion of the five milestones that of the Federation of Canadian Municipalities Partners for Climate Protection Program
- Reviewing and implementing strategies to comply with the Regional Waste Management Strategy
- Preparing a Sustainable Transportation Plan
- Developing a Sustainable Water Plan
- Undertaking an Economic Development, Tourism, Marketing and Communications Strategy
- Developing an implementation strategy for the City's Parks and Recreation Master Plan
- Preparing an Arts and Culture Strategy for the City

Section 5 describes how we will implement the Plan and monitor our progress. We will do this by showing leadership, effective administration, setting targets and developing strategic partnerships. We have also identified a number of projects that are eligible for funding from the Green Municipal Fund. As a City, we look forward to pursuing a path to a more sustainable future.

Contents

Execu	utive Summary	i
1.	Introduction	1
1.1 1.2	Planning for Sustainability The Federal Gas Tax Agreement	
2.	Development of the ICSP	3
2.12.2	Inputs Community Visioning Process	
3.	Vision and Goals	7
4.	Actions	9
4.1 4.2 4.3	Land Use and Built Environment	.1
4.4	Transportation	4
4.5 4.6 4.7 4.8	Municipal Operations and Community Engagement	.6 .7
5.	Implementation and Monitoring	23
5.15.25.35.4	Collaborations and Partnerships	23
Appe	ndix A: Ideas Bank	
Appe	ndix B: Green Municipal Fund Projects	
Appe	ndix C: Sustainability Assessment	
Appe	ndix D: Public Consultation Materials	
Appe	ndix E: Funding and Information Sources	
Appe	ndix F: ICSP References	

1. Introduction

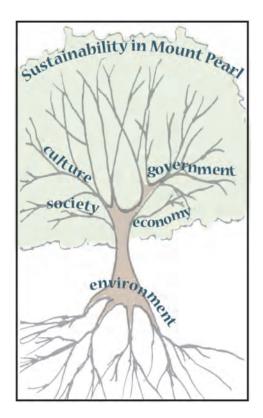
Mount Pearl is a growing and dynamic city that cares about the quality of life of its citizens. Changes within the community, and outside influences beyond our control, will have impacts, pose risks, and present challenges that will affect our ability to achieve the kind of community we aspire to be. Today, towns and cities across the country are concerned about future sustainability - a balancing act that considers how decisions that are made affect the social, cultural, economic and environmental aspects of the community. To meet these challenges head-on, requires a plan, and this plan has been prepared to help us realize the kind of city we want for future generations.

Sustainability is the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs.

-Bruntland Commission, 1987

In a sustainable Mount Pearl, the environment is conserved, local businesses are promoted and, because of its special strengths, the community participates with confidence in the modern economy. Social networks are strong, people are engaged in the process of local governance, and the community is open to and adept at managing complexity and change. In a sustainable Mount Pearl, community groups, institutions, businesses, agencies, governments volunteer individuals work together to set goals, form plans and implement solutions. We recognize that in achieving a sustainable future, local government needs support, and that everyone has an important role to play.

Sustainability in Mount Pearl is supported by the environmental, social, cultural, economic and governance aspects of our community. While nature is often the first thing that comes to mind regarding sustainability, our understanding of the issues is broadened by the awareness that our city is sustained, not only by nature, but also by the economy, society, governance and culture. An integrated approach to understanding sustainability recognizes that when one of these community aspects suffers, the whole city is set back from fully achieving its potential.



Like the branches and roots of a tree, the five parts of a sustainable community are closely related.

1.1 Planning for Sustainability

This Integrated Community Sustainability Plan (ICSP) - is a long-term plan, developed in consultation with community members. It provides direction for the City to realize sustainability objectives for our environmental, cultural, social, governance and economic dimensions. It is important that we craft a vision for the future and plan for the strategic realization of our goals in the context of a changing climate, aging infrastructure, economic change, social concerns and demographic and cultural shifts. By planning for greater sustainability, we engage citizens, establish a common vision and shared goals. build local capacity, and encourage positive outcomes and pro-active solutions.

A sustainable Mount Pearl is the ultimate goal of the Integrated Community Sustainability Plan (ICSP); the positive actions that community leaders and citizens take to get there constitute the process of sustainable development. Sustainability is not an end state; it is the continual series of changes that contribute to improvements over time. The task of achieving a sustainable community is never actually done, as there are always ways for us to keep moving in the right direction.

1.2 The Federal Gas Tax Agreement

In 2006, the federal and provincial governments signed the Canada – Newfoundland and Labrador Agreement on the Transfer of Federal Gas Tax Revenues (the Gas Tax Agreement). The Gas Tax Agreement includes a commitment to develop Integrated Community Sustainability Plans at the local level. The agreement includes a clause that requires the province to ensure that municipalities develop ICSPs and permits them to use a portion of their gas tax allocation to develop the plans.

This plan has been prepared, partly to meet the City's requirement to enhance an ongoing sustainability plan, and position the City to take advantage of the Federation of Canadian Municipalities Green Fund and other funding sources. This funding is essential for the successful implementation of the City's sustainability vision through pro-active goals and strategic actions.

Green Municipal Fund

Funding for this Plan was also partially provided through the Federation of Canadian Municipalities Green Municipal Fund Grants for Sustainable Community Plans. The Green Municipal Fund is a long-term source of financing for municipalities and their partners to develop communities that are more environmentally, socially, and economically sustainable.

Throughout the ICSP Process, City staff were able to identify and elaborate on specific projects that were consistent with the emerging priorities of the Plan that would be eligible for consideration for funding under the Green Funds.

2. Development of the ICSP

To begin the process of developing the plan, the City, with funding support from the Federation of Canadian Municipalities Green Municipal Fund, hired a consultant to help organize and facilitate meetings, review documents, meet with City staff and Council, and write the Plan. Thus, the Plan is the result of a variety of inputs.

2.1 Inputs

Community Profile

During the early phases of the ICSP process the background information presented in Appendix C was compiled. This information provides a snap shot of Mount Pearl today, the existing initiatives that are already underway that contribute to the city's current sustainability, and the issues which this Plan will need to address to enhance the sustainability of the community.

Review of City Plans and Policy

The City has recently undertaken a number of studies and initiatives that contain many recommendations that if implemented, support and enhance sustainable development principles and fit well with the future vision and goals developed through the ICSP planning process. Following a review of the studies, many of their recommendations have been incorporated into the actions that can be undertaken to implement the Plan.

Interviews with City Staff

City Staff are dedicated to supporting elected officials so that they can make informed, fiscally responsible decisions, in the best interests of the City. They identified where current operations, policies, and actions support and are consistent with the vision and goals identified through community consultations.

Meeting with Elected Officials

Mount Pearl's elected officials are committed to a sustainable city, building on past accomplishments and implementing future actions that will improve the social, cultural, economic, and environmental aspects of the city, through governance that is responsible, open and inclusive. Input from Council was sought to discuss and receive feedback on the community vision and goals developed through the planning process.

Public Consultation

A key component of community sustainability involves ongoing consultation with community members in the process of visioning, goal setting and action planning. Visioning is a process by which the community imagines the future it wants, and plans how to achieve it by developing a manageable and feasible set of goals and plans for action. Through the ICSP process, residents of Mount Pearl were informed, consulted and given the opportunity to provide input.

2.2 Community Visioning Process

Stakeholders Workshop

A visioning workshop was held with stakeholders on May 14 2009 at the St. Peter's Parish Community Hall. Of almost 100 invited stakeholders, approximately 25 people were in attendance for the event, with representatives from Mount Pearl City Council and staff, community service groups, sport organizations and other levels of government.

The purpose of the workshop was to gather the ideas, values and concerns of stakeholders. Attendees worked in small groups to imagine and describe the kind of place they would like Mount Pearl to be 20 years from now.

Participants discussed the positive aspects of Mount Pearl today, the internal and external forces that will affect the future, and what needs to be done to ensure the future sustainability of the city.

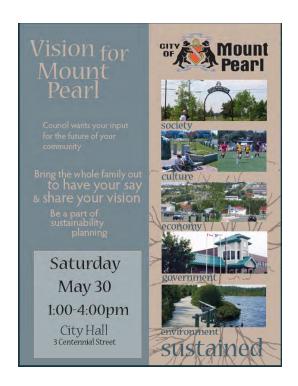
A number of key themes emerged from the stakeholders workshop.

- There was considerable emphasis placed on meeting the needs of an aging population, and reducing instances of illness and disease through healthier lifestyles.
- Many attendees agreed that the arts should have a more prominent role in Mount Pearl, particularly through support for local artists.
- An important topic of discussion was the importance of maintaining and enhancing the city's strong local business sector.
- Interest in minimizing Mount Pearl's ecological footprint through such things as making efficient use of land, and reducing consumption of water, waste and energy, by building upon the current recycling program and initiating a composting program.
- Enjoyment of and respect for the natural environment was important to attendees, and in particular, the value of the Waterford River was highlighted.
- Interest in a transportation system that would reduce reliance on the single vehicle and increase use of public transit

 both local and regional systems – was raised.

- Alternative modes of transportation, such as cycling and walking, were identified as an important part of an active transportation system and much needed in Mount Pearl.
- An aging population and its effect on volunteerism, were also important issues raised at the Stakeholder workshop.

These themes represent some of the common values and concerns of Mount Pearl citizens.



They are the basis for the Plan Vision and Goals, and after further discussion, were accepted by stakeholders, the public, City staff and Council.

Public Open House

A public open house was held on May 30 at Mount Pearl City Hall. Before and after the open house, a newsletter, survey, draft materials and sources of more information were provided on the Mount Pearl website and at City Hall. The purpose of the open house was to inform the public of community sustainability issues, gather input on the draft Vision Statement and Goals, and prioritize proposed actions. While public attendance was low, input received confirmed the issues identified by the Stakeholder workshop and supported the Vision and Goals that came out of the stakeholder group.

Draft Plan and Public Consultation

Our consultants prepared a Draft Plan that was reviewed by Staff and accepted by City Council. The Plan was presented to the Public at a meeting held March 16, 2010. Some further revisions were made and the plan was formally accepted by Council on March 22.

3. Vision and Goals

Vision

To be a prosperous, progressive and innovative city, where arts and culture flourish, businesses thrive, and citizens are active and engaged. Our urban form is compact, our services efficient, and our natural environment protected.

Mount Pearl: proud to call it home.

Goals

Society

Our goals for social sustainability refer to community wellbeing, including considerations of health, education, housing and social services.

S1	To encourage a society of healthy families in all stages of life who are proud of their community and welcoming of newcomers.
S2	To promote a variety of high quality and appropriate housing options, easily accessible child care, medical and social services.
S3	To attain an integrated transportation system that includes walking, cycling and public transit that are accessible, pleasurable and efficient.

Culture

Our goals for cultural sustainability refer to our local arts, pastimes, and shared cultural and historic assets and what we need to do to protect and enhance these for the future.

C1	To promote and strengthen volunteerism and involvement in recreation, the arts and community service.
C2	To foster and encourage active lifestyles through recreation and leisure activities.
C3	To encourage and support growth of the arts in the city.

Economy

Our goals for economic sustainability refer to how well the economy is functioning, opportunities for sustained long-term economic growth, and peoples' ability to make a comfortable living.

Ecn1	To promote local entrepreneurship and be a significant contributor to the regional economy.
Ecn2	To sustain and expand commercial hubs to support local business and provide goods and services required by Mount Pearl citizens.
Ecn3	To improve cooperation between the community, businesses and government.

Governance

Our goals for sustainable governance refer to engaging citizens in the affairs of our community and the improvement of decision-making processes that will enhance the sustainability of the City.

	G1	To ensure citizens and relevant committees are consulted in decision-making processes and that elected officials are available to the public.		
G2 To integrate sustainability principles throughout all aspects of municipal dec making, including fiscal management.				
	G3	To build upon mutually beneficial partnerships within the region for the pursuit of common objectives.		

Environment

Our goals for environmental sustainability are meant to ensure that our use of natural resources is in balance with nature's ability to replenish them.

Env1	To protect the local and global environment by reducing energy consumption and greenhouse gas emissions.
Env2	To reduce waste, water consumption and vehicle use.
Env3	To protect the rivers and open spaces as natural places and ensure wise land use practices.

4. Actions

Throughout the consultations and research, a number of themes emerged as areas where specific actions are needed to achieve the goals for sustainability of the city. Each of these themes is described in the following sections in the context of sustainability, current initiatives, ideas, and specific actions – including those considered a priority - that were identified through the planning process.

4.1 Land Use and Built Environment

The pattern and quality of development of Mount Pearl has an important correlation with residents' health and lifestyles and the function of the environment. The features of our built environment influence our daily lives, and the lifestyles we choose influence how development occurs. car-based community, development will occur in a manner that supports vehicular transportation. Sidewalks, trails and parks encourage us to be physically active and spend time outdoors with friends, family and neighbors. Pleasant, walkable commercial areas close to where people live, will attract consumers and support local businesses. These types of relationships are key as we consider the actions we can take to create a more sustainable land use pattern and built environment in Mount Pearl.

