

Our future... Our legacy

Sustainable Peterborough
2012 – 2017 Progress Report
June, 2018

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#### Introduction

The Greater Peterborough Area Integrated Community Sustainability Plan was adopted in 2012, with a 25-year vision to strive for **caring communities balancing prosperity**, **well-being and nature**. With representation across the Greater Peterborough Area (GPA), Sustainable Peterborough, as we are formally known as, consists of a community based, regional collaborative, comprised of non-profit organizations, businesses, 10 municipalities and two First Nation communities.

The Sustainable Peterborough Plan was developed through extensive community consultation, capturing the values and actions needed to advance sustainability across the GPA. The Plan encompasses 11 theme areas that were identified by the community as significant sectors that can provide the foundation to achieve the vision of the plan. Within each of the theme areas, there is an overarching goal and a number of priority actions embedded within the plan that identifies areas of short-term focus.

The 11 theme areas of the Sustainable Peterborough Plan include:

- Agriculture & Local Food
- Climate Change
- Cultural Assets
- Economic Development & Employment
- Energy
- Healthy Communities
- Land Use Planning
- Natural Assets
- Transportation
- Waste
- Water

### **Purpose of a Progress Report**

It has been five years since the Sustainable Peterborough Plan was adopted. As with any new direction, it was a slow start, creating our governance structure, hiring staff, setting up committees and finding our feet. Much has changed within the five years, especially with the development and implementation of the Ontario Climate Change Action Plan and the Ontario Cap and Trade programs.

Each year, Sustainable Peterborough releases an annual Report Card to showcase sustainable initiatives and celebrate leaders in our community. The annual Report Card is a promotional tool to highlight the great work of Sustainable Peterborough partners and inspire community members to make sustainable choices but it is does not provide indicators or metrics to measure progress.

This report was originally requested to identify indicators to measure the progress made to date, identify gaps, and provide a baseline for future governance planning. However, indicators for measurement were not originally built into the development of each priority action when the plan was adopted. The Greater Peterborough Sustainability Plan is an integrated community plan with work interwoven throughout the rich fabric of the community. Without specific indicators built into each priority action, it wasn't possible to accurately and effectively measure progress. The purpose of this report then shifted to provide a document highlighting progress focusing specifically on the Sustainable Peterborough Plan priority action advancements made in the community between 2012 and 2017. The Progress Report highlights the status of each action; provide community results, community accomplishments, identifies implementation challenges, and potential next steps.

The results of this report demonstrate that through collective action, our community can make measureable steps towards balancing prosperity, wellbeing and nature. This report leads Sustainable Peterborough into a new phase of planning, refreshing strategic direction, action, and future goals.

### **How to Read this Report**

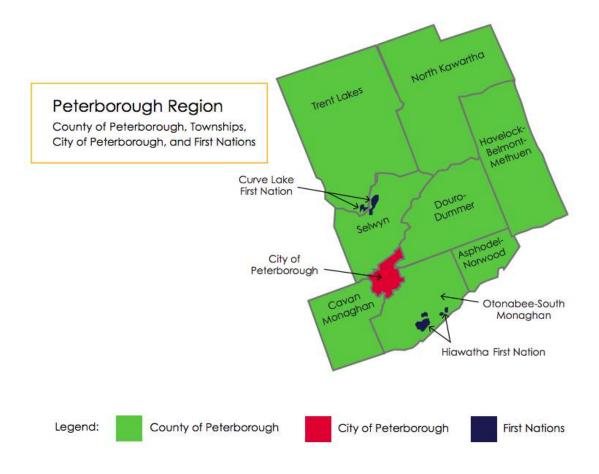
The Progress Report is comprised of 19 sections, one for each priority action within the Sustainable Peterborough Plan. A goal of this report is to provide some information about the status of each priority action identified and described as either **complete**, **underway**, or **no action**.

### Framework for progress:

- 1. Identify the status and progress of each priority action from 2012-2017;
- 2. Celebrate community accomplishments and identify implementation challenges; and
- 3. Provide next steps for future strategic and governance planning.
- 4. This report includes information that will assist with the future development of indicators for measurement of each priority action.

### **Geographic Area**

The Greater Peterborough Area includes the City of Peterborough, the County of Peterborough, eight townships, and two First Nation communities<sup>1</sup>.



<sup>&</sup>lt;sup>1</sup> Age Friendly Plan Peterborough. 2017.



## Agriculture and Local Food – Food System Assessment

Food affects us all, particularly access to local, healthy and sustainable food so that all residents are secure. Food affects our health, our local and global economies, and our ecological footprint. It is an important part of the fabric of our social and cultural wellbeing. It is only by engaging everyone who has a stake in the food system—from farmers to policymakers—that we can create a future of food that is sustainable.

Development of a Community Food System Assessment will provide the framework to review food on a systematic, 'cradle to grave' approach. The food system categories could include the following: population statistics; food production; food access and distribution; food purchasing and consumption; food education, knowledge and literacy; food waste management; food policy and advocacy; food innovation and technology; and food funding, finance and investment.

Goal: We will feed ourselves sustainably with local, healthy foods.

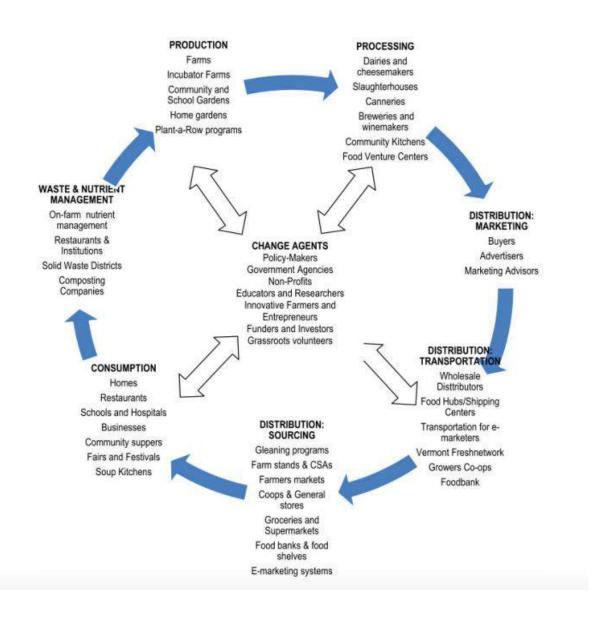
**Priority Action:** Undertake a community food system assessment to identify gaps and opportunities to connect local food growers and producers, processors, distributors, retailers and consumers throughout the region, building on the feasibility study currently planned by the Kawartha Community Food Hubs.

**Status:** No formal action taken - Although there has been no formal action taken on the development of a Community Food System, components of the System have been initiated independently.

**Community Results**: A community food system assessment looks at local food from a holistic or a "cradle to grave" approach. There is not a specific indicator for this Priority

Action, however there have been a number of community research components contributing to the complex planning of a Community Food System. Some of the research projects have been highlighted in the Community Accomplishments section below.

Figure 1.1: Scope of the food system as per the Future of Food and Farming Summit (2012)<sup>2</sup> The below image illustrates the complexities of a local food system.



<sup>&</sup>lt;sup>2</sup> Proceedings from "The Future of Food & Farming Summit". 2012.

### **Community Accomplishments:**

- Sustainable Peterborough's Future of Food & Farming Working Group has hosted four summits and completed eight reports on the changing nature of food and farming in Peterborough.
- Peterborough Public Health in partnership with local agencies, created a
  Peterborough Food Charter in 2016. The charter built upon an extensive amount
  of research and community consultation including reports developed by
  Sustainable Peterborough's Future of Food & Farming Working Group.
- The Food Charter was created for all residents in the City of Peterborough, County of Peterborough, Curve Lake First Nation, and Hiawatha First Nation with a focus on food security. The Peterborough Food Charter differs from a full food assessment as the aim of the charter is to be a guiding document to encourage the development of policies and support for programs that promote a healthy and just food system<sup>3</sup>. The Peterborough Food Charter is an integral step in the planning process of a Full Food Assessment for the GPA.
- The Peterborough Food Action Network defines food secure community as: all people, at all times, have physical and economic access to nutritious, safe, personally and culturally appropriate foods, food is produced in ways that are environmentally sound, socially just, and promote community self-reliance, and food is provided in a manner that promotes human dignity3.
- In 2015, the City of Peterborough created an on-line Community Service Map that includes a Food layer.
- An extensive amount of research and consultation has been completed that supports the goals of food assessment.
- In 2016, Peterborough Public Health, in collaboration with a number of local agencies, created a local Food Charter. The Peterborough Food Charter provides a community vision and goals in support of a healthy, sustainable, and just food for all, community food system. 3 The Peterborough Food Charter encompasses the following sectors:
  - Local Food System: local farmers and their commitment to sustainable stewardship, policies, programs and infrastructure to ensure the locally grown food is available in the future, land use policies that protect food producing lands, policies to increase procurement, opportunities to connect, and access to wild foods obtained by fishing, hunting, and gathering<sup>3</sup>.
  - Health: strategies to ensure all residents have access to nutritious, safe, personally and culturally appropriate food. Land use policy to protect farmland, public policy development for food contribution to overall well-

<sup>&</sup>lt;sup>3</sup> The Peterborough Food Charter, 2016.

