

Appendix E – Current Conditions Report



March 2012

"Let's raise our eyes beyond the conventional horizon of a year and ask, What kind of world would we like to have in a generation?" – David Suzuki

© 2012 Greater Peterborough Area Economic Development Corporation. All Rights Reserved.
The preparation of this sustainable community plan was carried out with assistance from the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.

This plan was prepared by Lura Consulting, in association with Grant Consulting and Hardy Stevenson and Associates Limited, under the direction of the Sustainable Peterborough Steering and Community Committee.



Contents

1. Introduction.....	1
What is an Integrated Community Sustainability Plan?	1
What are the Benefits of the Greater Peterborough Area having an ICSP?.....	2
What is a Current Conditions Report?.....	3
What Data have we Gathered?.....	3
How Does the Current Conditions Report help us to understand the Sustainability Framework?	4
2. WHAT IS THE CONTEXT OF OUR SUSTAINABILITY VISION?.....	6
Greater Peterborough Area.....	6
County and Local Municipalities	11
City of Peterborough	14
First Nations.....	14
Conservation Authorities.....	15
NGOs and Agencies	15
Businesses.....	16
3. HOW HAVE WE ORGANIZED OURSELVES TO PURSUE SUSTAINABILITY?	18
How are we able to make Decisions in Support of Sustainable Paths?	18
How are we prepared to make Sustainable Land Use Decisions?	20
How do our Buildings and Structures Support Sustainable Paths?.....	23
What Programs and Plans are in Place to Protect our Environment?	24
How do we Deliver Clean, Healthy and Sustainable Water?	25
How are we organized to Protect Species and Habitat?	27
What Facilities, Programs and Policies are helping us to select Sustainable Energy Paths?.....	28
How are we prepared to Manage Solid Waste?	29
How do we sustain our Health and Nurture our Minds and Souls?.....	30
How are we set up to Learn about Sustainability?	31
How do we provide Sustainable and Full Life Circumstance Support for all Residents?	32
4. WHERE ARE WE NOW ON OUR PATH TO SUSTAINABILITY?	35
Environmental Pillar	35
Social and Cultural Pillar	46
Economic Pillar.....	61
5. SUMMARY OF CURRENT SUSTAINABILITY CONDITIONS.....	73
Land Use Planning	73
Water.....	75

Waste.....	77
Transportation	78
Energy.....	80
Natural and Cultural Assets	81
6. SOURCES	85

1. INTRODUCTION

What is an Integrated Community Sustainability Plan?

The Greater Peterborough Area (GPA) is developing an Integrated Community Sustainability Plan (ICSP) – *Sustainable Peterborough* – a long range plan designed to provide a framework to address areas of mutual concern and responsibility across the region. The Plan aims to bring communities together around common environmental protection needs and quality-of-life issues, identifying and harmonizing best approaches to achieving the goals and objectives of the GPA for a sustainable future.

An ICSP sets goals, directions, actions, and targets for balancing the environmental, socio-cultural, and economic pillars of sustainability. Each of these pillars is interconnected (see Figure 1.1), and the impacts of a decision directed at one pillar are felt in all. An ICSP accounts for this and actively encourages accountability in decision-making across all pillars of sustainability. “*Sustainable Peterborough* will drive future actions, change in behaviours, while providing the framework for implementation, with all effects to be monitored over time.”

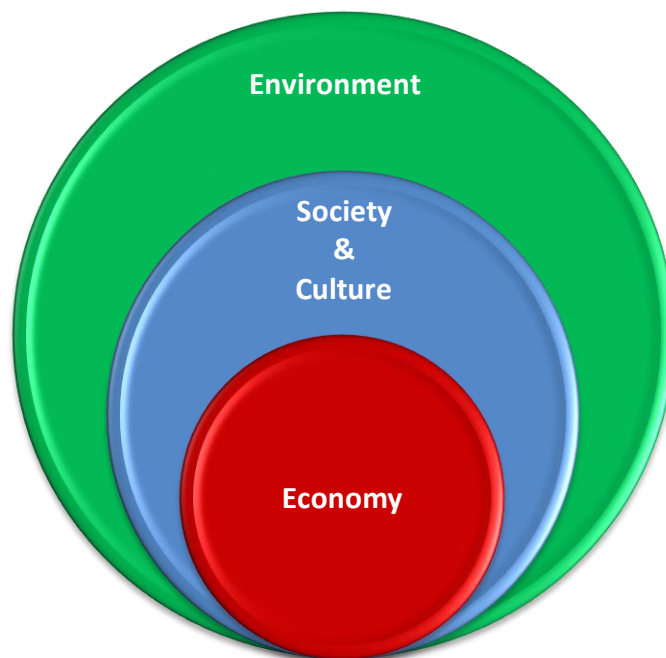


Figure 1.1: Pillars of Sustainability Guiding the Development of the *Sustainable Peterborough* Plan

Since 2005, municipalities have received Federal Gas Tax funding to enable investment in environmentally sustainable municipal infrastructure. This infrastructure has led to cleaner air, cleaner water, and reduced greenhouse gas (GHG) emissions. The Municipal Funding Agreement for Ontario municipalities requires the development or enhancement of a Sustainability Plan that meets the four core principles of an ICSP. Core principles of an ICSP include:

- A coordinated approach to community sustainability (e.g., linkages of various plans,

- planning and financial tools that contribute to sustainability objectives);
- Reflect and integrate social and cultural, environmental and economic sustainability [the “three pillars”] objectives in community planning;
- Collaboration with other municipalities where appropriate to achieve sustainability objectives; and,
- Engagement of residents in determining a long-term vision for the municipality.¹

Municipalities must be in a strong position to demonstrate they have made progress towards greater sustainability. Benchmarking and monitoring implementation are important components of demonstrating progress.

What are the Benefits of the Greater Peterborough Area having an ICSP?

An ICSP for the Greater Peterborough Area will have numerous benefits for each municipality and community member. Creating a sustainable future for the GPA will help to foster healthy environments, people, and economies. The GPA’s *Sustainable Peterborough* Plan will guide the way for the community to reduce its environmental impacts, strengthen social networks, increase avenues for public participation in decision-making processes, and increase economic prosperity. In addition, *Sustainable Peterborough* will further solidify the area’s already strong reputation as a leader in environmental commitment.

Development and implementation of an ICSP will benefit all members of the GPA. Benefits include:

- Facilitates triple-bottom-line thinking;
- Brings together people from many sectors which in turn promotes a systems approach and integrated solutions;
- Allows improved environmental performance through sustainable infrastructure investment by means of gas tax transfer;
- Identifies cost savings associated with energy, water, and fuel consumption;
- Positions municipalities well to receive funding from federal and provincial sources;
- Reduces exposure to future risks and uncertainties;
- Provides opportunities for enhanced service delivery;
- Increases citizen engagement in municipal affairs;
- Mobilizes community members to take sustainable actions; and,
- Strengthens the local economy and encourages innovation and creativity.

¹A Sustainability Planning Toolkit for Municipalities in Ontario. Association of Municipalities of Ontario. June 2008.

What is a Current Conditions Report?

Understanding where the GPA currently stands in terms of sustainability is fundamental in determining how to get where you want to be in the future. Current conditions research provides a snapshot of where the GPA is now from a broad sustainability perspective.

The current conditions analysis is a review of the current state of key sustainability themes in the GPA. This document summarizes the current conditions of the GPA as they relate to a comprehensive range of interconnected topics with the purpose of supporting the ICSP development process. Specifically, analysis includes an inventory of the current data and characteristics, policy frameworks, programs, organizations, and initiatives that shape the region.

Section 2 of this report outlines the context and characteristics of the GPA. Section 3 reviews the legislative and policy situation that affects the GPA and outlines how the area is organized to pursue sustainability. A snapshot of where the GPA stands and how it compares to other jurisdictions within each sustainability pillar is presented in Section 4. Finally, Section 5 summarizes the current sustainability conditions in terms of the strengths, weaknesses, opportunities, and threats that face the GPA as it moves forward on the path to sustainability.

What Data have we Gathered?

Information presented in the report was mostly obtained through secondary sources published up to January 2011. The sources of data reviewed included, but are not limited to, the following:

- Census 2006
- Agricultural Census 2006
- Municipal Official Plans, Strategic Plans, and Growth Management Strategies
- Other municipal plans and documents, such as Master Plans, Waste Management Plans, Accessibility Plans, and by-laws
- Municipal websites
- Municipal Performance Measurement Program reports
- Local and regional organizations' (e.g., tourism, agricultural, source protection, conservation authorities, economic development) websites and documents
- Natural Heritage Information Centre database
- Local Health Integration Network website and reports
- Peterborough County-City Health Unit website and reports
- Utility providers websites and reports
- Regional Tourism Profiles
- Provincial documents, provincial regulatory and policy instruments, and reports such as the Ontario Road Safety Annual Report
- Various other websites

A full list of documents consulted can be found in Section 6 – Sources.

How Does the Current Conditions Report help us to understand the Sustainability Framework?

Development of the Sustainable Peterborough Plan will follow a seven-step process, as outlined in Figure 1.2. The first step, known as “Structuring the Process”, has been completed. The second step in the process is researching the “Current Conditions” before moving into the “Vision and Goals” step.

The information provided in this Current Conditions Report serves as background for the development of a vision and goals for the *Sustainable Peterborough* Plan. Importantly, the baseline of the current conditions allows for the identification of gaps and the identification of actions that are already being taken in certain parts of the GPA that are working well and can be applied across the entire region.

Additionally, defining strategic directions and actions (Step 4) and identifying indicators and targets (Step 5) will rely on the baseline information from the current conditions research to identify the gaps between the goals and what currently exists, in order to guide the development of meaningful strategies and actions.

The *Sustainable Peterborough* Plan will build on the keystone municipal documents and objectives reviewed, strengthening and providing a framework for all future municipal plan developments or amendments, while being sure to avoid a duplication of efforts. This approach allows integration or a systems approach for future planning and decision-making.

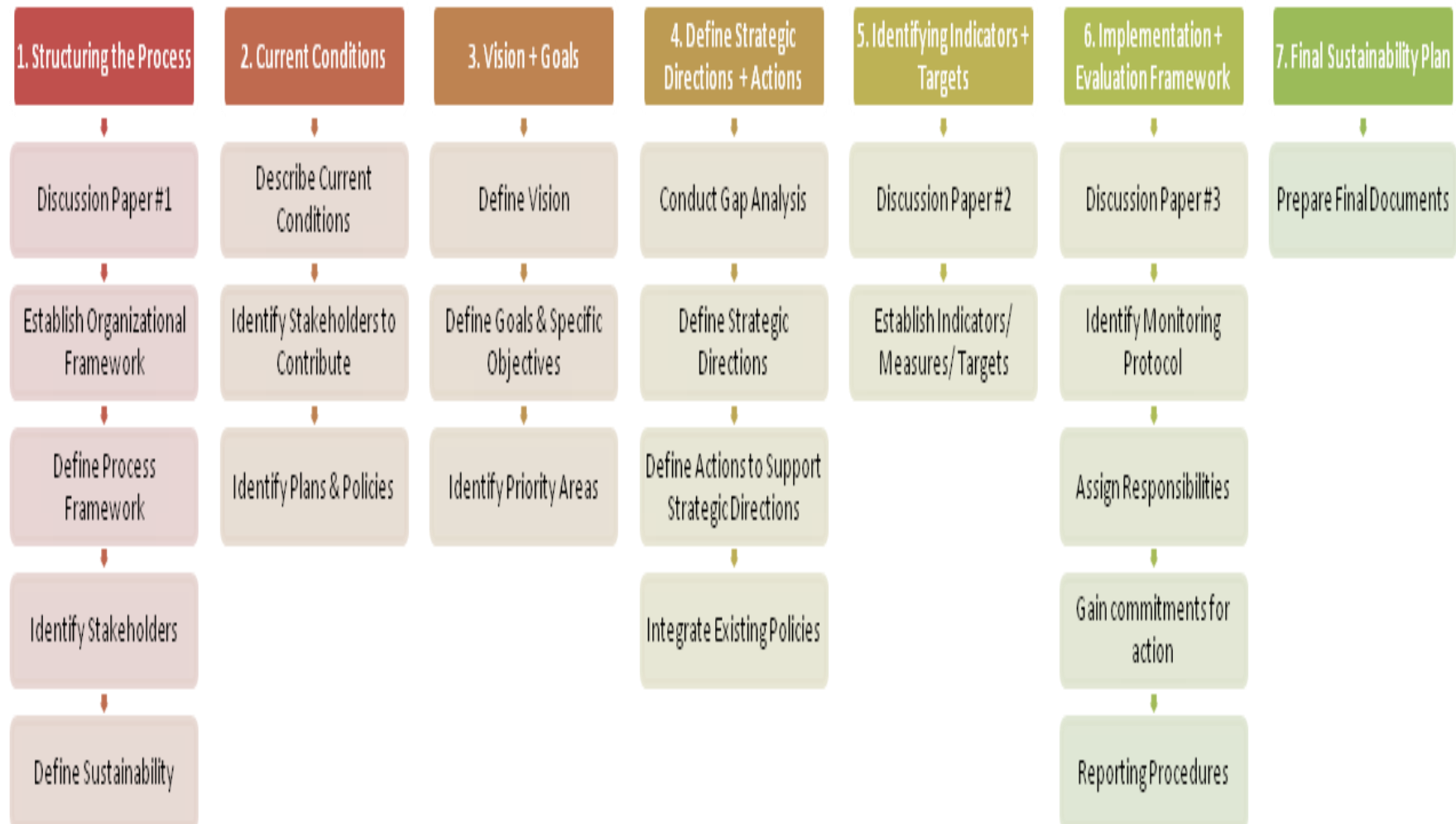


Figure1. 2: Sustainability Planning Process

2. WHAT IS THE CONTEXT OF OUR SUSTAINABILITY VISION?

Greater Peterborough Area

Context

The Greater Peterborough Area is located in East Central Ontario, easily within reach (90 minute drive) of the Greater Toronto Area.

The GPA consists of ten municipalities and two First Nations (Curve Lake and Hiawatha). The municipalities include the City of Peterborough and the County of Peterborough, along with the County's eight local municipalities: Asphodel-Norwood, Cavan Monaghan, Douro-Dummer, Galway-Cavendish & Harvey, Havelock-Belmont-Methuen, North Kawartha, Otonabee-South Monaghan, and Smith-Ennismore-Lakefield.

Gifted with a diverse and ruggedly aesthetic landscape, the area is characterized in the south by its agriculture and in the north by its wilderness and lakes. The maps below show the GPA's location within the province of Ontario (Figure 1.3) coupled with a more detailed map of the region (Figure 1.4).



Figure 1.3: Location of the Greater Peterborough Area in the Ontario Context

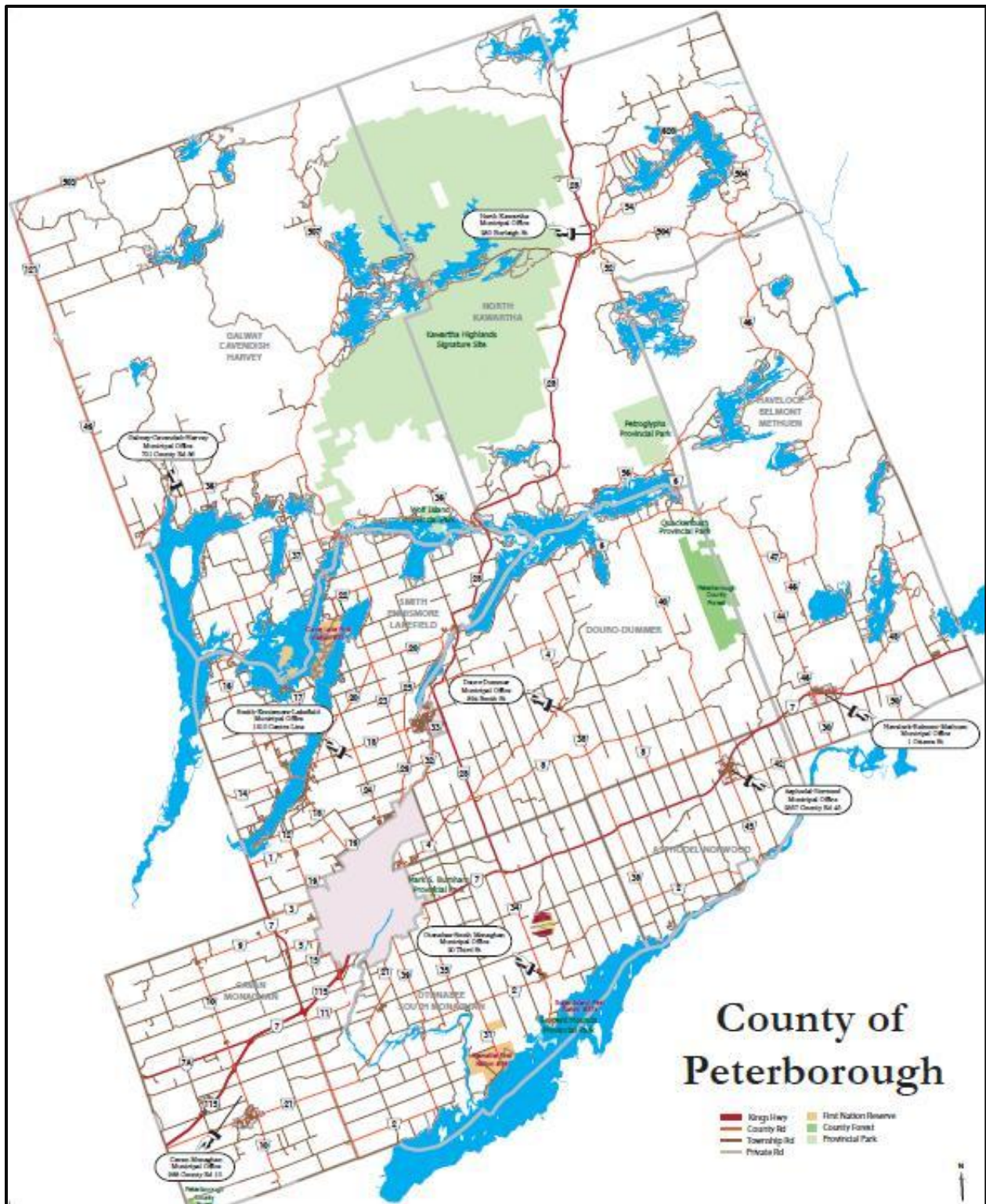


Figure 1.4: Map of Peterborough County.

Note: The City of Peterborough is not part of the County of Peterborough but falls within the geographic boundary of the County. The City of Peterborough is depicted in the map by the grey area.

How many of us are there?

In 2006 the population of the Greater Peterborough Area was 133,080, and is projected to reach 159,840 by 2031. The GPA is facing growth pressures from migrating baby boomers moving to the area taking up full time residence in their once seasonal homes. Most of the growth that has been occurring in the GPA has been taking place throughout the rural areas of the County, and much of it is shoreline development.

Specific population characteristics and community level data are found in the following sections for each municipality in the GPA.

What are our demographics? Who are we? Where do we come from?

Demonstrated in Table 2.1 below, the GPA (relative to Ontario) as a whole is an aged community. The median age for each municipality in the GPA is greater than that of the province, and with the exception of Curve Lake First Nation, the percentage of the population aged 15 years or older is greater in each municipality than in the province as a whole. This is especially pronounced in the three most northern municipalities: Galway-Cavendish & Harvey, North Kawartha and Havelock-Belmont-Methuen, where the median age in each instance is more than ten years greater than the Ontario average.

Such demographical characteristics present both challenges and opportunities. Aging populations, as most are aware, place strain on social and health programs, as well as community organizations that are tailored for this demographic. Yet at the same time, an aging population represents a tremendous volunteer base for these very same organizations.

Table 2.1: Age Characteristics

	Greater Peterborough Area	City of Peterborough	Asphodel-Norwood	Cavan Monaghan	Douro-Dummer	Galway-Cavendish & Harvey	Havelock-Belmont-Methuen	North Kawartha	Otonabee-South Monaghan	Smith-Ennismore-Lakefield	Curve Lake First Nation	Ontario
Median Age of the Population (2006)	43.6	41.7	44.8	42.5	42.8	51.7	49.4	51.2	44.3	46.2	39.2	39.0
% of the Population Age 15 and Over	84.6	84.7	84.6	82.2	83.1	88.2	86.2	87.6	84.1	84.7	79.2	81.8

Note: Data unavailable for Hiawatha First Nation.

Table 2.2 below outlines the diversity characteristics of the GPA's population.

Perhaps what most stands out from this table is the observed tendency for visible minorities to cluster in the city. Though only 56.28% of the GPA's population is in the city, 81.78% of the region's visible minority population can be found there. Such trends however, are not unique to Peterborough, and similar clustering forces can be observed in other urban communities throughout Ontario, and further abroad.

Unlike visible minority populations, immigrant populations are distributed fairly evenly relative to population. Though only 2% of Ontario residents are Aboriginal, 3.1% of the GPA's population is of Aboriginal identity.

Table 2.2: Diversity											
	Greater Peterborough Area	City of Peterborough	Asphodel-Norwood	Cavan Monaghan	Douro-Dummer	Galway-Cavendish & Harvey	Havelock-Belmont- Methuen	North Kawartha	Otonabee-South Monaghan	Smith-Ennismore- Lakefield	Curve Lake First Nation
Non-Immigrant Population	118,530	66,010	3,815	7,940	6,430	4,610	4,255	2,030	6,465	15,485	-
Immigrant Population	12,450	7,340	310	665	495	665	370	305	435	1,800	-
Visible Minority Population	3,210	2,625	10	100	90	20	75	10	75	200	10
Aboriginal Identity Population	4,145	1,690	105	195	130	245	125	95	140	355	775

Note: Data unavailable for Hiawatha First Nation.

How are we educated?

Educational attainment in the GPA, below in Table 2.3, is quite evenly distributed relative to population. Data here is presented in gross figures then as a percentage of that row, to allow for an estimation of relative distribution of that level of educational attainment. To understand this relative distribution as it applies to a community's relative population, one should compare percentages within a column to the first set of data: Total population 15 years and over.