As a relatively small, compact city with clearly defined boundaries, Mount Pearl has a tremendous opportunity to continue improving efficient use of infrastructure. Our community has a good balance of commercial and residential development. We also have a considerable land area dedicated to regionally significant industrial and commercial activity. Most housing is in the form of single-family

detached dwellings. We must plan for the housing and mobility needs of an aging population, as well as the continued presence of young families. City Council has the greatest capacity to influence future land use and the form of the built environment.

Municipal Plan

A priority action is to approve and implement the new Municipal Plan that is currently in draft form. The Draft Plan contains many proposed policies, which, if implemented, will result in a more sustainable housing structure that will emerge over the next 20 years. Future development would be directed toward intensification of housing through development of multi-unit buildings, lot infilling, and a variety of other means recommended in the Draft Municipal Plan. Many of the policies contained in the Municipal Plan support recommendations of the Housing and Homelessness Study to increase the stock of affordable housing and range of housing choices, especially for seniors.

By directing development to existing built up areas more open space can be conserved, neighbourhoods will be more vibrant, and municipal infrastructure will be used more efficiently. This approach to development will create the density necessary to support a more effective public transportation system. Multi-unit dwellings are also appropriate for the growing number of seniors and small families who require smaller more affordable living spaces.

Housing

Implementation of some recommendations of the Housing and Homelessness Study can be achieved through the new Municipal Plan, while others will require further research and community partnerships. The community is in need of affordable housing, a range of housing choices, universally accessible housing, and options for both rental and home ownership, particularly for seniors, young people and single parent families.

Brownfields

Within the city there are a number of sites that can be redeveloped such as the former landfill. We need to ensure that before any development takes place on these or any sites, that they are clean and free of environmental contaminants.

Urban Design

Intensification of residential land use in combination with the provision of local commercial convenience nodes will create a more efficient and walkable development pattern. Dependency on vehicular



transportation can be reduced by providing for local amenities such as a convenience store, hair salon, bank, restaurant or coffee shop at appropriate locations within predominantly residential areas. Through design changes, large scale commercial centres can also become more suitable for non-vehicular transportation. Sidewalks, pathways and access-ways through parking lots and between stores make using active forms of transportation safe and enjoyable and compatible with public transportation.

As our city grows and matures, the integration of these elements will become ever more important. As a priority action, we will establish Urban Design Guidelines for the city that will help us integrate elements of our built form, including streets, walkways, buildings and open space. They will provide a means of assessing how site specific plans will fit into the larger urban fabric, include design standards and required design elements, as well as a design review process for new developments.

4.2 Natural Environment

Balancing development pressures, enjoyment of the outdoors and conservation of the natural environment is essential to the sustainability of Mount Pearl. In Mount Pearl we enjoy considerable vegetation, natural park areas and waterways. The natural environmental features of the ity perform important functions, such as cleaning the air, supporting wildlife and collecting and transporting stormwater. Because natural systems like water and climate do not adhere to political boundaries, environmental sustainability is important at the local, regional and global scales.

Watershed Management

The Waterford River is a particularly important waterway within the city and the Northeast Avalon Region, and we have invested considerable effort to map its floodway and manage development along it to preserve the integrity of the river and ensure public safety. For example, we require all new development and major redevelopment projects to control storm water on-site. We have also partnered with adjoining municipalities and local environmental groups to clean up and restore parts of the river. However, more can be done to bring the Waterford River back to life, with improved water quality, fish and wildlife habitat. In doing so, the river will provide us with valuable outdoor recreational opportunities at our doorsteps.

A number of actions can be taken to protect and improve the state of the Waterford River, its tributaries and associated wetlands. Stormwater runoff has a major influence on the quality and flow of the river, and is, therefore, a main point of action. A priority action for the City is creating a Waterford River Watershed Management Plan, developed partnership with the neighboring municipalities and community groups that are also part of the watershed. The Watershed Management Plan should address the host of activities that influence the river, and include public involvement and education programs.

Stormwater management infrastructure research should be conducted, either as a stand-alone initiative, or as a component of the Waterford River Watershed Management Plan. Green infrastructure can help to maintain a natural quantity of stormwater and reduce the contaminants entering the Waterford River, primarily by improving infiltration. Other research options include stormwater treatment systems and flood prevention infrastructure. These methods of stormwater

management would help to ensure that the existing no-net-runoff policy is reinforced and adhered to. We can provide stormwater management training to staff and developers to help them in meeting the objectives of the no-net-runoff policy.

Reducing Greenhouse Gas Emissions

The City of Mount Pearl is committed to reducing energy consumption and greenhouse gas emissions. The City currently has an energy management control system for various major municipal facilities, and has taken steps to improve energy efficiency. Initiatives, such as the proposed Glacier Arena expansion and the Pearlgate Recreation Multiplex will be designed to a LEED¹ Silver certified standard, demonstrating the City's commitment to environmental sustainability.

¹LEED (Leadership in Energy and Environmental Design) is an internationally recognized third-party rating system and certification program for the promotion and measure of sustainable building and development.



The City would like to work with businesses and institutions to build their capacity and establish community-wide initiatives for reducing energy consumption. Much more can be done to continue moving in the right direction, such as constructing new municipal buildings to a LEED Silver certified standard, educating and training building maintenance staff and project managers about green building technologies, continuing to upgrade existing city buildings for greater energy efficiency and improved accessibility.

Partners for Climate Protection

We will show leadership by undertaking a review of ways to improve fuel efficiency in our City vehicle fleet through better operational procedures and replacement process that gradually incorporate fuel-efficient vehicles and equipment into the fleet. One way to do this is through the Federation of Canadian Municipalities Partners for Climate Protection. In 2004 the City signed on to this program, which helps municipalities determine their energy use and develop a plan to reduce greenhouse gas emissions. As a priority action, the City will begin working toward achieving the five milestones of the program:

- Milestone 1: Creating a greenhouse gas emissions inventory and forecast;
- Milestone 2: Setting an emissions reduction target;
- Milestone 3: Developing a local action plan;
- Milestone 4: Implementing the local action plan or a set of activities; and
- Milestone 5: Monitoring progress and reporting results.

4.3 Infrastructure and Services

Over the next 20 years the City of Mount Pearl will move toward a more sustainable approach to water consumption, wastewater and solid waste management. Our community currently has clean drinking water from Bay Bulls Big Pond regional supply, and we have taken steps to ensure water is not wasted through leaks in the distribution system and restrictions on outdoor water use.

The City is cooperating with other municipalities to build a regional sewage treatment facility. Our solid waste is disposed of at the regional sanitary landfill at Robin Hood Bay, and we will work with other



communities in the Northeast Avalon Region to achieve a 50% diversion of solid waste from the regional landfill by 2015 - a key objective of the Greater Avalon Waste Diversion Strategy. A paper recycling program and an annual household hazardous waste pickup are already helping us to achieve this target, and more community members are interested in participating in recycling and composting as indicated at an information session in spring of 2009.

Waste Management

While water and wastewater treatment, and waste disposal facilities are located outside of our community, Mount Pearl has an obligation to help ensure their long-term operation as part of the regional community. Part of this involves reducing our consumption of water and reducing production of wastewater and solid wastes. We can do more to reduce costs of transporting waste for disposal by reducing the volume of waste we generate. By reducing our consumption of water we can reduce the risk of periodic low water levels and ensure the supply will be sustained for future generations.

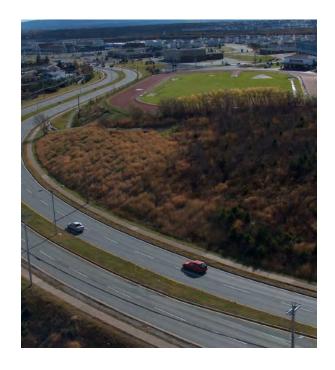
As a priority action the City will review and implement strategies to comply with the Regional Waste Management Strategy in accordance with the Greater Avalon Waste Management Authority. Solid waste reduction programs for recycling, composting and household hazardous waste will be included. The strategies will identify the range of options available in waste diversion and determine the most appropriate approach for Mount Pearl, with involvement of community members.

Water Conservation

The City will also develop a Sustainable Water Plan for Mount Pearl in partnership with the surrounding municipalities. Water conservation programs for citizens and businesses will encourage low-flow plumbing, rainwater collection, alternative landscaping and other efforts, primarily through public education.

4.4 Transportation

Within Mount Pearl and the Northeast Avalon Region generally, most people rely on the use of automobiles to go to work, shop, visit friends, or use recreation facilities and parks. A sustainable transportation system in Mount Pearl will link people and neighbourhoods with each other and with the goods, services and employment opportunities they need



without dependence on a privately owned vehicle. Our transportation network will offer a choice of interconnected modes of travel, such as public transit, walking, cycling and automobile travel, that allow us to move easily within the city and commute to and from areas within the region. Such a system would reduce the environmental and financial impacts of vehicle use, and help us to lead more active lifestyles.

Sustainable Transportation Plan

A priority action for transportation is to develop a Sustainable Transportation Plan that would include strategies for:

- Public Transit
- Active Transportation

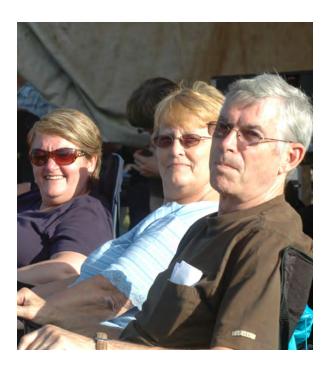
A Sustainable Transportation Plan would consider public transit, its relationship to urban form, and address three main issues: regional rapid transit, local transit, and transit infrastructure. A regional rapid transit system would allow people to commute efficiently to and from Mount Pearl. As part of a Sustainable Transportation Plan, public transit strategies could include creative local transit solutions that would move people between destinations inside the City boundaries. The strategy would also address the required transit infrastructure, such as signage, stop locations, shelters, benches and user information.

A Sustainable Transportation Plan would incorporate modes of active transportation, integrated with public transit, identifying ways for people to walk or bicycle to destinations, or combine active transportation with other modes. An integrated network of bike and walkways, and safe, comfortable streets will create travel options. Active Transportation strategies could address upgrades to the existing trail and bikeways, new paths

to enhance connections, bike lanes and strategic upgrades to sidewalks. The Parks and Recreation Master Plan sets forth some excellent recommendations to enhance active transportation, and these are described in greater detail in Section 4.7: Arts, Recreation and Quality of Life.

4.5 Municipal Operations and Community Engagement

The City of Mount Pearl has an important role to play in ensuring the sustainability of our community, but the municipality will not be able to achieve the ICSP Vision and Goals alone. The traditional role of Council has been as decision-makers who provide citizens with the services and infrastructure they need and desire. In the context of sustainability, Council members can become even more effective as community organizers, facilitators and capacity builders who help citizens understand issues and participate in discussions to achieve common ends. This



model of civic engagement positions Council and community leaders as mutual partners, equally accountable for the successes and sustainable outcomes envisaged in this plan.

Today we are fortunate to have a community that is highly involved in sports and recreation, both as participants and volunteers. Residents are generally satisfied with the services they receive. The City also has a number of checks and balances throughout its operational procedures to ensure opportunity for public input and transparency. These are opportunities to build upon and are encouraging signs that our community can become a model of civic engagement. Our citizens have the capacity to consider the range of possibilities we have open to us, make decisions together, and affect change. It is within the role of our municipal leaders to help make this happen.

Citizen Participation in City Initiatives

A priority action is recruitment of community members to City committees such as advisory committees or Mayor's task forces to address special initiatives, particularly for the purpose of sustainability and environmental efforts. This is key to strengthening the long-term capacity of our community, and seeing many of the ICSP actions come to fruition. A more engaged citizenry requires human resources to organize people, meetings and events, and liaise with a wide range of organizations, including various municipal departments, levels of government, businesses and schools. Human resources dedicated to the coordination, initiation and implementation of these initiatives would be a great asset.

City Administration

Internal operations and administration at City Hall have improved greatly over the past decade as we have implemented more sophisticated means of monitoring and evaluating our various lines of business. New processes and procedures to monitor and manage City assets such as roads, buildings, facilities and equipment (tangible assets) are being developed. Consideration of the life cycle costs of maintaining City assets is being incorporated into City budget and financial management processes to ensure that we make the best use of revenues to maintain City assets over the long term.

Council and senior management are currently undergoing a strategic planning process to set Council's direction, priorities and actions for the next four years. As part of ongoing efforts to constantly review and improve governance and administration, including long term financial sustainability, the City is also considering implementing a municipal performance measurement program that will include such things as performance indices, program evaluation, benchmarking and reporting.