- being, networks to support and encourage food-producing land, and access to wild foods.3
- Social Justice: dignified access to healthy and local food for all, increased access to land, a living wage, income, education, transportation that support access to healthy food3.
- Culture & Community: Strengthen links between the farm and table, celebrate and promote culturally significant food, opportunities for community to grow, prepare, and eat together3.
- Education: Public awareness, promoting connections between health, the environment and food choices, programs for current and future farmers, and food literacy programs3.
- Economic Sustainability: increased production, storage, processing distribution, consumption, marketing, promotion of the GPA as an agricultural and culinary destination, protection of land for sustainable food production, economic, physical services, and infrastructure to support food-producing land3.
- Environment: promote and support environmental stewardship practices, minimize negative environmental impacts of the food system, and improve soil, water and air quality for sustainable food production3.

### **Implementation Challenges:**

- Funding and capacity to undertake a full food system assessment.
- Due to the scale of a full food system assessment, the project requires capacity
  and resources at a consultant role rather than at a volunteer organizational level,
  together with a formal project coordinator, such as Peterborough & the
  Kawarthas Economic Development.

### **Next Steps for Sustainable Peterborough:**

 Completion of a full foods assessment in partnership with Peterborough & the Kawarthas Economic Development (PKED), Sustainable Peterborough Food and Farming Working Group, and local organizations.



## Agriculture and Local Food – Protect Existing Farmland

The goal set in the Sustainable Peterborough Plan, of "feeding ourselves sustainably with local, healthy foods", provides an opportunity to investigate food production and consumption in our community. It provides an opportunity to ask what role local food plays today in our community, and what our prospects are, as a community, for meeting increasing demand for local food and for security of access to food. Ensuring sufficient, viable farmland is available to meet these growing demands for local food is a critical component of being able to feed ourselves sustainably.

Goal: We will feed ourselves sustainably with local, healthy foods.

**Priority Action:** Identify and protect existing farmland, and increase its capacity to supply local food needs.

**Status:** Underway - Research and policy development ongoing across the Greater Peterborough Area.

### **Community Results:**

The below indicators are from the fourth Summit of Sustainable Peterborough's Future of Food & Farming Working Group. The Food and Farming Working Group of Sustainable Peterborough has been researching food and farming trends and needs in the GPA.

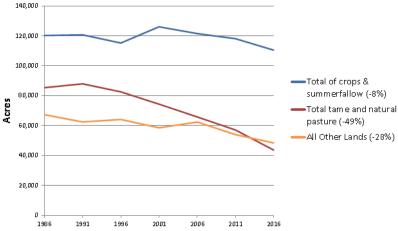
Figure 1.2: 2011 to 2014 data showing Percentage of farmed land protected in Official Plans<sup>4</sup>.

### Percentage of farmed land protected in Official Plans

Township	# of Farms Reporting in Census, 2011	# of Acres Farmed, 2011 Census	# Acres Designated as Agriculture in the OP, 2014	% Protected
Cavan- Monaghan	186	36,311	36,311	100%
Otonabee- South Monaghan	223	51,007	43,000	84%
Asphodel- Norwood	136	28,903	17,500	61%
Smith- Ennismore- Lakefield (now Selwyn)	188	36,845	12,500	34%
Havelock- Belmont- Methuen	58	13,435	1,500	11%
Douro- Dummer	206	45,074	0	0%
Galway- Cavendish and Harvey (now Trent Lakes)	56	17,361	0	0%
County total:	867	228,936	110,811	48%

Figure 1.3: Illustrates the decrease of workable farmland in Peterborough County from 1986-2016<sup>4</sup>





<sup>&</sup>lt;sup>4</sup> Berry-Merriam, Dawn. 2018. Planning Locally for the Future of Food & Farming. Fourth Summit of Sustainable Peterborough's Future of Food and Farming Working Group.

Figure 1.4: Growth in the number of local community gardens from 2010 to 2017<sup>4</sup>.

2010	2013	2015	2017
14	29	41	47

Figure 1.5: Location of local Community Gardens<sup>4</sup>.

Locations	Number of Gardens
Municipal Lands	12
Schools	11
Churches	9
Private Lands	8
Public Housing	4
Federal & Provincial	3

### **Community Accomplishments:**

- The first Future of Food and Farming Summit was held in 2012 to increase awareness, links between food, healthy, community economic development, food security and farming in the context of planning4.
- The number of community gardens has grown from 14 in 2010 to 47 in 2017<sup>5</sup>.
- Peterborough Gleans and Fruit Tree Picking matches' fruit tree owners with gleaners to offer people with limited access to fresh food. In 2015, participants gleaned \$20,000 worth of local fresh produce. In 2017, there were approximately 400 community members involved in the network 5 <sup>6</sup>.
- The 2016 Peterborough Gleans report identified 7 local farms participated,
   14,268 pounds picked, 561 local harvesters, \$21,169 of produce harvested<sup>6</sup>.
- Cultivating a Fertile Environment for Urban Agriculture in the Greater
  Peterborough Area report was completed in 2015 to showcases the historical
  and current work, opportunities for urban agriculture, as well as provide guidance
  on policy incorporating local food policies into its land-use development
  processes<sup>7</sup>.

<sup>&</sup>lt;sup>5</sup> Merriam & Associates. 2017. Community Focus Bulletin: Creating Community Conversations.

<sup>&</sup>lt;sup>6</sup> Peterborough Gleans Report, 2016

<sup>&</sup>lt;sup>7</sup> <u>Sustainable Peterborough Urban Agriculture Task Force. 2015. Cultivating a Fertile Environment for Urban Agriculture in the Greater Peterborough Area.</u>

- Creation of the Community Focus Bulletin, an overview of recent Agriculture and Local Food research projects completed in the GPA with community partners and the Sustainable Peterborough Future of Food and Farming working group.
- In 2014, the Sustainable Peterborough Future of Food and Farming Working Group, and Farmland Task Force created the Farmland, Farmers, and Food Production in Peterborough County report<sup>8</sup>.
- In 2015, a Regional Local Food Production Survey summary was completed by Farms at Work to identify marketing avenues, and determine potential for the Find Local Food platform that connects local producers with wholesale marketing opportunities<sup>9</sup>.
- In 2014, Farms at Work and Peterborough Social Planning Council created Phase One (in a Peterborough Context): Documenting How Local Activities Align with the AMO Best Practices in Local Food Guide for Municipalities<sup>10</sup>.
- 178 farms sell direct to consumer which is 18% of total farms compared to provincial average of 15%4.
- Increase in the number of farm operators under 35 years of age4.
- To date, 20 local farms have been certified organic4.
- Increase in land prepared for seeding, increase in the use of conservation tillage.
- In 2012, September was proclaimed "Local Food Month" which is now celebrated annually<sup>4</sup>.

### Implementation Challenges:

- Reduction in the number of farms from 2011-2016, and overall, a reduction in number of acres of farmland<sup>4</sup>.
- 72% of farms have under \$50,000 in gross farm sales compared to provincial average of 50%<sup>4</sup>.
- Proportionally more farms under 69 acres<sup>4</sup>.
- Increase in farms properties less than 10 acres and between 1,100 and 1,600 acres<sup>4</sup>.
- Characteristics of farmland in Peterborough County, like many parts of central and eastern Ontario has meant that large scale agriculture is not the norm<sup>4</sup>.
- 27% of farmers work full-time on the farm compared to the provincial average of 49%<sup>4</sup>.