Table 2.3: Educational Attainment

	Greater Peterborough Area	City of Peterborough	Asphodel-Norwood	Cavan Monaghan	Douro-Dummer	Galway-Cavendish & Harvey	Havelock-Belmont- Methuen	North Kawartha	Otonabee-South Monaghan	Smith-Ennismore- Lakefield	Curve Lake First Nation
Total population 15 years and over	111,000	62,355 (56.2%)	3,470 (3.1%)	7,050 (6.4%)	5,770 (5.2%)	4,660 (4.2%)	4,055 (3.7%)	1,985 (1.8%)	5,820 (5.2%)	14,620 (13.2%)	935 (0.8%)
No certificate, diploma or degree	26,665	14,740 (55.3%)	960 (3.6%)	1,680 (6.3%)	1,375 (5.2%)	1,170 (4.4%)	1,505 (5.6%)	500 (1.9%)	1,435 (5.4%)	2,900 (10.9%)	280 (1.1%)
High school certificate or equivalent	31,190	17,920 (57.5%)	1,030 (3.3%)	1,845 (5.9%)	1,690 (5.4%)	1,215 (3.9%)	980 (3.1%)	480 (1.5%)	1,670 (5.4%)	4,030 (12.9%)	215 (0.6%)
Apprenticeship or trades certificate or diploma	10,405	4,870 (46.8%)	355 (3.4%)	685 (6.6%)	650 (6.2%)	635 (6.1%)	510 (4.9%)	280 (2.7%)	615 (5.9%)	1,710 (16.4%)	65 (0.6%)
College, CEGEP or other non-university certificate or diploma	24,635	13,615 (55.3%)	815 (3.3%)	1,800 (7.3%)	1,290 (5.2%)	945 (3.8%)	775 (3.1%)	415 (1.7%)	1,240 (5.0%)	3,430 (13.9%)	215 (0.8%)
University certificate or diploma below the bachelor level	2,845	1,610 (56.6%)	35 (1.2%)	135 (4.7%)	105 (3.7%)	210 (7.4%)	45 (1.6%)	80 (2.8%)	135 (4.7%)	470 (16.5%)	15 (0.5%)
University certificate, diploma or degree	15,255	9,600 (62.9%)	275 (1.8%)	895 (5.9%)	660 (4.3%)	485 (3.2%)	235 (1.5%)	225 (1.5%)	715 (4.7%)	2,085 (13.7%)	50 (0.3%)

Note: Data unavailable for Hiawatha First Nation.

Several interesting trends do emerge from Table 2.3. For instance, there are relatively fewer people formally trained in trades in the City of Peterborough, while this figure is relatively higher in all eight of the local municipalities. On the other hand, relatively more people in the City of Peterborough have a university education, while (for the most part) relatively fewer have achieved this level of education in the local municipalities. This suggests, generally speaking, a more hands-on, trades-based workforce

and/or economy in the County of Peterborough, with the City being home to a more knowledge-based workforce and/or economy.

The Greater Peterborough Area as a whole is demonstrating attainment of higher levels of education than the provincial average, with 13.7% (15.4% in the City) of its residents age 15 and over having obtained a university degree, while 12.5% have done so in Ontario as a whole.

County and Local Municipalities

Context

The County of Peterborough is a two-tier municipality, with the County forming the upper-tier of government and its eight member Townships forming the lower-tier. Responsibilities such as land use planning are split between the two tiers of government, with other services such as garbage collection being a lower-tier responsibility and recycling collection being an upper-tier responsibility.

How many of us are there? How many of us will there be in the future? How are we growing?

Table 2.4 below breaks down the population characteristics, including the past and future growth, of each of the local municipalities within the County of Peterborough. It is important to note that though the County's total population is 56,639, this figure increases seasonally by approximately 30,000.

Table 2.4: Local Municipalities' Population Breakdown										
	Asphodel-Norwood	Cavan Monaghan	Douro-Dummer	Galway-Cavendish & Harvey	Havelock-Belmont-Methuen	North Kawartha	Otonabee-South Monaghan	Smith-Ennismore-Lakefield	County of Peterborough	Ontario
Population (2006)	4,247	8,828	6,954	5,284	4,637	2,342	6,934	17,413	56,639	-
% Change in Population Since 2001	6.6	4.4	4.5	20.9	3.5	9.2	4.0	6.1	6.5	6.6
Projected Population (2036)	5,716	13,268	8,616	7,472	5,717	2,668	9,756	23,020	76,236	-
% Change in Population from 2006-2036	34.6	50.3	23.9	41.4	23.3	13.9	40.7	32.2	34.6	-

Figure 1.5 below shows the projected population growth of the individual Townships and easily displays which are expected to experience the highest growth rates.

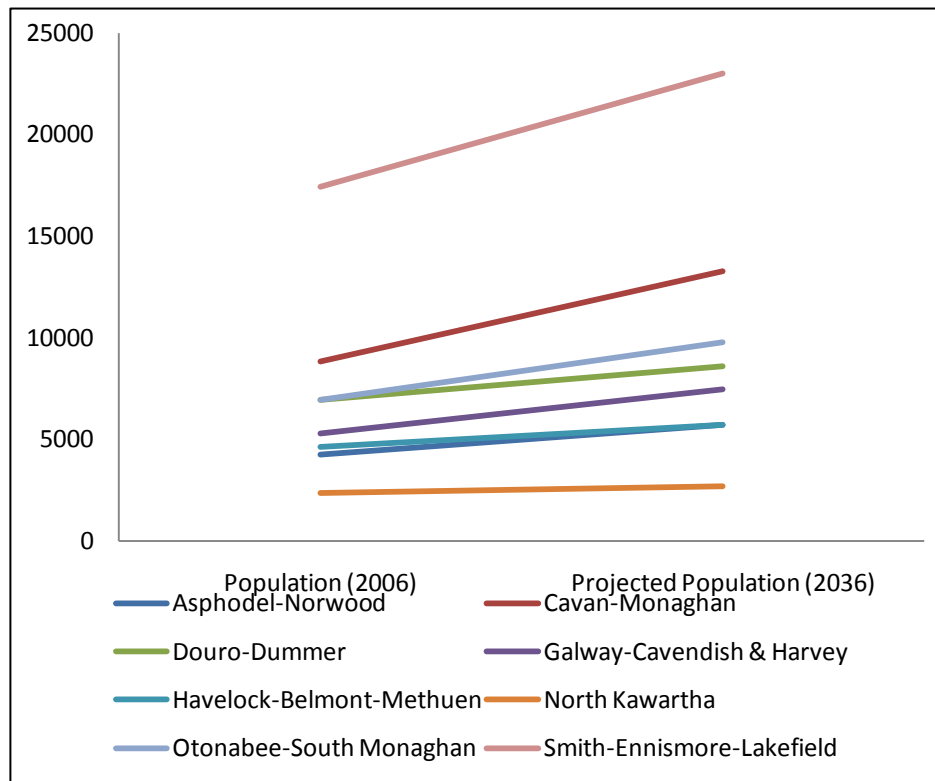


Figure 1.5: Projected Population Growth for each Township.

Asphodel-Norwood

Asphodel-Norwood is the smallest of the local municipalities with respect to land area (160.85 km²), and is the second least populous; however, with higher rates of growth, its population is expected to rival that of neighbouring Havelock-Belmont-Methuen by 2036.

Cavan Monaghan

Though Cavan Monaghan saw relatively little growth from 2001 to 2006, it has been forecasted to see the greatest rate of growth from 2006 to 2036 of the local municipalities in the County of Peterborough. Such projections and future demands for growth in this community are likely attributable to its proximity to the City of Peterborough, its relative proximity to the GTA, the presence of Highway 115, and the future expansion of Highway 407.

Douro-Dummer

Douro-Dummer, located in the heart of the GPA, is on the lower side of growth rate projections, though is still anticipated to see another 1,700 residents join its community by 2036.

Galway-Cavendish & Harvey

Recent growth in this municipality, the largest (848.26 km²) Township in the County of Peterborough, is most pronounced. Yet, referring to the data presented in Table 2.1, it is the most aged community with respect to both the median age of its population (51.7) and the percentage of its population (88.2%) age 15 and over.

The interpretation of these data is fairly straightforward. This municipality is seeing fairly impressive growth spurred by an out-migration of aged urban residents seeking a rural way of life and the predominantly natural setting offered in Galway-Cavendish & Harvey. Growth here is expected to remain strong over the coming years.

Havelock-Belmont-Methuen

Havelock-Belmont-Methuen has been projected to see low growth rates, similar to those of Douro-Dummer.

Further, it would not be unreasonable, based on projections, to see the population of Asphodel-Norwood surpass that of Havelock-Belmont-Methuen by 2036; dropping it to second lowest of the local municipalities.

North Kawartha

North Kawartha is anticipated to see little growth over the coming years, adding just 300 more residents by 2036.

At first glance, this lack of growth is surprising considering the 'boom' of growth both experienced and anticipated in neighbouring Galway-Cavendish & Harvey; however, this is likely attributable to such large areas of this Township being parkland rather than developable land.

Otonabee-South Monaghan

Otonabee-South-Monaghan is expected to add nearly 3,000 residents by 2036. With a similar location to that of Cavan Monaghan, the drivers behind this growth are likely very similar.

Smith-Ennismore-Lakefield

Already the most populous of the local municipalities, Smith-Ennismore-Lakefield is expected to add approximately 5,600 more people by 2036.

City of Peterborough

Context

Home to greater than 50% of the GPA's population and a number of large businesses and institutions, the City of Peterborough is the urban and economic heart of the region.

A single-tier municipality, the City is solely responsible for the provision of regular municipal services such as land use planning, waste management, road maintenance, parks, water and wastewater, etc.

How many of us are there? How many of us will there be in the future? How are we growing?

The City of Peterborough was home to 74,898 people in 2006 – a 4.8% increase from its 2001 population of 71,468. The city is seeing slower growth than the province, which grew by 6.6% over the same time period.

The population has been projected to increase by 19% over the period of 2001-2031, bringing the city's total to 85,047.

First Nations

Two First Nations communities are located within the GPA: Curve Lake and Hiawatha.

The Greater Peterborough's First Nations communities are seeing high rates of growth (Table 2.5), relative to their total populations. Nestled on the north shore of Rice Lake, in the south end of the GPA, Hiawatha First Nation increased by 62.6% between 2001 and 2006.

Located on the shores of Chemong and Buckhorn Lakes, Curve Lake First Nation saw a 12.2% growth in population over the period of 2001 to 2006.

Future growth projections are not available for either community.

Table 2.5: First Nations Population Breakdown			
	Hiawatha First Nation	Curve Lake First Nation	Province
Population (2006)	483	1,060	-
% Change in Population Since 2001	62.6	12.2	6.6

Conservation Authorities

There are four Conservation Authorities operating within the boundaries of the GPA: Otonabee Region Conservation Authority, Crowe Valley Conservation Authority, Kawartha Conservation and the Ganaraska Region Conservation Authority. A substantial portion of the County of Peterborough is not under the jurisdiction of a Conservation Authority.

Each of the Conservation Authorities undertakes practices as they relate to watershed management and protection, such as shoreline naturalization, stabilization, and restoration projects. They also participate in programs such as ground and surface water quality monitoring, tree planting, and offering environmental advice for proposed development. Moreover, the Conservation Authorities oversee the twenty Conservation and Wildlife Areas found within the Greater Peterborough Area.



Figure 1.6: Conservation Authority Jurisdictions in the GPA

NGOs and Agencies

The GPA has a strong representation of community organizations involved in each of the pillars of sustainability.

Numerous environmental groups ranging from lake associations and stewardship groups to general green living groups are active in the GPA. The focus area of these groups ranges from water quality protection, to land stewardship, to climate change resiliency. Importantly, the focus of these groups can be broadly ascribed to environmental protection.

Local and regional organizations support the GPA economy and its economic development. These include the Greater Peterborough Area Economic Development Corporation, Community Futures, Chambers of Commerce, and Business Improvement Associations amongst others. The main objective of many of the abovementioned groups is ensuring both the short- and long-term economic prosperity of the GPA and its inhabitants. Through initiatives such as encouraging innovation and fostering vibrant downtowns, a wealth of organizations focusing on furthering the region's economic development are found in the GPA.

Social and cultural groups are numerous in the GPA. These groups all remain committed to enhancing the quality of life of those in the GPA. Be it the provision of basic necessities such as food, or the preservation of items and stories important to the community's history, these groups are continually striving to enhance community and cultural well-being.

The GPA is also home to Trent University and Fleming College, which have each undertaken a number of initiatives in the name of sustainability. Trent's Sustainability Office, established in 2007, leads a number of initiatives including green buildings (Leadership in Energy and Environmental Design or LEED initiatives), adopting the use of green cleaning products, continuing Trent's green roof program, implementing lighting retrofits for efficiency, encouraging alternative forms of transportation, encouraging (through incentive such as free coffee) the use of reusable coffee mugs, using 'vending misers' to reduce energy consumption (lighting) when no motion has been detected at vending machines, and establishing a print cartridge recycling program. Moreover, Trent is home to Sustainable Trent, a student-run organization that promotes sustainable practices on campus.

Fleming's 2010-2015 Strategic Plan lists a variety of sustainability initiatives, including the proposed development of a sustainability plan, reducing waste, reducing the College's carbon footprint, infusing sustainability across the curriculum, and designing and implementing community-based applied learning opportunities. Fleming's Green Objectives club is a student-run group that strives to improve environmental health at the College and in the community.

Businesses

A number of large multinational corporations are located in the GPA, many with strong corporate sustainability mandates. Quaker Oats, owned and operated by PepsiCo, is a major employer in the City of Peterborough. The company is committed to achieving sustainable practices through a holistic approach and states that it incorporates sustainability into every facet of the Quaker operations. It has also committed to reducing water and electricity consumption by 20% by 2015, reducing greenhouse gas emissions by 25% and streamlining packing to require less paper product. In addition, they take pride in:

- Having worked with Canadian farmers for over 70 years and using 100% percent Canadian-grown oats;
- Growing oats which require less water and fertilizer versus most other crops;
- Protecting the soil from erosion, and tilling less;
- Using or selling 100% of the oat, which includes providing the oat hulls to a local company to turn into fuel pellets;
- Having reduced their water usage at the Peterborough plant by 40% since 2004;
- Having installing motion activated lighting in 70% of the Peterborough plant; and,
- Having decreased their landfill waste by 29% from 2007 to 2008.

General Electric (GE) is another key employer in the City of Peterborough. GE is committed to the Global Reporting Initiative (GRI) G3 Sustainability Reporting Guidelines which provides a framework for organizations to report and evaluate their social, environmental and economic performance. GE includes a vision of Contributing to Environmental Conservation through Business, and Promoting Sustainable Corporate Activities in their 2010 Environmental Sustainability Report. In particular, in 2009,

they committed to helping China with regards to power generation, smart grids, water treatment and recycling, and urban transportation. In addition, their aluminum rolling stock achieved a high efficiency rating, and their sales of environmentally conscious Eco-Products reached 53 percent, thereby bettering the 48 percent target. In the future, they are aiming to reduce water consumption and incur zero fines and zero notices of non-compliance with environmental regulations.

Tim Hortons is also committed to sustainability practices and has developed the following goals for the near future:

- 5% reduction in packaging within their supply chain and manufacturing operations by 2012;
- Work to achieve a solution so that their paper cups are accepted in recycling and/or composting systems in local municipalities;
- 5% energy and water use reduction for all corporate buildings and new restaurant construction by 2011;
- Register 2 pilot restaurants for Leadership in Energy and Environmental Design (LEED) certification in 2010;
- 5% increase in fuel efficiency for their distribution fleet by 2011;
- Implement their Business Partner and Supplier Code of Conduct and develop a supporting auditing program in 2010; and,
- Develop an independent audit and verification program for their coffee sourcing in 2010 and begin auditing and verification in 2011.

Similar sustainability initiatives are also in place for TD Canada Trust, Loblaws, and Royal Bank amongst others. In addition, Kawartha Ethanol Inc. is a major industrial facility in the County of Peterborough which has the capacity to produce 80 million litres of ethanol per year.

3. HOW HAVE WE ORGANIZED OURSELVES TO PURSUE SUSTAINABILITY?

How are we able to make Decisions in Support of Sustainable Paths?

Organization

Municipalities in Canada are considered ‘creatures of the province’, being legislated into existence by each province. In Ontario, the *Municipal Act* prescribes the roles and responsibilities of municipalities. The Act provides municipalities with both general (natural person) powers and ten specific spheres of jurisdiction, including such things as roads, waste management, drainage and flood control, and parks.

The *Conservation Authorities Act* authorizes Conservation Authorities in Ontario. The Act was created to ensure the conservation, restoration and responsible management of water, land, and natural habitat through programs that balance human, environmental, and economic needs.

Ten municipalities make up the GPA. The GPA includes the City of Peterborough, a single-tier municipality, as well as the County of Peterborough, an upper-tier municipality that contains eight lower-tier municipalities. A regional dynamic exists in the GPA with a number of services shared between the County of Peterborough and the City of Peterborough.

Municipal Official Plans

Municipalities prepare official plans to guide the development of their municipality based on council priorities and provincial direction. The Minister of Municipal Affairs and Housing approves the official plans of upper-tier and single-tier municipalities. In the Greater Peterborough Area, the County of Peterborough establishes its Official Plan which all eight of its member townships must adhere to, though they are free to establish their own within its confines. The Townships of Cavan Monaghan, Douro-Dummer, Galway-Cavendish & Harvey, Havelock-Belmont-Methuen, and Otonabee-South Monaghan have established their own, while the Townships of Asphodel-Norwood, North Kawartha, and Smith-Ennismore-Lakefield use the County’s Official Plan for their own purposes. The City of Peterborough, as a single-tier municipality, has its own Official Plan, separate from that of the County.

The County of Peterborough Official Plan came into effect in 1994 with a vision and supporting objectives formulated by County Council during their visionary retreat in August 1991. The County updated its Official Plan in 2010 to be consistent with the 2005 Provincial Policy Statement, also supporting the intentions of the Provincial Policy Statement. The 2010 version includes consolidated information and approved updates from a number of other plans including the *Oak Ridges Moraine Conservation Act*, Official Plan Updates, Local Components, Peterborough Housing, Growth Plan Conformity and the Shrama Pit. The purpose of the County Official Plan is to “direct and guide the actions of local municipalities and the County in policy planning and physical planning on a very broad basis” (Section 1-1). As such, it serves as a guiding plan for the County, establishing a vision through which activities and well-planned development can protect and enhance the natural environment, peoples’ lifestyles and the sense of community within the County.

Within this plan are strategic goals, objectives and policies for planning and development initiatives within the County of Peterborough. The information however, is broad in nature and provides only a general direction for Township development. The intention of the Official Plan is to simply provide a framework for County development, and to provide direction for County services. The Plan states that:

It is not the intention of the Peterborough County Official Plan to interfere with those planning matters which are considered to be the responsibility of the local municipalities. Local municipal official plans complement the Peterborough County Official Plan by providing detailed strategies, policies and land use designations for the planning and development at a local municipal level (County of Peterborough Official Plan, 2010, 1-2).

Therefore, under the County Plan, and where more specification is needed, local municipalities are encouraged and able to create their own Official Plans, a move that has been completed by Cavan Monaghan, Douro-Dummer, Galway-Cavendish & Harvey, Havelock-Belmont-Methuen and Otonabee-South Monaghan townships. For the remaining three townships however (Smith-Ennismore-Lakefield, Asphodel-Norwood and North Kawartha), the County Plan functions as a lower tier Official Plan in which the local municipalities can incorporate their specific information and policies. Section 6 and 7 and the related Schedules of the County Plan contain this information for the three townships, and are implemented by Official Plan Amendment #3. As such, planning for sustainability within the County of Peterborough is possible for both tiers of government, where each municipality is able to make their own planning and development decisions within the County framework.

The City of Peterborough Official Plan similarly sets out goals and objectives to guide the social development of the community and the creation of the physical structure of the City. The Official Plan was originally developed in 1981 and updated consistently since then. Currently, the City of Peterborough is in the process of undertaking the five year review of its Official Plan – “Plan it Peterborough”.

History of Sustainability

The GPA has a long history of community support for sustainability. One of the first sustainability initiatives undertaken was the “Our Common Future” forum held in 1989 that brought together citizens to discuss their collective futures, share visions and suggestions for local action. This forum produced a number of recommendations that were widely circulated and spurred the establishment of local environmental organizations.

The Sustainable Development Task Force was formed in 1990 to further refine the agenda on sustainability and promote implementation by identifying priorities, increasing knowledge and awareness, and building stronger links between citizens, organizations, businesses, and government. The Sustainable Development Task Force Report was developed collaboratively with the community and identified numerous recommendations to encourage action and provide direction for the future.

In addition, the Prosperity Roundtable of Peterborough Region was established in 2007 to facilitate the progression of economic opportunities in the GPA by bringing together local business people and

government officials to discuss growth opportunities for the GPA. Included within the Roundtable is a Steering Committee, as well as Community, Transportation, Municipal Environment, Sustainability, Infrastructure, Industrial Land, and Downtown Revitalization Task Teams. The Prosperity Roundtable's recent report identified six economic opportunities: need for community vision; public and private infrastructure; serviced industrial land; transportation strategy; more competitive municipal environment; and downtown revitalization plan.

How are we prepared to make Sustainable Land Use Decisions?

Provincial Direction

Land use planning in Ontario is regulated by the *Planning Act* and associated land use plans and policy statements. The Ministry of Municipal Affairs and Housing (MMAH) administers the Act and the land use planning system in Ontario. Ontario has a policy-led land use planning system, where policy direction is provided by the province and municipalities prepare an official plan that requires approval by the Minister.

Section 2 of the *Planning Act* identifies a number of provincial interests, addressing the physical, social, economic, and natural environment that must be regarded in planning decisions. Planning decisions must also be consistent with policy statements and conform to provincial plans.

The *Provincial Policy Statement (PPS)*, issued under the authority of the *Planning Act*, promotes sustainability and provides clear direction on how to manage land use planning.

Provincial Plans

The *Planning Act* and the PPS affect both the County and City of Peterborough. Development, process, and local official plans must therefore adhere with the regulations and policies of the *Planning Act* and the PPS. In addition, sections of the County fall under the regulations of several other plans due to its location and natural heritage features. Additional supporting plans and policies have been developed with respect to land use. More information on these plans and policies and how they affect the County's development processes are provided below.

Places to Grow

The *Growth Plan* for the Greater Golden Horseshoe (GGH) came into effect in 2006 in order to establish a framework for the management of growth up to 2031. The *Growth Plan* guides municipal and provincial decisions on a number of issues including transportation, infrastructure, land use planning, urban form, housing, natural heritage and resource protection, with a vision to build stronger, more prosperous and complete communities.