4.6 Business and Entrepeneurs

As the city has grown, so too has our business sector. Today, over 1,000 businesses operate in Mount Pearl, and employ in excess of 13,000 people. Since 2000, our economic development efforts have successfully focused on the marketing and sale of industrial land in Donovans Business Park. Additional industrial lands in the Kenmount Business Park are also under development. Commercial development at the Pearlgate Centre, revitalization of Centennial Square, and conversion of the former Sobeys Square shopping centre on Topsail Road to office use, provide us with a healthy business mix that is an important contributor to the local, regional and provincial economy.

We recognize the importance of our local entrepreneurs to the economic sustainability of Mount Pearl and are working closely with the Mount Pearl Chamber of Commerce to foster entrepreneurial growth and development. We have also initiated an Eco-Industrial Networking concept to explore ways for businesses in the Donovans Business Park to cooperate in an effort to reduce waste and share resources.

Economic Development Strategy

The health of our economy is closely tied to the physical development of our city. In 2009, as part of an organizational restructuring, we created a Department of Planning & Development to provide a more comprehensive and integrated approach

to planning and economic development. With the completion of major commercial and industrial developments in Mount Pearl and the city's role as an important regional business center, there is now a need for a renewed economic strategy for the city.

As a priority action Mount Pearl will initiate the preparation of a comprehensive Economic Development, Tourism, Marketing and Communication Strategy. This strategy will build on past successes and identify new actions that will ensure a sustainable economy for Mount Pearl well into the future, including measures to support business retention and expansion, youth entrepreneurship and opportunities for new business development, particularly in the tourism sector.

4.7 Arts, Recreation and Quality of Life

The health, well-being and happiness of Mount Pearl citizens are important to the sustainability of the community. Strong communities have opportunities for citizens to be creative and active, and have resources to help them through all stages of life. Community arts, sport and cultural events also have the added benefit of providing economic opportunities for tourism. As our community continues to mature over the next twenty years, plans will be required to meet a growing desire for more arts, cultural and leisure amenities.







The City of Mount Pearl has extensive sports and recreation opportunities, facilities and programs, and a growing interest in cultural events. The Association for Arts in Mount Pearl is involved in promoting a range of artists and cultural events. There is a strong music, dance and theatre community, particularly at the high school level. It is also likely that with an aging population more retirees will be seeking occasions and programs in the arts.

Parks and Recreation Master Plan

of This plan number contains а recommendations that, if implemented, would contribute to the cultural sustainability of the city. For example, the Plan identifies the need for programs that promote physical fitness and wellbeing among seniors and vouth and recommends initiatives such as a multigenerational community gardening program that could be pursued as a form of low-impact exercise, a source of fresh produce, an educational opportunity and a community project.

As a priority action, we will develop an implementation strategy for the Parks and Recreation Master Plan. This plan contains many recommendations for development and renewal of recreational facilities, construction of new or upgrades to existing walking trails, and delivery of programs and services. Implementation of this plan requires significant investment and a plan is needed to ensure that implementation can be achieved without undue financial burden.

The Community Services Department will continue exploring more ways of encouraging physical fitness beyond organized sport. In cooperation with the operators of the Admiralty House Museum, the City will work to enhance the functions of the museum, growing radio broadcasting and potentially facilitating arts programs.

Arts and Culture Strategy

As a second priority action the City will prepare an Arts and Culture Strategy. The purpose of the strategy will be to identify ways to foster the arts and culture sector in the city so that it can enliven and enrich the lives of citizens. The strategy will explore ways to support local artists, through shows and sales, an art procurement program, theatre, designation of a Poet Laureate, and community based art projects. It will also include strategies to integrate art programs as a component of recreation programming for all ages, and could include such things as free weekend concerts, or an outdoor family movie series. The Association for Arts in Mount Pearl will be an important partner for the City in this initiative.

4.8 Priority Actions

While we have already initiated many actions that will help us achieve our goals and move us towards greater sustainability, the priority actions set out in the ICSP will help us futher consider our current activities, and identify others that may be needed, in a coordinated manner. Priority actions for implementation were identified during the consultation process. These actions will take time and effort, but it is important that we begin working toward them as soon as possible. Other actions were also suggested, and while worthwhile, have not been selected as priorities for action at this time. We do not want to lose these ideas, however they have been included in an "Ideas Bank" in Appendix A. They should be regarded as complementary to the priority actions, worth implementing when the time is right and budgets allow. It is likely that a number of these ideas will be brought forward and incorporated into detailed plans as part of our priority actions. Others could be initiated and undertaken by community groups or individual citizens. In the immediate future, as the City decides where to direct its efforts toward improving sustainability, it will focus on the following:

- Approval and implementation of the Draft Municipal Plan
- Preparation and implementation of Urban Design Guidelines
- Preparing a Waterford River Watershed Management Plan
- Achieving the Partners for Climate Protection milestones
- Reviewing and implementing strategies to comply with the Regional Waste Management Strategy
- Preparing and Implementing a Sustainable Transportation Plan
- Preparing a Sustainable Water Plan
- Recruiting community members to City committees/task forces
- Preparing an Economic Development Strategy
- Developing an implementation strategy for the Parks and Recreation Master Plan
- Preparing an Arts and Culture Strategy for the City

Table 1: Priority Actions

Theme and Priority Action(s)	Society	Culture	Economy	Governance	Environment
Land Use and Built Environmen	nt		^		•
1. Approve and implement new Municipal Plan	S2 – Leads to greater variety of housing options, accessible service	C2 – Compact land use patterns, provision of open space recreation encourages active lifestyles	Ecn2 – Provides areas for business growth, including commercial hubs	G1 – Provides for public consultation in decision-making process	Env 3 – Measures to protect rivers and open spaces and ensures wise land use practices Env1 – Encourages compact land use to reduce energy consumption, and GHG emissions, and efficient use of infrastructure
2. Develop and implement Urban Design Guidelines	S1 – Ensure quality neighbourhoods S2 – Addresses mix of housing options, access to services through design S3 – Integrates people with transportation systems	C2 – Can be used to promote and support arts and culture in the city	Ecn3 – Encourages cooperation between business, government and community	G2 - Integrates sustainability principles	Env1 – Promotes energy efficient design and construction Env2 – Design to reduce waste, water consumption and vehicle usage Env3 – Considers protection of natural environment
Natural Environment					
Develop a Waterford River Watershed Management Plan		C2 – Improved river system leads to improved outdoor recreation and leisure opportunities		G3 – Builds upon partnerships within the region for mutual benefit	E3 – Protects river as natural places, results in cleaner water and improved fish habitat

Theme and Priority Action(s)	Society	Culture	Economy	Governance	Environment
2. Work toward achieving the milestones of the Partners for Climate Protection	S1 – Measures will improve health of community		Ecn 3 – Fosters cooperation between business, government and community for purpose of mutual success in reducing energy costs and GHG emissions	G2 – Leads to integration of sustainability principles throughout many aspects of municipal decision-making	Env 1 – Measures will protect local and global environment by reducing energy consumption and GHG emissions
Infrastructure and Services		Į.	J.	J.	J.
Review and implement strategies to comply with the Regional Waste Management Strategy Develop a Sustainable	S1 – Measures will improve health of community and instill sense of pride	C2 – Will promote and strengthen volunteerism and community service	Ecn1 – Measures can involve local entrepreneurship and business development Ecn 3 – Can lead to	G2 – Encourages integration of sustainability principles in municipal operations; results in reduced operational costs G3 – Builds upon	Env1 – Measures protect local and global environment Env 2 – Measures result in reduced waste Env – Leads to reduced
Water Plan	water consumption contributes to a healthy society by ensuring the long term viability of the regional water supply		mutually beneficial partnerships in the city in efforts to reduce water consumption	partnerships within the region for mutual benefit	water consumption
Transportation	T	I	T	T T	T T
1. Develop a Sustainable Transportation Plan	S3 – Will result in an integrated transportation system	C2 – Will lead to increasingly active lifestyles C3 – Improved transportation will encourage growth and development of the arts	Ecn1 – Measures will provide greater access to local business Ecn2 – Improved transportation can support growth of commercial hubs that support business in the city		Env1&2 – Measures will result in reduced vehicle usage, GHG emissions

Theme and Priority Action(s)	Society	Culture	Economy	Governance	Environment			
Municipal Operations and Community Engagement								
1. Recruitment of community members to City committees	S1 – Greater Citizen participation will increases sense of civic pride		Ecn3 – Improves cooperation between business, government, and community	G1 – Promotes dialogue among citizens, elected leaders, and creates civic awareness				
Business and Entrepreneurs								
1. Develop an Economic Development Strategy		C3 – measures could encourage and support growth of the arts as a component of economic development	Ecn1 – Objective to promote entrepreneurship and business development Ecn3 – Will improve cooperation between businesses, government and community	G3 – Will build upon partnerships within the city and the region				
Arts, Recreation and Quality	of Life							
1. Develop an implementation strategy for the Parks and Recreation Master Plan	S1 – Measures will ensure healthy society and instill sense of civic pride S3 – Measures will provide active transportation options	C3 – Measures will foster and encourage active lifestyles through recreation and leisure activities		G3 – Implementation may involve regional partnerships				

5. Implementation and Monitoring

The Mount Pearl ICSP sets out a 20-year vision for sustainability for the city. Municipal services, polices, regulations and expenditures are tools that will assist in achieving city-wide sustainability goals. Community-led initiatives and cooperation with businesses and other levels of government will also be important. We will review the ICSP annually to check on our progress, to determine if the ongoing initiatives are still valid, and whether changes to the Plan are required. Every five years we will review the ICSP and the actions being undertaken in more detail, to see whether our efforts are achieving desired outcomes. Along the way, we can expect external forces and community needs to change. As a result, our plan and actions may need to be modified to remain current and effective.

Successful implementation of the ICSP will involve:

- Municipal Leadership
- Effective administration
- Strong partnerships with citizens, businesses, organizations and other levels of governments
- Ongoing evaluation and monitoring of progress.
- Financial resources

We have all the elements required for successfully implementing our plan and achieving our goals for a sustainable future.

5.1 Collaborations and Partnerships

City Council will not be able to achieve our sustainability goals alone. Collaboration and partnerships are needed in order to create change and explore new ideas. Table 2 lists our

priority actions, their anticipated outcomes, timeframes and some potential partners who could assist us in undertaking them. Our partners will include community organizations and individual citizens, business associations, schools, neighboring municipalities, regional organizations, and other levels of government.

Achieving a sustainable future will require an ability to respond to changes, make difficult choices and implement lifestyle changes that may be difficult, if not impossible, through a top down approach. We recognize that achieving our goals for a sustainable future can only be successful when we work closely with the citizens of Mount Pearl. To this end, we will build upon existing relationships and establish new ones through collaboration and partnerships through the ICSP actions.

5.2 Indicators and Targets

Indicators are an important tool in monitoring and evaluating the success of our sustainability initiatives. An indicator is a measure that helps track progress over time, monitor change and identify trends. An indicator will show whether or not projects, policies or actions are achieving intended outcomes. They will help to identify successes as well as areas that need further work.

Targets are measurable outcomes that are set for the indicators we use to measure progress. They are important because they provide a quantifiable way of tracking progress, and help to ensure accountability.

The use of indicators is challenging, because it is not always easy to link change in a particular indicator to a specific action. It may be that several actions will result in the desired change. Where possible, we will use as indicators, data that

23

- is readily available (Census of Canada, Community Accounts Indicators of community well-being, drinking water quality data)
- has been collected for a period of years already (establishes a baseline)
- can be easily obtained from existing databases (building permit statistics, municipal electricity and vehicle fleet fuel consumption records)

In some cases, we will need to develop new indicators and take steps to collect data to measure them. For example, in preparing a watershed management plan for the Waterford River, we will need to collect data on several water and sediment quality parameters that are indicators of the health of aquatic ecosystems to establish the existing condition and identify what improvements are needed. Periodic monitoring of these parameters will help us determine whether our efforts are having the desired results. In some cases, indicator data will be available monthly, annually, or only every five years as is the case with data from the Census of Canada.

In Table 2, we list the potential outcomes, indicators and targets for a number of our priority actions.

Indicators and targets should be reviewed and refined as actions are put into place and new data becomes available. Most data is already available for the suggested indicators in Table 2 through City departments or other readily available sources. A few indicators will require the collection of new information. In particular, monitoring reductions in greenhouse gas emissions and energy consumption will require a greenhouse gas emissions inventory and forecast, and setting an emissions reduction target which are part

of the milestones of the FCM Partners for Climate Protection program.

5.3 Green Municipal Fund

The Green Municipal Fund provides the City with opportunities to implement sustainability projects in five infrastructure sectors:

- Brownfields
- Waste
- Energy
- Water
- Transportation

City staff have reviewed and considered the actions, projects and ideas identified in this plan, and have selected those that are eligible for funding through the Federation of Canadian Municipalities Green Municipal Fund. Preliminary project descriptions, indicators for monitoring and additional innovative features have been developed, as well as the timeframe for implementation. These projects are summarized in Appendix B: Green Municipal Fund Projects.It is the City's intention to pursue funding for these projects through the Green Municipal Fund and other funding programs that may be available.