<sup>&</sup>lt;sup>8</sup> Sustainable Peterborough Food and Farming Working Group & Farmland Task Force. 2014. Farmland, Farmers and Food Production in Peterborough County.

<sup>&</sup>lt;sup>9</sup> Farms at Work. 2015. Farms at Work Local Food Production Survey.

<sup>&</sup>lt;sup>10</sup> Farms at Work & Peterborough Social Planning Council. 2014. Peterborough in context: Phase One. Documenting How Local Activities Align with the AMO Best Practices in Local Food for Municipalities.

### **Next Steps for Sustainable Peterborough:**

- Working with the local municipalities to identify tools and support policies to protect existing farmland.
- Increase public awareness of the importance of local food production
- Research, document, and report farm viability in the GPA, and share the findings with decision makers at all levels of government.



## **Climate Change – Partners for Climate Protection Program**

Climate change is one of the major challenges of our time that is global in scope and unprecedented in scale. We are experiencing shifting weather patterns that are threatening food production, rising sea levels, extreme weather events, catastrophic flooding, to drought. We need to take local, provincial, national, and global action to mitigate greenhouse gases as well as adaptive measures to become more resilient to our changing climate.

**Goal:** Reduce our contributions to climate change while increasing our ability to adapt to climate change conditions.

### **Priority Action:**

Become active members in the Partners for Climate Protection (PCP) program to establish a baseline for greenhouse gas emissions with a corresponding plan for achieving a set target in emissions reductions. Status: Complete -



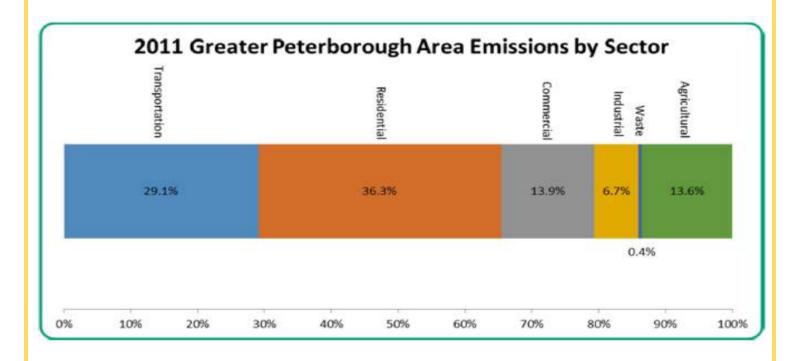
PCP Milestones 1, 2 & 3 complete for both Corporate & Community Sectors for all 12 Partners

## **Community Results:**

Figure 2.1: Reduction of Corporate and Community Sector GHG emissions compared to 2011 GHG reduction targets.

	City of Peterborough	County of Peterborough	Asphodel- Norwood	Cavan Monaghan	Douro- Dummer	Havelock- Belmont- Methuen	North Kawartha	Otonabee- South Monadhan	Selwyn	Trent Lakes	Curve Lake First Nation	Hiawatha First Nation
Reduction of Cor	porate Se	ector GF	lG emiss	ions com	pared to	2011 GI	HG reduc	tion targ	ets			
2011 Corporate Target	30%	26%	28%	29%	32%	40%	20%	25%	40%	26%	15%	15%
2012 - 2015 GHG Reduction Total	11.1%	6.1%	19.0%	10.0%	18.2%	12.1%	10.0%	11.3%	13.1%	4.0%	15.0%	15.0%

Reduction of Community Sector GHG emissions compared to 2011 GHG reduction targets												
2011 Community Target	30%	31%	25%	31%	29%	31%	25%	25%	39%	39%	15%	15%
2012 - 2015 GHG Reduction Total	14.%	13.3%	8.0%	10.0%	9.0%	16.0%	22.0%	11.1%	17.0%	24.0%	11.0%	11.0%



### **Community Accomplishments:**

- All ten municipalities in the Greater Peterborough Area (GPA) joined the Federation
  of Canadian Municipalities (FCM) Partners for Climate Protection (PCP) by passing
  a Council motion. This program is restricted to municipal partners, so special
  permission was requested and granted by FCM for Curve Lake First Nation and
  Hiawatha First Nation to participate in the PCP program.
- LURA Consulting, together with ICLEI Canada, were hired in October 2014 to develop the GPA Climate Change Action Plan (CCAP). The CCAP project consisted of completing the first three milestones in the PCP framework. Milestone 1 was the creation of a 2011 baseline inventory of GHG emissions; Milestone 2 set GHG emission reduction targets; and Milestone 3 developed local actions plans.
- In 2011, total emissions in the GPA were 690,140 tons of CO<sub>2</sub>. Just over 3% of emissions are attributed to municipal/First Nation operations; residents, businesses, and institutions generate the remainder. Majority of emissions come from the residential sector at 36.3% and transportation at 29.1%.
   Sustainable Peterborough hired a full time Climate Change Coordinator to implement the CCAP actions.
- In 2013, Ontario phased out coal-fired electricity generation, which drastically reduced GHG emissions associated with electricity. This action reduced local GHG impacts of electrical consumption by approximately 6% when modelled against our 2015 electricity use.
- With the completion of Milestone 3, each municipal and First Nation Council passed Council resolutions formally adopting both the Corporate Sector and the Community Sector emission reduction targets and local action plans. Curve Lake First Nation and Hiawatha First Nation became the first two First Nations in Canada to complete PCP milestones.
- Working with Hydro One and Peterborough Distribution Inc. to hire an Energy Manager for a 2-year contract, working exclusively for the municipalities and First Nations in the GPA. Peterborough & The Kawarthas Economic Development also consider an Energy Manager for the Industrial, Commercial & Institutional Sector.
- The CCAP demonstrates a paradigm shift from inaction to tangible, measurable action on adaptation and mitigation strategies.

### **Implementation Challenges:**

 Measuring adaptation is a moving target, not an end point. Communities and their changing climate is complex, as measurements span multiple scales and sectors.
 There is no one set of indicators or measurement approaches. Early development of indicators and baseline measurements provide the foundation to shift from measuring progress to the effectiveness of actions. Data collection processes need

- to become more granular and specific for reporting purposes. The Provincial Government should provide municipalities with free access to locally specific data such as vehicle type and distance traveled which is currently available from Service Ontario, for a fee.
- The GPA CCAP has a 30-year planning window, from 2011 to 2031. The Ontario CCAP planning horizon is from 1990 to 2050. As experienced in the first round of the MOECC Municipal Challenge Fund, municipalities must show how their targets meet or exceed the provincial targets. All GPA partners should consider extending their climate change targets and timeframes to 2050 and meet the Provincial target.

### **Next Steps for Sustainable Peterborough:**

While we work towards implementation of Climate Change adaptation and mitigation strategies, here are a few opportunities to keep in mind:

- Stay "shovel ready" on projects, programs and services to tap into future Cap and Trade, MOECC, or future funding opportunities.
- Consider placing funding from SaveOnEnergy projects in a reserve fund that may be used to leverage or match future funding projects.
- Apply for funding for projects that the municipality or First Nation cannot afford to implement on their own. Municipal Challenge Fund awarded to City of Peterborough in 2018 to implement a curbside Source Separated Organics program and Selwyn Township to provide electrical retrofits.
- Start working on projects that are attainable with big GHG savings such as the conversion of sport field and decorative streetlights to LED.
- Complete Milestone 4 Implement the Local Action Plan and Milestone 5 Monitor progress and reporting results.
- Consider an Adaptation Plan and a Community Energy Plan.

## **Cultural Assets – Municipal Cultural Plan**

A Municipal Cultural Plan (MCP) provides a vision that highlights economic prosperity, social progress, and quality of life, while focusing culture's role in creating a livable, sustainable community with a vibrant downtown and healthy neighbourhoods. It creates a shared cultural vision of guiding principles and actions that ensure our greatest potential as a culturally vibrant, creative community are met.

Goal: We will support, sustain and promote a wide breadth of community cultures.

**Priority Action:** All municipalities in the Greater Peterborough Area should consider developing a Municipal Cultural Plan.

**Status:** Complete - Municipal Cultural Plans, Community Mapping, Community Improvement Plans, and Downtown Revitalization Plans are underway or complete across the GPA.