Within the GGH, there are two separate areas known as the Inner and Outer Rings of Municipalities. The Inner Ring, a mostly urban area surrounding Toronto, will accommodate most of the area's anticipated growth up to 2031, while the Outer Ring, a more rural area with small and mid-sized communities, will relieve the pressure by accommodating a share of the region's growth. The County of Peterborough falls

mostly into the Outer Ring of the Greater Golden Horseshoe area with appropriate forecasted growth according to the plan. Under this Plan, the County is responsible for allocating growth in the region to each of the individual townships, and working towards the Plan's employment forecasts, density goal, and 40% intensification target. The County is also required to adhere to policies contained within the *Growth Plan* for land use, planning/coordination of transportation infrastructure, expansion of community boundaries, revitalization of the downtown areas, provision of housing options, protection of farmlands, and the protection of green spaces.

Greenbelt Plan

The *Greenbelt Plan* was developed in 2005 to permanently protect land within the Province while providing a healthier environment for residents. Currently, 1.8 million acres of land are protected from development, providing recreational opportunities, parks and trails while protecting agricultural lands and providing clean air and water. At this time, only a small portion along the southwest corner of the County of Peterborough in Cavan Monaghan Township is within the Greenbelt boundaries, therefore protected from development under the *Greenbelt Act*. Municipalities are however, able to request an expansion of the Greenbelt into their area.

Oak Ridges Moraine Conservation Plan

The *Oak Ridges Moraine Conservation Plan* was created by the Ontario government to provide land use and resource management direction for the 190,000 hectares of land and water within the Moraine. The purpose of the plan is to protect the Oak Ridges Moraine; provide a policy framework for municipalities to follow when creating and implementing their own Official Plans. This plan takes precedence over municipal Official Plans, which are required to conform to the regulations and legislation within the *Conservation Plan*.

The policies within the *Conservation Plan* for creating new lots within Natural Core Areas, Natural Linkage Areas, and Countryside Areas, are very restrictive; however, there exists an exception for limited residential development in Countryside Areas in the City of Kawartha Lakes and the County of Peterborough, provided the municipality has an approved growth management study, a rural economic development strategy, a water budget, a water conservation plan, so long as development does not take place within prime agricultural areas. At this time however, only a small portion of the County of Peterborough, specifically within Cavan Monaghan, falls within the Oak Ridges Moraine area and is therefore covered under the *Oak Ridges Moraine Conservation Plan* regulations.

Municipal Policy

The County of Peterborough and City of Peterborough Official Plans conform to the policies of the applicable provincial plans, as well as the needs and requirements of each municipality. The Official Plans contain a number of policies, goals and objectives with regards to land-use planning across a variety of landscapes including settlement, shoreland, rural and agricultural areas. They also address land-use planning in environmentally significant areas such as wetlands, flood plains and fish habitat, as well as in recreational and open space areas.

Efficient Use of Land

The City of Peterborough Official Plan contains policies on land use planning with the goal that the city will be developed for all the people, and adequate areas of land use or land development opportunities should be made available to provide for the needs of the community. The policies within this plan cover natural areas and natural heritage features, major open space, residential areas, commercial areas, industrial space, agriculture, major institutions and special policy areas. In the context of planning for growth and settlements, the City's Official Plan states:

A significant portion of future growth will be directed to areas within the Built Boundary of the City, through infill or appropriate intensification, in locations where infrastructure capacity exists or can be readily improved, and where additional development can be compatibly integrated with existing built form, land use patterns, natural heritage features and natural hazards. (City of Peterborough Official Plan, 2009, 2.4.4.1)

The same strategies exist for Cavan Monaghan, Otonabee-South Monaghan, and Douro-Dummer where policies direct growth and development into existing hamlets, towns and concentrated areas of development, where there is the ability to provide adequate sewage and water services on a sustainable basis. Other residential development in the remainder of the townships must be directed to non-prime agricultural lands, specifically those not possessing high mineral or forest resource potential.

Intensification is encouraged through Official Plan policies, with the County of Peterborough stating that it will encourage local municipalities to permit residential intensification where the required services and infrastructure are considered appropriate and suitable. In the Official Plan for the City of Peterborough, intensification is also encouraged in order to optimize the use of land and infrastructure, particularly within the downtown core. Intensification is further encouraged in the townships of Cavan Monaghan, Otonabee-South Monaghan, and Douro-Dummer, providing certain requirements are met, the intensification is compatible with adjacent land uses, and the required services and infrastructure are available.

Along with the intensification policies, density bonusing, secondary suites and mixed-use development are also permitted and encouraged in both the City and County of Peterborough, providing certain criteria are met in terms of available services and infrastructure.

Agricultural Preservation

Official plan policies are in place to direct and protect land use planning within agricultural areas. The County's Official Plan states that farmland will be protected from incompatible uses. Cavan Monaghan's Official Plan recognizes that agriculture is an important part of the economy and they will therefore protect land suitable for agricultural production from scattered development or land uses that are not related to agriculture. They also state that value-added agricultural operations and resources will be promoted within the Township and non-farm growth in rural areas will only be permitted if it will not interfere with or limit farming activities.

Douro-Dummer recognizes that the residential use of land in farming areas can create land-use conflicts and compromise agricultural activities and farming operations. They therefore state that they will maintain, preserve and enhance agricultural areas when assessing development applications, and will ensure that the location of new lots will not interfere with farming operations or the expansion of agricultural areas. Otonabee-South Monaghan also notes that prime agricultural lands within the Township will be protected for agricultural uses on a long-term basis, to ensure that a secure, permanent and available agricultural foundation is maintained in the area.

How do our Buildings and Structures Support Sustainable Paths?

Legislation

The *Ontario Heritage Act* gives municipalities and the provincial government powers to preserve the heritage of Ontario through the protection of heritage buildings and archaeological sites. The Act allows municipalities and the provincial government to designate individual properties and districts in the Province as being of cultural heritage value or interest.

Under the *Accessibility for Ontarians with Disabilities Act*, public sector organizations are required to prepare annual accessibility plans that address a broad range of disability issues. The Plans must also examine all aspects of an organization's operations, including by-laws, practices, facilities, programs, and services.

The Ministry of Municipal Affairs and Housing administers the *Building Code Act* and the *Ontario Building Code*, which governs the construction of new buildings and the renovation and maintenance of existing buildings. The Code is a mechanism to achieve efficient development and to promote public safety. It also regulates energy and water efficiency, and barrier-free accessibility.

The Ontario Building Code is being reviewed and updated to make enforcing better building standards much easier. It is intended to provide better support for enhanced energy and water conservation, greenhouse gas reduction, climate change adaptation, and environmental protection. Use of the new Code will be an important strategy for sustainability.

Municipal Policy

Conservation policies for heritage sites are currently contained in the Official Plans for the City of Peterborough, as well as Cavan Monaghan, Otonabee-South Monaghan, and Douro-Dummer Townships. Policies focus on the importance of preserving cultural heritage, and the identification, conservation, restoration, protection and enhancement of heritage properties. The City of Peterborough in particular encourages that archaeological resources or potential must be taken into consideration during development. In addition, any development or site alteration may only occur if the heritage integrity of the area is maintained and where this is not possible, mitigative measures or alternative development approaches may be required.

The County of Peterborough, the City of Peterborough, as well as the townships of Otonabee-South Monaghan, Asphodel-Norwood, North Kawartha, Galway-Cavendish & Harvey, and Smith-Ennismore-Lakefield have developed their own Accessibility Policies. Accessibility issues for the County are currently addressed by the Joint County of Peterborough and Township of Smith-Ennismore-Lakefield Accessibility Advisory Committee (AAC), the Accessibility Advisory Committee of the City of Peterborough, and a few local chapters of the Ontarians with Disabilities Accessibility Advisory Committee. Through the assistance of these committees, accessibility plans have been developed for the County of Peterborough (in conjunction with Smith-Ennismore-Lakefield Township), as well as the City of Peterborough, and North Kawartha and Galway-Cavendish & Harvey Townships. These plans focus on inventories of municipal buildings with regards to accessibility barriers, recommendations and prioritization for addressing barriers, activities that are being carried out to remove barriers, and future requirements and processes regarding identifying and eliminating barriers.

What Programs and Plans are in Place to Protect our Environment?

Legislation

The purpose of the *Canadian Environmental Protection Act* is to protect the environment, the health, and well-being of Canadians. A major part of the *Act* is aimed at preventing pollution and addresses potentially dangerous chemical substances in a sustainable manner. The *Act* applies to federal lands only.

Ontario's Ministry of the Environment administers the *Environmental Protection Act* to prevent pollution and protect and restore the environment. The Ministry is also responsible for permitting activities that emit any pollutants into the natural environment, including issuing Certificates of Approval. Permitting and enforcement of the *Act* predominantly applies to commercial and industrial operations, which can include certain aspects of municipal operations (e.g. landfills, wastewater treatment, etc.).

Municipal Policy

Physical Environment

The County of Peterborough Official Plan provides a comprehensive section on natural environment protection, stating: "the County recognizes the important contribution that natural systems, natural heritage features and natural resources make to the social, economic, and environmental health of local municipalities" (County of Peterborough Official Plan, 2010, 4-1). The policies within the plan cover the major topics of Hazard Lands, Natural Heritage Features and Natural Resources, and within these sections: floodplains, wetlands, endangered and threatened species habitat, fish habitat, wildlife habitat, woodlands, valleylands, areas of natural and scientific interest, the Oak Ridges Moraine, and mineral and mineral aggregates. Development and site alterations are generally not permitted within provincially significant areas; however, the plan lists some areas where exceptions may occur within the County. The Official Plan also provides guidance for local plans, stating that development and site alterations may not be permitted within significant wetlands and significant portions of endangered and threatened species habitat.

The City of Peterborough's Official Plan has similar policies, stating that "significant natural features and areas shall be protected for the long term" (City of Peterborough Official Plan, 2009, 2.4.10.1). Here, development and site alteration is not permitted in significant sections of endangered and threatened species habitat, wetlands, valley lands, wildlife habitat, and areas of natural and scientific interest unless it has been demonstrated that there will be no negative impacts on natural features and ecological functions. Similar policies are in place for several townships including Cavan Monaghan, Otonabee-South Monaghan, and Douro-Dummer. The City of Peterborough also has a Tree Conservation By-law.

Policies also exist for Cavan Monaghan, Otonabee-South Monaghan, and Douro-Dummer, the City of Peterborough, and the County with regards to Shoreline Protection. In these cases, development occurring in shoreline areas should enhance and protect the qualities that contribute to the area's character, and in the case of Douro-Dummer, should be at least 30 metres back from the high water mark. Policies for in-water and shoreline works, and related activities also exist for the Trent-Severn Waterway. The City of Peterborough has a Riparian Protection policy, stating that shoreland along watercourses must be planted to establish riparian buffers, protect water quality, and improve aquatic habitat.

Air Quality

Air quality policies at the municipal level are limited because they are governed by Provincial regulation. The City of Peterborough supports "energy efficiency and improved air quality through land use and development patterns" (City of Peterborough Official Plan, 2009, 3.7.2) focusing on corridor development, public transit promotion, intensification strategies, and mixed-use development. An open-air burning bylaw exists in Asphodel-Norwood Township.

The City of Peterborough has an anti-idling bylaw stating a maximum idling time of two minutes.

How do we Deliver Clean, Healthy and Sustainable Water?

Legislation

Canada's *Drinking Water Sources Act* requires the Federal Minister of the Environment to establish an agency with the power to identify and protect Canada's watersheds. Implementation of the Act is in cooperation with the provinces, to protect sources of drinking water in the future. This Act recognizes Canada's drinking water sources that are threatened by land uses and development that may have an impact on the quality of water and its suitability as drinking water.

Ontario's *Clean Water Act* sets out to ensure that Ontario delivers safe drinking water by requiring municipalities and conservation authorities to map the sources of municipal drinking water supply to protect and prevent the supply from being depleted or contaminated.

The Ontario *Nutrient Management Act* is a measure taken by the Ontario Ministry of Agriculture, Food and Rural Affairs and the Ministry of the Environment to maintain Ontario's priority standards for the protection of surface water and groundwater.

Source Protection

Water Quality within the County of Peterborough is currently overseen by the Trent Conservation Coalition Source Protection Region (TCCSPR), which includes the Kawartha-Haliburton Source Protection Area (SPA), the Otonabee-Peterborough SPA, the Crowe Valley SPA, the Ganaraska Region SPA, and the Lower Trent SPA. The TCCSPR is currently developing, through a multi-stakeholder approach, a source protection plan that will protect water quality and supplies. The source protection plan is anticipated to be completed in 2012. Another plan has previously been completed for the community of Fraserville, located in Cavan Monaghan, with the objective of determining the most feasible way of supplying clean and safe water to the Fraserville area. In addition, the 2009 Operational Plan for Smith-Ennismore-Lakefield outlines the Drinking Water Quality Management System in which Peterborough Utilities Service Inc. is committed to managing the drinking water for the area by establishing, maintaining and continually improving its Drinking Water Quality Management system to ensure clean, safe drinking water for its customers.

Municipal Policy

Water Quality Protection and Healthy Water Supply

The County of Peterborough bases its overall planning on a watershed-based strategic approach which includes several watershed and sub-watershed plans within the Official Plan. It does not however, have its own water quality protection policy at this time, but simply states in the Official Plan:

The County intends to amend this Plan to add policies to protect and enhance the function of strategic water resource areas and groundwater resources in general, based on the findings of the Trent basin groundwater study when available. In the meantime, local municipalities should use resource data available from the Ministry of the Environment and other best available data in their possession or provided to them. (County of Peterborough Official Plan, 2010, 4-13)

The City of Peterborough does have a water quality protection policy that focuses on protecting, improving or restoring the quality and quantity of water, which they plan to complete through a number of different avenues such as using the watershed as a scale for planning and minimizing potential negative impacts such as cross-jurisdictional and cross-watershed impacts. Cavan Monaghan and Otonabee-South Monaghan also have water protection policies within their Official Plans, focusing on managing water in a way that ensures a sustainable supply of clean water for the future, and protecting groundwater against potential negative effects to human and ecological health, and the natural environment.

Stormwater Management

Stormwater Management policies are present in the County Official Plan related to new development, and in the City Official Plan within open space and parklands, requiring the approval of the City and conservation authority for stormwater management features. In addition, where substantial changes to

grade are required as part of a stormwater management feature, or the presence of water precludes the use of part of the land for parkland purposes, the stormwater management feature will not be accepted as part of the parkland dedication.

Otonabee-South Monaghan and Douro-Dummer both have stormwater policies in their Official Plans, encouraging the control of runoff during development to minimize any potential impacts to the natural environmental.

None of the municipalities within the County of Peterborough have specific Stormwater Management Plans in place; however, the City of Peterborough developed a Flood Reduction Master Plan after the flood of 2004 that resulted in over \$100 million in damages to private and public property. This plan identifies the extent of the damage, findings of the study, and presents a recommended action plan to reduce flood damage in future. Key aspects of the action plan include the gathering of information and field work, a study of plans and policies in place, storm and sanitary environmental assessments, the designing and contracting of documents and permits, and subsequent tendering, construction and monitoring.

How are we organized to Protect Species and Habitat?

Legislation

The Federal *Fisheries Act* assigns the Department of Fisheries and Oceans Canada the responsibility to conserve and protect fish and fish habitat, which applies to the whole of Canada, including private property in every province and territory. The *Act* defines fish habitat as “*spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly to carry out their life processes.*”

Canada’s *Species at Risk Act* includes measures to protect both the species and the habitat. On non-federal owned lands the *Act* only applies to federally listed endangered, threatened or extirpated aquatic species and migratory bird species. The *Act* seeks to protect the species as well as their habitat.

The *Migratory Birds Convention Act* protects and conserves migratory birds, as populations and individual birds, and their nests and eggs from hunting, trafficking and commercialization, and stipulates the requirement of a permit to take part in any of these activities.

The *Ontario Endangered Species Act* protects endangered, threatened and extirpated species and their habitat and applies to all lands in Ontario not owned by the federal government.

Municipal Policy

In the GPA, endangered, threatened, and rare species, as well as wildlife habitat are covered under the Natural Heritage policies of the County and City, as well as the townships of Cavan Monaghan, Otonabee-South Monaghan and Douro-Dummer. The County also provides specific policies on rare and endangered species protection, prohibiting development and site alterations within significant portions of the endangered and threatened species habitat. This is also the case within Otonabee-South

Monaghan and Douro-Dummer; however, development may be permitted in Douro-Dummer if the ecological function of the adjacent lands has been evaluated and it has been shown that there will be no negative effects on species.

The County Official Plan also prohibits development and site alteration in fish habitat, except where allowed by provincial and federal regulations.

No policies of the City of Peterborough, the County of Peterborough, or the included townships specifically address habitat fragmentation or invasive species.

What Facilities, Programs and Policies are helping us to select Sustainable Energy Paths?

Energy Sources

The Ministry of Energy and Infrastructure has responsibility over energy generating facilities in Ontario, as well as over several agencies, including Ontario Power Generation (OPG). Ontario has a 'hybrid' electricity market where energy production is the responsibility of OPG and private companies (notably for renewable energy sources). OPG's generating assets include three nuclear, five coal and two natural gas, and 65 hydroelectric generating stations. The Ontario government has made a commitment to eliminate coal-fired generation by the end of 2014.

A culture of clean generation and energy conservation is promoted by the *Green Energy and Green Economy Act*, 2009, which is geared to expediting the growth of clean, renewable sources of energy like wind, solar, hydro, biomass and biogas. The *Act* is making development of renewable energy sources easier in Ontario as a result of a number of key elements:

- Feed-in tariffs that guarantee specific rates for energy generated from renewable sources over fixed terms;
- Allowing renewable energy projects (that meet technical, economic, regulatory requirements) to connect to the electricity grid;
- Allowing certain renewable energy projects regardless of any restrictions in place (e.g. municipal bylaws, policies, etc.);
- Implementing a "smart" power grid system to support the development of new renewable energy projects and prepare Ontario for new technologies (e.g. electric cars); and,
- A streamlined approvals process and service guarantees for renewable energy projects that meet regulatory requirements.

Energy conservation initiatives in the *Act* include:

- Making goods, services, and technology more efficient (Section 4);
- Home efficiency disclosure when selling homes (Section 3); and,
- Requiring public agencies to prepare energy conservation and demand management plans (Section 6).

Municipal Policy

Energy policies within the County are limited. The County Official Plan only refers to energy as a component of Physical Services and Utilities, stating that it encourages energy conservation under the general goal of ensuring adequate provision of services and utilities consistent with the environmental, cultural and economic goals of the County.

The City of Peterborough Official Plan notes that consideration will be given to the implementation of principles of energy conservation in the design and layout of subdivisions, buildings and structures, in terms of access efficiency along streets, bicycle routes, and pedestrian areas.

In Cavan Monaghan, the development and utilization of alternative energy is encouraged as per regulation under the *Green Energy and Green Economy Act*. The Energy Policies cover large-scale power generation and commercial operations, particularly with respect to wind farms. The Cavan Monaghan Official Plan also contains policies on energy conservation, achieved through lot, building, and community design, the use of vegetation, facilities, and infrastructure layout, LEED building certifications, and mixed-use development.

Although not permitted under the Act, Asphodel-Norwood has proposed a moratorium on wind turbine development (October 2010). North Kawartha has also passed a by-law controlling wind development.

How are we prepared to Manage Solid Waste?

Provincial Policy and Programs

The *Waste Diversion Act*, 2002 was introduced to promote the reduction, reuse, and recycling of waste, and to provide for the development, implementation and operation of waste diversion programs. Current approved waste diversion programs in Ontario include the Blue Box, Waste Electrical and Electronic Equipment (WEEE), Household Hazardous Waste (HHW), and used tires. The *Waste Diversion Act* is currently being reviewed and the province is proposing to move towards a zero waste future to help reduce waste, increase diversion, build a greener economy, and build a more sustainable society. The proposed changes are premised upon waste reduction and reuse, and they build upon Extended Producer Responsibility.

The Ministry of the Environment's *Ontario's 60% Waste Diversion Goal - A Discussion Paper* (June 2004), outlined waste diversion goals and how to reach them. The Paper established a provincial goal of 60% waste diversion.

The Ministry of the Environment also released a proposed policy document in 2007 entitled *Policy Statement on Waste Management Planning: Best Practices for Waste Managers*. Long-term waste management plans, integrated with other on-going strategic planning (e.g. growth plans, environmental or sustainability plans) are recommended, as well as coordination with the 5-year Official Plan review (or when 10 years or less of disposal capacity remains).

Municipal Policy

Policy objectives of the County Official Plan are to promote waste reduction and support the programs and initiatives outlined in the County/City Waste Management Master Plan.

The County and City of Peterborough completed an initial Waste Management Master Plan in 1993 and is currently developing a new one. Stemming from this plan, a number of waste programs have been created to help residents manage and recycle their waste. The County has an individual diversion target of 50% and will eventually work towards the province's target of 60%.

Garbage collection is currently the responsibility of individual municipalities, and recycling services for the townships are the responsibility of the County. The City of Peterborough also contracts out the collection or recycling however, collects both the garbage and yard waste.

How do we sustain our Health and Nurture our Minds and Souls?

Healthcare

The Ministry of Health and Long-Term Care funds health care services in Ontario through the Ontario Health Insurance Plan (OHIP).

The *Local Health System Integration Act, 2006* changed the way Ontario's health care system is managed by creating 14 Local Health Integration Networks (LHINs). These LHINs are not-for-profit corporations that act as a multi-stakeholder, regional planning unit taking full responsibility for health services in their communities.

The County of Peterborough falls under jurisdiction of the Central East LHIN, and overall health of the community is managed by the Peterborough County-City Health Unit.

Recreation and Leisure

The County of Peterborough provides a number of opportunities for residents to nurture their minds and souls within the community. Access to the natural environment for recreational, spiritual, and health purposes is governed through Open Space Policies, which are stated in the Official Plans of the County, City and townships of Cavan Monaghan and Douro-Dummer. The County Official Plan states that it is striving to increase public awareness, access to, and opportunities for enjoyment of the Trent-Severn Waterway system, the Kawartha Highlands Signature Site and other Crown land protected areas. In addition, they are working towards establishing an integrated system of areas and corridors across the County for recreation as well as recognizing and promoting linkages between natural areas and adjacent watershed areas.

The City of Peterborough recognizes existing and potential open spaces along the Otonabee River and Jackson Creek, as well as the major parks in the Central Area and states that these areas will be maintained, enhanced, and expanded where possible. Similarly, the township policies note that the open space areas will be protected and conserved, while being made available for appropriate

recreational uses.