5.4 Evaluation

The ICSP will undergo periodic evaluation to determine what progress is being made toward achieving our goals for sustainability. An annual review will be conducted by City Council and staff to evaluate progress made toward the implementation of the ICSP actions, and to prioritize actions for the next year. The annual review will also evaluate where changes may be required to improve implementation efforts.

At least every five years we will undertake an outcomes review that will include:

- Comparing the results of our specific actions against set targets
- Communication of outcomes with partners
- A progress report to the public
- Identification of new actions and
- Celebration of successes

We look forward to pursuing a path to a more sustainable future.

Table 2: Implementation and Monitoring

Action	Desired Outcome	Suggested Indicator	Target	Timeframe	Approximate Cost	Potential Partners
Approve and implement the new Municipal Plan	Compact, urban form, amenity spaces, mix of uses	Number of dwelling units by type		2010	Ongoing operations budgets	Municipal Affairs
Prepare and Implement Urban Design Guidelines	Improved quality and amenity of development	Measure citizen satisfaction through periodic surveys		2011-2013	TBD	Professional Associations (architects, landscape architects, planners); FCM, Chamber of Commerce, Citizen Advisory Committee (new)
Prepare a Waterford River Watershed Management Plan	Improved Water Quality of Waterford River Improved fish health	Water Quality parameters - BOD, suspended solids, pH Fish and benthic health parameters	Establish baseline water and sediment quality – target to achieve CCME standards for protection of Aquatic Life¹	2011-2015	TBD	DFO, City of St. John's, Town of Paradise, NAACAP, FCM, Environment Canada, Memorial University Conservation Corps, schools, community youth organizations
Work toward Partners for Climate Protection milestones	Lower GHG emissions	Municipal consumption of electricity (GHGs produced per kWh)	Reduce GHG emissions in municipal operations by 20% ²	2010-2020	TBD	FCM, Chamber of Commerce, Newfoundland and Labrador Hydro, Conservation Corps, PCP Program Officer
Review and implement strategies to comply with the Regional Waste Management Strategy	Increase life of regional landfill	Kg of solid waste sent to regional landfill	50 % of municipal solid waste diverted from landfill ³	2010-2020	TBD	Greater Avalon Waste Management Authority, MMSB, FCM

- 1. Will involve measuring a number of parameters and ongoing monitoring at various locations. Dissolved oxygen (DO) is the most fundamental parameter to be monitored and should be between $5500 9500 \,\mu\text{g/L}$, pH: 6.5 9; Nitrate: $2900 \,\mu\text{g/L}$; and Phosphorous: most uncontaminated freshwaters have levels between 10 and 50 $\,\mu\text{g/L}$. A monitoring program should be developed as part of the watershed management plan.
- 2. The Federation of Canadian Municipalities recommends the following targets:
 - A 20 per cent reduction below baseline year GHG emissions for municipal operations within 10 years; and
 - A six per cent reduction below baseline year GHG emissions for the community within 10 years.

An emissions reduction target can be established at any time. The target however, is normally set following the development of an emissions inventory and forecast or after the quantification of existing emissions reduction measures that are part of the Partners for Climate Change milestone process.

3. Target is consistent with the Provincial Waste Management Strategy

Action	Desired Outcome	Suggested Indicator	Target	Timeframe	Approximate Cost	Potential Partners
Prepare a Sustainable Transportation Plan	Reduce GHG emissions	Annual Transit ridership	Increase transit ridership by 25%	2010-2013	TBD	Metrobus, FCM
Prepare and Implement Sustainable Water Plan	Long term supply of quality drinking water	Water consumption data	Reduce per capita water consumption by 20%	2010-2015	TBD	Environment Canada, FCM, Conservation Corps
Recruit community members to City advisory committees, Task Forces	Greater civic pride and engagement	Number of citizens involved in civic initiatives/committees	Increase number of city advisory committees	2010-2011	Part of annual departmental operating budgets	Service groups, citizens, Chamber of Commerce
Prepare and Implement a new Economic Development Strategy	Healthy business economy and increased employment	Number of businesses in the city Employment Data	Increase number of business startups Increase local employment	2010	TBD	REDB, Chamber of Commerce
Develop an implementation strategy for the Parks and Recreation Master Plan	Improved health of citizens	Participation in sports and recreation programs and activities Community Health Indicators – ie. rates of obesity, heart	Increase participation in fitness activities in all age groups Decline in incidence of illnesses linked to inactivity (ie obesity, heart disease, stroke)	2010-2015	TBD	Funding providers, tax payers, recreation user groups, YM/YWCA
Prepare an Arts and Culture Strategy	Increase civic pride, community health and well being	Number of arts programs and events Number of participants	Increase in number of events and participants	2015-2020	40,000	Association for Arts in Mount Pearl, school art programs Cultural Industries Association

Appendix A: Ideas Bank

Appendix A: Ideas Bank

Pot	ential Future Action	Related Goals						
Lan	Land Use and Built Environment							
1	Explore options to encourage incentives to existing businesses to consider pedestrian oriented retrofits to existing shopping centres and associated parking lots.	S3 Ecn2						
2	Prepare energy efficient building, renovation, and site plan guidelines. Review development and engineering standards and incorporate green infrastructure requirements.	Env1 Env2 Env3						
3	Explore options to encourage incentives to encourage energy and water efficient building practices, such as a toilet replacement program. (Green Municipal Fund Project)	Env1						
4	Review, update and maintain the heritage building inventory.	C1 Enc1						
5	Identify brownfields, remediation requirements and potential for redevelopment. (Green Municipal Fund Project)	Env2 Env1						
6	6 Develop an implementation strategy for the Housing and Homelessness Study recommendations, including developing affordable housing for seniors, establishing an inventory of accessible units, and partnerships for new affordable housing units.							
Nat	ural Environment							
1	Promote the reduction of use of cosmetic pesticide and chemical fertilizer and encourage use of alternative methods. (Green Municipal Fund Project)	Env3						
2	Require the conservation of existing vegetation during development.	S3 Env1 Env3						
3	Promote the development of natural vegetation and tree planting to residents, business owners and developers.	Env1 Env3						
4	Encourage an annual Waterford River community cleanup and education campaign, on a regional basis.	C1 Env3						
5	Operate a water flow monitor in the Waterford River. (Green Municipal Fund Project)	C1 Env3						
5	Initiate a Yellow Fish Road Program to raise awareness of storm water pollution.	C1 Env3						
7	Undertake a review of the City fleet and determine initiatives to reduce greenhouse gas emissions.	S1 G1 Env1						
8	Construct new municipal buildings to a minimum LEED Silver certification. (Green Municipal Fund Project)	Env 1 Env2 Env3						
9	Educate and train building maintenance staff and project managers about green building technologies. (Green Municipal Fund Project)	Env1 Env2						
10	Upgrade existing city buildings for greater energy efficiency and improved accessibility. (Green Municipal Fund Project)	S1 Env1 Env 2						
11	Require Environmental Assessment as required for new development to identify potential contamination. (Green Municipal Fund Project)	Env1 Env2						

12	Establish community compost programs with schools, businesses and residents.	S1 Env1 Env2
13	Develop partnerships with businesses to promote and make available energy and conservation products to households in Mount Pearl	G1 Env1 Env2
Infi	astructure and Services	
1	Continue road upgrades to improve vehicle efficiency and reduce greenhouse gas emissions.	Env1 Env2
2	Replace street and traffic lights with energy efficient bulbs. (Green Municipal Fund Project)	Env1
3	Research options to increase use of green infrastructure, such as streetscape planting and rain barrels. (Green Municipal Fund Project)	C2 Env2 Env3
4	Continue to identify and repair leaks in the drinking water distribution system. (Green Municipal Fund Project)	Env2 Env3
5	Continue education of staff and developers to increase compliance with the City's no net stormwater runoff policy.	Env3
6	Research the need for storm water treatment systems, upgrades to storm water management infrastructure and flood prevention infrastructure.	Env3
7	Implement a Capital Asset Management Strategy for the City.	Env2
Tra	nsportation	<u> </u>
1	Prepare a bicycling plan for the City.	Env1
2	Promote and enforce the City's anti-idling policy.	S1 Env1
3	Conduct a review of the current traffic light system.	Env1
4	Conduct a review of roads materials with a view of increasing sustainability of road infrastructure.	Env1
5	Provide assistance to businesses and organizations for development of Transportation Demand Management plans.	S3 C2 Env1 Env2
6	Develop and promote a carpooling program.	Env1
7	Develop and promote a car share program.	Env1
8	Hold a car-free day.	S3 Env2
Mu	nicipal Operations and Community Engagement	
1	Establish new methods of communication between the public, the City and Council through the use of digital technologies which facilitate dialogue.	G1
2	Consider incorporation of sustainability criteria into the municipal decision-making framework (i.e. The Natural Step)	G2 G3 Env1
3	Review existing City policies to ensure they incorporate sustainability and environmental responsibility (ie green procurement).	G2 G3 Env1
4	Establish an online mapping tool to share geospatial information with the public.	G1

5	Explore opportunities between the City, community groups and schools to promote civic responsibility.	C1 G1
6	Review committee structures to promote sustainable practices within their current mandate.	C1 G1 G2
7	Implement paperless office and electronic council meetings. (Green Municipal Fund Project).	G2 G3 Env1
8	Review City regulations to incorporate "green" technologies/ approaches.	G2 G3 Env1
9	Develop a municipal performance measurement program.	G2 g3
10	Set up a newcomers committee to organize events to welcome and include immigrants to the City.	S1 G2
Bus	siness and Entrepreneurs	-1
1	Conduct a Local Business Promotion Campaign	S1 S2 Ecn1 Ecn2 Ecn2
2	Pursue development of a high quality hotel and convention centre.	Ecn1 Ecn3
3	Implement Parks and Recreation Master Plan recommendation for research into tourism, especially event-based tourism.	Ecn1 C3 G3
4	Establish a small business incubator.	Ecn1
5	Establish incentives for young entrepreneurs.	Ecn1
6	Investigate options for a local product weekend market and yard sale. (Green Municipal Fund Project)	S1 Ecn1
7	Investigate opportunities and incentives for businesses in Donovan's Business Park to participate in eco-industrial networks, environmental management systems, life cycle assessment or district heating/ cooling. (Green Municipal Fund Project)	Ecn3 Env1 Env2 Env3

Appendix B: Green Municipal Fund Projects

Appendix B: Green Municipal Fund Projects

Brownfields

Olympic Drive Remediation for Commercial Sale

The project involves removing contaminants in the soil from the former landfill and prepares land for development purposes. This project is of high importance.

Old Placentia Road Water Tower Site Remediation

The project involves removing the Old Water Tower as well as any contaminants that may remain in the soil and prepares land for development purposes.

Swimming Pool Site Remediation

The project involves removing the old swimming pool on Park Avenue as well as any contaminants that may remain in the soil and prepares land for redevelopment.

Smallwood Arena Site Remediation

The project involves removing the Old Smallwood Arena as well as any contaminants that may remain in the soil in preparation for the planned expansion of the Smallwood Recreational Area.

Glacier Arena Site Remediation

The project involves removing portions of the Glacier Arena as well as any contaminants that may remain in the soil in preparation for the planned expansion of the Glacier Arena.

Pesticide and Chemical Fertilizer Ban

This project is a no-cost, regulatory device to reduce the toxins in the soils of Mount Pearl, and also reduces toxins in the watershed that might otherwise reach the Waterford River and aquatic habitats.

New Developments: Environmental Assessment as Required

This project is a no-cost, regulatory device to determine the soil toxicity of a property under consideration for development. An amendment to the Development Regulations would be required to impose the condition such that all proposals that require a development permit shall be required to undertake an Environmental Assessment at cost to the applicant. This project will reduce toxins in the City property by property, and will reduce toxins in the Waterford River watershed and their effects on aquatic habitats. If the EA shows toxicity, then the property will require remediation prior to occupancy.

Waste

Paperless Office and Electronic Council Meeting

This project is of high importance.

The city intends to prepare a study in support of the eventual project to implement a "paperless municipal office", and a series of "Electronic Council Meetings". The study would investigate and implement measures to reduce paper use. The benefits would include less waste consumption and minimization of the impacts of production, such as chemical treatments that can enter watersheds and biotic habitats, deforestation, and the greenhouse gases related to the transportation of the finished paper and materials and equipment needed to make paper.

Multi-Stream Collection Vehicles and Containers

This project is of high importance.

The city intends to purchase a number of material collection vehicles able to collect many types of waste materials separately for easier recycling. The innovative aspect of this project is that by collecting waste by material, recycling each material is made simpler by not needing to be separated. The project will also involve a public awareness campaign to gain citizen and business support.