### **Community Results:**

- Township of Cavan Monaghan completed a Cultural Mapping Project in 2011.
- City of Peterborough adopted their Municipal Cultural Plan in 2012.
- Township of Selwyn completed a Cultural Mapping exercise in 2013.
- The 2015 2109 Strategic Plan for the County of Peterborough engrained the preservation and promotion of the County's heritage and culture into its vision.
- A three-year, collaborative, Federation of Canadian Municipalities (FCM)
   Community Economic Development Initiative (CEDI) project was approved in 2017.

### **Community Accomplishments:**

- Following extensive community consultation and dialogue, the City of Peterborough adopted their Municipal Cultural Plan (MCP) in 2012. The MCP is a strategic document that provides municipal policy, leadership, and investment framework for:
  - o leveraging and nurturing Peterborough's significant cultural assets;
  - building the capacity of Peterborough's cultural sector;
  - more fully integrating culture into all facets of municipal planning and decision making; and ultimately enabling greater long-term sustainability and prosperity<sup>11</sup>.

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<sup>&</sup>lt;sup>11</sup> City of Peterborough. 2012. <u>Municipal Cultural Plan</u>.

- City of Peterborough is working on a report card that will measure progress since the MCP was adopted in May 2012.
- As a key component of the Municipal Cultural Plan, a cultural mapping project was developed as a tool to increase awareness and understanding of local cultural assets in order to maximize their use, enhance creative and cultural endeavors, and to stimulate innovation, entrepreneurial activity, cultural tourism and economic growth. The City of Peterborough's cultural maps are available in an interactive format online. Filters are available to highlight: Public Art, Cultural Facilities and Spaces, Cultural Organizations, Heritage Resources, Cultural Economy and Business<sup>12</sup>.
- The 2015-2019 Strategic Plan for the County of Peterborough includes
  Community Values and Cultural Identity in the strategic priorities, with the
  preservation of cultural heritage as an objective. The Strategic Plan also includes
  the preservation and promotion of the County's heritage and culture in the
  vision<sup>13</sup>.
- Townships of Trent Lakes, Asphodel-Norwood, and Havelock-Belmont-Methuen have all completed a Community Improvement Plan (CIP). Selwyn Township and Cavan Monaghan Township are currently working on their CIP.
- The City of Peterborough completed a Central Area Community Improvement Plan in 2017.
- In January 2018, the Province announces up to \$430,000 in downtown revitalization funding for the City of Peterborough and municipalities within Peterborough County through the Main Street Revitalization Initiative.
- In 2013, the Downtown Millbrook Revitalization Strategy completed.
- The County of Peterborough Strategic Plan highlights<sup>12</sup>:
  - Support the diversity of the community,
  - o Continue to support and fund the Sustainability Plan for the GPA13,
  - Continue to grow Lang Pioneer Village Museum, Lang Pioneer Village & Museum Peterborough County Agricultural Heritage Building,
  - o And, Integration of Hope Mill properties.
- Representatives from Curve Lake First Nation, Hiawatha First Nation, Selwyn Township, Peterborough & the Kawarthas Economic Development, and Sustainable Peterborough submitted a joint application for the Federation of Canadian Municipalities (FCM) Community Economic Development Initiative (CEDI) for First Nations and municipal partners. The First Nation–Municipal Community Economic Development Initiative (CEDI) supports municipal and indigenous neighbours in creating and implementing joint community economic

<sup>&</sup>lt;sup>12</sup> City of Peterborough. Municipal Cultural Mapping.

<sup>&</sup>lt;sup>13</sup> County of Peterborough. 2015. <u>Strategic Plan 2015-2019</u>.

- development initiatives. The three-year project launched in fall 2017. The County of Peterborough and Township of Otonabee-South Monaghan formally joined the project in 2018.
- CEDI project objectives highlight the development and enhancement of working relationships between Curve Lake First Nation, Hiawatha First Nation and the neighbouring municipalities, enhance the collective working network, map the cultural, historical, natural, environmental and unique significant areas to Curve Lake First Nation, and Hiawatha First Nation.

### **Implementation Challenges:**

Accessing funding sources to support cultural planning and mapping processes.

### **Next Steps for Sustainable Peterborough:**

- Encourage further development of MCP planning based on identified gaps.
- Continue to work in collaboration towards the completion of the FCM CEDI project, further develop relationships, identify opportunities for cultural mapping, and integrate cultural planning and MCP recommendations into all local Official Plans.
- Support the identification of opportunities for newcomers to the GPA.
- Support the integration of cultural diversity into the cultural planning processes.



## Economic Development & Employment – Community Asset Mapping

Identify local, natural assets and resources. Consider how they can be valued, used, and enjoyed by the community and how they contribute towards strengthening our community as a whole. Expand the awareness of what exists within your community and share this information. The real value and payoff of identifying natural assets is in actions that will improve your community.

**Goal:** We will create and retain prosperity by providing investment and employment opportunities within sustainable local and global markets.

**Priority Action:** Through community asset mapping, promote the region's abundant natural assets, its sustainability initiatives and industries, and its economic potential.

Status: Complete.

### **Community Results:**

Sustainable Peterborough partner growth from 2012 – 2017 by business and community sector. The Business Sector is representative of small and medium sized businesses located in the GPA. The Community Sector is representative of organizations that are community focused including Municipalities and municipally operated facilities.

### **Community Accomplishments:**

- In 2015, the City of Peterborough created an on-line <u>Community Service Map</u> that provides basic information about community programs and agencies in the City and County of Peterborough.
- In 2017, the Federation of Canadian Municipalities Community Economic
  Development Initiative (CEDI) for First Nations and municipal partners approved a
  pilot project to map culturally significant lands, features, and areas identified by
  Curve Lake First Nation and Hiawatha First Nation in Selwyn Township.
  Representatives from Curve Lake First Nation, Hiawatha First Nation, Selwyn
  Township, Peterborough & the Kawarthas Economic Development, and

Sustainable Peterborough initiated the joint application that funds a 3-year process to prioritize relationship building and develops a collaborative economic development project. The County of Peterborough and the Township of Otonabee-South Monaghan joined the project in 2018.

- In 2013, the Township of Selwyn completed a Cultural Mapping project.
- Kawartha, Naturally Connected has a goal to identify and map a connected system of natural areas that can inform and support:
  - sustainable land use planning and resource management decisionmaking;
  - strategic priorities for stewardship and restoration projects;
  - o priorities for conservation land acquisitions, and
  - priorities for inventory programs and research projects<sup>14</sup>.
- The Provincial Policy Statement 2014 was adopted to protect our natural environment through policies that protect, preserve, and mitigate potential impacts to our natural heritage features and areas. The Natural Heritage Section, specifically section 2.1, provides direction through municipal Official Plan's to protect water, woodlands, wetlands, and endangered or threatened species habitat from development pressures.
- Otonabee Conservation completed a Watershed Report Card in 2013 and again in 2018 to evaluate the health of a watershed including information on surface water quality, forest cover, ground water resources and wetlands.

### Implementation Challenges:

• The Priority Action is too broad to rely on one project to complete community asset mapping of the region's natural resource. Multiple projects with various drivers will support this action.

### **Next Steps for Sustainable Peterborough:**

 Continue to support agencies that are mapping local natural resources as a tool for policy development, education, and evaluation of the quality and quantity our natural resources.

<sup>&</sup>lt;sup>14</sup> <u>The Kawarthas, Naturally Connected</u>. A Natural Heritage System for the Kawartha Lakes. 2013.



## Economic Development & Employment – Sustainable Business Activities

Small and medium-sized enterprise (SMEs) are crucially important to the health and stability of the global economy as they account for 95 percent of all businesses and for the majority of private sector gross domestic product, wealth, employment creation, and social and environmental impacts. As an integral part of the supply chain, SMEs are under pressure to measure and manage their environmental impact. Cost savings, reduced risk, positive brand association, and provision of environmentally conscientious products and services will offset the cost of integrating sustainability into the SMEs business strategy.

**Goal:** We will create and retain prosperity by providing investment and employment opportunities within sustainable local and global markets.

**Priority Action:** Develop and implement a local program, which fosters sustainable business activities among our region's small and medium sized enterprises.

**Status:** Underway - Sustainable Peterborough Business Initiative (SPBI) tool kit, green business community engagement events, and the completion of the Green Economy Action Labs.