The City of Peterborough Official Plan also states that off-road pedestrian trails will be developed to link with major open space areas, and they may be extended through them to improve public access and mobility in new development areas. Bike Network Policies are also covered in the City Official Plan, with the City of Peterborough currently having 18km of bike lanes. The Official Plan states that Council will continue to provide for the development of Bikeways through implementing a Bike Network, ensuring new development includes bikeways and support facilities, maintaining bike paths, and ensuring that bikeway design is coordinated with pedestrian routes, open space systems, and access to public transit.

Recreation in the County is also governed through Recreational, Leisure and Parks Plans. The County of Peterborough does not have a Recreational Plan at this time; however Smith Ennismore Lakefield is currently developing a Recreation Service Plan. The City completed a Strategic Plan Update for Recreation, Parks and Culture for Peterborough and Area in 2007. This plan provides guidance for the future of recreation, parks, culture, and heritage in Peterborough, and provides a strategy for building capacity in the recreational system. A similar plan was completed for Smith-Ennismore-Lakefield in 2002, and a plan is currently in progress for Cavan Monaghan to set priorities for the future provision of recreational facilities, programs, and services. Otonabee-South Monaghan also states in their Official Plan that all municipal parks and recreational facilities in the Municipality shall be developed according to a parks plan and the policies within their Official Plan.

Arts and Culture

There are few policies and plans covering culture, heritage and the arts within the County; however, the City of Peterborough is currently working towards the development of a Municipal Cultural Plan that will focus on economic development through culture, creating livable and sustainable municipalities, and vibrant and healthy neighborhoods. No other policies or plans currently exist on public art or culture within the area, although Cavan Monaghan is currently undertaking a cultural mapping exercise.

How are we set up to Learn about Sustainability?

Provincial Education System

Ontario's Ministry of Education administers the publicly funded elementary and secondary education system in the province under the *Education Act*. The Ministry develops and implements the Ontario curriculum and promotes education through various programs. Information and programs for adult learning and postsecondary education are also available.

Each school has sufficient leeway within the system to include programs on the environment, recycling or science related issues like climate change. Furthermore each Board of Education can set direction for the schools within its jurisdiction and can support or promote environmental or sustainability programs as long as it operates within the parameters of the *Education Act*.

Both Trent University and Fleming College offer a range of programs on sustainability and on topics that directly support the three pillars: economic, environmental and social-cultural.

How do we provide Sustainable and Full Life Circumstance Support for all Residents?

Poverty

Ontario's poverty reduction strategy, *Breaking the Cycle*, is a plan that was developed in 2008 and sets an aggressive target for poverty reduction. It sets a goal of reducing the number of children living in poverty by 25 percent over five years through investments in the education system and social assistance programs to break the cycle of intergenerational poverty.

The *Poverty Reduction Act* (December 2008) strengthens the Province's commitment to reduce child poverty and also includes adult poverty. The *Act* requires the provincial government to maintain or develop clear poverty reduction strategies with set timelines and targets, as well as assess the strategy, at least every five years.

Affordable Housing

Affordable housing support in Ontario is administered by the Ministry of Municipal Affairs & Housing. Under the *Canada-Ontario Affordable Housing Program*, new homes and access to housing are being provided for low-income families, senior citizens, persons living with mental illness, and victims of domestic violence.

The Ontario *Long-Term Affordable Housing Strategy* has a vision to improve Ontarian's access to adequate, suitable and affordable housing, and provide a solid foundation on which to secure employment, raise families, and build strong communities. The *Strategy* outlines the objectives and interests for affordable housing and requires municipalities to develop and implement local housing and homelessness plans within the broader provincial framework.

The City states in its Official Plan that it will also strive to develop a minimum of 10% of new housing as affordable housing units to accommodate both family and non-family housing, that is suitable for all age groups, and located across the City.

Affordable housing matters are also encouraged and supported in the area by the Affordable Housing Action Committee of Peterborough. This organization seeks to identify emerging needs around affordable housing, use communications and consultation strategies for the better awareness of, and commitment to, affordable housing needs and policies, and influence policy development about affordable housing at all levels of government. The committee publishes an annual report called *Housing is Fundamental*, which includes a number of recommendations on housing strategies each year.

The County of Peterborough Housing Division administers the social housing portfolio for the City and the County, and oversees the operations of 22 publicly funding housing providers. In addition, Peterborough Housing Corporation provides social housing support to 818 households, and affordable housing to 190 households in the area.

In the Peterborough Area, a 2003 Housing Needs Analysis was prepared for both the City and County,

which contains an affordable housing strategy. The strategy recommends increasing the supply of smaller housing units, preserving older housing stock, making home ownership a realistic option for more residents, and increasing the supply of rental units. Furthermore, it suggests addressing the need for more affordable housing, meeting the need for seniors housing, improving incomes, establishing housing targets for new supply, and creating a position for an affordable housing facilitator.

The 2002-2012 Economic Strategy of Galway-Cavendish & Harvey also encourages the development of an affordable housing strategy.

Community Support and Inclusion

No social support or poverty support policies exist in the County of Peterborough or City of Peterborough.

4. WHERE ARE WE NOW ON OUR PATH TO SUSTAINABILITY?

Environmental Pillar

What are our environmental conditions/characteristics of our land, water and air?

Land

The GPA has a varied surficial geology and geomorphology, ranging from the Canadian Shield in the north to the Oak Ridges Moraine in the south. The area is replete with natural heritage features including wetlands, flood plains, endangered and threatened species habitat, wildlife habitat, woodlands, valley lands, fish habitat and riparian zones.

There are 15 earth science and 30 life science Areas of Natural and Scientific Interest, 19 Life Science Sites and 20 Conservation Authority Conservation and Wildlife Areas in the County. The NHIC also lists 164 wetlands in Peterborough County and three types of vegetation communities, which include Dry Black Oak-Pine Tallgrass Savannah, Dry Bur Oak – Shagbark Hickory Tallgrass and Dry Tallgrass Prairie Type.

FACTS

Butternut (Jugiancinerea) is under threat from an invasive fungus. It is considered endangered in Ontario and is classified as a species at risk by the Ministry of Natural Resources.

Large tracks of contiguous forest area can be found in the northern areas of the region, which are located on the Canadian Shield and less desirable for agricultural uses. Natural forest cover in the southern portions of the region is particularly vulnerable due to high land competition from agricultural and urban development. During a watershed monitoring program, the south-western region of Cavan Monaghan was awarded only a 'C' for its forest cover (22.7%) and forest interior (3.1%) by the Ganaraska Region Conservation Authority.

FACTS

The Kawartha Bioregion is covered by:
50.2% Wooded Area
7.9% Water Surface
41.9% Other

The GPA also encompasses 134 lakes, including the well-known and touristic Stoney, Clear, Rice, Pigeon, Buckhorn and Lovesick Lakes. Part of the Oak Ridges Moraine lies within the County, and the 386km Trent Severn Waterway, a major tourism draw to the region, travels right through the County, starting at the Bay of Quinte and ending near Port Severn. Other notable features include Norwood Esker, Otonabee River and the Ouse River.

The total amount of Open Space, being parks, trails and other non-developed areas, varies throughout the region with Cavan Monaghan and Havelock-Belmont-Methuen having 9 and 10 hectares respectively located within their townships. When broken down into the amount of open space per 1,000 people, the numbers are substantially different. The City of Peterborough possesses 5.145 hectares/1,000 people, while North Kawartha and Cavan Monaghan have only 1.708 and 1 hectare of open space per 1,000 people respectively.

Air

There is little information on current air quality within the County. The City of Peterborough is a member of the Partners for Climate Protection program; however, they have not achieved any corporate or community milestones to date. There is also no greenhouse gas inventory for any of the municipalities including the County.

Water

The County receives its drinking water from the Otonabee River, groundwater sources for rural areas, and the Norwood Esker for the urban area of Norwood. Several water studies have been conducted in the County of Peterborough in recent years. The Kawartha Lakes Stewards Association measured the E.coli levels at 99 sites in 11 of the GPA's lakes in 2009, and found the levels to be generally low, with only 9 sites being 'somewhat elevated' and 3 'needing observation'. The organization also measured phosphorus levels at 42 sites in 12 GPA lakes in 2009 with the levels found to be lower overall than in past years.

FACTS

The southwestern corner of Cavan Monaghan is in the Rice Lake south shore watershed. The area was awarded a 'B' for its overall surface water quality, which measures phosphorus, E.coli, and benthic invertebrates.

Thousands of water samples are also tested each year by the Peterborough Utilities Commission and the MOE. Results from both testing programs indicate that Peterborough's drinking water surpasses MOE health related guidelines.

To what extent are we consuming natural resources?

Energy and Energy Efficiency

Energy is currently provided to the County municipalities by Hydro One. The City owned Peterborough Distribution Inc., a division of the Public Utilities Commission (PUC), provides electricity throughout the City of Peterborough. Smart meters are currently being installed in the City of Peterborough, and specific areas of Asphodel-Norwood and Smith-Ennismore-Lakefield Townships for implementation in the near future.

FACTS

Kawartha Ethanol Inc. is currently operating a corn ethanol production facility in Havelock, with the capacity to produce 80 million litres of fuel-grade ethanol per year.

Lily Lake solar, owned by Peterborough Utilities, will provide 10 MW of electricity to the provincial grid once completed. In addition, Peterborough Utilities has a Feed In-Tariff Contract with Ontario Power Authority for a 2 MW Landfill Gas Generation Project, and the organization owns several hydro-electric dams that provide energy to the City and County. There are also three wind farms in the infant stages of development within the area including Whispering Woods in Millbrook, ZEP Wind Farm in Ganaraska,

and Collie Hill in Asphodel-Norwood. A number of small solar farms are also beginning to emerge in the region.

There is a strong transmission grid in the region, making the grid relatively accessible for more alternative energy production. There is currently however, limited Transformer Station access, which limits alternative energy.

Several energy conservation or renewable energy demonstration projects also exist in Peterborough area such as the Sisters of Joseph Convent, which is a certified LEED building, the new Trent University Community Sport Centre which has a Silver LEED rating, and the newest module of Trent's DNA cluster being developed to LEED standards.

Waste

The waste diversion rates for the County, City, Cavan Monaghan and Curve Lake First Nations are 42%, 50.9%, 29% and 65% respectively, while the County continues to work towards its individual diversion target of 50%, and the province's target of 60%.

Garbage collection is currently the responsibility of individual municipalities and is collected by either township staff, a private collection contractor, or is self hauled to a transfer stations by residents. A number of landfills, waste transfer stations (TS), hazardous waste depots and recycling depots are established throughout the region, with the joint Peterborough County/City Waste Management Facility located on Bensfort Road acting as the primary facility. This facility is maintained by the City but operated, by a private contractor. Other smaller, municipal landfill sites include Oak Lake, West Kosh Lake, Norwood and Smith Landfill sites. There are also transfer stations (TS) in the County, located in and operated by individual townships, including:

- | | |
|--------------------|-------------------------------|
| ➤ Cavan TS | ➤ Cavendish TS |
| ➤ Line Belmont TS | ➤ Bobcaygeon TS |
| ➤ Jack Lake TS | ➤ Buckhorn TS |
| ➤ Drummond Line TS | ➤ Crystal Lake TS |
| ➤ Anstruther TS | ➤ Hall's Glen TS |
| ➤ Haultrain TS | ➤ Curve Lake First Nations TS |

The City of Peterborough received a Gold Award in 2009 for their waste management brochure, and a Bronze Award for their Waste Reduction and Conservation Calendar.
-Municipal Waste Association

Both the City and the County contract out their respective recycling collection services; however, all of the material is taken to the City owned but privately contracted Material Recycling Facility on Pido Road for processing and marketing. In almost all areas of the County, recycling is possible through curbside collection, except in the entirety of Galway-Cavendish

& Harvey, and the Belmont and Methuen wards of Havelock-Belmont-Methuen, where individuals are required to drop their recycling off at depot sites.

Source Separated Organics are not collected across the region at this time, although the County initiated a pilot study in Bridgenorth area in 2008 to determine the feasibility of expanding this program in future. The City of Peterborough has been running an organics collection pilot to 625 households since 2001. The City needs to develop a larger composting facility prior to expanding the program City-wide. The City currently owns and operates the Harper Road Composting Site which accepts the pilot organics from the City and the County as well as all leaf and yard waste collected curbside throughout the City and from transfer stations in the township. This site has reached capacity with the 6,000 to 7,000 tonnes of organic material collected annually.

Backyard composting is encouraged, with the County and City selling subsidized residential composters and Peterborough Green-Up conducting composting and vermicomposting workshops. The City also collects unlimited quantities of yard waste from the April until November.

The City operates a permanent Household Hazardous Waste Depot at 400 Pido Road in Peterborough which is open to residents and small businesses as well as County residents. Household Hazardous Waste is collected at six seasonal transfer stations in the County and demolition waste is accepted at the Peterborough County/City Waste Management Facility on Bensfort Road as well as the township transfer stations. Peterborough Green-Up offers waste audits and waste reduction planning for the IC&I sector on a fee for service basis.

The City provides recycling of waste electronics at its permanent Household Hazardous Waste Depot on Pido Road as well as at the Peterborough County/City Waste Management Facility. The County offers one day collection events of electronic waste at the Township Transfer Stations. There are also a number of businesses throughout the City and the County that offer recycling of electronic waste. A list of recycling sites is provided on www.recycleyourelectronics.ca.

Peterborough Green-Up in conjunction with Kawartha Food Share currently facilitates the collection of printer cartridges and cell phones in a program named Phones-For-Food. Waste Electronics Drop Off Days are also held within the County at certain times of the year and some retailers offer a Take it Back program for certain products. Peterboroughreuses.com also lists 68 waste categories with links on how and where to recycle or reuse these materials. Finally, Peterborough's Habitat for Humanity has recently started accepting electronic waste.

Water Management and Efficiency

The City of Peterborough owns and operates the Waste Water Treatment Plant on Kennedy Road. In 2009, the City treated 11,944 mega litres of waste water. There were 6.3107, 1 and 0 watermain breaks per 100 kilometers of pipe in the City, and the Townships of Cavan Monaghan and Havelock-Belmont-Methuen respectively.

Peterborough Utilities Commission, a not-for-profit municipal services board of the City, is installing 25,000 water meters in residential housing across the city in order to charge people directly for their water usage. This will create a fair payment system and will minimize stress on the wastewater treatment plant by encouraging awareness of water use and water conservation. A number of townships are also investigating water meters.

Peterborough Utilities Commission also provides a number of water conservation tips on their website.

What organizations and initiatives are available to help us manage our natural environment?

There are a number of organizations within the area that help the County, the City and individuals to manage the natural environment. Most notably, the **Peterborough County Stewardship Council** works with a number of stakeholders to enhance stewardship on private lands. The activities they encourage and take part in include:

- Communications and community relations – responding to requests for resource management information, referrals, and assistance;
- Collaborative approaches to farm stewardship – encouraging the uptake of exiting environmental funding programs geared towards creating, enhancing or restoring in-stream, riparian, and upland forested habitat for fish, wildlife, and other native species;

- Landowner and student education and awareness – raising awareness and increasing education levels on issues of resource management;
- Tree planting and wildlife habitat enhancement programs;
- Aquatic, water quality and shoreline habitat enhancement programs – improving the health of lakes (Lakeland Alliance, below), streams, and rivers through workshops, events, and field project delivery; and
- Forestry and woodlot management programs – annual woodlot conference and trade show in Lindsay.

FACTS

The City of Peterborough and the Township of Smith-Ennismore-Lakefield have summer watering restrictions in place.

FACTS

The Peterborough County Stewardship Council distributed 32,000 tree seedlings to private landowners in 2009

The **Kawartha Heritage Conservancy (KHC)**, a community-based organization that is part of the Ontario and Canadian Land Trust Alliances, is also supporting and working to protect the natural environment in the GPA. This charitable land trust, in partnership with a number of community groups, government agencies, and individual landowners, works to conserve the natural and cultural heritage, and distinctive landscapes of the Kawartha bioregion. The organization also provides technical and legal information on conservation strategies, engages in research and proven scientific practices and strives towards a sustainable future, alongside the land, people and features of the Kawartha region. The Kawartha

Heritage Conservancy is involved in several environmental partnerships in the County of Peterborough, including the Waterway Wildlife Species at Risk program, the Ganaraska Hills Area of the Caring for the Moraine project, and the Land Between Collaborative. The KHC is also currently developing a Kawartha Natural Heritage Strategy, which will collaboratively develop targets for protection, education and awareness in the Kawarthas region.

Head office of the **Ontario Ministry of Natural Resources** (MNR) is located in Peterborough. The Ministry oversees the province's natural resources, promoting healthy, sustainable ecosystems and conserving biodiversity. They also manage Ontario's Crown land, promote economic opportunities in the resource sector and enhance opportunities for outdoor recreation.

The **Ontario Federation of Anglers and Hunters** (OFAH) has its head office in Peterborough, and is the oldest and largest not-for-profit, non-government fish and wildlife conservation organization in Canada. OFAH is an effective advocate for Ontario's natural resources, and the rights of anglers and hunters. Importantly, OFAH involves itself in conservation efforts, investing in fish hatcheries, improving habitat, saving wetlands, restoring wildlife numbers, and providing programs for youth. OFAH is currently working on several programs across the province including the Community Stream Steward Program, Invasive Species Public Education and Outreach, and the Lake Ontario Atlantic Salmon Restoration Program Partnership.

Lakeland Alliance is a collaboration of government agencies (four stewardship councils, MOE, DFO, ORCA and Kawartha Conservation) and not-for-profit environmental organizations (Green-Up, Federation of Ontario Cottager's Associations, local lake associations) that are working to improve the ecosystem health of lakes and rivers in the Kawartha Lakes Watershed. They also provide a free and voluntary Shoreland Advisor Program for shoreline owners, as well as information sessions and educational tools designed to help property owners take positive action.

Kawartha Lakes Stewards Association (KLSA) monitors lakes in the Kawartha region (Bald Lake, Big Cedar Lake, Buckhorn Lake, Chemong Lake, Clear Lake, Katchewanooka Lake, Lovesick Lake, Lower Buckhorn Lake, Pigeon Lake, Sandy Lake, Stoney Lake, Upper Stoney Lake and White Lake) for yearly changes in phosphorus and E.coli levels. They also work to understand problems in the lakes associated with invasive species, provide education on the importance of lake protection, and develop partnerships with a variety of stakeholders to further the organization's objectives. They have developed an aquatics plant guide, and are in the process of creating a Kawartha Lakes algae handbook.

Trent Conservation Coalition Source Protection Region (TCCSPR) includes the Kawartha-Haliburton Source Protection Area (SPA), the Otonabee-Peterborough SPA, the Crowe Valley SPA, the Ganaraska Region SPA, and the Lower Trent SPA. The TCCSPR is currently developing, through a multi-stakeholder approach, a source protection plan to be completed in 2012 that will protect water quality and supplies. The plan will detail:

- Policies and programs to eliminate existing significant threats
- Policies and programs to ensure no future drinking water threats become significant
- Rules for activities in wellhead and intake protection zones

- Public education programs
- Programs to promote voluntary action

Ontario Drinking Water Source Protection funding is administered by the five conservation authorities in the TCCSPR which is supporting four key programs until the spring of 2011, including well decommissioning (testing, monitoring, and technical work); the repair, upgrade, or replacement of faulty septic systems; runoff and erosion protection; and pollution prevention audits which are made available to small and medium-sized businesses.

Ganaraska Region Conservation Authority (GRCA) delivers a groundwater monitoring project that measures groundwater level fluctuations, flow directions and gradients, and quality, and records the changes over time. The GRCA also monitors surface water quality to characterize watersheds, looks at trends in quality and monitors long-term health of watersheds to assist in source water protection planning. The organization opened the Ganaraska Forest Outdoor Education Centre in 2009.

Kawartha Conservation Authority monitors and collects groundwater information, enabling the detection of early indications of changes in quality. They also assist with the naturalization of shorelines, and promote watershed stewardship to ensure the responsible care of natural resources and wildlife.

Otonabee Region Conservation Authority (ORCA) owns and manages more than 4,000 hectares of conservation areas and forests and has 16 surface water quality monitoring sites in its jurisdictional region that provide information on the state of local water resources. They are also involved in the Cavan Creek stabilization project, the Norwood Millpond restoration project, and the restoration of Riverview Creek.

Crowe Valley Conservation Authority (CVCA) undertakes groundwater monitoring. The subsequent data provides important information regarding water quality. The CVCA has five sites where surface water quality is monitored to ensure that water quality is suitable for both human and aquatic life, and to assess long-term trends.

Other support for land and water protection is provided by a variety of Lake Associations. **Big Bald Lake Association** has adopted a lake plan containing a number of recommended actions involving: the continuation of water quality monitoring; habitat and natural shoreline preservation; the development of stewardship activities such as septic work partnerships; and lobbying for inclusion in the jurisdiction of a Conservation Authority.

The Clear/Stoney/White (CSW) Lake Plan Environment Council has developed a lake plan which suggests the naturalization of shorelines, the avoidance of fertilizer and pesticide use, the performing of ongoing septic maintenance and inspection, and the protection of fish habitat such as wetlands and natural shoreline through government due diligence in permitting development applications.

The **Belmont Lake Cottager's Association's** plan recommends that municipalities ensure new developments protect the integrity of shorelines, the township develop a policy regarding the retention

of shoreline vegetative buffers, and that they include in their official plan a requirement for a lake impact study for any major development in its vicinity.

The **Jack Lake Cottager's Association** has developed a sustainability and stewardship plan that recommends a number of activities to maintain and enhance the integrity of the lake.

What initiatives are available to help people live and work in a more environmentally sustainable manner?

There are several local organizations that are helping people and businesses reduce their impacts on the natural environment. **Peterborough Green-Up**, a community-based, not-for-profit environmental organization in the heart of Peterborough is leading the way in this regard, their mission is to enhance “the environmental health in the Peterborough region by interpreting environmental concerns, facilitating positive action and providing services recognized as valuable by the community.” The organization is a knowledgeable and trustworthy source, providing the tools for people to engage in and develop environmentally sustainable lifestyles.