City Wide Yard Sale Event

The City proposes to host a series of markets to reduce material going to the landfill. The markets would be hosted by City staff once per month for three months. The project may involve the purchase of outdoor tents, or the renovation of an existing facility to better accommodate these events. The project will also involve a public awareness campaign to gain citizen and business support.

Eco-Industrial Networks; Create a By-Product Exchange (BPX) System

Eco-industrial networks operate as standard businesses, with additional focus on ecological aims. The project involves hosting meetings of business and industrial operations to identify ways to trade excess materials from the production line and materials created as by-products. By the recovery of previously discarded waste or by-products and recycling of wasted heat and water, the Eco-Industrial Network will take the lead in designing and implementing a by-product exchange (BPX) for the Province, and will including draft agreements for participating operations to trade materials, share energy, and cost-sharing, agreements for finished products and for bulk purchasing. The project will also involve a public awareness campaign to gain citizen and business support.

Open-Air Composting Facility and Soil Creation

The project involves the construction of an asphalt pad, the purchase of a tractor (scarab), a mulcher and grinder. Within the first stage of composting, the City will collect and deliver only yard, garden waste, leaves and Christmas trees. The material can be used for conditioning or improving soil quality, nursery plants, and for City landscaping projects. The scale of the open-air facility will adjust to meet the need of the City. In future years, the composting may be expanded to include other forms of organic material.

Open Air Composting is performed by piling organic material into long, 3m high 'windrows', which are turned regularly by a tractor. Material is shredded, turned and screened after the composting. Concrete pads and collection lagoons for any liquid, which may run off the concrete pad will also be investigated and implemented. The project will also involve a public awareness campaign to gain citizen and business support.

Energy

Electric Ice Resurfacing Machines (2)

This project is of high importance.

The purchase of two electric ice resurfacing machines is proposed for this project. The electric power source will maintain a high air quality within the arena. Electric ice resurfacing machines are much cleaner than gasoline powered, especially indoors where the assembly of people might be bothered by the exhaust given off by a fossil-fuelled ice resurfacing machine. The electric ice resurfacing machines does not add air pollution to the arena air, which can be filled with spectators. The electric ice

resurfacing machines are a more healthy choice for the arena project than traditional gas or propane powered ice resurfacing machines, and can be replicated in other jurisdictions and organizations.

Glacier Arena Expansion (A Second Ice Pad)

This project is of high importance.

The City of Mount Pearl began the design and construction of two large state-of-the-art recreation facilities for Mount Pearl that will provide recreation, health and wellness and sport programs to all ages. Scheduled to open in December 2010 the Glacier Arena Complex will include:

- A national standard (85' X 200') ice pad
- Four dressing rooms, canteen, training room; referees room
- Seating area for 350 spectators
- State-of-the-art energy efficiency features such as:
 - o It will be the 1st Municipal LEED Silver certified building
 - o Eco-Chill system
 - o Green roofing
 - o Geothermal heating

Pearlgate Multiplex

Scheduled to be completed in the summer of 2012, the Pearlgate Recreation Multiplex will be one of the largest 'Community Places' in Atlantic Canada and will feature:

- Reid Pavilion expanded gymnasium and multi-use 350 seat theatre
- A 1200m² Fitness and Wellness Centre consisting of a walking track/cardio/weight room/private studio and ladies workout area.
- Aquatics Pavilion (2500m²) includes a 25m, 8 lane lap pool/large training/therapy pool/fun splash pad, hot tub and other amenities including dry and steam saunas, large change rooms, gender neutral change space, community meeting space, concession area and large deck space.
- Youth Centre Pavilion over 350m² of recreational space for social and active recreational opportunities such as table tennis, pool, music and dance, meeting space and other multi-use functions.

Anti-Idling Program for Municipally Owned Property

Initiatives within the project include an anti-idling bylaw adopted by Council, a community outreach program, and idle free zones. The bylaw may limit/ prohibit the idling of vehicles engines and set out a fine of \$50 for those that don't adhere to the limit. The bylaw will be communicated through a public awareness campaign. The first phase of the campaign is to get residents to pledge to eliminate five minutes of idling a day. The public outreach program is intended to gain citizen and business support.

Retrofit Municipal Systems, Facilities, and Buildings for Energy Efficiency

Each City facility and system has the opportunity to benefit from the advanced building technology that has lead to more efficient building components, or alternative practices that lead to improved energy efficiency. The Project involves preparing a study of all energy systems, not just buildings to identify opportunities to make each system a more energy efficient system. The study would identify priorities for energy efficiency improvements, and the preparation of construction documents, as well as the renovations to each structure.

Retrofit Municipal Systems for Energy Generation

The Project involves referring to the study of all energy systems to identify opportunities to generate energy on the property, or as part of the existing system, facility, or building. In the project, priorities for clean energy generation are to be identified, the construction documents prepared, and specific renovations to each system will be detailed. The project will also involve a public awareness campaign to gain citizen and business support.

Replace incandescent traffic lights with energy efficient bulbs

The traffic control system within the City contains a number of incandescent lighting fixtures that can be replaced with more energy efficient fixtures. The project involves replacing the remaining incandescent light fixtures and bulbs for a total estimated cost of \$300,000.

Water

Continue to identify and repair leaks in the drinking water distribution system

The leak detection and repair program is an ongoing project. The annual cost to continue this program is \$150,000. The project involves measuring pressure at various locations to identify a potential leak in the water distribution system and performing repair. Conventional methods involve digging up the street to conduct repairs.

This project proposes to study and identify the sustainable design, installation, and maintenance of underground services. Potential systems upgrades to be considered include electrical, telecommunications, district heating distribution using new and emerging technologies. The improved distribution systems such as district heating may lead to better transfer of energy within a city by-product exchange. Services located underground that can be repaired without digging up the roadway will conserve vehicle momentum, fuel efficiency and reduce greenhouse gases. The options appropriate to Mount Pearl at this point in time may include designing municipal services in sections that can be easily tested, repaired or replaced without compromising the flow of traffic above, or flexible conduits that may be replaced.

Residential water metering program

The City proposes to implement a policy that requires the purchase and installation of a water meter by every property that does not currently have a water meter, or a property that is in need of a replacement. Replacement costs will be considered by Council where conditions merit. The intention is to measure the actual consumption of water and charge property owners directly for the water used. The user-pay approach is considered to be an effective measure to reduce consumption, but is also a good method of collecting valuable data for future water-related projects. Comparing property information (such as age of structure, the date the meter was installed) will contribute to making the program a success, and enable continuous monitoring. The project will also involve a public awareness campaign to gain citizen and business support.

Community Gardens Partnerships

The project involves identifying potential locations for community gardens using property information and aerial photography. Gardens may be considered on school grounds, federal and provincial government lands, lands above the 190m contour (where development is restricted), or privately owned lands. The project may include land acquisition from private owners, but the preferred method of developing these gardens is through partnerships with the property owners and tenants, where the City

assists in the maintenance of these gardens, and may consider providing material and resources (soil, mulch, et cetera), staff capacity, and may also involve the purchase of small tilling equipment and gardening tools for use by residents.

Water-Efficient-Toilet Replacement Program

This project is intended to follow the installation of residential water meters.

The project creates ways that property owners can replace an existing toilet with a new water efficient toilet in the City. Since the water meters must precede this project, the owner will see a financial incentive to conserve water by saving on the water bill. The City will provide property owners with a cash rebate when they show proof that a City-selected water-efficient toilet has been purchased and is installed at a property in Mount Pearl. The project will also involve a public awareness campaign to gain citizen and business support.

Rain-Barrel Purchase Program

The City will provide property owners with a cash rebate when they show proof that a City-selected water-efficient toilet has been purchased and is installed at a property in Mount Pearl. If the installation of water meters precedes this project, the owner will see a financial incentive to conserve water by saving on the water bill. The project will also involve a public awareness campaign to gain citizen and business support.

Waterford River Water Flow Monitoring Equipment

The project consists of the purchase of, installation of, and staff training for equipment that will measure the flow rate of the Waterford River at specific locations, and can measure the volume of water at a specific location in order to monitor flood risk along the Waterford River and Tributaries. The project will also involve a public awareness campaign to gain citizen and business support and may also involve digital signage to indicate the level of the river, a system of webcams for citizens to monitor flood status, and other flood awareness measures.

Streetscape Planting

As a way of capturing and sequestering both water and carbon dioxide, street trees are intended to improve local air quality by emitting oxygen as well as provide pleasurable scents, flowers and fruits useful to pollinators and birds. The project involves the purchase of vegetation to be placed along streets directly in the soil along the street, or within movable containers. The project will also involve a public awareness campaign to gain citizen and business support.

Transportation

Walking Path Paving

The City has an extensive length of trails along streams, roads, connecting civic facilities, residences and businesses. Large portions of the trails are not paved making it difficult for snow removal, making the trails impassable during the colder months. The City proposes to pave the unpaved portions of the existing trail system with asphalt. The clearing of snow along these trails will become feasible, making year-round use of the trails to enhance health as well as serving as transportation corridors providing additional modes and routes of transportation to the City. The project will also involve a public awareness campaign to gain citizen and business support.

Linear Park (75 km) Paved Walkway Widening Program

This project is of high importance.

The City proposes to widen 75km of trails in places to include bicycle paths alongside the walking trail. These paths are already paved, but have a current paved width of 2m (on average). The City expects this project to cost approximately \$3 Million. The project will also involve a public awareness campaign to gain citizen and business support.

Bicycling Path Street Path Widening

In order to develop a bicycle path system some of the roads may be widened, adding an additional 2m on both sides of the road to the existing carriageway. In places, where land ownership may not be held by the City, expropriation may be needed to clarify land ownership to correspond to surfacing work. The project will also involve a public awareness campaign to gain citizen and business support. Purchases of additional snow clearing equipment may also be needed to maintain the safety of bicycle paths all-year-round.

The cost to add two bicycle lanes has been estimated at \$200,000/km. The total widening has a length of approximately 15 kilometres. The cost per kilometre for this widening is approximately \$7.5M.

The Length of Roads (the centre line distance) for:

- 1. Commonwealth Avenue (from Topsail to Old Placentia) has a length of 2507m,
- 2. Mt. Carson Avenue (from Topsail to Kenmount Rd, including Wyatt and Mount Carson realignment) has a length of 1897m
- 3. Topsail Rd (from Commonwealth Avenue to 701 Topsail Rd) has a length of 2379m
- 4. Topsail Rd (from Commonwealth Avenue to the overpass at Paradise) has a length of approximately 2169 metres to boundary
- 5. All of Ruth Avenue has a length of 2044m to boundary
- 6. All of Old Placentia Road has a length of 3899m.

Public Transit Study

This study will lay the groundwork for the City to investigate and propose solutions to transportation issues directly related to Mount Pearl. The second phase of this project is to purchase new City buses to initiate a bus service. The project will also involve a public awareness campaign to gain citizen and business support.

Bus Purchases

The project involves the purchase of a number of City buses that will allow the City to initiate a bus service. Related features will be the service depot, vehicles and ancillary equipment and training for staff to operate. Once in place, the City would maintain and enhance the bus service with additional supports for transit in Mount Pearl. The project may involve an amendment to the City of Mount Pearl Act, the Development Regulations, and the Municipal Plan, as well as the creation of a business plan for the operation of a Mount Pearl bus service, and the construction of a service garage for the buses. The project will also involve a public awareness campaign to gain citizen and business support.

Transit Infrastructure Improvements

The City would maintain and enhance the bus service with the following additional supports for transit in Mount Pearl such as bus lanes, lay-bys, shelters, benches, information kiosks and renovations to the service garage. This is a long-term project, expected for commencement in 20 or more years. The project will also involve a public awareness campaign to gain citizen and business support.

Road Upgrades to Improve Vehicle Efficiency

The project is expected to improve local air quality, reduce greenhouse gas emissions, operational costs, increases the lifespan of both the roadways and the vehicles that travel on the roads. The upgrades include:

- Digital Signage for traffic notices
- Mt Carson Realignment (Phase 1: \$3.5M)
- Transportation software for traffic modeling
- A city-wide traffic synchronization study intended to determine traffic light timing over the entire city road network, investigate the feasibility of motion and weight detectors to control traffic signals, the feasibility of developing a roundabout in problem areas, and the installation of photo-ticketing systems, and the feasibility of priority-lanes (for 'sustainable' modes of travel: bus, carpool, approved hybrid/electric taxi, et cetera).

The project will also involve a public awareness campaign to gain citizen and business support.

Vehicle Replacement Program to Electric or Hybrid

The project involves the completion of a study on fuel consumption of city vehicles at the current time. Each vehicle will be included in the study. Council would a then adopt a purchasing / replacement program with policies to guide decisions related to vehicle purchases, upgrades and replacement. The project also proposes to outline operating practices that will reduce fossil-fuel consumption and methods of monitoring ongoing success.