### **Community Results:**

Sustainable Peterborough partner growth from 2012 – 2017 by business and community sector. The Business Sector is representative of small and medium sized businesses located in the GPA. The Community Sector is representative of organizations that are community focused, including Municipalities and municipally operated facilities.

NUMBER OF SP PARTNERS	BUSINESS SECTOR	COMMUNITY SECTOR	TOTAL
2012	14	29	47
2013	7	9	63
2014	19	19	101
2015	17	7	125
2016	12	6	143
2017	7	4	154

### **Community Accomplishments:**

- Sustainable Peterborough ran 10 popular Climate Change columns in the Peterborough Examiner, written by Jim Hendry.
- Creation of an SPBI toolkit that provides tools for building programs, funding and incentive programs, energy retrofits, transportation, and waste diversion programs.
- A Green Business Group category for members of the Peterborough Chamber of Commerce.
- Love Local Expo: business to business tradeshow open to-the- public and a "Green Zone" to promote sustainability minded businesses.
- In 2015 the Mayor of the City of Peterborough and Warden of the County of Peterborough met with top 10 community organizations employers and top 10 business employers in the City and County.
- Participation in the Mid-Sized Cities Program led by Evergreen. The Lab was
  intended to advance the City of Peterborough as a central hub for the Greater
  Peterborough Area by collectively evaluating and developing actions to support
  the advancement of Peterborough as a Green Economy and sustainable
  community<sup>15</sup>.
- Green Economy Action Labs: goal to collectively evaluate and develop actions to support the advancement of Peterborough as a green economy and sustainable community.
- Creation of a Peterborough & the Kawartha Economic Development Corporation Clean Technology advisory committee 2017- a recommended outcome from the Green Economy Action Lab. The aim of the committee is to help identify and leverage assets to align the clean technology sector15.
- Development of the Cleantech Commons green industrial park, clean tech community, and innovation hub. The aim for the Cleantech Commons is to be

<sup>&</sup>lt;sup>15</sup> Evergreen. 2017. The Peterborough Green Economy Action Lab.

- integrated into Trent University's main campus, foster innovation, collaboration, lead sustainable design, maintain flexibility to accommodate a range of enterprises, and connect with the City, County, and Region.
- 7 Days of Green project hosted by Community Foundation of Greater Peterborough. The 7 days of green events promoted green initiatives with participation throughout the GPA. The project ran for two years.
- The Buy Local Cash Mob was a Sustainable Peterborough event, ran as part of the 7 Days of Green projects. The event was to support small local business that have engrained sustainability into their business model.
- Green Expo Event held to showcase all aspects of living "greener".
- Peterborough Pulse annual event is a car-free and promotes healthy communities, active transportation, local businesses and neighborhood pride.
- Peterborough Tool Library offered through Endeavour Centre, provides members access to inventory of tools and resources.
- Repair Café PTBO events promote skill and knowledge sharing to fix broken items, with the aim to divert waste.
- Win This Space Competition is an economic development initiative in partnership with the Downtown Business Improvement Area, Peterborough & the Kawartha Economic Development, Start-up Peterborough, Community Futures Development Corporation and more than 30 partners and sponsors.
- Bears Lair Competition is an annual competition for up-and-coming entrepreneurs in Peterborough & the Kawarthas.
- Purple Onion Festival started in 2011 to celebrate local farmers, food producers, and promote climate change awareness the festival has successfully grown each year, and will be celebrating its 8<sup>th</sup> event in 2018.
- FastStart is an entrepreneurial training partnership and support program for entrepreneurs between the ages of 18-29.
- Start-up and small business support program development offered at Peterborough & the Kawarthas Economic Development through Starter Company Plus, Summer Company program.
- Transition Town Peterborough created an Economic Localization strategic framework ranging from 2013- 2033 with aim to build knowledge and action around community economic resilience.
- Creation of a local currency called the Kawartha Loon aimed to build economic localization and resilience.
- The Innovation Cluster offers business resources, skill development, networking, incubation and office space to foster local entrepreneurship.
- The Cube is an incubator for innovative business starting in the Cleantech, Agtech, and Healthcare sectors. The Cube operates in partnership with Trent University, Fleming College, and the Innovation Cluster.

- The Green Business Program, a partnership of the Peterborough Utilities Group, GreenUP, and the Chamber of Commerce, originally offered support for local organizations through a self-auditing tool, to identify areas of focus and recognize conservation efforts. Green Business Peterborough transitioned to offer a centralized program website that offers case studies of retrofit programs, current retrofit subsidies, and information regarding energy audit services<sup>16</sup>.
- Sustainable Peterborough Future Food and Farming Working Group has hosted 4 summits focusing on economic issues and development in agriculture and food production. The summits have had extensive representation from the agriculture sector as well as government and community groups. Results of the summits have enabled the group to monitor issues and make presentations to government regarding strategic directions needed for economic development of the agricultural sector.

### Implementation Challenges:

- Accessible funding sources for programs to support green business initiatives.
- Communication, marketing and promotion to local businesses has been identified as a barrier to growth.

### **Next Steps for Sustainable Peterborough:**

• In 2018, a collaborative application was submitted to the Ontario Trillium Foundation to complete a feasibility study for the Green Business Program, to further develop partnerships, and to explore the co-lab design process.

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<sup>&</sup>lt;sup>16</sup> GreenUP.



## **Energy – Community Energy Plan**

A Community Energy Plan (CEP) is a comprehensive, long-term plan to increase energy efficiency, reduce greenhouse gas emissions, and encourage local sustainable energy solutions. CEPs analyze community-wide energy consumption and GHG emissions; identify and implement solutions to improve energy efficiency and conservation; helps develop community priorities around renewable energy and other energy infrastructure projects; and, integrates energy conservation and sustainability into the local planning process.

**Goal:** We will minimize the amount of energy we use and maximize the production of local, dependable sources of renewable energy.

**Priority Action:** Develop community energy plans in each of the Greater Peterborough Area's member communities, coordinated at a regional level.

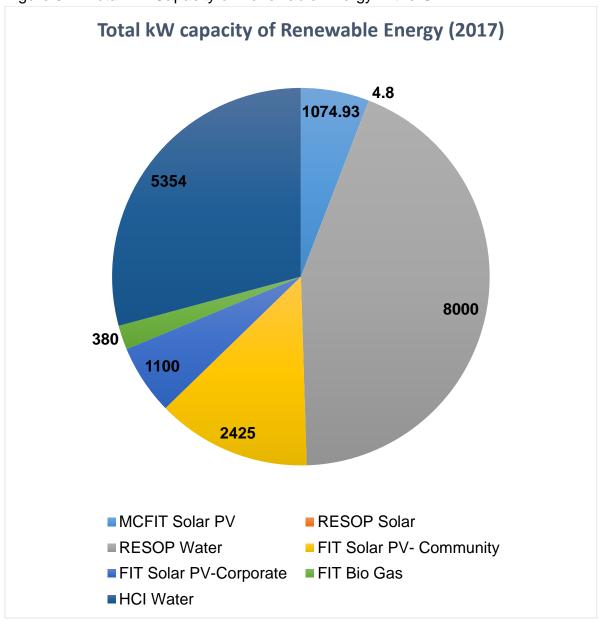
**Status:** Underway- Curve Lake First Nation completed their energy plan in December 2017. Hiawatha First Nation's Community Energy Plan is underway. City of Peterborough is considering a Community Energy Plan.

### **Community Results:**

Figure 5.1: Status of the development of Community Energy Plans across the GPA

Area	Under	Received	Underway	Complete
	consideration	Funding		
Curve Lake		Received	Х	December
First Nation		100% funding		2017
Hiawatha First		Received	Х	Completion on
Nation		100% funding		target for
				December
				2018
City of	X	Eligible for		
Peterborough		50% funding		

Figure 5.2: Total kW Capacity of Renewable Energy in the GPA.



Percentage of Renewable Generation by **Connection Type** 2% 4% | 1% MCFIT Solar PV 1% RESOP Solar 9% 0% ■ RESOP Water FIT Solar PV-Community ■ FIT Solar PV-Corporate FIT Bio Gas 83% ■ HCI Water

Figure 5.3: Percentage of Renewable Energy Generation by Connection type in the GPA for 2017.