Currently, Green-Up's projects cover water conservation, water quality, energy conservation, waste reduction, greenspace enhancement, air quality, climate change and sustainable transportation. They also offer a *Fostering Sustainable Business Practices Program* within the GPA and provide the Well Aware program to help rural land owners identify priorities for action to protect and enhance the quality of their drinking water. Furthermore, they are active participants on the Steering Committee of agencies that host the Peterborough Children's Water Festival which provides students in grades 2-5 with the opportunity to discover the importance and diversity of water, the need to ensure high quality water resources for future generations, and a healthy environment.

Peterborough Green-Up is also very active in promoting renewable energy and energy conservation within the area, offering a number of programs and incentives to homes and businesses including pre-retrofit Ontario Home Energy Savings Plan and ecoEnergy Retrofit Homes audits, covering lighting, motors, heating ventilation, air conditioning and overall electricity systems. They facilitate blower door air leakage testing by Natural Resources Canada certified energy advisors and offer a Power Saving Blitz that provides up to \$1,000 of free energy efficiency upgrades to small businesses. In addition, they host a solar audit program which helps people learn more about the potential of Solar Energy and its potential for use within homes and businesses.

Green Communities Canada, a national network of community-based non-profit organizations, is also located in Peterborough and delivers innovative environmental programs and services with a focus on household and community action. They work with their member organizations to achieve environmental sustainability through developing healthy eco-systems and communities, sustainable resource use and

FACTS

Peterborough Green-up worked with Peterborough Distribution Inc. to deliver the Light Bulb Exchange Program and Water Flow Reduction Program for Social Housing in the City of Peterborough. Results included:

- *21,570 compact fluorescent bulbs installed in all 1688 units*
- *741 low flow showerheads installed*
- *1,029 low flow bathroom tap aerators*
- *1,215 low flow kitchen tap aerators*

clean water, air and soil. Alongside their members they deliver a number of programs including Pesticide Free Naturally, Well Aware, ecoEnergy, Active and Safe Routes to School and Sustainable Transportation.

Ontario Public Interest Research Group Peterborough (OPIRG) is a Trent University campus-based, not-for-profit organization focusing on research, education and action on social justice and environmental issues. The organization offers skills development workshops and research-for-credit opportunities for students. Current programs for OPIRG-Peterborough include the Do-It-Yourself Upcycling Workshop Series, OPIRG Ethical Food Sourcing Project, and the OPIRG Supermarket Tour Project. The last two are focused discovering and knowing the background of food products. Some of their programs are open to the general public.

John Howard Society of Peterborough helps to make the community safer through providing support and services to individuals in conflict or at risk of being in conflict. In addition to the provision of social services, they also help not-for-profit agencies within the community to make positive environmental changes to their workplace. This program is funded by the Ontario Ministry of Energy, and supported by Peterborough Green-Up.

Peterboroughreuses.com encourages the reuse, recycling or composting of items by providing comprehensive information to Peterborough residents on sustainable waste management, and the purchasing of environmentally friendly products and services.

Peterborough Moves is a partnership between the City of Peterborough, Peterborough Green-Up and the Peterborough County-City Health Unit that advocates for sustainable transportation. Peterborough Moves presently offers a number of programs, campaigns and resources to encourage commuters, neighbourhoods and schools to transition to active and efficient modes of transportation.

Transition Town Peterborough is a not-for-profit organization focused on reducing the community-wide dependence on fossil fuels, and increasing local resilience and self-sufficiency with regards to food, water and energy.

Sustainable Trent is an inclusive, student-run organization that works to promote sustainability within individual lifestyles as well as within the institution, by working with on and off campus organizations and encouraging education and involvement to anyone interested. Their programs include the Green Pledge and Water Bottle Free Convocations.

How are we able to get around the GPA in sustainable manner?

There are currently 58,355 commuters within the County of Peterborough, with 77% of them traveling on their own, as drivers, and just under 10% travelling as a passenger (Table 4.1). Public transit use is low at only 1,325 people in the County and 1,180 in the City; however, 5,735 people in the County and 4,520 people in the City do walk or cycle to work. Vehicle use is particularly high in the townships, where the rural settings and longer distances provide few options for public transportation, walking or cycling.

Table 4.1: Mode of Transportation to work												
Transportation	County of Peterborough	City of Peterborough	Cavan Monaghan	Havelock-Belmont-Methuen	Otonabee-South Monaghan	Asphodel-Norwood	North Kawartha	Galway-Cavendish & Harvey	Smith-Ennismore-Lakefield	Douro-Dummer	Hiawatha First Nation	Curve Lake First Nation
Mode of transportation to work (total)	58,355	33,140	4,185	1,700	3,175	1,685	775	2,075	7,905	3,090	n/a	415
<i>Car, truck, van, as driver</i>	44,885	23,455	3,635	1,380	2,680	1,410	625	1,680	6,770	2,765	n/a	315
<i>Car/truck/van as passenger</i>	5,725	3,605	370	155	295	110	80	190	645	210	n/a	45
<i>Public transit</i>	1,325	1,180	30	10	10	10	10	15	35	20	n/a	0
<i>Walk/bicycle</i>	5,735	4,520	90	115	150	140	35	155	380	85	n/a	55
<i>All other modes</i>	685	375	60	40	45	15	25	35	80	10	n/a	0

The County of Peterborough's Transportation Plan was completed in 2004, with the aim of developing localized transportation improvements plans in community areas, analyzing the existing and future County Road network, and coordinating transportation improvements plans with the City of Peterborough.

The City also has a Transportation Plan that was completed in 2002. Its goal was to identify and incorporate community goals, environmental concerns and new technology impacts into a set of transportation planning principles, and a subsequent comprehensive plan to provide direction to the original goals of the 1990 Transportation Plan. An update of their plan is currently in progress. No other plans are in place for the remaining townships; however, a Road Needs Study was completed for Smith-Ennismore-Lakefield in 2002.

The length of roads within the townships varies depending on their size. North Kawartha has 234km, while Douro-Dummer and Smith-Ennismore-Lakefield have 270 km and 305 km respectively. Road Salt is regulated for County roads through the County of Peterborough's 2006 Salt Management Plan, which states that the County will optimize the use of chloride-based winter maintenance materials on all municipal roads while striving to minimize its negative environmental impacts. No other salt management plans exist, although Cavan Monaghan does make reference to road salt management within its Official Plan.

At this time, there are no known recycled materials used for road paving.

Sustainable Transportation

Sustainable transportation is possible in the County through Public Transit, carpooling and active transportation. Carpooling is encouraged through online services such as carpoolzone.ca, pickupal.com and carpoolworld.com, which show listings throughout the GPA. There are car pool parking lots at Peterborough South Park and Ride at Harper Road and Crawford Drive, at Lansdowne Street and Television Road, and at the Cavan/Millbrook Park and Ride near County Road 10 and Highway 115.

Public Transit is available with Greyhound Canada and Coach Canada for trips between Toronto and Ottawa, with various drop-offs along the way, and Peterborough and Lakefield. Go Transit provides a bus link to Oshawa Go-Station, thereby enabling people to travel into Toronto or along the Eastern Lake Ontario corridor. In addition, Peterborough Transit operates buses and a handivan services within the City boundaries.

Peterborough Municipal airport, although city-owned, is located in Cavan Monaghan Township. Currently, it caters only to corporate jets, commercial usage, flight schools and cargo shipments. Rail lines are also present within the County, although the track is generally in poor condition, and only used for freight. A study has been completed on the possibility of developing a rail link between Peterborough and Toronto; however, it is suggested that the costs to upgrade the track at this time are not viable.

There is little information about bike use and plans within the County; however, the City of Peterborough, which currently has 18 km of bike lanes, does include Bike Network Policies within its Official Plan and states its intent to develop and implement a Cycling Master Plan in the future. The Peterborough and the Kawarthas Cycling Summit, which aims to make the community more bike-friendly, was held in the region in March 2011.

Where do we stand in comparison to other areas of Ontario?

The Greater Peterborough Area is generally well positioned from an environmental perspective. The area has a strong reputation as an environmental leader; however this momentum has been slowing as other Ontario municipalities have been advancing on this front. Despite the slowing momentum, the GPA remains in a strong position with an established 'environmental' brand based on past leadership and champions.

FACTS

The median commuting distance in the City of Peterborough is only 4.2 km yet 82% of commuters use a car to get to work.

The GPA's natural features and environmental characteristics make the area unique. There is a good understanding of ecosystems and natural environmental features in terms of mapping and planning. Land stewardship programs are also strong. The community has a sense of connection with the natural environment, particularly water.

There is a strong environmental platform of policies and organizations on which to build. Many institutions and organizations are actively advancing environmental initiatives in the GPA. The

environment is a priority as there are numerous active environmental groups, a strong awareness about environmental issues, and a culture of conservation.

Innovation is occurring with the University, College, and Conservation Authorities. Fleming and Trent work closely with the community and amongst themselves on community initiatives and programs, particularly on the environment.

Like many municipalities in Ontario, the GPA is facing development pressures. People are moving here and converting cottages into full time residences, often near shorelines and other environmentally sensitive areas. Numerous lake associations have arisen and are showing innovation in environmental monitoring and getting wetlands designated as significant features, filling a void that once existed.

There are many good things happening in the GPA; however, there is little integration and consistency amongst groups, organizations, and municipalities.

Details on the initial theme areas (land use planning, water, waste, transportation, energy, natural and cultural assets are provided in Section 5.

Social and Cultural Pillar

How do we learn about sustainability?

There are numerous opportunities for youth and adults to increase their knowledge about sustainability in the GPA. **Trent University** has created a Masters in Arts of Sustainability Studies program, which focuses on the concept of sustainability; relationships to organizations, institutes and economic structures; knowledge creation within the community; as well as social innovation and advocacy. Programs and courses are also available in Ecological Restoration, Environmental Resources Science/Studies, Conservation Biology, Indigenous Environmental Studies, Indigenous Management and Economic Development.

At **Fleming College**, relevant programs include Sustainable Building Design and Construction, Ecotourism Management, Ecological Restoration, Ecosystem Management, Environmental Technology, Fish and Wildlife Technology, Environmental and Natural Resource Studies, Outdoor Adventure Skills, Sustainable Agriculture and Sustainable Renovations.

Local organizations also provide sustainability education opportunities. **Peterborough Green-Up** has curriculum-based educational waste reduction programs for Grades 1, 3, and 7, called Quest for Less. They also provide a workshop for students to learn how to use the Peterborough transit system, and have developed an ecology park where children's programs are designed to teach skills about sustainable lifestyles, based on the themes of food, habitat, biodiversity and respect for life. Peterborough Green-Up also co-hosts the **Peterborough Children's Water Festival**, which teaches children in grades 2-5, the importance of water and its conservation.

The **City of Peterborough** Waste Management staff also provides sustainable education opportunity to schools, agencies, and special interest groups on the 3Rs, waste services, audits, the value of recycling, composting and environmental awareness. City staff regularly attends community outreach events,

setting up displays, handing out information and providing presentations on topics of interest.

Kawartha Outdoor Education Centre provides over 50 interactive curriculum-based programs for grades 1 to 8 on science & technology, geography, social studies, history, the arts, and health and physical education. In addition, the new **Camp Kawartha Environment Centre**, housed in *Canada's Most Sustainable Building*, delivers over 40 environmental education programs that are linked to the school curriculum. The Centre also offers workshops on environmental education to Trent's School of Professional Learning, and workshops, lectures and seminars on sustainability to the general public.

Trent Centre for Community-Based Education is an independent, not-for-profit organization that connects post-secondary students and faculty with local organizations to create community-based research, community service-learning and experiential education opportunities. The organization works within the City and the County as well as within the County of Haliburton.

Kawartha World Issues Centre is a community-based, non-profit, education and resource centre that promotes dialogue and understanding of world issues to enable people to create positive social and environmental change. The organization serves the Peterborough and surrounding communities.

FACTS

County Health Stats (2010):

- *Mortality rate: 950 per 100,000 people*
- *Total deaths: 1,300*
- *Hospitalization rate: 468 per 100,000*

Are we taking care of ourselves in a sustainable manner?

Health and Wellness

The County of Peterborough lies under the Central East LHIN, and overall health of the community is managed by the **Peterborough County-City Health Unit**. This organization provides a variety of programs and services to the ten municipalities and two First Nations groups including:

- Family planning and family services (e.g., breastfeeding, pregnancy, toddler development programs);
- Chronic disease prevention;
- Clinical services (sexual health, travelling clinic);
- Dental health;
- Environmental Health (e.g. beach testing);
- Immunization clinics and infection control; and,
- School and workplace health.

The main health care facility in the County is the **Peterborough Regional Health Centre** (PRHC), which serves 300,000 people across four counties, services by 494 beds. PRHC is the largest employer in the

region.

Physician Recruitment is jointly funded by the City and the County, with the assistance of the GPAEDC. A number of incentives are offered for physicians who choose to locate in the area. The aim of the program is to attract physicians to the GPA area and help them to make a smooth transition.

There are four long-term care facilities in the region. **Peterborough Hospice**, which at this time provides support only, has plans to build a residential facility in the near future.

Mental health is supported in the GPA through the **Canadian Mental Health Association's Peterborough Branch** which serves the GPA and promotes a healthy mental state by providing case management services for individuals with mental illness, court diversion programs and supportive housing. In addition, the Peterborough Support Group of the **Mood Disorders Association of Ontario** aims to help individuals and families impacted by mood disorders to recover and heal. The organization provides: awareness, education and training; family and youth clinical support; recovery programs; and peer support for mood disorders.

The **Down Syndrome Association of Peterborough** is a not-for-profit charitable organization supporting families and residents with Down Syndrome throughout Peterborough and Northumberland Counties, as well as the City of Kawartha Lakes. The organization strives to normalize and enrich the lives of people with Down Syndrome in an effort to ensure they reach their fullest potential, living a meaningful life. They also advocate for acceptance and opportunities for persons with Down syndrome within the community.

There are currently five community homes in the City, supported by **Community Living Peterborough**. The organization supports people in a group living environment, provides family support such as educational workshops, and hosts a community support program that allows people to become active members of the community.

Another health organizations in the area is the **Greater Peterborough Health Services Foundation**,

FACTS

Long-Term Care Facilities:

- *Extendicare Lakefield (100 beds)*
- *Fairhaven (256 beds)*
- *Extendicare Peterborough (172 beds)*
- *St. Joseph's (208 beds)*

which is a not-for-profit organization dedicated to improving the health services available in the GPA. Formerly known as the St. Joseph's Care Foundation, the organization supports local family health teams through funding equipment, education and research, while promoting preventative action and healthier lifestyles.

Accessibility

Accessibility issues within the County of Peterborough area managed by accessibility committees, with the general goal of improving the quality of life for all persons with disabilities by promoting equal opportunities in all aspects of life.

Currently in place are the **Joint County of Peterborough and Township of Smith-Ennismore-Lakefield Accessibility Advisory Committee**, and the **City of Peterborough Accessibility Advisory Committee**.

In addition, the **Kawartha Participation Projects** (KPP) provides accessible housing and support services to people with disabilities within the counties of Haliburton, Northumberland, Peterborough and Kawartha Lakes. The organization works to help disabled people live as independently as they choose.

Are we able to support ourselves and our children to maintain a good quality of life?

The median income of Peterborough households is \$45,335, which is \$6,782 below the Ontario median. The median income for just the City of Peterborough is a bit lower, at \$42,349.

Table 4.2: Income in 2005, Peterborough versus Ontario									
	County of Peterborough			City of Peterborough			Ontario		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Median income for households after-tax	\$45,335			\$42,349			\$52,117		
% low income after tax- persons less than 18 years of age	\$22,517	\$27,926	\$18,708	\$22,081	\$27,146	\$18,825	\$24,604	\$30,182	\$20,201

A widening gap between different groups of wage earners is evident. The median earnings for those in the bottom fifth of earners dropped by 10.4 % to \$15,005 from 2000 to 2005. Incomes for those in the top fifth increased by 6.7% to \$81,863 over the same five year period.

A report on poverty within the City and County of Peterborough was completed in November 2008 by the **Roots Causes of Poverty Working Group**. The report provides a clear picture of current poverty issues, and the extent of poverty within the Peterborough area, focusing on all age groups and populations, housing, food security, health, transportation and employment, among other topics. The report also provides a number of recommendations to reduce and alleviate poverty in the region.

Almost 1 in 10 people in the City and County of Peterborough live in poverty. This level is somewhat higher in the City of Peterborough (12.6%) compared to the combined City and County (9.1%), while rates in the province are at 11.1%. Females and children and youth under 18 have higher levels of poverty than the general population.

Table 4.3: Low Income Persons in Private Households									
	County of Peterborough			City of Peterborough			Ontario		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
% low income after tax – all persons	9.1	8.4	9.8	12.6	11.3	12.7	11.1	10.5	11.6
% low income after tax- persons less than 18 years of age	9.7	9.0	10.4	13.4	12.4	14.5	13.7	13.7	13.8

The number of adults and children in the GPA that were receiving Ontario Works and the Ontario Disability Support Program (ODSP) are shown below.

Table 4.4: Number of Individuals and Families Receiving Social Assistance

	City of Peterborough		County of Peterborough	
	Adult	Children Under 18	Adult	Children Under 18
Ontario Works (June, 2008)	2,658	1,140	594	306
Ontario Disabilities Support Program (Aug. 2008)	3,083	493	770	124

Housing

As of December 2003 there were 2,098 rent-geared-to-income (RGI or social) housing units within the County and City of Peterborough. This included 1,282 mixed, 590 seniors only with no supports, 82 seniors only with supports, 92 supportive housing, and 52 housing for victims of violence and their children. The Federal-Provincial Affordable Housing Program (AHP) has provided 416 housing units in the City of Peterborough and Lakefield since 2003.

There are several shelters for the homeless within the City of Peterborough and total bed days within these organization increased 22% from 2008. The shelters include:

- Cameron House (Women's shelter) - 267 Clients in 2005 and 3,563 'bed days' in 2009
- Youth Emergency Shelter - 477 Clients in 2005 and 5,534 'bed days' in 2009
- Brock Mission - 1,203 Clients in 2005 and 8,747 'bed days' in 2009
- Our Space – Drop in Centre only

FACTS

In February 2010 there were 1,501 applicants waiting for rent-geared-to-income housing (Community Assessment Report 2010).

Affordable Housing within the GPA is overseen by the **City of Peterborough Housing Division**, which administers the social housing portfolio for both the City and County. The Housing Division oversees the operations of 22 publicly funded housing providers. The **Peterborough Housing Corporation** (PHC) is the City of Peterborough's non-profit housing organization, which provides property management services and develops new affordable housing projects. The PHC provides social housing to approximately 818 households and affordable housing to 190 households. Also providing assistance is the **Peterborough Rent Support and Stabilization program** (PRSSP) which helps low-income renters who are having trouble paying their monthly rent, who owe their landlords, or who wish to move into a new unit, to pay their rent. The **Rent Supplement Program** also provides Social Housing tenants with rent-geared-to-income accommodation in privately owned buildings, and currently assists with 308 households in the City of Peterborough.

The City of Peterborough has an ***Affordable Homeownership Assistance Loan Program***. At this time no funds are available for the program; however, they may be in place again in the future. ***Housing Access Peterborough*** is where residents can go to apply for subsidized housing programs for both the City and the County, and find out where they are eligible for subsidized housing programs.

The ***Peterborough Social Planning Council*** covers all social issues and serves as a resource for information on social planning and trends through research, community development, and public education. They believe that decent, affordable housing is a fundamental right for all citizens and have developed a report to help the community create, implement and advocate for solutions to the housing crisis. In addition, the ***Affordable Housing Action Committee*** works to identify, sort and assign affordable housing needs, increase awareness of, and commitment to affordable housing needs and policies, and influence policy development within all levels of government. Lastly ***Peterborough and District Habitat for Humanity*** is a community-based, not-for-profit organization working to mobilize volunteers and community partners in building affordable housing and promoting homeownership in order to break the cycle of poverty. The organization has completed nine houses within the City of Peterborough since 2002.

How do we support a sustainable society? How do we maintain a sense of community? How do we help community members that need help?

Community Engagement

There are a number of opportunities for residents to be engaged and involved in their communities. Some organizations in the area are listed below:

- ***Lions Clubs*** support sight programs such as vision screenings and glasses recycling. They also support health programs that focus on hearing loss and diabetes control, as well as prevention and participate in environmentally focused programs such as tree planting, recycling, education, and litter removal. Clubs include: Peterborough Lions Club, Peterborough Lioness Club, Millbrook Lions Club, Norwood Lions Club, Havelock Lions Club, Keene Lions Club, Apsley & District Lions Club, Lakefield & District Lions Club and Warsaw Lions Club.
- ***Rotary Clubs*** undertake projects and activities to improve life in the community, such as tree planting or road clean-ups, as well as contribute to hospitals and other community organizations and events. Clubs include: Rotary Club of Peterborough-Kawartha, Rotary Club of Peterborough, Norwood Rotary Club, and Bridgenorth-Ennismore-Lakefield Rotary Club.
- ***Probus Clubs*** are not service clubs, but are formed to provide social events and to schedule speakers to keep community members up to date with community issues and happenings. Members may participate in an array of events, and at meetings will hear from a community member who speaks on community issues, events, and projects, and answers any questions that members may have. Clubs include: Peterborough & District Probus Club and Lakefield & District Probus Club.

- **Legions** provide veteran and senior services such as home support for those living independently and Meals-On-Wheels. Legion Halls also provide a gathering space for a variety of community events. Branches include: RCL Branch 52 (Peterborough), RCL Branch 402 (Millbrook), RCL Branch 389 (Havelock), RCL Branch 300 (Norwood) and RCL Branch 77 (Lakefield).
- **Peterborough Kinsmen Club** is a service club that contributes to community organizations such as United Way and hosts community events such as the Santa Claus Parade and soap box derby.
- **Knights of Columbus** (Peterborough) is a men's fraternal charitable organization that works closely with the Arthritis Society as well as a number of local charities.
- **Kiwanis Club of Peterborough** is a service club that focuses on sponsoring and assisting with youth programs, helping the Salvation Army, raising funds for healthcare in the community, and supporting local events.

Many opportunities are also available for volunteering in the area for organizations such as the United Way of Peterborough and District, YMCA of Peterborough, Peterborough Regional Health Centre, Adopt-a-Road programs, libraries, various committees, the Police Services Board, and the Business Improvement Association. Volunteering in the community is generally overseen by **Peterborough Council for Voluntary Services** which acts as a hub for volunteering activity in the City, and works with organizations and volunteers to provide training, referrals and all-round support. Most organizations appear to conduct their own volunteer recognition programs.