The project is intended to reduce green house gas emissions, improve local air quality, reduce the possible soil and watershed contamination caused by fossil-fuel engines, such as oil leakage, fuel spills, and biotic degradation. Using electric vehicles in the municipal fleet may also help to positively influence private consumer choices and purchasing decisions. The costs will also be monitored to determine the economic benefits. The project is medium term, expected to be initiated in 5-10 years. The project will also involve a public awareness campaign to gain citizen and business support.

Project	Cost	Goal	Indicator(s)	Innovative Features	Monitoring Data Source	Time Frame (Years)		
Brownfields	Brownfields							
Olympic Drive Remediation for Commercial Sale		Reduce the Area of Contaminated Land	Total area of uncontaminated land" / "Total area of land with unknown toxicity"	Remove the former landfill contaminants Prepares land for development purposes	City	5		
Old Placentia Road Water Tower Site Remediation	\$200,000	Reduce the Area of Contaminated Land	Total area of uncontaminated land" / "Total area of land with unknown toxicity"	Remove contaminants from the soil Increase the land available for development purposes	City	5		
Swimming Pool Site Remediation	\$1M	Reduce the Area of Contaminated Land	Total area of uncontaminated land" / "Total area of land with unknown toxicity"	Remove contaminants from the soil Increase the land available for development purposes	City	5		
Smallwood Arena Site Remediation	\$500,000	Reduce the Area of Contaminated Land	Total area of uncontaminated land" / "Total area of land with unknown toxicity"	Remove contaminants from the soil Increase the land available for development purposes	City	5		
Glacier Arena Site Remediation	\$50,000	Reduce the Area of Contaminated Land	Total area of uncontaminated land" / "Total area of land with unknown toxicity"	Remove contaminants from the soil Increase the land available for development purposes	City	5		
Pesticide and Chemical Fertilizer Ban	No Cost Regulatory Change	Reduce Contamination of the watershed	Number of Complaints	Reduction in the number of per capita complaints Improves health of local vegetation Reduction in toxins in the watershed that might otherwise reach the Waterford River and aquatic habitats.	City	5		

New Developments: Environmental Assessment as Required	No Cost Regulatory Change	Reduce the Area of Contaminated Land	Total area of uncontaminated land" / "Total area of land with unknown toxicity"	Greater controls on environmental issues related to soil contamination Reduction in toxins in the City property by property Reduction in toxins in the Waterford River watershed and their effects on aquatic habitats. If the EA shows toxicity, then the property will require remediation prior to occupancy.	City	5
Waste						
Paperless Office and Electronic Council Meetings		Reduction of the paper used in the Municipal Organization of the City of Mount Pearl	Mass of paper consumed in the Municipal Organization of the City of Mount Pearl (kg) per capita	"Paperless Municipal Office" "Electronic Council Meetings" Paper waste is reduced Embodied resources are reduced that would normally be needed to make paper Reductions in chemicals that would normally enter riparian habitats and habitats, Reduction of deforestation Reduction of greenhouse gases related to the transportation of both the materials and equipment needed to make and the paper finished paper.	City	
Multi-stream collection vehicles and containers	\$3.8 million	Reduction in total weight sent to the Landfill	Weight of waste in each waste stream, Total weight sent to the Landfill	Collection vehicles able to collect many types of materials separately for easier recycling By collecting waste pre-sorted by material, recycling each material is made simpler by not needing to be separated. May involve a public awareness campaign to gain citizen and business support	City	5

City wide yard sale	\$20,000	Reduce the mass destined for the landfill	Weight of each item sold (assuming all was destined for the landfill)	Once per month for three months Reduce material going to the landfill May involve the purchase of outdoor tents, or the renovation of an existing facility to better accommodate these events.	City	10
Eco-industrial networks Create a By-Product Exchange (BPX) system		Reduce the mass destined for the landfill, Improved Business operation capacity	Weight of each item sold (assuming all was destined for the landfill)	The Eco-Industrial Network will take the lead in designing and implementing a byproduct exchange (BPX) in the Province	City	15
(Open-air) Composting Facility and soil creation		Reduce the mass destined for the landfill, Soil creation	Weight of all organic material	Asphalt pad, tractor, mulcher and grinder The compost will improve local soil quality, used locally, GHG's are minimized The compost and mulch created will be used in City landscaping projects The compost and mulch created will be used to aid another project: "Gardens" The compost and mulch created will be used to remediate local soils The scale of the open-air facility will adjust to meet the need of the City In future years, the composting will be expanded to include other forms of organic material.	City	15
Energy						
Electric Ice Resurfacing Machines (2)	\$400,000 (for two)	Reduce Fuel Consumption, Improve Air Quality	Consumption	These will be the only electric ice resurfacing machines in the Province, Electric power source will maintain a high air quality within the arena Currently most are gasoline powered, some are propane, these are much cleaner	NF Power	5

Glacier Arena Expansion (second ice pad)	\$15M	Reduce Electrical Consumption	Consumption	1st Municipal LEED Silver certified Building Eco-Chill system Green Roofing Geothermal Heating	NF Power	5
Pearlgate Multiplex (Swimming Pool, Fitness Centre, Theatre, Youth Centre)	\$30M	Reduce Electrical Consumption	Consumption (per Capita) For each building	Municipal LEED Silver certified Building Eco-Chill system Green Roofing Geothermal Heating	NF Power	5
Anti-Idling Policy on Municipally Owned Property	Signage, radio ads	Reduce Fuel Consumption, Improve Air Quality	Air Quality Testing at specific locations (intersections, parking areas, pedestrian intersections, schools	Include All City Facilities Enforced by the Municipal Enforcement Officers Regulation adopted by Council, a community outreach program, and idle free zones. The first phase of the campaign is to receive pledges to eliminate five minutes of idling a day.	City	5
Retrofit Municipal Systems, Facilities, and Buildings for Energy Efficiency		Reduce Electrical Consumption	Consumption (per Capita) For each building	Library, Kenmount Community Centre, Water Pumping Stations, Street Lighting Systems, Recreation Land Lighting, etc.	NF Power	10
Retrofit municipal buildings for Energy Generation (Geothermal, PV, Wind)		Reduce Electrical Consumption	Consumption (per Capita) For each building	Uses energy-efficiency technology, and practices to reduce the energy consumed by existing municipal systems, facilities and buildings. Identify opportunities to make each system a more energy efficient system. Identify priorities for energy efficiency improvements Preparation of construction documents for the renovations to each structure	NF Power	10
Replace incandescent traffic lights with energy efficient bulbs	\$300,000	Reduce Electrical Consumption	Electrical Consumption (per Capita) of the street-lighting system	Replace existing incandescent traffic-signal lighting fixtures with more energy efficient fixtures such as florescent, LED, etc.	NF Power	10

Water						
Residential water metering program	\$10M	Reduce Water Consumption	Water Consumption (per Capita)	The purchase and installation of a water meter is required of all properties Replacement costs will be considered by Council where conditions merit. Actual consumption of water will be used to determine monetary charges for fresh water used. Collects valuable data for future water-related projects. Enables continuous monitoring of water consumption.	City	5
Continue to identify and repair leaks in the drinking water distribution system	\$150,000 for conventional methods, \$ for an innovation program	Reduce Water Consumption	Water Consumption (per Capita)	Implement new and emerging technologies for the design, installation, and maintenance of underground services (including potential for all potential services located underground)	City	5
Waterford River Water Flow Monitoring Equipment	\$300,000	Reduce the Effects of Flooding		Monitors flood risk along the Waterford River and Tributaries to be able to alert property owners if there is a danger of flooding. May also involve digital signage to indicate the level of the river, a system of webcams for citizens to monitor flood status, and other flood awareness measures	City	5
Streetscape Planting		Reduce the Effects of Flooding		Captures and sequesters both water and carbon dioxide Improves local air quality by emitting oxygen as well as providing pleasurable scents Provides flowers and fruits useful to pollinators and birds. Vegetation may be placed directly in the soil, or within movable containers	City	10

Rain-Barrel Purchase Program		Reduce Water Consumption	Water Consumption (per Capita)	Cash rebate when proof that a City- selected Rain-Barrel has been purchased and installed at a property Financial incentives to conserve water by saving on future water bills	City	10
Water-Efficient-Toilet Replacement Program		Reduce Water Consumption	Water Consumption (per Capita)	Financial incentives to conserve water by saving on future water bills Cash rebate when proof that a Cityselected water-efficient toilet has been purchased and installed at a property	City	10
Community Gardens Partnerships (on school grounds and government Land)		Reduce the Effects of Flooding		Establish partnerships and cost-sharing arrangements for initiating a community garden on various private properties, especially school property, Gov. land	City	15
Transportation						,
Walking Path Paving		Improve Citizen Health, Reduce fossil Fuel Consumption for active transportation		Snow clearing along these trails will become feasible, making year-round use of the trails to enhance health as well as serving as transportation corridors providing additional modes and routes of transportation to the City.	City	5
Linear Park (75 km) paved walkway widening Program	\$3M	Citizen Health, Reduce fossil Fuel Consumption for active transportation		To widen 75km of trails with bicycle paths will greatly improve the capacity for active transportation in the City, leading to improved health Increases in the use of the trails will increase safety through citizen-observation	City	5

Bicycling path Street Path Widening	\$15M	Citizen Health, Reduce fossil Fuel Consumption for active transportation		This will be the City's first steps to develop a bicycle path system Enhances Citizen health, Increases the options for transportation for providing additional modes and routes of transportation to the City. Purchases of additional snow clearing equipment may also be needed to maintain the safety of bicycle paths all-year-round	City	10
Public Transit Study	\$60,000			Lays the groundwork for a transit system for the City where no transit system has served Mount Pearl specifically	City	5
Bus Purchases		Reduce Fuel Consumption, Reduce GHG's, Improve Air Quality		This is the second phase of the start of a municipal bus service	City	10
Transit Infrastructure Improvements				Construction of lay-bys, bus shelters, benches, and information kiosks Construction of a service garage	City	15
Road upgrades to improve vehicle efficiency		Reduce Fuel Consumption, Reduce GHG's, Improve Air Quality		Digital Signage for traffic notices Mt Carson Realignment (Phase 1: \$3.5M) Transportation software for traffic modeling	City	15
Vehicle Replacement Program to Electric		Reduce Fuel Consumption, Reduce GHG's, Improve Air Quality	Fuel Consumption (per capita) for each vehicle, and for the entire fleet	Baseline study on fuel consumption of city vehicles Each vehicle will be included in the study Council adopts a purchasing / replacement program will guide decisions related to vehicle purchases, upgrades and replacement	City	15

Appendix C: Sustainability Assessment

Appendix C: Sustainability Assessment

Introduction

The City of Mount Pearl is the second largest city in Newfoundland and Labrador, with a 2006 population of just under 25,000 people. It is located adjacent to the City of St. John's and the Town of Paradise. The Waterford River and variable topography are distinguishing environmental features of the City. Major regional transportation routes serving the city are Pitts Memorial Drive, the Trans Canada Highway and Kenmount Road. Within the City the main roads include Topsail Road, Park/Ruth Avenue, Richard Nolan Drive, Smallwood Drive and Commonwealth Avenue.

Mount Pearl is a family oriented community whose land use reflects a healthy mix of residential, commercial, recreational and open space uses. A variety of housing types exist, but the majority live in single detached residences (64%) in traditional subdivisions. There is a strong and growing business community, particularly in the sectors of manufacturing, technology, retail, oil and gas, and transportation. Recreation opportunities are abundant in Mount Pearl, and include a variety of programs, facilities, parks and trails which keep residents active in the community.

Mount Pearl is fortunate to have high levels of education, higher than average incomes, low crime levels, good employment opportunities and citizens who are highly satisfied with the community they live in. Like many communities in Canada, Mount Pearl follows a high-consumption, low or medium-density development pattern and lifestyle that is traditional in post-war suburbs. Within our youngest generation's lifetime, car-based societies will be faced with serious challenges which we are now beginning to see and must be addressed today.

Land Use

Mount Pearl has approximately 42% of the land area used for residential purposes. Although the city has a number of apartment buildings, townhouses and duplexes, the majority of homes are single-family dwellings of low to moderate density configured in a traditional subdivision pattern. This form of housing is land intensive and allows for relatively inefficient use of infrastructure. The land use pattern also promotes and encourages the use of a vehicle for most of life's tasks.

Approximately 20% of the City's land base is used for industrial purposes, 6% for commercial use, and another 6% for mixed development. These areas are important to the City's tax base and economic viability, but they also have implications for sustainability. Like the residential areas, they lack integration to other areas of the City, and promote and encourage vehicle dependency. They are predominantly paved and have minimal natural vegetation, which reduces water infiltration and air quality. Donovan's Business Park is the largest single industrial/ commercial land area, encompassing approximately 55% of Mount Pearl's total commercial space. Of this 55%, 86% is used for warehousing activities.