### **Community Accomplishments:**

- Through the Greater Peterborough Area Climate Change Action Plan, a comprehensive baseline inventory of energy consumption was conducted for the City of Peterborough, the County, the eight Townships, Curve Lake First Nation and Hiawatha First Nation for both the Corporate and the Community Sectors. Through the Climate Change Action Plan, a GHG emissions reduction target and local action plan was completed for each of the 12 partners. This data has been logged in the Partners for Climate Protection Tool. Energy conservation actions and progress from 2012 to 2015. A complete re-inventory of energy consumption will be undertaken for 2016 to compare progress against the targets<sup>17</sup>.
- Curve Lake First Nation received 100% funding for development of an Aboriginal Community Energy Plan. The plan outlines retrofit and building requirements for hot water tanks, energy efficiency requirements for new builds and existing infrastructure, conservation for water through monitor use, upgrade fixtures, and

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<sup>&</sup>lt;sup>17</sup> Climate Change Action Plan.

- grey water re-use, reducing electrical usage and managing in-floor heating systems. Research and identification also highlighted a sustainable school design and wind turbine tree technology. The plan also includes recommendation for a hydro one conservation program and community liaison.
- Hiawatha First Nation received 100% funding for development of an Aboriginal Community Energy Plan which began in the spring of 2017. The Plan is half way through development.
- City staff are considering developing a Community Energy Plan for the City of Peterborough, but no process has been made to date.
- The City of Peterborough is in the process of hiring a Municipal Energy Manager for all municipal and First Nation facilities and operations within the Greater Peterborough Area. This position will be fully funded by the IESO on a two-year contract.
- Peterborough & The Kawarthas is considering hiring a Business Energy Manager for the Industrial, and Commercial sector of Peterborough, Northumberland, and the Kawarthas.

### **Implementation Challenges:**

- According to research conducted for CCAP, deep energy retrofits for existing residential dwellings will be challenging to access as there are limited local energy auditors and incentives to implement these residential changes.
- City of Peterborough is working on a Local Improvement Charge (LIC), but need Provincial, Energy and Utility Sector involvement.
- There is a need for incentives, rebates, programs and services to leverage facility energy retrofits, especially for the residential sector.

### **Next Steps for Sustainable Peterborough:**

- The City of Peterborough to consider applying for 50% funding and initiate a Community Energy Plan.
- Develop City of Peterborough LIC program.
- Province to support and lead on Municipal LIC projects.
- CCAP Re-inventory for 2016 Greenhouse Gas emissions data.
- Work with Hydro One, Peterborough Distribution In., and Enbridge to lead and promote conservation within the GPA.



## **Energy – Establish Energy Efficiency Standards**

According to the Green Building Council, buildings generate up to 35 percent of all greenhouse gases, generate 35 percent of landfill waste just from construction and demolition activities, and use up to 70 percent of municipal water. Leadership in Energy and Environmental Design (LEED) is a building rating system that incorporates sustainability into the design, construction, and operation of a building. LEED buildings have a better indoor air quality, more natural daylight, reduce waste, conserve energy, decrease water consumption, and drive innovation.

**Goal:** We will minimize the amount of energy we use and maximize the production of local, dependable sources of renewable energy.

**Priority Action:** Establish energy efficiency standards for all new development which would consider LEED certification in all new construction and for renovations.

**Status:** No action- This priority action is outside of Sustainable Peterborough's scope and capacity.

### **Community Results:**

- 9 Electric Vehicle charging stations installed by Peterborough Utilities Inc. in six locations across the GPA.
- Community Emissions data has been collected by sector to benchmark for future measurement.
- This priority action is outside of Sustainable Peterborough's capacity, however, there have been recent changes to the Ontario Building Code that include updates for energy efficiency standards.

Figure 5.4: Community emissions breakdown by sector in the GPA in 2017. The community emissions data breakdown by sectors provide a baseline that can be used for future measurement purposes and reporting.

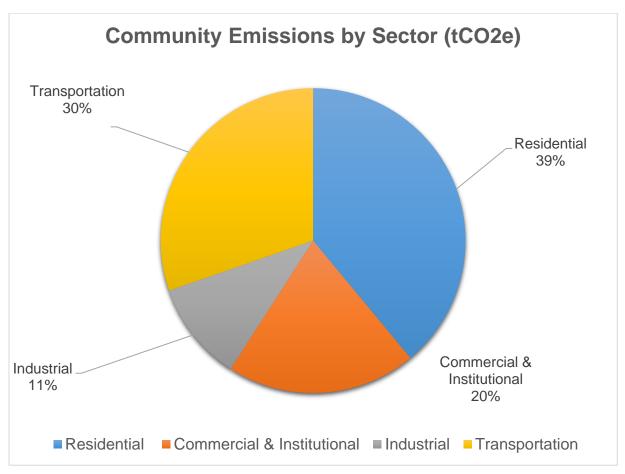
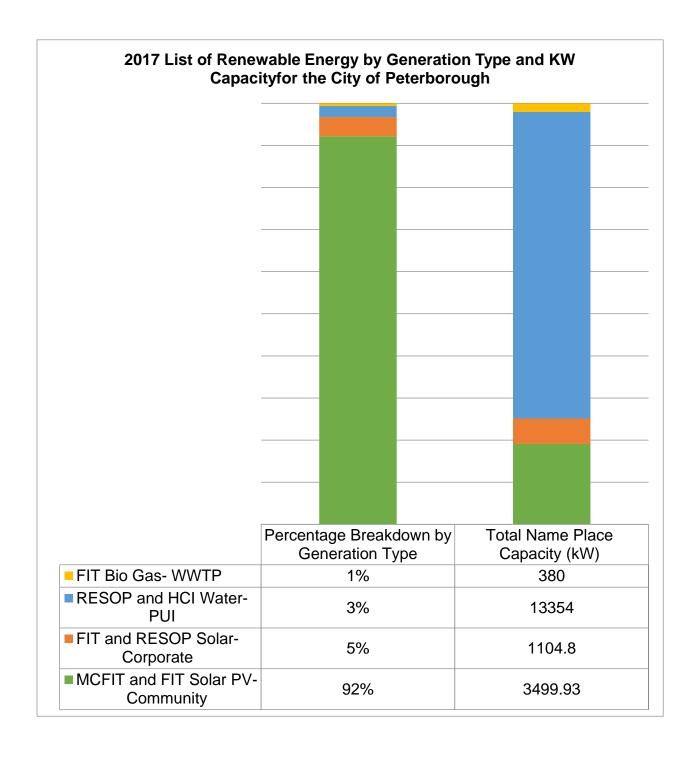


Figure 5.5: Renewable Energy by Generation Type for the City of Peterborough for 2017. This data provids a baseline for future planning and measurement and reporting.



### **Community Accomplishments:**

- Progress on this action has been moved forward through Ontario Building Code updates.
- Through Ontario Regulation 397/11 the Green Energy Act, municipalities started reporting on energy consumption from designated buildings in 2011. In July 2014, municipalities were required to prepare a Conservation Demand Management Plan outlining local actions planned to reduce consumption of energy. The Plan is to be updated every 5 years, with 2019 the next target date.
- The Ministry of Transportation through the Electric Vehicle Chargers Ontario Program awarded \$291, 480 grant to Peterborough Utilities to install 9 electric vehicle charging stations in 6 locations across the GPA.
- A project in partnership with Endeavour Centre and Ryerson University, Zero House was built using four key concepts: zero net energy use, zero carbon footprint, zero toxins, and zero construction waste<sup>18</sup>.
- Peterborough Distribution Inc., Hydro One, and SaveOnEnergy have programs available for energy retrofits to reduce energy consumption for both residential homes and businesses<sup>19</sup>.
- High Performance New Construction program through SaveOnEnergy targets new construction and major renovations in the planning stages to provide design assistance and financial incentives for architects and building owners that exceed the electricity efficiency standards in the Ontario Building Code<sup>20</sup>.
- Starting construction in 2018, Fleming College will install a new geothermal heating and cooling system at the Sutherland Campus to reduce the GHG emissions. Fleming will receive a total of \$12,147,000 from the Greenhouse Gas Campus Retrofits Program. The funding includes: \$6.2 million from the Innovation Grant Fund for the Fleming College Emission Reduction Initiative, \$1.538 million from the Retrofits Grant Fund for Can and Trade Non-Participants, and a \$4.4 million repayable loan from the Interest-Free Loan Fund.
- Buildings in Peterborough that have completed the Enbridge Gas Savings by Design Program include Canadian Canoe Museum, AON, and Ylofts.