Youth Engagement

The Ontario Partnership for Active and Engaged Youth has recognized Peterborough as a Youth Friendly Community. For youth in the area, opportunities to become involved in the community are numerous. The **City of Peterborough Youth Council** provides members with leadership skills, responsibility and an opportunity to contribute to the community. The council also provides a positive connection to other youth and adults in the community.

Girl Guides of Canada, Peterborough Division, offers opportunities for young girls to take part in sports, camping, science, fashion design and community projects. **Scouts Canada, Kawartha Waterways Area**, also offers programming for a wide range of age groups and gets involved in local initiatives such as assisting Conservation Authorities with tree planting projects. The **Peterborough County 4-H Association** teaches children and youth about agriculture, good health, and the environment, helping them to gain self-confidence, a sense of responsibility and a useful skill set. In addition, **Big Brothers and Big Sisters of Peterborough** offers a range of programs including in-school mentoring, couples matching and group events. **Kawartha World Issues Centre** provides opportunities for youth to become involved in local initiatives as well as conferences and youth days.

Youth events include Blue Sky which is a celebration of **National Youth Week**, and features a number of activities and local youth bands, and the **Peterborough Children's Water Festival**, which provides children with an opportunity to learn about the importance of water.

Community Support and Services

Community support organizations include **Alcoholics Anonymous District 86**, and the **Al-Anon Family Groups District 32**, the **Youth Gambling Awareness Program** offered by the Peterborough YMCA, and the **Peterborough Drug Awareness Coalition**, which is dedicated to preventing the misuse of drugs and alcohol in the City and County. The organization comprises a number of health and social partners and has delivered several recent projects on Safer Bars, youth prevention projects, Operation Lookout - Choose Your Ride, and safe and sober driving, boating, ATVing, and snowmobiling.

Support is also available for the Gay, Lesbian, Bisexual and Transgender population in Peterborough area. The **Peterborough Lakefield Community Police Service Liaison Committee With the G,L,B,T Communities** provides a channel of communication between the police and these communities with the goal of enhancing the overall safety. The **Rainbow Youth Coalition** strives to develop safer spaces for queer youth in the GPA and beyond, through education on the needs of queer youth, providing settings for queer youth to meet and socialize, and advocating for the development of safer and inclusive spaces. The **Trent Queer Collective** provides a safe space, resource, and opportunities for queer students at Trent, and aims to foster a safe and anti-oppressive environment, which affirms and celebrates the diversity and intersectionality of all queer identities. **Fleming's Association of Queer Students and Their Supporters** offers a positive environment for all sexualities, free from any prejudice or harassment. They also want to provide a safe place where people can go to discuss any topic or issues. Lastly, the **Rainbow Service Organization** is committed to promoting, advocating, and celebrating the interests of queers, and running special events such as Peterborough Pride.

Organizations focusing specifically on youth include **Peterborough Youth Services**, which provides individual, family, group, and outreach/crisis counselling and support for youth issues such as bullying, peer pressure and depression. In addition, **Kawartha Youth Unlimited** and **Lakefield Youth Unlimited** helps youth to achieve their potential through several initiatives, including a mentoring program that matches youth with an adult mentor.

Poverty Support

A number of organizations are active in the GPA that provide support for those in poverty. The **Peterborough Poverty Reduction Network** (PPRN) works to inspire people to ease and reduce poverty, and has engaged over 100 residents and business owners/managers to work on projects that reduce and alleviate poverty. The organization advocates for secure and affordable housing, food and income, employment with good wages, continued access to education and training, opportunities for people to reach their potential, including being involved and included, and support for continually changing needs throughout life.

The **Peterborough Coalition Against Poverty** is an anti-poverty group, comprising poor people and their allies. The organization develops social justice campaigns against government policies for the poor, homeless and working communities, and provides free advocacy for all individuals and families. In addition, the **Community Counselling and Resource Centre of Peterborough** is a not-for-profit, community-based agency that focuses on making a positive and lasting difference in people's lives and in the community. They offer counselling, support and resources to help with personal well-being, credit

and financial management and access to housing. In the past year they have assisted more than 11,000 people, including the counselling of 1,800 people, and providing housing assistance through their Housing Resources Centre for 4747 households.

United Way of Peterborough & District seeks to enhance community life and build stronger, healthier communities by connecting community needs to community resources. They support 152 programs and services, providing assistance to 42,000 residents in the City and County of Peterborough. The organization provides funding to its 33 member agencies, as well as special project grants and loans, community impact grants, and youth grants.

Salvation Army Community and Family Services helps community members to meet a variety of needs during difficult times. Programs include emergency assistance (access to food, heat, hydro, medical), produce box program (participants pay \$10 for an order at the beginning of the month), a financial management program, a breakfast program, emergency disaster service, and the distribution of snacks and juice to identified priority schools. The **YWCA Peterborough, Haliburton and Victoria Chapter** focuses on supporting the right of all women and their families to live free from violence, poverty and oppression and provides an emergency shelter and counseling to women and their children who are in a threatening or abusive situation. Lastly, **Kawartha-Haliburton CAS** provides services such as adoption, foster care, supervised access, legal services, and behavioural intervention for at risk children.

Recreation for underprivileged residents is also offered by the **Peterborough YMCA** which believes that all individuals in the community should have the opportunity to join the YMCA regardless of their financial circumstances. The YMCA will provide assistance where possible. In addition support programs for seniors are offered through the **Royal Canadian Legion** which provides home support and augments existing programs such as meals-on-wheels.

Other more specific services are also available for poverty-related issues. The County's Social Services Division offers a **Van Shuttle Service** for Ontario Works and ODSP clients. The van travels throughout the County on an as needed basis and is generally used for employment and placements, job interviews and occasionally other reasons such as medical appointments. There are also a number of food banks and initiatives in the County. The **Kawartha Food Share** (KFS) is a distribution warehouse for emergency food for 41 member agencies across the City and County, supporting more than 7,100 people each month. KFS also provides food to 45 schools for breakfast programs. Its members, meal programs and food cupboards include:

- **KFS member agencies:** Good Neighbours Care Centre; Salvation Army Peterborough; St Vincent DePaul Immaculate Conception, Sacred Heart, St Alphonsus, St Anne's, and St Peter's.
- **KFS Meal Programs:** Brock Mission, Food for Kids, KPED School Board, Our Space, Out of the Cold, Seventh Day Adventist Church, St John's Church.
- **KFS client food cupboards:** Big Brothers & Big Sisters, Canadian Mental Health Association, Learning Disabilities Association of Peterborough, NijkiwendidaaAnishnaabekwewag Services Circle, OPIRG – Sadlier House, Partners in Pregnancy Clinic, Peterborough AIDS Resource Network, Peterborough Community Chaplaincy, Peterborough Family Resource

Centre, Peterborough Housing Corp, Peterborough Youth Services, Rural Outreach Committee, St Luke's Food Cupboard, Trent Child Care, Youth Unlimited, Youth Emergency Shelter, YWCA Centennial Food Cupboard.

Other food banks in the GPA include:

- Millbrook Food Share
- Havelock Food Bank
- Hastings Food Bank
- Norwood Food Bank
- North Kawartha Food Bank
- Lakefield Food Bank
- Curve Lake Food Bank

In addition, ***Kids Against Hunger Peterborough*** helps to provide food for hungry children in the area, while ***Food not Bombs*** collects surplus food that would otherwise go to waste, and has weekly gatherings where the gathered food is cooked and shared. The ***Community Food Network***, which is part of the Poverty Reduction Network seeks to address and prevent hunger in Peterborough through partnering with agencies such as KFS to maintain the food programs offered in the City and County. The organization strives to ensure that everyone in Peterborough has enough healthy food to eat. In addition, the ***Community Garden Network*** is a group of committed garden enthusiasts who work together to advocate for the increased presence of community gardens throughout the County and City of Peterborough, connecting people with land, and creating conditions for gardeners and communities to flourish. They also develop community gardens as a key tool for food security, ecological integrity and community building. Lastly, ***Kawartha Community Food Centre*** encompasses a number of organizations to revive traditional connections to food by raising awareness about local food in the urban environment while revitalizing the agricultural landscape and farming tradition of this area.

FACTS

Kilometres of trail per 1000 people:

- *City of Peterborough: 0.36*
- *Cavan Monaghan: 0.98*
- *Havelock-Belmont-Methuen: 0.97*

How do parks, recreational activities and other institutions deliver sustainability?

Parks and Trails

There are numerous opportunities for outdoor recreation within the GPA, with the amount of open space varying throughout the region. Cavan Monaghan and Havelock-Belmont-Methuen have 9 and 10 hectares respectively. When broken down to the amount of open space per 1,000 people, the City of Peterborough, and the Townships of Cavan Monaghan, Havelock-Belmont-Methuen and North Kawartha have access to 5.145, 1.0, 2.42 and 1.708 hectares per 1,000 people respectively. There are

also a number of trails in the Peterborough area, with 27 km within the City of Peterborough alone, and the Trans-Canada Trail Network travelling through Lindsay, Peterborough and Hastings for over 40 km, joining with the Lakefield Trail in Smith-Ennismore-Lakefield. Cavan Monaghan and Havelock-Belmont-Methuen have 9 km and 4 km of trails respectively.

The Peterborough County Forest occupies a total of approximately 2,130 hectares of County owned lands within the County of Peterborough. Six parks and 3.6 hectares of parkland currently exist in Cavan Monaghan Township, while seven are in Smith-Ennismore-Lakefield Township and one is in the Hiawatha First Nations. The Robert Johnston EcoForest Trails property, located in Douro-Dummer, is a 50 acre parcel of land that has been developed into a trail system for recreational use with 5.2 km of trails.

Several organizations and committees oversee the maintenance and development of trails and parks including:

- Ontario Trails Council
- Lakefield Trail Stewardship Committee
- Rotary Greenway Trail Committee
- Millbrook Valley *Trails Committee*
- Peterborough and Region Trails Committee
- Kawartha Trans Canada Trail Association
- Kawartha Bike and Hike Association
- Ganaraska Hiking Trail Association

Recreation

Recreational programs are available throughout the GPA, offered through private organizations, municipal recreation departments, and not-for-profit organizations such as the YMCA. Recreational opportunities include hockey, lacrosse, swimming, skating, gymnastics, soccer and a number of other activities. Recreational programming is also available for other hobbies such as horticulture, bridge, Scottish and English dancing, and photography. An example of the selection of organizations present in the area includes:

- Apsley Bowmen
- Bridge Club
- Buckhorn District Snowmobile Club
- Country Kickers Line Dancing (Apsley)
- Champions Gymnastics Club
- Junior Lakers
- Kawartha Gymnastics Club
- Kawartha Nordic Ski Club
- Kawartha Pool League
- Lakefield Skating Club Millbrook & District Garden Club
- Peterborough Crystal Blades Synchronized Skating Team
- Peterborough Cycling Club Peterborough Girls Hockey Association
- Girls Hockey Association
- Peterborough Lift Lock Square Dance Club
- Peterborough Scottish Country Dance Society

- Lakefield Horticultural Society
- Trent Latin Swing Dance Club
- Peterborough Rowing Club

There are twelve recreation/community centres throughout the GPA, including six in the City of Peterborough, one in Cavan Monaghan (plus one outdoor facility), one hockey arena in Asphodel-Norwood, two in Smith-Ennismore-Lakefield (plus two outdoor facilities), and two in Douro-Dummer.

The amount of total recreational space varies greatly among the townships, with 41,980 square metres in Cavan Monaghan and only 3332 in Havelock-Belmont-Methuen. In proportional terms, there are 432, 4545, 806 and 1701 square metres of indoor recreational space in the City of Peterborough, Cavan Monaghan, Havelock-Belmont-Methuen, and North Kawartha townships respectively.

Outdoor recreation also varies with Cavan Monaghan having 2100 square metres available, while the City of Peterborough and Havelock-Belmont-Methuen only possess 468 and 684 respectively. Lastly, outdoor recreation space per 1000 people is high in North Kawartha at 3416 square metres, while only 227 and 165 in Cavan Monaghan and Havelock-Belmont-Methuen respectively.

Have we provided for the long-term identification, protection and sustainability of our cultural assets?

Identification and Preservation

In the GPA, there are currently 20 provincial and 76 local heritage sites, as well as seven National Historic Sites and Sites of Significance Heritage, and two aboriginal settlements, namely Curve Lake First Nations and Hiawatha First Nations. In addition, a Cultural Heritage Inventory is currently being

The City of Peterborough has recently been awarded the prestigious Lieutenant Governor's Ontario Heritage Award for Community Leadership for outstanding contributions to the identification, preservation, protection and promotion of Ontario's heritage.

developed for Peterborough County by the Trent Centre for Community Based Education and the Kawartha Heritage Conservancy. The project is ongoing and is collecting geo-referenced (using GPS) and/or significance-assessed cultural heritage data through the County of Peterborough and the City of Kawartha Lakes, in order to enhance the cultural heritage database. Data is currently being sought on archeological sites, mills

and processing plants, historical industrial sites, natural heritage as a cultural heritage resource, tourism sites in the Kawarthas, and schools and churches.

A cultural mapping process for the City of Peterborough has already been completed and revealed 42 heritage, education and umbrella organizations, as well as 142 arts and cultural organizations, a number of professional cultural works, and 350 businesses relating to cultural activity. A similar cultural mapping process is

FACTS

Total participation hours for recreation programs per 1000 people:

- *City of Peterborough: 30,847*
- *Cavan-Monaghan: 26,149*
- *North Kawartha: 15,650*

underway for Cavan Monaghan, which will help to identify community organizations, cultural industries and businesses, cultural and creative occupation, cultural and natural heritage, festivals and events and facilities and spaces.

To help identify, protect and ensure the sustainability of existing and future cultural and heritage sites, a number of organizations, committees, programs and initiatives are currently in place in the Peterborough area, and are detailed below:

Kawartha Heritage Conservancy, a not-for-profit land trust, currently plays an important role in heritage conservation by working with landowners and the community to identify and protect important ecological, heritage and cultural features within the Kawartha bioregion.

The ***Architectural Conservancy of Ontario*** (ACO) is a charitable organization that works through a number of local community branches across Ontario to preserve Ontario's architectural and environmental heritage. The ACO works to raise awareness of preserving community heritage, and presses for heritage legislation and funding in Ontario. The Peterborough branch of the ACO was opened in 2006.

Trent Centre for Community-Based Education is an independent, not-for-profit organization that enhances the social, environmental, cultural and economic health of surrounding communities by connecting students and faculty with local organizations, in order to develop community research, service learning and experiential education opportunities.

Lakefield Heritage is a not-for-profit, informal research group that was formed to increase awareness of the rich heritage of the Village of Lakefield to residents and visitors. The organization leads historical walks in the summer, as well as publishes books and information on Lakefield history.

Peterborough Historical Society is a not-for-profit organization that plays a key role in preserving and promoting the area's rich architectural and cultural history. Among its other activities, the organization hosts public meetings and publishes books and papers on historical subjects, erects historical plaques, contributes to the development of heritage policies, produces a monthly Bulletin and presents annual heritage and history awards to the community. Similar organizations also exist in the individual townships including:

- Millbrook & Cavan Historical Society
- Belmont Methuen and Havelock Historical Society
- Otonabee-South Monaghan Historical Society
- Asphodel-Norwood Historical Society
- Burleigh Road Historical Society
- Greater Harvey Historical Society
- Lakefield Historical Society
- Douro-Dummer Historical Society

Trent Valley Archives is a public advocacy group that promotes the preservation, identification and care of archives. The organization also advocates for more access to archival collections and favours the development of public, regional, municipal and county archives. It also encourages businesses and organizations to include archiving as part of their record management programs and assists individuals in the proper keeping and management of their archives.

Peterborough Architectural Conservation Advisory Committee (PACAC) is a municipal heritage committee, established under the *Ontario Heritage Act*, which encourages community participation in local heritage conservation. The organization advises Peterborough City Council on heritage conservation and designation, cultural landscapes and heritage districts. They also carry out an inventory and research on heritage and cultural properties and work closely with the Heritage Preservation Office in Peterborough City Hall. They also encourage property owners to have regard for the heritage aspects of their properties, hold special events and produce a newsletter called Peterborough Heritage Review.

The **Arts, Culture and Heritage Advisory Committee** advises and supports the Arts, Culture and Heritage Division of the City of Peterborough. The organization advises, formulates and recommends policies to Council on arts, cultural and heritage matters.

The **Museum and Archives Advisory Committee** advises Council in the City of Peterborough, and the Arts, Culture and Heritage Division on the management and regulation of the Peterborough Centennial Museum & Archives.

Museums and Resources

Peterborough Museum and Archives preserves, present and promotes the heritage and culture of Peterborough and area, and celebrates its history through stories, images and traces of people and the land. The organization provides significant heritage programs for the education and enjoyment of visitors as well as residents.

The **Canadian Canoe Museum** is a natural heritage centre that explores the canoe's significance to people within Canada. The museum has the world's largest collection of canoes, kayaks and paddled watercraft and visitors can learn how the canoe has defined the Canadian character and spirit.

Hutchison House is a living museum providing a glimpse of life in Ontario in the 1800's. The museum provides guided tours and special events, and conducts Scottish Teas during the summer.

Hope Mill was built on the bank of the Indian River in the 1800's. This historic landmark remains on its original site and is owned by Otonabee Conservation, which has restored the mill with the help of Algonquin Forest Authority and now provides demonstrations of its sawmilling operations.

Lang Pioneer Village Museum was established in 1967 to celebrate and preserve the rural history of the area, and enables visitors to see how the pioneers lived. The museum features over twenty-five restored and furnished buildings constructed between 1825 and 1899. It offers a number of special events and educational programs.

Petroglyphs Provincial Park lies within the forest northeast of Peterborough and contains the largest known concentration of Aboriginal rock carvings in Canada. The Petroglyphs show turtles, snakes, birds, humans and other images. The park also offers hiking trails through the nearby forests, wetlands and rocky ridges, and has established an *Explore The Learning Place* interpretive centre.

Arts and Culture

The GPA enjoys a culturally vibrant community with various arts and cultural events and activities held throughout the year. There are over 300 festivals and events held in the GPA each year.

There are 29 visual art galleries and five performing arts venues in GPA. The **Art Gallery of Peterborough**, the GPA's primary gallery for visual arts, offers visual art classes to adults, youth, and schools. Its vision is to be a gathering place that engages the community and promotes the arts as a cornerstone of community creativity and development.

Numerous events, exhibits, and productions are offered by the local arts organizations. **Artspace** is an artist-run centre that provides presentation opportunities for artists. **The Art School of Peterborough** offers a variety of courses in visual arts.

Where do we stand in comparison to other areas of Ontario?

The GPA is a strong community. There is a strong sense of pride and belonging amongst the community and a connection to the natural environment and history of the area. The people who live in the GPA generally want to stay in the area as they relate to the identity of the area. People are also retiring here. The population is aging and this has implications on health and other community services.

There is a balance between urban and rural across the region – people work, live, and play all within the same area. There are connections between the urban and rural; however, there are also some tensions as well.

There are strong post-secondary educational resources in the GPA with Trent and Fleming. The community has a higher than average level of education, generally focused more in the City of Peterborough. Retaining young, educated people in the community can be a challenge, as it is for most other rural areas of Canada. The area is lacking cultural diversity and which in turn makes it difficult to attract new immigrants.

Poverty does exist. Income levels are lower than Ontario as a whole and there is a widening gap between the rich and the poor. Community support programs are in place for lower income members of the community and other community members that need them.

There are strong heritage resources and a sense of preservation in the GPA. Cultural heritage resources are well documented. Most downtowns are intact and have been maintained as strong downtown cores with cohesive neighbourhood feelings.

The GPA has a diverse base of entertainment, creative arts, and a creative sector. The GPA places high on the list of creative cities by the *Ontario's Small-Sized Regions' performance on the 3Ts of Economic Development* – a report from the Martin Prosperity Institute, led by Richard Florida. The report ranked Peterborough 3rd for the category Talent: Human Capital and the Creative Class among the Ontario seven regions. This was 7th place of the total 17 regions across Canada and the United States.

Economic Pillar

What do we make? What do we do? Is our economy sustainable? How is our economy supporting sustainability?

FACTS

Retail Sales in the GPA were 22% above National Average in 2009 (GPAEDC)

The Greater Peterborough Area revolves around the industries of Other Services (20.4%), Business Services (15.9%), Healthcare and Social Services (12.5%), and Retail Trade (12.7%), while Finance and Real Estate, and Agriculture are comparatively very small at only 4.5% and 4% respectively. Established and growing sectors include Aerospace/Aviation and the Peterborough Airport, Innovation, Tourism Development, Advanced Manufacturing, Agriculture & Rural, and Food Processing.

The GPA ranked #1 among the seven Ontario regions in the category Technology: Innovation and High-Tech Production in Ontario's Small-Sized Regions' performance on the 3Ts of Economic Development study.

Renewable energy is also becoming a significant and growing industry. The Industrial Transition and Investment Project of the GPAEDC and the Greater Peterborough Innovation Cluster, supports the expansion of the Nuclear, Wind, Solar and Water Treatment Industries in the GPA. This project will present industry opportunities to GPA small and medium-sized businesses and enable development activities for these industries within Peterborough region.

Major industrial employers in the area include General Electric (1100-1200 people), PepsiCo Foods (650-750 people) and Sysco Food Services (525-625 people). Major employers of Peterborough area commuters are General Electric in Oshawa (725-825 people) and Ontario Power Generation in Clarington and Pickering (300-400 people). Other large industrial employers that employ at least 100 people include:

- SGS Lakefield Research
- Minute Maid (Coca-cola)
- Ventra Plastics
- McCloskey International Limited
- Siemens Milltronics
- Safran Electronics
- Swish Maintenance / Charlotte Products
- Trent Metals
- Unimen Canada
- Nefab Inc.
- FisherCast Global
- Savage Arms

➤ Flying Colours/Rapid Air

Major non-industrial employers are Peterborough Regional Health Centre Health Care & Social Assistance (2,100-2,200 people), Public School Board (FT Peterborough) Educational Services (1,300-1,400), and City of Peterborough Public Administration (1,150-1,250 people). Other non-industrial employers, employing over 100 people include:

- | | |
|--|---------------------------------|
| ➤ Trent University | ➤ St. Joseph's at Fleming |
| ➤ Ministry of Natural Resources | ➤ Extendicare |
| ➤ Separate School Board (Peterborough) | ➤ GTS Lufthansa |
| ➤ Aon Inc. | ➤ Zellers |
| ➤ Sir Sandford Fleming College | ➤ Costco |
| ➤ AmeriCredit Financial Corporation | ➤ Royal Bank |
| ➤ Minacs Worldwide | ➤ Sears Canada |
| ➤ Wal-Mart | ➤ OLG Slots at Kawartha Downs |
| ➤ Loblaws | ➤ Kawartha Downs & Speedway |
| ➤ Fairhaven | ➤ Peterborough Utility Services |
| ➤ Sobeys | ➤ Canada Post |
| ➤ ICT Group | ➤ Kawartha Credit Union |
| ➤ McDonalds (all locations) | ➤ Riverview Manor |
| ➤ Canadian Tire (all locations) | ➤ Morello's Independent Grocers |
| ➤ Coach Canada | ➤ Victorian Order of Nurses |
| ➤ Home Depot | |

How are we employed? How many of us are working? Where do we work?