Environment

The Waterford River is an important natural feature in Mount Pearl. The headwaters are located in Paradise, and the river flows southeast to Bowring Park along Topsail Road, eventually draining in the St. John's Harbour. Virtually all the surface runoff from Mount Pearl drains untreated to the Waterford River, either directly or via one of its tributaries. Industry in the Waterford River basin is concentrated in the Donovans Industrial Park and along Topsail Road. The health of the Waterford River fluctuates throughout the year and does not support a reliable fish population.

Several species of fish include Brook Trout, Brown Trout, Stickleback and Eel are present in the river and at one time, the river was a popular place for recreational fishing. Over time however, urban development has had an impact on fish and fish habitat and as a result, the enjoyment of the river as a source of recreation has suffered.

Concerns about the health of the Waterford River have given rise to community groups such as the Friends and Lobbyists of the Waterford River, who have worked with the Town of Paradise and the cities of Mount Pearl and St. John's to restore the recreational use of waters in the basin. The City of Mount Pearl has implemented a policy requiring new developments to have no net increase in the volume of stormwater as a result of development, as a means of preventing flooding along the river. All three municipalities have a responsibility to protect the river and as such, must work together to address issues of water quality, stormwater management and protection of fish habitat.

There are a number of parks and open spaces in Mount Pearl, which make up 20% of Mount Pearl's total land area. Much of this area is comprised of playgrounds, tot lots and multipurpose fields, however others are natural parks. Power's Pond and Branscombes Pond are both wetlands surrounded by vegetation. Some segments of trail through the City have minimal landscaping, and a forested area remains above the 190m contour, north of Topsail Road. Mount Pearl is part of the Maritime Barrens eco-region, which is typified by extensive barrens, bogs and sparse stands of evergreen trees. These conditions are still somewhat present in the undeveloped areas of the City, but as the city has developed, many different plant and tree species, both native and naturalized to Newfoundland have been planted. As new areas are cleared for urban development, it will be important for the City to ensure that new trees are planted on private and public properties.

Economy

Mount Pearl has a healthy business sector that employs over 13,000 people. The major occupations of the labour force in Mount Pearl include: sales and service; business, finance and administration occupations; trades, transportation and equipment operators; and management occupations. At the time of the 2006 Census the unemployment rate in the City was 7.7%, significantly lower than the provincial rate of 18.6%. Many of these activities are directly or indirectly related to the growing offshore oil industry as well as wholesale and retail trade.

Reliance on the automobile for travel to work is an important consideration for sustainability. Of the 12, 970 residents of Mount Pearl who are employed, 43% work outside the City. A good percentage (57%) of those who are employed in the City, also live there and are either able to walk or have a

short commute to work. However, the majority (78%) of employed residents of Mount Pearl go to work in a private vehicle as the driver, and only 7% used public transportation, walked, rode a bike or took some other mode of transport. Future sustainability in Mount Pearl must consider and address the high dependency on lone automobile transportation for all kinds of trips, as vehicle use is a significant contributor to greenhouse gas emissions.

It should also be noted that Mount Pearl businesses also employ people who live outside the city in St. John's, Conception Bay South, Paradise, and Torbay, and who also rely on travel to work by car. Reducing travel into the city by car through other means should also be part of any strategies to reduce greenhouse gas emissions.

Society and Culture

The 2006 Census population of Mount Pearl was just under 25,000 people, representing a small decline (1.5%) from 2001 which is consistent with the province as a whole. Based on growth and development within the City in the period between the 2006 Census and 2009 the population has likely increased.

Mount Pearl's population shows an aging population profile, with a median age of 38.6 years old - slightly younger than the provincial median age. Population pyramids are graphs that show how the population is distributed by age and sex. The population pyramid for the province, *Figure 2:*Newfoundland Population Pyramid, 2006 Census shows a significant bulge in the proportion of the population who are part of the baby boom generation and a small number of those between the ages of 20 and 35. This will present future challenges in meeting the needs of seniors.

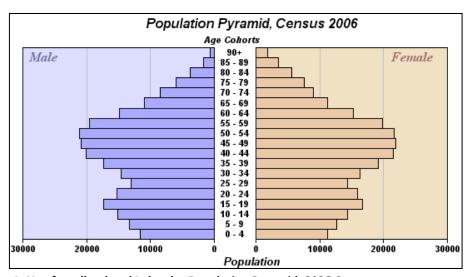


Figure 1: Newfoundland and Labrador Population Pyramid, 2006 Census

Like the provincial profile, Mount Pearl's population pyramid (*Figure 3: Mount Pearl Population Pyramid, 2006 Census*) shows a large number of baby boomers, with the largest number in the younger boomer cohort (40 to 54 years old). Mount Pearl is also slim in the 20-35 year old age cohorts, which may be related to migration out of the province for employment reasons. There is a

small number of people between the ages 0-10, reflective of the low population of young adults of childbearing age. Mount Pearl differs from the provincial profile in having a relatively large number of children and youth between the ages of 14-25 which will help sustain the population in future if they can be encouraged to stay in the community as they begin to form their own families in the future. (Community Accounts, 2008, Statistics Canada, 2008, Newfoundland and Labrador 2007).

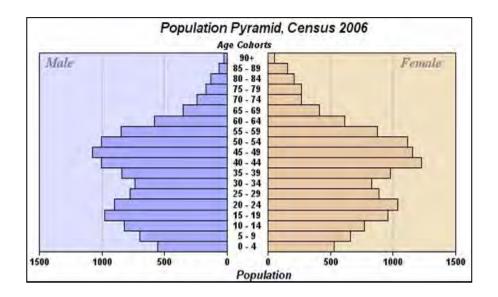


Figure 3: Mount Pearl Population Pyramid, 2006 Census

Mount Pearl will need to meet the needs of an aging population over the next twenty years, but it will also have a fairly significant portion of the population who are young, employable and having families. This will provide the City with opportunities that other communities in the province, and the country, will not enjoy.

There are implications of this population structure that have begun to affect Mount Pearl, and will continue to do so. Currently there is a lack of housing options suitable for seniors, particularly those who are healthy and active, but who do not wish or do not have the capability to perform the routine upkeep of a detached dwelling and private yard. In an aging population more and more people will be unable to drive to the goods and services they require. Typically more people will desire recreation opportunities that are low impact and socially engaging and less people will be interested in structured sport. The need for healthcare resources may increase, and additional medical services may be required within the City.

Many residents take advantage of the numerous recreation and leisure amenities available in Mount Pearl, and hundreds of people volunteer with local sport and community service organizations to implement a range of activity programs. There are over 65 km of natural and paved walking trails in the City as well as a number of parks and playgrounds. There are ice rinks, ball fields, soccer turfs, tennis courts, a swimming pool, community centres, a track and field complex, and a skateboard park. Yet, despite this, rates of obesity (not only in Mount Pearl but in the province as a whole) are

significantly higher than the national rate of 15.8% (Community Accounts, 2008). Programs, services and opportunities for citizens of all ages to be more active are an important factor for ensuring the long term health of the city's population.

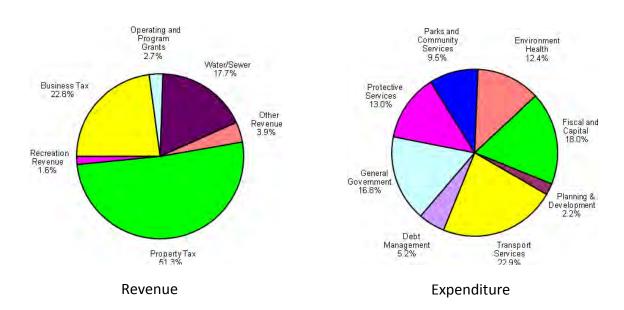
Governance

Mount Pearl City Council consists of the Mayor, Deputy Mayor and five Councillors. Council has six standing committees which oversee the functions of municipal departments. Public Council meetings are held bi-weekly throughout the year, and elections are held once every four years in September.

Administratively, the City is headed by a Chief Administrative Officer who oversees four departments, each led by a Director. The four departments are Planning and Development, Infrastructure and Public Works, Community Services and Corporate Services.

The six standing committees are as follows: Corporate Services; Community Services; Public Works; Planning and Land Use Development; Economic Development, Communication and Tourism; and Infrastructure, Engineering, Water and Sewer Services.

In 2009, the City operated with a budget of \$30.6 million – sources of revenue and allocation of expenditures are as follows:



As a component of the ICSP process, the City responded to the questions set out in the Provincial Guidelines - *Table 1: Basic Questions of Sustainability* - to determine sustainability as it relates to governance. In all areas, the City achieves the minimum operational and legislative requirements as determined by the province.

Basic Questions of Sustainability	Yes	No
In general are you able to get candidates to run for municipal council?	Х	
Does your council hold at least one public council meeting per month?	Х	
Has the municipality been able to avoid an operating deficit continuously in the past 2 years?	Х	
Is your debt servicing level within the Provincial benchmark of 30%?	Х	
Is your Municipal Plan up to date?	Х	
Do you have adequate municipal buildings to meet your current needs?	Х	
Do you currently meet <u>all</u> conditions of your permit to operate your water system?	Х	
Are you able to meet <u>all</u> Provincial and Federal requirements for sewage treatment?	Х	
Do you have sufficient water and sewer infrastructure to meet the needs of your residents?	Х	
Does your council keep at hand, adopted rules of procedure?	Х	
Do you currently employ <u>all</u> the staff you require to meet the operational needs of you municipality?	Х	
Is your sold waste collected at least once a week and disposed of at a department of Environment approved site?	Х	
Do you provide, or contract for, adequate emergency response services?	Х	

Table 1: Basic Questions of Sustainability

Water, Wastewater and Solid Waste

Drinking water is provided to Mount Pearl through the regional water system from Bay Bulls Big Pond, under the policy direction of the Regional Water Committee. The watermains range in age from quite new to 50 years old, and the distribution system is continually being monitored and repaired. The Engineering Department has developed a computerized model of the water distribution system which allows predictions of the effects of major water demands. Development along and above the 190m contour line receives water through booster pumps, and there are pressure problems in some of these areas.

As part of the Regional Water Committee, Mount Pearl is working with other communities in the region to ensure a safe and sufficient supply of good quality potable water. Water conservation measures, infrastructure upgrades and public education are being considered to ensure sustainability of the system for future generations. As the region grows, the need to implement further measures to reduce consumption and waste of water will be necessary. Each municipality has a role to play in ensuring long-term viability of the water supply.

There are two major sanitary sewer systems that service Mount Pearl. These sanitary sewers transport sewage through St. John's directly into the St. John's Harbour. Approximately 99% of Mount Pearl citizens have sewage (and water) services. Currently, a regional sewage treatment plant is under construction on the south side of the St. John's Harbour and when the plant becomes operational in 2010, all sewage that is presently entering the Harbour from St. John's, Mount Pearl, and Paradise will receive primary treatment prior to its release into the Harbour.

Solid waste is transported to the Robin Hood Bay Sanitary Landfill, the only landfill currently in operation on the Avalon Peninsula. It is operated by the City of St. John's and Mount Pearl pays a per tonnage tipping fee for disposal of its solid waste. By 2010 and 2011 the Robin Hood Bay disposal site will be upgraded to become an Integrated Waste Management Facility that will include recycling and central composting facilities, a household hazardous waste depot, leachate trenches, protective liners, and a methane gas collection system. When this facility is completed Mount Pearl will utilize this new facility.

The City has implemented a number of programs to address waste disposal, including a Bulk Garbage Program, fibre cardboard and paper recycling, and a white metals materials recycling program. Within the City, a Green Depot supports citizen actions by accepting recyclables.

To ensure that the landfill can accommodate waste for its expected lifespan, municipalities that send their wastes to it must consider ways to reduce the volume of waste they dispose of, find means to re-use and re-cycle materials. To this end, measures that are being developed by the Greater Avalon Regional Waste Management Committee need to be examined and incorporated into municipal operations as part of a regional effort to address waste disposal.

Collaboration and Partnerships

The city of Mount Pearl is currently engaged in numerous collaborations and partnerships with community groups, institutions, business, and other levels and agencies of government and regional committees. Some of these include:

- Northeast Avalon Regional Plan Review
- Regional Water Services Board
- St. John's Sewage Treatment Plant and harbour clean up
- Greater Avalon Regional Waste Management Committee
- Northeast Avalon Regional Economic Development Board
- Economic Diversification and Growth Enterprise (EDGE) program
- Partners for Climate Protection

- Northeast Avalon Joint Council
- Regional Fire Service

The Mount Pearl Community Contacts list documents all the associations and agencies that have contact with the City, including schools, churches, sport groups, service groups, community boards/groups, provincial government departments, and Members of Parliament. The innumerable relationships between residents, organizations, governments and the City are an extremely valuable resource. The trust and understanding built as a result of these relationships, and the capacity to continue forming new relationships, is a major determinant of community success.