### Implementation Challenges:

• Energy efficiency standards are created at the Provincial level, this is outside of the scope and capacity for Sustainable Peterborough.

<sup>&</sup>lt;sup>18</sup> Endeavour Centre. 2017

<sup>&</sup>lt;sup>19</sup> PDI. SaveOnEnergy.

<sup>&</sup>lt;sup>20</sup>PDI New Home Construction.

- LEED certification is costly for developers and can be seen as a barrier to implementing LEED. Many builders are opting to build to a LEED equivalent without paying the actual cost of certification.
- Lack of trained Energy Auditors to complete home energy audits.

### **Next Steps for Sustainable Peterborough:**

- Although Sustainable Peterborough does not establish building standards, it can support and promote the quest for a low carbon economy to key decision makers.
- Connect local builders and the Kawartha Homebuilders Association with incentive programs to promote energy efficiency, sustainable building practices and promote funding opportunities and tools.



# Healthy Communities – Increase availability of Affordable Housing

A smart growth approach to housing, with compact development, green design and construction, and transportation options, can help communities and their residents protect the environment and create more affordable neighbourhoods. The location of affordable housing and the local transportation options, specifically access to public transit, biking, or pedestrian options, contribute to affordability.

**Goal:** We will be a community where everyone has the opportunity and support to achieve their physical, social, mental, emotional and spiritual potential.

**Priority Action:** Increase the availability of affordable housing throughout the entire Greater Peterborough Area.

Status: Underway - The number of affordable housing units has increased.

**Community Results:** The supply and demand of affordable housing is constantly a moving target, but with the definition of affordable housing at 30% or less of household costs<sup>21</sup>, the demand outweighs supply.

#### Demand<sup>22</sup>:

- 10,000 low and moderate-income renters and homeowners in the GPA pay more than 30% of their household income on housing.
- Approximately 850 people have requested rent supplement assistance.
- 80 households have received homeownership loans since 2008; about 14 more applied beyond the loan capacity.
- 113 households have received assistance through Peterborough Renovates since 2014; about 35 more applied beyond the assistance capacity.
- The Peterborough Housing Access waitlist stands at 1,526 at the end of 2017

<sup>&</sup>lt;sup>21</sup> City and County 2017 <u>Housing is Fundamental</u>.

<sup>&</sup>lt;sup>22</sup> City of Peterborough. 2017. Housing Department.

#### Supply<sup>23</sup>:

- Average rent from 2011-2016 for 1-bedroom apartment Average market rent for a 2 bedroom was 900 in 2011, in 2016 was 978. Rent in Peterborough is not dramatically higher than average cities of comparable size, however, there are pressures on the housing market that increase affordability challenges due to:
  - Lower incomes overall than the Canadian and Ontario averages
  - Higher percentage of people on social assistance than Canadian and Ontario averages
  - Note that where households have social assistance as their primary source of income, even when they have a rent supplement, the percentage of their income spent on rent will be measured at higher than 30% - because their whole shelter allowance, which is a significant proportion of their income, will be spent on their rent.
- Between 2012 and 2017, 178 new below-market units were developed in the GPA.
- 67 new units are approved and under development that are at or below the 80% of Average Market Rent.
- There are 1,569 Rent Geared to Income units in the GPA.
- In 2015, 94 low-income households received assistance to pay rent, 11 renter households received assistance to buy a home, and 24 homeowners received assistance for repairs and upgrades.

#### **Community Accomplishments:**

- The 10 Year Housing and Homelessness Plan was created to strategize and lead future action from 2014-2024 in the GPA's housing and homelessness sectors, meeting the legislation set out by the Ministry of Municipal Affairs and Housing<sup>24</sup>.
- Over the past decade there have been significant efforts to increase the number
  of affordable housing units to 500 rental homes through capital funding. Over
  10% of units have rent geared-to-income and 20% of units are fully accessible.
  The units are developed/owned by a mix of private developers and non-profit
  organizations.
- 200 low and moderate-income homeowners have access to grants and loans to complete necessary repairs, energy efficiency and accessibility upgrades. In 2013, 45 applications were submitted, 28 received grants.

<sup>24</sup> Peterborough 10-year housing & homelessness plan 2014-2024.

<sup>&</sup>lt;sup>23</sup> City of Peterborough. 2017. Housing Department.

- New residential development applications received by the City and Townships propose a higher proportion of affordable housing than in previous years.
- Homeowner Assistance Loan Program developed with aim to have 100 renters become homeowners.
- In December 2016, the Ontario government passed the Promoting Affordable Housing Act. Through this Act, municipalities have the option to implement inclusionary zoning (requiring affordable housing units in each development), making second units such as, basement apartment units, less costly to develop, giving more choice for social service managers to deliver and administer social housing programs, encourage inclusive communities, and gathering homelessness data by requiring service managers to complete community enumeration of the homeless population in order for the Province to work towards its goal of ending chronic homelessness by 2025.
- Completion of the Age Friendly Plan provides an opportunity as it re-affirms
  resident interest in housing. The plan focuses on eight age friendly themes:
  transportation, housing, outdoor spaces and buildings, community support &
  health service, civic participation & employment, communication & information,
  social participation and respect and social inclusion1.
- The Community Wellbeing Plan, which is currently under development, recommends municipal priorities to improve the quality of life for Peterborough residents focus on democratic engagement, education, environment, healthy populations, leisure and culture, living standards, time use, and community vitality.

- Lack of funding and capacity to access affordable housing remains a challenge for the Greater Peterborough Area. According to the City & County of Peterborough Affordable Housing Action Committee (AHAC) highlighted that in the Peterborough Census Metropolitan Area, the greatest housing affordability discrepancies is experienced by approximately 2,640 renter households21.
- The AHAC 2017 report also highlighted the need to change the conversation around affordability to expand and include ways to create affordability beyond building new units but also by "providing the means of affordability where people currently live"21.
- The influx of student renters competing for affordable housing from three postsecondary institutions21 applies greater pressure on the GPA when compared to other communities.
- In 2016 Peterborough was tied with Guelph for the lowest vacancy rate in Ontario21.

 According to the Age Friendly Plan, housing challenges in the GPA are identified as: affordability, availability of appropriate housing options, housing design standards and accessibility, and affordability of home maintenance and support services<sup>1</sup>.

- Continue to support the integration of affordable housing into municipal planning processes, and Official Plans.
- Continue to support policy development, incentives and capital funding opportunities to foster home improvements, and increase affordable housing availability.
- Support of the existing housing stock retrofit programs.
- Support existing infrastructure and access to social housing for aging people in the GPA.
- Investigate support services and resources for seniors, the fastest growing segment of our population.



# Land Use Planning- Neighbourhood Design Guidelines

Neighbourhoods constructed in isolation may suffer from lack of culture, social interaction, economic aspects as well as environmental impacts. Urban planning should incorporate community values, social and culture integration, environment and economic contexts in all development including neighbourhoods.

**Goal:** We will support the building of sustainable, healthy and diverse communities through planning policies and decisions that are developed and made in a transparent, open and accessible manner.

**Priority Actions:** Develop and implement neighborhood design guidelines that ensure equal opportunities for all users – including pedestrians, cyclists, public transportation, and automobiles – relevant to both urban and rural areas.

**Status**: Underway – One neighbourhood Plan is complete and five are planned or underway.

# **Community Results:**

Figure 7.1: Status of neighbourhood plans implemented.