Employment rates vary throughout the region, ranging from just 47.2% in Havelock-Belmont-Methuen to 79.9% in North Kawartha. Unemployment ranges from 4.6% in Smith-Ennismore-Lakefield to 12.5% in the Curve Lake First Nations area. Most areas average 6-8% (Table 4.3). The average income for families in 2005 was \$37,696 in Curve Lake and up to \$75,770 in Cavan Monaghan, and the number of hours of unpaid work for those 15 years and older range from just 775 hours in Curve Lake to 13,715 in Smith-Ennismore-Lakefield, and 56,940 in the City of Peterborough.

Of the employed labour force, aged 15 years and over, most worked at their usual address, and within Ontario and Canada. A relatively large proportion of the county (18.6%) worked either from home or, having no fixed workplace address, from a variety of locations. Many also travelled to another municipality within the County to work, with few people working within their own townships, aside from those living within the City of Peterborough.

Table 4.5: Labour Force Statistics for the Greater Peterborough Area

	County of Peterborough	City of Peterborough	Cavan Monaghan	Havelock- Belmont- Methuen	Otonabee- South Monaghan	Asphodel- Norwood	North Kawartha	Cavendish & Harvey	Smith- Enismore- Lakefield	Douro- Dummer	Hiawatha First Nation	Curve Lake First Nation
Total employed labour force 15 years and over	63,950	35,255	4,770	1,915	3,630	1,985	990	2,395	8,750	3,575	n/a	455
<i>Worked at home</i>	5,320	1,940	585	205	450	300	210	285	810	470	n/a	45
<i>Worked outside Canada</i>	280	175	0	10	10	0	0	35	35	10	n/a	0
<i>No fixed workplace address</i>	6,575	3,030	605	315	400	175	175	385	905	425	n/a	100
<i>Worked at usual place</i>	51,780	30,115	3,585	1,390	2,770	1,510	600	1,690	7,000	2,665	n/a	315
Worked in census subdivision (municipality) of residence	27,500	23,990	420	320	305	315	190	280	1,360	185	n/a	135
Worked in a different census subdivision (municipality) within the census division (county) of residence	15,310	2,375	1,805	550	2,015	840	280	545	4,535	2,130	n/a	130
Worked in a different census division (county)	8,815	3,670	1,350	515	450	340	130	860	1,080	335	n/a	20
Worked in a different province	155	75	10	0	0	10	10	0	25	10	n/a	0
Agriculture and other resource-based industries (%)	4	2.2	7	9.8	8.3	12.5	3.8	2.7	4.2	8.6	n/a	2
Construction (%)	7.4	5.5	8.3	12.3	9.8	9.7	11	14.3	8.5	9.5	n/a	14
Manufacturing (%)	10.8	10.3	13.3	10.3	11.9	10.4	9.6	7.5	12.1	12.2	n/a	4
Wholesale trade (%)	3.6	3.6	4.9	3.7	2.9	4.2	1.4	4.4	3	3.5	n/a	0
Retail Trade (%)	12.7	13.6	8.6	14.3	10.2	15.8	12.4	14.6	12.1	10.2	n/a	12
Finance and real estate (%)	4.5	4.6	2.8	2.7	2.6	4	9.1	5	5.7	5	n/a	3
Health care and social services (%)	12.5	13.5	11.4	10.3	12.1	9.2	9.1	8.7	11.3	11.8	n/a	15
Educational services (%)	8.2	8.9	7.9	5.4	8.1	5	6.7	6.2	8.3	7.8	n/a	5
Business services (%)	15.9	16.7	17.1	15.2	13.1	13.4	13.4	17.1	14.3	13.1	n/a	16
Other services (%)	20.4	21	19.2	15.5	20.1	15.8	23.4	19.7	20.4	18.2	n/a	29

How are we able to attract and retain a skilled workforce?

In the GPA, there are currently 12,450 immigrants, with the majority living within the City of Peterborough. Most immigrants (10,325) arrived before 1991, with only 1170 arriving between 1991 and 2000, and another 250 arriving between 2000 and 2006, indicating that immigration to the area has dropped drastically in recent years. Attracting and retaining immigrants is a real pressure facing the GPA.

The **Peterborough Partnership Council on Immigrant Integration (PPCII)** works to promote, advance, and support coordinated immigrant integration within Peterborough, regardless of immigrant status or any prohibited ground based on the Ontario Human Rights Code and the Canadian Human Rights Act. The organization believes that immigrant integration is essential for the long-term social, cultural, economic and environmental success of the County. They have recently completed the 2010-2015 Integration Strategy for the City and County, and continue to:

- Advocate for prioritization of immigrant attraction in regional growth plans;
- Strategically promote Peterborough to new immigrants as a place to live, study, and work;
- Improve the immigrant 'friendliness' of government and social service programs and workplace policies;
- Identify the barriers faced by immigrants in accessing housing and transportation and determine how to address them; and,
- Provide opportunities for the Peterborough community to learn how to become more welcoming and inclusive.

In addition, the **New Canadians Centre** in Peterborough is a not-for-profit organization that supports immigrants, refugees and other newcomers to Peterborough and Northumberland regions. Specifically, they work to:

- Ease the process of adjusting to a new life in Canada;
- Provide staff and facilities for settlement services required by new Canadians;
- Act as an advocate and resource partner for new Canadians; and,
- Promote acceptance of new Canadians through education and awareness projects.

The **Community Opportunity and Innovation Network (COIN)** has recently developed a Small Business Development Guide for New Canadians to help new Canadian entrepreneurs start their own businesses.

Are we able to retain and attract businesses (so as to provide for long term sustainable growth) through our economic development programs? What organizations are in place to help us anticipate and respond to global and local economic challenges?

Several organizations are in place within the GPA to assist in attracting, retaining and expanding of businesses. **The Greater Peterborough Chamber of Commerce** works to enhance business growth, opportunity, innovation and partnerships, and develop and retain a diverse Business Community across

all sectors. It represents business concerns, lobbies for good government, and advocates for business legislation and prosperity, as well as economic growth and development. Services include a young professionals organization, breakfast club, business after hours, golf tournament, excellence awards, gala, advertising and marketing opportunities and discount coupons. Chambers of Commerce are also present in Havelock-Belmont-Methuen as well as in North Kawartha, Galway-Cavendish & Harvey, Smith-Ennismore-Lakefield and Douro-Dummer, which share the joint Kawartha Lakes Chamber of Commerce.

The **Greater Peterborough Area Economic Development Corporation** (GPAEDC) is the regional economic development organization contracted to provide a variety of economic development services for the City and County. Its activities focus on four business pillars: manufacturing and small business; innovation; tourism; and agricultural and rural. The GPAEDC provides support services for companies or individuals interested in locating, growing, or starting a business in the region. These services include:

- Marketing the Peterborough region to attract new business and tourism;
- Single point of contact for regional investment opportunities;
- Confidential information source for businesses, site selectors and consultants;
- Maintaining current economic data, statistics and information on the GPA;
- Assisting with property and building site location and selection in partnership with local realtors and property owners;
- Sourcing government and private sector funding programs;
- Local liaison to federal and provincial economic development agencies; and,
- Developing partnerships to promote, support, and sustain economic growth.

The GPAEDC recently won top honours in the Strategic Plan category for their 2010-2014 Greater Peterborough Area Strategic Plan at the Ontario Economic Development Awards.

The GPAEDC also offers a variety of business retention and expansion services including information and assistance with government programs, training and networking events, assistance with building/property leases and purchases, delivery of the manufacturing training initiative, third party partner/support for government programs and deliver the 'Made in Peterborough' promotional campaign. In 2007, the GPAEDC Business Retention & Expansion project found the retail and service sector in Peterborough area to be quite stable. The region's tourism businesses were found to be even stronger in terms of stability.

The Prosperity Roundtable is a forum that provides an opportunity for the business community and community leaders to discuss growth potential for the Peterborough region. Task teams meet regularly to address and discuss specific economic issues that are of interest to the business and general community and provide observations to community decision-makers. Annual plenary sessions provide a venue for review of task team research and observations as well as a chance to exchange information between the business community and community leaders on issues relevant to the economic state in

the Peterborough region.

The **Community Opportunity and Innovation Network (COIN)** is a community development organization that collaborates with entrepreneurs, business, government, and others to assess the needs of different people in the community. They also work to harness local resources to meet those needs in a way that is healthy and economically viable. COIN has conducted a number of Community Skills Inventory Projects across the GPA and administers numerous programs.

The GPAEDC also operates a **Business Advisory Centre** that acts as an all-encompassing resource centre for entrepreneurs. Here, consultants advise on key aspects of business start-up (such as developing a business plan) and maintenance requirements for business success and prosperity.

Peterborough Community Futures Development Program is a provincially incorporated, and federally funded lending agency that generates and assists in the creation of employment opportunities within the City and County of Peterborough. The organization focuses specifically on supporting small business through providing flexible financing, access to capital, and business counseling services. They also provide workshops and training on entrepreneurship. So far the Peterborough CFDP program has invested \$20 million into small business enterprises, helped over 639 businesses, and created or maintained more than 2,600 jobs.

Peterborough Downtown Business Improvement Association (BIA) represents over 500 businesses in the downtown core of the City of Peterborough. The organization promotes the downtown area, and builds a strong business area through co-op advertising, beautification programs, liaising with politicians, tourist organizations, and sponsoring events that bring people downtown. Also in place is the **Millbrook BIA**, which seeks to increase business by developing special events, undertaking beautification efforts (primary focus), and promoting and advertising the downtown.

In addition, the **Women's Business Network of Peterborough** acts as a networking channel for women who wish to enhance their business contacts and expand their businesses. The network includes a growing membership of women with diverse backgrounds and careers to meet to share their knowledge and experience and promote their businesses. The types of women who have joined include entrepreneurs, business owners, professionals, administrators, writers, media representatives, computer specialists and healthcare providers.

The **Workforce Development Board (WDB)** is a community based, not-for-profit organization that serves the cities of Peterborough and Kawartha Lakes, and the counties of Northumberland, Peterborough and Haliburton. The WDB works with the community to identify trends and opportunities in the labour market environment that impact the workforce. They also establish community partnerships and work to nurture new ideas which address these impacts and help prepare the community to thrive in the local economy.

The **Greater Peterborough Region Innovation Cluster** is a not-for-profit organization that bridges science and business, ensuring that the programs and services of the Ontario Ministry of Research and Innovation are provided within the Peterborough region. The Cluster focuses on environmental, water quality, wildlife DNA and forensics, agricultural, health and biomaterial research. The organization

assists start-up companies with intellectual property valuation and protection, market analyses through partners, such as MaRS Discovery District in Toronto, and mentoring and assistance in obtaining funding and investment during various stages of the innovation process.

Lastly, economic development within Peterborough County is also overseen by Economic Development Officers/Coordinators, which are present within most townships.

To what extent do our businesses practice sustainability? How do we encourage sustainable business practices?

A number of organizations in the GPA are developing their Sustainability and Corporate Responsibility programs with some key players and initiatives including:

- **Quaker Oats** - owned and operated by PepsiCo, it has committed to reducing water and electricity consumption by 20% by 2015, reducing greenhouse gas emissions by 25% and streamlining packing to require less paper product.
- **General Electric (GE)** -conducts its practices according to the Global Reporting Index G3 Sustainability Reporting Guidelines which provides a framework for organizations to report and evaluate their social, environmental and economic performance. GE has communicated its vision of Contributing to Environmental Conservation through Business, and Promoting Sustainable Corporate Activities during its business practices.
- **Tim Hortons** - has also developed a number of sustainability goals that relate to decreased packaging, energy and water use, increased recycling and fuel efficiency, LEED certification, and the development of audition programs.
- **Loblaws** - has made a Sustainable Seafood Commitment, and has chosen to establish a sustainable procurement practice that focuses on the responsible sourcing of seafood, and the phasing-out of unsustainable supplies.
- **Royal Bank of Canada** - also supports the Global Reporting Index and has adopted a multi-pronged approach to sustainability reporting, publishing information about their social, environmental and ethical performance for a variety of stakeholder groups.
- **TD Canada Trust** - Its Friends of the Environment Program has provided more than \$53 million to more than 19,000 grassroots environmental projects, and has committed to donating 100% of every donated dollar to future local community projects.

Several organizations within the GPA are helping, and encouraging businesses to become more sustainable. COIN has a triple bottom line coordinator who conducts 'sustainability audits' of COIN enterprises and helps develop a sustainable business strategy.

The Fostering Sustainable Business Practices Program, hosted by Peterborough Green-Up helps organizations to improve their bottom line through developing more sustainable and viable business practices, socially, environmentally and economically. Currently the organization is focusing on the

Electricity Retrofit Incentive Program and the Power Saving Blitz.

Peterborough Green-Up also organizes the Green Expo each year, which is one of Ontario's first environmental-themed trade shows and provides eco-friendly businesses and organizations an opportunity to showcase their services and products. The show also enables the local community to be introduced to businesses, not-for-profit organizations, community groups and governmental agencies that are dedicated to preserving the natural environment in and around Peterborough. Exhibitors for the 2011 Green Expo include:

- Bullfrog Power
- Camp Kawartha
- Durham Sustain-Ability
- Enviro Threads
- Ethic Tree Creations
- Flanagan and Sun Renewable Energy
- Fleming College
- Franklin Tint
- Green Side Up Environmental Services
- McLeod's Eco Water
- Otonabee Region Conservation Authority
- Generation Solar
- Peterborough Utilities Group
- Porcupine Creek Farm
- Shifting Gears
- Solar-&Alternative Technology Corp
- Ten Thousand Villages
- Your Healthy House

To what extent do people from outside the community see the Greater Peterborough Area as a place to visit and possible invest?

Tourism

Peterborough and the Kawarthas is a major tourism destination in Ontario, and experiences a seasonal increase in the population of 30,000 visitors and cottagers each summer, as well as over 200,000 fishing visitors each year. In 2006, the number of tourist visits was measured at 2,345,000, and from 2009 to 2013, this number is anticipated to grow by 3-5%, resulting in 2,414,320 to 2,461,200 visitors per year. Overnight visits equalled 1,234,564 visitors in 2004, and it is believed that 64% of these visitors were visiting friends and families, often at a cottage. Day visits for the same year were at 861,381.

The area is well situated for tourism, being only an hour's drive northeast of Toronto, located on the historical Trent-Severn Waterway, and surrounded by 134 lakes. Peterborough's downtown features more than 60 restaurants, and is home to the highest hydraulic Lift Lock in the world. The region also hosts over 300 events and festivals in the summer months alone, with more being held year round throughout the County. Some of these include:

FACTS

The total visitor spending in the GPA was \$95,169,290 (2006). Spending is expected to grow to between \$134,631,288 and \$137,245,488 from 2009 to 2013.

- Head of the Trent Rowing Regatta (Peterborough City)
- Summer Festival of Lights
- Havelock Country Jamboree
- Lakefield Music Fest
- Buckhorn Wildlife Arts Festival
- Lakefield Literary Arts Festival
- Peterborough Folk Festival
- Peterborough Festival of Trees
- Home and Outdoor Show
- Bridgenorth Winter Panfish Festival
- Peterborough Canada Day Parade
- Peterborough Dragon Boat Festival
- Lakefield Jazz, Art and Craft Festival
- Lakefield Agricultural Fair
- Norwood Agricultural Fair
- Peterborough Exhibition
- Millbrook Agricultural Fair

In addition, there are a number of major tourism attractions in the area, with some being:

- Riverview Park and Zoo
- Kawartha Downs and Speedway
- Ganaraska Forest/Oak Ridges Moraine
- Maple Creek Ranch
- Kawartha Race Track Slots
- 4th Line Theatre
- King Street Centre for the Arts
- Millbrook Valley Trails
- Millbrook Gallery
- Cordova Gold/Iron Mines
- Blairton Iron Mine
- Falls at Cordova Lake
- Belmont Lake Islands
- Loon/Osprey Nesting Sites
- First Cottage
- Kawartha Highlands Signature Site (not yet operational)
- Petroglyph's Provincial Park
- Conservation Authorities
- Warsaw Caves
- Whetung Ojibwa Centre
- Serpent Mounds Park National Historic Site of Canada

Tourism is managed by ***Peterborough and the Kawarthas Tourism*** which is the official Destination Marketing Organization for the area. Their website provides a calendar of events and a tourism partnership directory, based on the themes of Relax and Play, and Dine and Stay. The organization also provides interesting facts and figures about the region, information on motor coach operators, and conference and meeting venues. Peterborough and the Kawarthas Tourism, and in turn, Peterborough County, is also a member of ***Regional Tourism Organization (RTO) 8***, an organization developed according to the Ontario Ministry of Tourism's request for the coordination of the diverse tourism interests, and the building and supporting of a competitive tourism region through marketing and destination management. RTO 8, which also encompasses Northumberland County and the City of Kawartha Lakes, represents, markets and showcases more than 400 tourism related businesses and attractions in the area.

In addition, the **GPAEDC Tourism Advisory Committee** works to increase the average expenditure per visitor by extending individual visits to include an overnight stay, encourage repeat visits by ensuring the quality of the visitation experience, optimize the expenditure of cottagers and people visiting friends and relatives, and increase the number of visitors to the region.

Themed tourism is gaining an increasing presence in the area. Alongside the themes of Peterborough and the Kawarthas Tourism; Smith-Ennismore-Lakefield Township promotes the themes of Where Waterways Beckon, The Great Outdoors and Arts, Culture & Heritage. ts and inns in the area, as well as food articles and recipes. There is very little information available on ecotourism within the County, in terms of suppliers and eco-friendly transportation, food and accommodation. This is therefore an area that requires further development.

Natural Capital

The GPA is abundant in natural assets. The value of the region's natural capital can be leveraged to ensure a sustainable economy and a sustainable future. An example of natural capital and ecological goods and services is provided in Table 4.6. No assessment currently exists of the natural capital in the GPA.

Table 4.6: Examples of Natural Capital and Ecological Goods and Services^[1]	
Forests	Air quality, carbon storage and sequestration, soil formation, waste treatment, biological control, cultural, storm water control, recreation, raw materials (timber), genetic resources.
Grasslands, rangelands	Water regulation, erosion control, soil formation, waste treatment, pollination, carbon storage and sequestration, biological control, food production.
Wetlands	Water supply and treatment, disturbance regulation, food production, recreation, cultural, habitat/refuge.
Lakes, rivers, riparian areas	Water supply and treatment, food production, recreation.
Croplands	Food production, habitat/refuge, scenic.
Undeveloped lands	Scenic, carbon storage and sequestration, tourism.

^[1]*The Value of Natural Capital in Settled Areas of Canada*, Ducks Unlimited and Nature Conservancy of Canada (2004)

Agriculture

Agriculture has traditionally been a dominant land use and economic force in the GPA. Agriculture and agriculturally related businesses is one of the leading economic sectors, generating significant economic activity through direct and indirect employment and through the buying and selling of products, goods and services.

An *Agricultural Economic Impact and Development Study* found that the agri business network that supports the industry is strong and comprehensive and serves a market much larger than the study area. The GPA has an established agricultural base with strong supporting infrastructure. Agricultural production and processing is a strong economic driver. Agriculture in the region has not changed dramatically over the last several decades, declining at a slower rate than the rest of Ontario.

FACTS

Top Farms by Industry Group (2006):

- *Beef cattle ranching/ farming: 421*
- *Other crop farming: 284*
- *Other animal production: 197*
- *Dairy cattle & milk production: 73*
- *Oilseed & grain farming: 63*
- *Greenhouse, nursery & floriculture: 51*

There were a total of 1192 farms in the GPA in 2006, covering 100,940 hectares. Additionally, there was 11,620 m² of greenhouse area.

The major commodity groups in the region, based on percentage of total gross farm receipts, include dairy, poultry, cattle (beef), corn, and floriculture. Percentages of each commodity group are presented in Table 4.7.

Table 4.7: Farm Cash Receipts for Main Commodities (2008)

Dairy	17.5%
Poultry	10.2%
Cattle & Calves	8.6%
Corn	4.5%
Floriculture, etc.	4.0%
Soybeans	2.6%
Wheat	2.2%

A number of agricultural organizations are active in the GPA. These include:

- Peterborough County Federation of Agriculture (OFA affiliate)
- Peterborough County Holstein Club
- Peterborough County Junior Farmers
- Peterborough County 4-H Association
- Peterborough Agricultural Society
- Millbrook Agricultural Society, Council Agricultural Advisory Committee

➤ Lakefield Agricultural Society

Kawartha Choice FarmFresh consists of farmers, producers, chefs and retailers who promote and sell agricultural products grown and produced in the Kawartha region. They promote ‘agri-tainment’, which “offers a blend of agriculture, entertainment, tourism, and in many cases, education. Agri-tainment options in the Peterborough and Kawartha Lakes include horseback riding, maple syrup festivities, strawberry festivals, agricultural fairs, Kawartha Farmfest, and farm open houses”.

Where do we stand in comparison to other areas of Ontario?

The GPA relies on several large international businesses and the MUSH sector (municipalities, universities, schools, and hospitals). This reliance on the MUSH sector has allowed the area to weather the economic downturn relatively well with the shift away from a manufacturing base.

Despite the strong MUSH sector and large corporations, partnerships and collaborations are limited. There are numerous local businesses that are active environmental participants and have impressive practices but partnerships and an overall level of integration amongst the business community and the broader community is not happening. The Prosperity Roundtable was a solid stride in connecting the business leaders and the community leaders; however, momentum has slowed recently.

The GPA has, or is striving to establish, numerous centres of excellence in a number of areas. The number of centres of excellences in the GPA is higher than most areas in Ontario, who often tend to focus efforts on one or two centres to become well-know and established leaders in those areas.