Municipal Plan and Development Regulations

The City of Mount Pearl is currently conducting a review of the Municipal Plan. The current *Municipal Plan* and *Development Regulations* were adopted in 1989 and despite many amendments over the years the circumstances and assumptions of that plan have not changed. The proposed *Mount Pearl Municipal Plan – Advancing the Vision* sets out a strategy for land use and physical development over the next ten-year period. The intent of the Plan is to generate a healthy, safe and high quality urban environment for residents. The Vision and goals set forth by council in the draft Municipal plan are generally sustainable objectives. All developments will be reviewed with regards to impacts on the natural environment, surrounding land uses, and the quality of life of Mount Pearl citizens (Mount Pearl Municipal Plan Draft 2005).

The Proposed Municipal Plan includes a number of policies which are particularly relevant in the context of sustainable development. The policies which would contribute most significantly include:

- 10% conservation area in new development
- Waterford River flood protection zoning
- Centennial Square revitalization
- Residential and commercial intensification

Other Municipal Policies

There are numerous City policy documents that play a role in community sustainability. Some of these include:

- The Planning and Development Department produces a Business Guide outlining all the
 information and opportunities available to anyone establishing a business in Mount Pearl.
 Home based business regulations exist to guide commercial operations in a residential
 dwelling. Site and landscaping guidelines exist to promote sustainable land use and to
 conserve the natural environment to the extent possible.
- The Infrastructure and Public Works Department monitors City policies designed to reduce
 waste, conserve water and properly manage wastewater and storm water. Vehicle fleet
 management policies ensure fleet efficiency. Policies and procedures exist to ensure high
 quality drinking water is provided to citizens. Sustainable infrastructure is promoted by
 asset maintenance and replacement policies.
- The Department of Community Services provides many of the policies of the City designed to promote the social and cultural sustainability of the City. Numerous subsidies and memorandums of understanding exist to support various groups in the areas of sports, arts,

- and aging adults for example. Recreational policies have been adopted by the City for such things as smoke-free outdoor spaces, alcohol use in recreational facilities and displaying art in our atrium.
- The Department of Corporate Services enforces various policies designed to ensure the
 financial sustainability of the City. For example, tax collection policies exist to ensure all
 revenues needed to operate are received as required. Debt management policies ensure
 debt is minimized to the extent possible. Policies governing taxpayer discounts and
 donations exist to provide assistance to citizens in need.

These policies, amongst others, contribute to all aspects of community sustainability – culture, government, society, economy, and environment.

Appendix D: Public Consultation Materials

Sustainability Planning In Mount Pearl

May 2009

envision your community

What is an Integrated Community Sustainability Plan?

The Integrated Community Sustainability Plan (ICSP) is an opportunity to consider the future and to think about the full range of possibilities for sustainability in Mount Pearl.

It is a long-term plan, developed in consultation with community members. It identifies a vision for the future of the community that will enable Mount Pearl citizens to achieve objectives they have for environmental, cultural, social, economic and governmental sustainability. The ISCP is a tool that will help to plan and prioritize how the funds from the Federal Gas Tax Agreement and other sources will be distributed in order to achieve the sustainability goals of the community.



Funding Sustainability in Mount Pearl

A major source of funding for sustainable infrastructure and services is the Federal Gas Tax Agreement. Similar agreements were signed with other Canadian provinces and the territories to share federal gas tax funds with municipalities. The City of Mount Pearl will receive funding for at least the next ten years toward eligible environmentally sustainable infrastructure projects and related programs, such as:

Public transit

Active transportation

Drinking water

₩astewater

Storm water

Solid waste

Energy systems

Capacity building

Research

Policy development

▶ Partnerships

Public Open House

Council wants your input for the future of your community.

Saturday May 30 1:00-4:00pm City Hall 3 Centennial Street Bring the whole family out to have your say and share your vision for the future!



Sustainability Planning In Mount Pearl

May 2009

envision your community



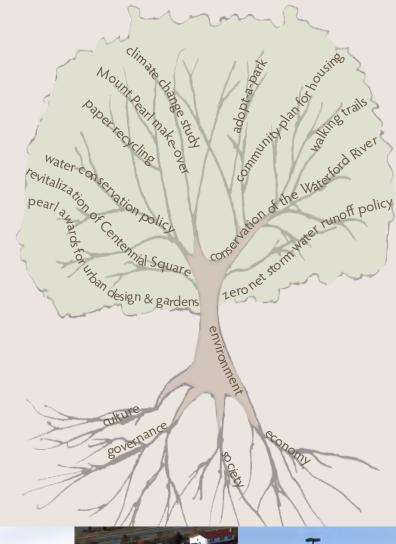
What is sustainability?

In the last 15 years there has been growing concern that the systems we depend upon, like the economy and the environment, might not be able to support us in the long-run. For example, climate change, economic instability and increasing health concerns are problems that show us the complexities of the issues we face. Sustainability is a principle and a practice that has emerged to address such multifaceted concerns.

In a community like Mount Pearl, living sustainably refers to finding ways of cutting back on material and energy use, reducing waste and pollution of all types, creating a resilient economy, easing social inequalities and engaging the public meaningfully in tough decisions that need to be made. Sustainability about maintaining healthy environmental conditions and a good quality of life for all, now, and into the future.

Sustainability Initiatives in Mount Pearl Today

Mount Pearl already has a number of projects and policies that contribute to the sustainability of the community. Some of these include:









Fax: (709) 748-1111





please contact: Mary Bishop Senior Project Manager CBCL Limited

Phone: (709) 364-8623 Fax: (709) 364-8627 Email: maryb@cbcl.ca

www.cbcl.ca

or drop a note to the Mount Pearl Planning & Development Department:

rkanne@mountpearl.ca Phone: (709) 748-1029



Vision for Mount Pearl

Council wants your input for the future of your community

Bring the whole family out to have your say & share your vision

Be a part of sustainability planning

Saturday May 30 1:00-4:00pm

City Hall
3 Centennial Street





society



culture



economy



government



environment

sustained

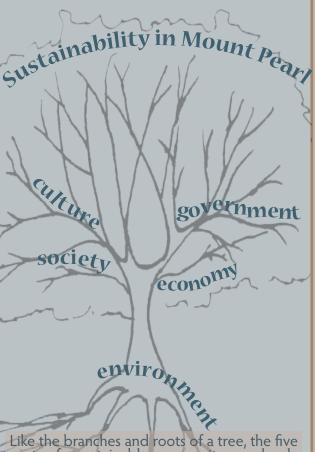
our community has an opportunity

participate in shaping the future

The City of Mount Pearl is creating an Integrated Community Sustainability Plan (ICSP). This is an opportunity to consider the future and to think about the full range of possibilities for sustainability in Mount Pearl.

The ICSP is a tool to plan and prioritize things like water, waste management, energy, active transportation, public transit, parks, research and more.

The ICSP for Mount Pearl will be a 20 year visionary plan based on input from the community.



Like the branches and roots of a tree, the five parts of a sustainable community are closely connected. Sustainability planning in Mount Pearl is about deciding how we manage and plan these parts in order to provide a healthy, productive and meaningful life to all residents, present and future.

What kind of community do we want?

What are our strengths as a community?

What are our needs?

What does a sustainable Mount Pearl look like?

How do we get to where we want to go?

seize the opportunity

Come out and discuss what sustainability means to you and share your vision for Mount Pearl

If you have questions, or if you cannot make it to the meeting but would like to

give your input contact:

Mary Bishop

Senior Project Manager CBCL Limited

187 Kenmount Road, St. John's NL, A1B 3P9 Phone: (709) 364-8623 Fax: (709) 364-8627 Email: maryb@cbcl.ca www.cbcl.ca

or drop a note to the Mount Pearl Planning & Development Department: rkanne@mountpearl.ca Phone: (709) 748-1029 Fax: (709) 748-1111



Appendix E: Funding and Information Sources

Appendix E: Funding and Information Sources

Infraguide: National Guide to Sustainable Infrastructure

Federation of Canadian Municipalities

www.sustainablecommunities.fcm.ca/Infraguide/default.asp

Quick Action Guide: Municipal Action on Climate Protection

Federation of Canadian Municipalities

www.sustainablecommunities.ca/files/Capacity Building - PCP/pcp-quick-action-guide-En.pdf

Progressive Governance for Canadians: What You Need to Know

Crossing Boundaries National Council/ Canada 2020.

www.ppforum.ca/sites/default/files/BOOK-Progressive%20Governance%20for%20Canadians.pdf

The Local Government Commission

Design Guidelines for Multifamily Housing

www.lgc.org/freepub/community design/guidelines/multifamily housing.html

Melbourne Principles for Sustainable Cities
United Nations Environment Program
www.iclei.org/fileadmin/user_upload/documents/ANZ/WhatWeDo/TBL/Melbourne_Principles.pdf

Environment Canada Sustainable Community Indicators Program www.ec.gc.ca/soer-ree/English/Scip/default.cfm

Newfoundland and Labrador Waste Management Trust Fund www.mmsb.nf.ca/wmfund.asp

Green Municipal Fund Federation of Canadian Municipalities http://gmf.fcm.ca/Home/

Newfoundland and Labrador Municipal Rural Infrastructure Fund www.ma.gov.nl.ca/ma/mrifa/

Environment Canada EcoAction Community Funding Program www.ec.gc.ca/ecoaction/what is e.html

Environment Canada Science Horizons Youth Internship Program www.ec.gc.ca/sci hor/

Transport Canada Moving on Sustainable Transportation (MOST) www.tc.gc.ca/programs/environment/most/menu.htm

Canadian Heritage Museums Assistance Program www.pch.gc.ca/pgm/pam-map/index-eng.cfm#h1

Service Canada Youth Employment Strategy Programs www.servicecanada.gc.ca/eng/epb/yi/yep/newprog/yesprograms.shtml

Appendix F: ICSP References

Appendix F: References

- Municipalities Newfoundland and Labrador Community Cooperation Resource Centre. 2008. *Mount Pearl Municipal Sustainability Self-Assessment Report.*
- Bell, Trevor. 2002. *Ecoregions of Newfoundland: Maritime Barrens*. Memorial University. Retrieved April 29 2009 from www.heritage.nf.ca/environment/maritime_barrens.html
- Canadian Council of Ministers of the Environment. 2007. Canadian Environmental Quality Guidelines.
- City of Mount Pearl. City Services. Retrieved April 29 2009 from www.mountpearl.ca/default.asp.
- City of Mount Pearl Planning Department. 2007. Annual Report 2007.
- City of Mount Pearl Planning Department. 2005. Draft Municipal Plan: Advancing the Vision.
- City of Mount Pearl Planning Department. *Home Based Business in Mount Pearl*. Retrieved April 29 2009 from www.mountpearl.ca/downloads/homebased.pdf
- City of Mount Pearl Finance and Treasury Department. *Document downloads, 2008 Budget Brochure*. Accessed April 29 2009 from www.mountpearl.ca/deptdetail.asp?id=4.
- City of Mount Pearl Planning Department. 2008. Landscaping Guidelines.
- City of Mount Pearl Planning Department. 2008. Commercial Space Inventory Report.
- City of Mount Pearl Planning Department. 2008. *Discussion Paper on the Impacts of Climate Change for Mount Pearl.*
- City of Mount Pearl Planning Department. 2008. *Document downloads, Land Use Statistics*. Retrieved April 29 2009 from www.mountpearl.ca/deptdetail.asp?id=5.
- City of Mount Pearl Planning Department. 2008. City of Mount Pearl Land Use, Zoning, Subdivision and Advertising Regulations.
- City of Mount Pearl Planning Department. 2009. *Municipal Plan Review Municipal Plan Consolidation Copy.*
- City of Mount Pearl Economic Development Department. 1998, 2004. Mount Pearl Community Profile.
- City of Mount Pearl Engineering Department. 2008. Industrial and Commercial Sub-division Standards.
- City of Mount Pearl Engineering Department. 2008. Residential Sub-division Standards.
- Institute for the Advancement of Public Policy Inc. 2009. *Mount Pearl Housing and Homelessness Study Final Report.*

Newfoundland and Labrador Community Accounts. 2009. *Mount Pearl Community Profile*. Retrieved April 2009 from

www.communityaccounts.ca/communityaccounts/onlinedata/accountselectionpage.asp?p=%B D%BE%C4%9F%85%95%81%A6%AE%CDsfZ

Newfoundland and Labrador Environment and Conservation. 2009. Waterford River Water Quality Station Profiles. Retrieved April 29 2009 from www.env.gov.nl.ca/env/Env/waterres/WQMA/WQMA Stations.asp

Statistics Canada. 2009. 2006 Census Mount Pearl Community Profile. Retrieved April 29 2009 from www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-591/details/page.cfm?Lang=E&Geo1=CSD&Code1=1001542&Geo2=PR&Code2=10&Data=Count &SearchText=mount%20pearl&SearchType=Begins&SearchPR=01&B1=All&Custom=

Tract Consulting Inc. 2007. City of Mount Pearl Parks and Recreation Master Plan.