The region is well positioned for economic growth. The GPA is within relatively close proximity to major markets in Canada and the northeastern United States. Ease of connectivity with markets is strengthening with the expanded commercial airport, the proposed rail link, and the highway expansion. Access to markets and attracting new immigrants and retaining youth continue to be constraints to economic growth, as is the availability of serviceable industrial and commercial lands.

5. SUMMARY OF CURRENT SUSTAINABILITY CONDITIONS

Land Use Planning

What are our strengths?

- Provincial policies and direction
- Relatively up-to-date official plans
- Ecological inventory and mapping (in progress)
- Lake associations taking more active role in planning and development

What are our weaknesses?

- Rural municipal plans inconsistent in terms of shoreline protection, lake capacity protection, ecosystem protection
- Conversions to permanent residence occurring through the Committee of Adjustment process rather than Zoning Bylaw or OP review
- Comparatively little intensification due to slow growth
- Master planning not integrated into OP's (water, climate adaptation, transportation, waste etc.)
- Lack of cultural mapping and planning

What opportunities present themselves?

- Integration of sustainability planning into official plan process, strategic, transit, water, waste etc. planning
- Strengthen consideration of environmental policies throughout Greater Peterborough Area
- Rural policy harmonization
- Increase amount of industrial lands
- Green development – intensification and core area development – plan for growth
- Stronger downtown waterfront development
- Watershed-based planning – Conservation Authorities
- Lake associations can engage with politicians to advance issues

What are some possible threats?

- Piecemeal development in rural areas leading to ecosystem decline
- Habitat fragmentation
- Availability of industrial/commercial land
- Slow growth
- Environmental constraints can create more roadblocks to development

What can we learn from best practices used by comparable jurisdictions?

The **City of Guelph** completed a Natural Heritage Strategy in 2004 which included a review of the City's existing natural heritage resources and features, a review of other municipal approaches to natural heritage protection, and the development of working criteria for the identification of locally significant natural areas. Then in 2007 in a second phase of work the ecological field data was collected to support the amendment. In 2010, Council passed Official Plan Amendment #42 - Natural Heritage System with a purpose of establishing a sustainable greenspace network throughout the City. The protection of the Natural Heritage System will be achieved through an update to the Official Plan.

Post amalgamation in 1998, the **City of Kingston** now contains rural lands, waterfront and urban lands. Their new Official Plan provides a detailed approach to developing the Harbour area that has a focus on higher density use, access by residents and visitors, and the extension of the Waterfront Pathway along Lake Ontario within the Harbour Area through public actions and public private partnerships or easements.

Similarly, the **City of Brockville** has focused on putting waterfront master planning and building sustainability and master planning into their Official Plan. The Downtown and Waterfront Master Plan and Urban Design Strategy (DWMPUDS) recommends strategies and guidelines relating to the Downtown and Central Waterfront Area (plus certain additional areas). It establishes community planning and urban design principles to maintain the downtown and waterfront as a healthy, liveable and sustainable destination in the City. The built form and urban design guidelines provide guidance for reviewing development applications within the Downtown and Central Waterfront Area to ensure the character of the downtown and waterfront is preserved and enhanced.

The **City of Ottawa** is integrating climate change planning as components of their Official Plan and master plans. Air Quality and Climate Change Management Plan in 2005 which established targets for greenhouse gas reduction and outlines the types of measures that would, if fully implemented, achieve the targets. The Official Plan is used as a tool for implementation.

Sustainability has been built into a number of other municipalities planning and decision-making frameworks. These include **York Region**, **the City of Hamilton**, and **Halton Region**.

Water

What are our strengths?

- Aquatic ecosystem in GPA
- Trent Severn Waterway
- Water quality relatively good
- Kawartha Lakes Stewards Association monitoring
- Lake associations and plans
- Source water protection
- Preliminary water conservation programs in place
- Moving towards water metering
- Shoreline protection and restoration initiatives (Lakeland Alliance, MNR, CAs, DFO, Green-up, etc.)

What are our weaknesses?

- Quality of rural potable water supply
- Sustainable funding sources for water protection programs (e.g. Well Wise program)
- Quantity of rural potable water supply in some areas
- Source water protection focuses on drinking water, not the natural environment

What opportunities present themselves?

- Monitoring in more lakes
- Coordination of conservation authorities
- Consistent lake capacity modeling
- Additional conservation measures (e.g. invasive species, nutrient loading, etc.)
- Stronger water conservation opportunities (e.g. efficiency programs, water use restrictions)
- Metered usage
- Meeting future requirements of Water Conservation Act
- Septic system monitoring
- Appropriate development and redevelopment on lakes

- Regional centre for water excellence

What are some possible threats?

- Development on lakes (if not done appropriately)
- Demand for additional water from growth
- Age of existing water infrastructure (e.g. aging septic systems)
- Rural water supplies
- Flooding and cost of flood control measures
- Trent Severn Waterway water level control driven by navigation, not considering ecosystem impacts

What can we learn from best practices used by comparable jurisdictions?

Municipal water conservation policies and programs have advanced quickly across Ontario as a way of protecting water sources reducing strain on infrastructure.

York Region decided to dedicate allocated funding to water conservation to reduce water use in the first place. They developed a Water Efficiency Master Plan and the *Water for Tomorrow* program, which has been very successful. Recently, York Region has embrace behaviour change programming as an effective means of reducing residential water use and are applying Community-Based Social Marketing (CBSM) techniques to foster long term water conservation behaviours.

The **City of Guelph**, which relies solely on groundwater, has set a goal of 20% reduction by 2025 (per capita) and they want to “use less residential water per capita of any comparable Canadian city.” In December 2008, Guelph approved a 19% rate increase for water & waste water which includes a low fixed fee and a variable charge. This simple and consistent rate structure is easily understood by customers. They treat improving efficiency as a viable approach to meeting community water needs. Overall program priorities for water in the **City of Kitchener’s** Strategic Environmental Plan (2009) include the following.

- To contribute to an interdisciplinary and inter-agency approach to the sound management of the city’s surface watercourses and associated hydrological and ecological functions.
- To protect and conserve the natural hydrological and hydrogeological functions within the city so as to ensure the quality and continued replenishment of the groundwater supply.
- To improve the quantity and quality of the city’s potable water supply while maintaining an efficient distribution network.
- To monitor and publicize city initiatives to conserve and enhance water resources.
- To build public awareness, educate and provide expertise to the community on conserving and enhancing water resources.

Waste

What are our strengths?

- Recycling programs and waste diversion programs and targets
- Garbage quantity limitations
- Expanded provincial stewardship programs (e.g. WEEE, tires, MHSW)
- Educational programs (e.g. Health Unit on proper pharmaceutical disposal)

What are our weaknesses?

- Extended producer responsibility setback at provincial level
- Lack of integrated waste management plan across GPA
- Little yard waste composting in some Townships
- No food scraps collection/programs through the GPA
- Lack of set diversion targets

What opportunities present themselves?

- Development of GPA integrated waste management plan
- Embrace Zero Waste
- Reduction and purchasing policy for municipal operations
- Consistency in diversion programs across municipalities (e.g. recycling in all townships)
- Food scraps collection program for greater diversion
- Options for yard waste disposal
- Further definition and analysis of waste stream

What are some possible threats?

- Provincial EPR recently had setbacks
- Role of landfill in waste management
- Lack of influence over ICI sector
- Pharmaceuticals

What can we learn from best practices used by comparable jurisdictions?

The **City of Guelph** has long been known as a leader in municipal waste management with the innovative wet-dry system. In their Waste Master Plan, the City of Guelph has recommended a zero-waste philosophy. Waste diversion recommendations include programs and pilot studies on: multi-residential recycling; municipal by-laws and by-law enforcement; refining the list of blue bag recyclable materials; the development of a reuse centre; public open space recycling programs; special events recycling programs; and advertising, education and promotion. The Solid Waste Management Master Plan Steering Committee developed a set of Waste Diversion Targets. The diversion rate in 2008 was 39% (recyclable material diverted from landfill) and their new targets are 55% by 2011, 65% by 2016 and 70% by 2021.

Simcoe County has numerous successful waste management programs that have been implemented in a rural setting, including a curbside organics program. Recently the County has developed their new Solid Waste Management Strategy which uses the concept of Zero Waste as a guiding principle. Linked with Zero Waste and the waste management industry is the creation of green jobs. A recent study² on the green economy in Simcoe County found that if the County moved towards zero waste there is economic development opportunity that has the potential to create 220-420 new jobs in the County.

The **City of Kingston** is developing an Integrated Waste Management System (IWMS). Their goal is to divert 65% of waste by 2012. The IWMS includes: environmental goals and socio-economic goals; a hierarchy of alternatives to landfill consisting of eight levels of management; collection of compostable materials, including kitchen waste. The Plan directs the consideration of additional innovative program enhancements and working with local industry and the Provincial and Federal governments to implement policies to help reduce the quantity of waste being generated.

York Region is also currently developing an Integrated Waste Management Master Plan that is intended to go well beyond merely the management of solid waste and ties in with their sustainability strategy. The Plan is focusing heavily on waste reduction and reuse with behaviour change being an important component.

Transportation

What are our strengths?

- Transportation Master Plans
- Peterborough Transit and taxi system
- GO service/Greyhound service/Coach
- 115 link to 400 series highways
- Trent Severn Waterway

² Identifying Opportunity in the Green Economy – Waste Industry, North Simcoe County. Prepared by Lura Consulting, February 2010.

- Air transport and investment in the airport
- Trail system
- Passenger rail service expansion
- Shining Water Railway (freight and passenger)

What are our weaknesses?

- Hub system for transit instead of grid system
- Transit ridership levels – perceptions of public transit
- Rural public transit limited
- Deteriorating rail infrastructure
- Airport passenger carriers

What opportunities present themselves?

- Rural transit
- Passenger air service and airport investment
- Creation of a Transit Master Plan
- Bicycling and pedestrian Master Plan
- Stronger linkages to 400 series network
- North-south linkages (Prosperity Roundtable)
- Increased connectivity of the trail system
- Planned expansion of 407 to hwy 115

What are some possible threats?

- Planned expansion of 407 to hwy 115
- Lack of transportation linkages has growth and investment implications

What can we learn from best practices used by comparable jurisdictions?

The **City of Kingston** saw transit usage increase from 3% to 5% of daily trips, including 4% of work trips between 2001 and 2008. The City's Transportation Master Plan aims to accommodate travel demand through a focused effort on the promotion of non-automobile modes, including walking, cycling and transit, by managing travel demand, by making the most efficient use of existing infrastructure and by expanding the road infrastructure. The City forecasts public transit use to increase from the current 3% of commuter peak hour trips to 11%.

The Kingston Transportation Master Plan includes support for programs that promote walking, significant increases in the kilometres of on- and off-road pedestrian facilities across the City and designing, operating and maintaining barrier-free facilities to make walking more attractive. It also includes programs that promote cycling (both recreational and utilitarian), significant increases in the kilometres of on and off-road cycling facilities across the City and design, operating and maintenance practices that make cycling more attractive.

Kingston has also created a position of Transportation Demand Management Coordinator to coordinate public and private sector TDM initiatives in the City of Kingston and prepare a Community TDM Action Plan.

Energy

What are our strengths?

- Peterborough PUS projects, including the Lily Lake Solar project
- Local hydro power
- Local ethanol projects
- Landfill gas-to-energy project in progress
- Trent University refurbishing a 2MW hydroelectric facility
- Developing industry for wind turbine motors
- Growth of alternative energy sector – strong employers
- Transmission system strong in Eastern Ontario
- Well positioned for ‘green energy’ (Industrial Transition and Investment Project)

What are our weaknesses?

- Low integration of MUSH with alternative energy sector
- No integrated energy plans
- Amount of fossil fuel use
- Lack of conservation

What opportunities present themselves?

- Develop a community based energy system
- Links between universities and colleges and energy research

- Stronger linkages with GE and OPG
- Sustainable and energy efficient building designs (e.g. building integrated PV)

What are some possible threats?

- H1Transformer stations will not accommodate alternative energy
- Impacts if GE left or Darlington expansion did not proceed
- Tension over wind turbine development
- Elimination of feed-in tariffs

What can we learn from best practices used by comparable jurisdictions?

The City of Kingston has taken an integrated approach to energy. They have an energy-efficient building guidelines and checklist for homes, as well as a green building checklist and guidelines for industrial, commercial, institutional (ICI) and large residential projects.

Numerous energy efficiency programs are in place, including an Electronic Energy Meter that can be borrowed free of charge from any public library in Kingston. The Meter can show residents how much energy their appliances use.

The Queen's- RMC Fuel Cell Research Centre is leading the way in developing partnerships with industry dedicated to advancing the knowledge base for addressing the key technology challenges to the commercialisation of fuel cell applications.

Together with Guelph Hydro, the **City of Guelph** has identified about 4,600 square metres of rooftop space for solar photovoltaic panels that could generate up to 500 kilowatts of electricity. Once the panels are up and operating the power would be sold to the Ontario power grid over the next 20 years under the Ontario Power Authority's MicroFIT program.

Natural and Cultural Assets

What are our strengths?

- Ability to measure natural assets through GIS
- Combined Shield and lowlands ecosystems
- Trent Severn and Lake systems
- Wetlands and ecosystems
- Large areas of undeveloped land (e.g. Curve Lake)
- Greenbelt protection in areas

- Cultural mapping and planning underway
- Peterborough one of top creative cities
- Land stewardship programs; good understanding
- Heritage and historical societies
- First Nations communities
- City developing urban forest policy
- Emergence of lake associations

What are our weaknesses?

- Species at risk
- Local municipal bylaws have not kept up with ecosystem preservation practices
- Minimal cultural planning in local municipalities
- Not all municipalities have heritage advisory committees (for heritage designation)

What opportunities present themselves?

- GPA wide ecosystem inventory and strategy
- Cultural planning in all areas
- Updating of official plan policies, by-laws, planning procedures to protect natural areas
- Invasive species policies and protection
- Consistent management of forest habitat
- Establishment of the Oak Ridges Moraine as a World Biosphere Reserve
- Retirees moving to the area – volunteers and involvement
- Organization of more lake associations

What are some possible threats?

- Invasive species
- Increasing permanent residents in cottage communities
- Tensions between local and lake associations

What can we learn from best practices used by comparable jurisdictions?

The Natural Heritage Strategy developed by the **City of Guelph** is protecting the natural heritage system through the Official Plan.

Kingston City Council recently passed the Kingston Community Cultural Policy Plan which provides a long term vision and strategy for cultural vitality for the City. A unique component of the Plan is the recommendation that the Kingston Municipal Heritage Committee assume greater responsibilities for building consensus amongst stakeholders and for advising City Council on heritage and community cultural values.

The North Hastings Municipal Cultural Plan was just completed in 2010 and it supports the cultural pillar. The plan is a collaboration between the Municipality of Hastings Highlands, the Town of Bancroft and Township of Wollaston, who became interested in exploring the role culture could play in the social and economic development of North Hastings. The plan is currently in its implementation phase and a coordinator has been hired to implement its recommendations.

6. SOURCES

“2006 Annual Report”, Peterborough Lakefield Community Police Service, 2006.

“2007 Annual Report”, Peterborough Lakefield Community Police Service, 2007.

“2009 Financial Report Corporation of the City of Peterborough”, Collins Barrow Chartered Accountants for City of Peterborough, 2010.

“2010 Budget Highlights (Budget Book 1 of 4) – Draft”, City of Peterborough, November 2009.

“2010 Customer Service Accessibility Report”, City of Peterborough, 2010.

“A Strategic Plan for the Township of Smith-Ennismore-Lakefield, July 24, 2007.

“Accessibility Plan 2007 – 2008”, Township of Galway-Cavendish and Harvey.

“Accessibility Plan September 2006”, Corporation of the Township of North Kawartha, Township of North Kawartha, September 2006.

“Accessible Customer Service Policy”, City of Peterborough, January 1, 2010.

“Accessible Customer Service Standards Policy”, The Corporation of the Township of North Kawartha, Township of North Kawartha, September 11, 2009.

“Accessible Customer Service”, Township of Asphodel-Norwood, January 1, 2010.

“Agricultural Economic Impact & Development Study”, Regional Analytics and Planscape for City of Kawartha Lakes and the Greater Peterborough Area, September 15, 2006.

“Airport Development Program (2008-2013)”, Report PLPD08-044, City of Peterborough, May 20, 2008.

“Amendment to Purchasing Policy”, The Corporation of the County of Peterborough”, County of Peterborough, 2010.

“Business Case for Infrastructure Development – PeterboroughMunicipalAirport”, LPS AVIA Consulting for City of Peterborough, February 27, 2009.

“Cavan-Millbrook-North Monaghan Growth Analysis Study”, Watson & Associates Economists Limited, December, 22, 2006.

“City of Peterborough Accessibility Plan”, City of Peterborough, 2009.

“City of Peterborough Flood Reduction Master Plan”, City of Peterborough, 2005.

“City of Peterborough Sidewalk Strategic Plan: Phase 1 – Sidewalks”, City of Peterborough, February 2008.

“City of Peterborough Transportation Division 24 Hour Traffic Volumes”, City of Peterborough,

2008.

“City of Peterborough Transportation Division 24 Hour Traffic Volumes, City of Peterborough, 2009.

“Community Assessment Report 2010”, Peterborough County-City Health Unit, November 2011.

“Community Profile”, Township of Smith-Ennismore-Lakefield, October 2007.

“County of Peterborough Official Plan”, County of Peterborough, January 2010.

“County of Peterborough Transportation Plan”, Draft Report, IBI Group for the County of Peterborough, December 2004.

“Cultural Resource Mapping Project”, EcoVue Consulting Services Incorporate for the Township of Cavan Monaghan.

“Draft Initial Revision of The Peterborough County/City Waste Management Master Plan, Waste Management System Plan Final Report”, County of Peterborough/City of Peterborough, May 2005.

“Draft Official Plan”, Version 4, Township of Cavan Monaghan, May 30, 2010.

“Drinking Water Quality Management System Operational Plan”, Township of Smith-Ennismore-Lakefield, August, 2009.

“Economic Strategy 2002 – 2012”, The Township of Smith-Ennismore-Lakefield.

“Emergency Plan”, Authority of the Council of the Corporation of the City of Peterborough, County of Peterborough, November 15, 2005.

“Emergency Plan”, Authority of the Council of the Corporation of the County of Peterborough, County of Peterborough, May 6, 2010.

“FraservilleSeconary Plan”, Township of Cavan Millbrook-North Monaghan, April 2005.

“Fraserville Water Supply Master Plan Review”, Township of Cavan Monaghan.

“Housing is Fundamental”, Affordable Housing Action Committee, 2007.

“Housing is Fundamental”, Affordable Housing Action Committee, 2008.

“Housing is Fundamental”, Affordable Housing Action Committee, City of Peterborough, 2009.

“Housing is Fundamental”, Affordable Housing Action Committee, City of Peterborough, 2010.

“Housing is Fundamental”, Affordable Housing Action Committee.

“Housing Needs Analysis and Strategies for Peterborough City and County Final Report”, Social Housing Strategists Incorporate, December 2003.

“Lang Pioneer Village Museum Master Plan 2009 – 2013”, Lang Pioneer Village Museum, County of Peterborough, September 2009.

“LAS Natural Gas Procurement Program 2013 County of Peterborough Facility Use Report”, Local Authority Services Limited, The Corporation of the County of Peterborough, County of Peterborough.

“Little Lake and Area Master Plan”, The Planning Partnership for City of Peterborough, March 2010.

“Millbrook and Fraserville Water Supply Investigations – Summary”, Township of Cavan Monaghan, September 8, 2009.

“Millbrook Ward Marketing Plan”, First Harvest Marketing, 2007.

“Municipal Emergency Plan”, The Corporation of the Township of North Kawartha, Township of North Kawartha, December 20, 2004.

“Municipal Performance Measurement Program (MPMP)”, Township of Cavan Monaghan, 2009.

“Municipal Performance Measurement Program 2007 Results”, Township of Havelock-Belmont-Methuen.

“Municipal Performance Measurement Program Year 2008 Report”, Township of North Kawartha, 2008.

“Municipal Performance Measurement Program”, The Corporation of the City of Peterborough, December 31, 2009.

“Natural Gas Purchasing Objectives and Guidelines for Local Authority Services (LAS) Natural Gas Procurement Program”, Local Authority Services Limited.

“Official Plan”, Township of Cavan-Millbrook-North Monaghan, April 2005.

“Ontarians with Disabilities Annual Accessibility Advisory Plan 2004-2005”, Joint County of Peterborough and Township of Smith-Ennismore-Lakefield, September 2004.

“Peterborough Comprehensive Transportation Plan”, Stantec Consulting Limited for the City of Peterborough, April 2002.

“Peterborough Lakefield Community Police Service 2009 Survey of Residents and Businesses in the City of Peterborough & Village of Lakefield”, Fleming Data Research, May 2009.

“Peterborough Municipal Airport Master Plan”, LPS AVIA Consulting for City of Peterborough, October 28, 2009.

“Population Projections: The County of Peterborough, 2006-2036”, Lapointe Consulting Incorporated for the County of Peterborough Planning Department, September 2008.

“Public Art Policy”, Report CSACH09-007, City of Peterborough, April 6, 2009.

“Purchasing of Goods and Services”, Department of Finance, Policy Manual, County of Peterborough, June 23, 2010.

“Salt Management Plan”, County of Peterborough, August 17, 2006.

“Sidewalk Implementation Procedure for Existing Streets”, Procedure # 0002-P1, Division of Transportation, City of Peterborough, February, 11, 2008.

“Taking Charge: An Investment in Affordability -Affordable Housing 2002 Report”, Report PL02-001, City of Peterborough, January 7, 2002.

“The Official Plan of the City of Peterborough,” City of Peterborough, December 31, 2009.

“The Official Plan of the Township of Douro-Dummer”, Landmark Associates Limited for the Township of Douro-Dummer”, April 2008.

“Township of Cavan-Monaghan Input Survey”, First Harvest Marketing, August, 2007.

“Township of Douro-Dummer Development Guide”, Township of Douro-Dummer, January 2010.

“Township of North Kawartha 2010 Strategic Plan”, Township of North Kawartha.

“Township of North Kawartha 2011 Strategic Plan”, Township of North Kawartha.

“Township of Otonabee-South Monaghan Official Plan”, Township of Otonabee-South Monaghan.

“Urban Forest Strategic Plan”, City of Peterborough.

“Waste Management System Plan Report”, Proctor & Redfern Limited for the County of Peterborough, December 1993.