Neighbourhood	Lead	Program	Status
Stewart Street	GreenUP,	Active Neighbourhoods Comple	
Neighbourhood	funded by OTF	Canada	
Brookedale-	GreenUP,	Active Neighbourhoods	Underway
Jackson Park	funded by OTF	Canada	
Jackson Creek	GreenUP,	Active Neighbourhoods	Proposed
	funded by OTF	Canada	
Talwood	GreenUP,	Active Neighbourhoods	Proposed
	funded by OTF	Canada	
Kawartha Heights	GreenUP,	Sustainable Urban Unde	
	funded by OTF	Neighbourhood (SUN)	
Curtis Creek	GreenUP,	Sustainable Urban	Underway
	funded by OTF	Neighbourhood (SUN)	

- In 2016, Peterborough's Stewart Street neighbourhood became the second neighbourhood in Ontario to engage in the Active Neighbourhoods Canada project. This project was led locally by GreenUP and supported by a multi-sector partnership25.
- The Active Neighbourhoods Project engaged residents in the process of reimaging public spaces near their homes, with an emphasis on equitable processes that lead to healthy, active and green neighbourhoods. Stewart Street residents led the creation of a Neighbourhood Plan that reflected their priorities and vision for the area, and included renderings for redevelopment. Through this project, residents were also able to contribute to the Bethune Street Redevelopment Environmental Assessment consultation process in innovative and precedent-setting ways<sup>25</sup>.
- In 2017, GreenUP was successful with a \$480,000 grant from the Ontario Trillium Foundation to expand the Active Neighbourhoods Canada (ANC) participatory planning approach to three new local neighbourhoods. This project is called NeighbourPLAN<sup>26</sup>.
- The Brookdale-Jackson Park neighbourhood is currently completing their Plan, and over the next two years, residents in the Jackson Creek and Talwood neighbourhoods will also complete Neighbourhood Plans. As a result of this funding, Peterborough was also selected as the single Ontario community to continue participating in the Public Health Agency of Canada funded national ANC partnership project.
- In 2017, GreenUP was successful in receiving \$500,000 from the Ontario Trillium Foundation to implement the Toronto Regional Conservation Authority's Sustainable Neighbourhoods Retrofit Action Plan approach in two local neighbourhoods. The local project, called Sustainable Urban Neighbourhoods (SUN), is a neighbourhood-based solution for urban renewal and climate action. It prioritizes community-led interests and aligns them with local plans to achieve significant outcomes. The project will result in the creation of two collaborative Neighbourhood Plans one for the Kawartha Heights neighbourhood, and one for the Curtis Creek neighbourhood<sup>27</sup>.
- Creation of Reimagine Peterborough, an urban planning community group working to inspire and contribute to a wider conversation on public engagement community planning<sup>28</sup>.

<sup>&</sup>lt;sup>25</sup> Active Neighbourhoods Canada Project.

<sup>&</sup>lt;sup>26</sup> NeighbourPLAN Program.

<sup>&</sup>lt;sup>27</sup> GreenUP. Sustainable Urban Neighbourhoods.

<sup>&</sup>lt;sup>28</sup> Reimagine Peterborough.

- Broad-scale infrastructure adaptations can take time, but collaborative approaches to neighbourhood planning provides a promising mechanism to support continued resident and partner engagement.
- Application in a rural context needs to be explored. The Active Neighbourhood
   Canada project was piloted in a more rural northern community, but the approach
   and resulting Plan was quite different than in the Peterborough pilot.

- GreenUP's NeighbourPLAN funding continues into 2020, and the Sustainable
  Urban Neighbourhood project will wrap up at the end of 2019. Once these plans
  have been developed, partners and residents will continue to champion their
  implementation and to apply lessons learned in future planning processes.
- The presence of these Plans will also position local communities to apply for related infrastructure funding when it becomes available.



# Natural Assets - Natural Heritage Systems

The definition of Natural Heritage Systems as per the Ontario Ministry of Agriculture and Rural Affairs: "Natural Heritage Systems are connected systems of natural features and areas and the lands and waters that link them together, including:

- wetlands
- fish habitat
- significant woodlands
- significant wildlife habitat and
- habitat of endangered and threatened species.

Natural Heritage Systems enable ecological processes to continue across the landscape by reducing habitat fragmentation and allowing for the movement of plants and animals. Where natural features are limited in size or are widely dispersed, Natural Heritage Systems will include lands without natural features but with the potential to be restored to enhance habitat and connectivity. These lands may also be identified as working landscapes that enable ecological functions to continue<sup>29</sup>".

Planning for natural heritage systems is about maintaining, restoring and enhancing ecologically sustainable and resilient landscapes. It deals with addressing biodiversity loss, land use change, and the uncertainties of climate change so that we always have clean air, clean water and a rich diversity of plant and animal life to sustain present and future generations. Natural heritage systems planning include identifying spatially and functionally interconnected systems of core natural features, corridors and buffers. They include flood control, soil retention, water purification, improved air quality, pollination, climate change mitigation, as well as the provision of wildlife habitat, forest and freshwater foods, and places for outdoor recreation and activities.

**Goals:** We will preserve, enhance and restore our natural assets to maintain ecological health.

<sup>&</sup>lt;sup>29</sup> Ontario Ministry of Agriculture and Rural Affairs. 2017.

**Priority Action:** Adopt the "Kawarthas Naturally Connected" Natural Heritage System and integrate it into Official Plans.

**Status:** Underway– Natural Heritage System are currently being integrated into the local Official Plans.

#### **Note on Government Action:**

- A new Provincial direction related to Natural Heritage Systems requiring that municipalities complete watershed planning before planning settlement area expansions, infrastructure or major developments that could affect those watersheds<sup>30</sup>.
- The province is also leading Natural Heritage System Mapping in Ontario: Natural heritage policies for the Growth Plan for the Greater Golden Horseshoe (GGH) were reviewed as part of Ontario's Coordinated Land Use Planning Review. During the public consultation for the coordinated land use planning review, the government announced that the province would lead the development and mapping of a Natural Heritage System (NHS) for the Growth Plan for the GGH beyond the Greenbelt Plans<sup>31</sup>.

# **Community Results:**

Integration of 'Kawarthas, Naturally Connected" Natural Heritage System and integrate into GPA Official Plans. The Kawarthas, Naturally Connected has been integrated into the City of Peterborough Official Plan update, and the City of Peterborough has integrated the 'Kawarthas, Naturally Connected" Natural Heritage System into the latest Official Plan update.

<sup>&</sup>lt;sup>30</sup> Ontario Ministry of Municipal Affairs and Ministry of Housing. 2018.

<sup>&</sup>lt;sup>31</sup> Government of Ontario. Environmental Registry.

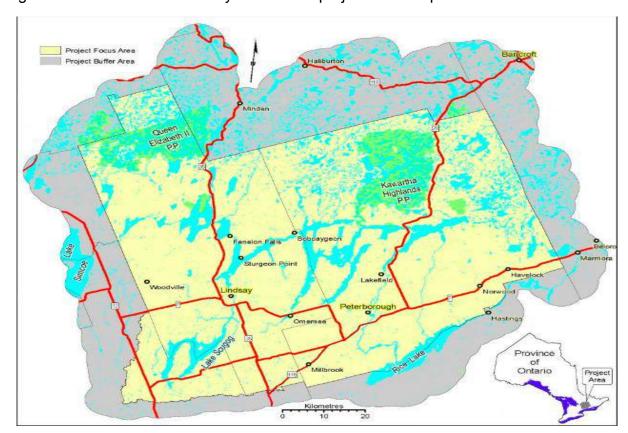


Figure 8.1: Kawartha's Naturally Connected project area map<sup>32</sup>:

- The City and County of Peterborough Official Plan, that are currently underway in 2018, will include natural heritage systems, as required by the Provincial Policy Statement – 2014. The Kawarthas, Naturally Connected will also be embedded into the Official Plans.
- Kawartha, Naturally Connected has a goal to identify and map a connected system of natural areas that can inform and support:
  - sustainable land use planning and resource management decisionmaking;
  - strategic priorities for stewardship and restoration projects;
  - o priorities for conservation land acquisitions, and
  - o priorities for inventory programs and research projects<sup>33</sup>.

<sup>&</sup>lt;sup>32</sup> Kawartha's Naturally Connected.

<sup>&</sup>lt;sup>33</sup> The Kawarthas, Naturally Connected. <u>A Natural Heritage System for the Kawartha Lakes</u>. 2013.

- The Ready for Rain Program a project of GreenUP and Green Communities Canada – supported the installation of 8 large rain gardens in the Avenues neighbourhood.
- Natural Heritage System planning has been included in the City of Peterborough's Urban Forestry Strategic Plan and Recreation Vision 2025.

- Funding to acquire and maintain property.
- Access to funding to support programs

- Looking forward: creation of a new priority action to include urban forestry, conservation, invasive species and natural heritage system
- Inform sustainable land use planning and resource management decisionmaking
- Support future research for the best areas for stewardship and restoration projects.
- Support further identification for potential natural heritage systems core areas and corridors.



# Natural Assets - Natural Heritage Systems

Land stewardship initiatives led by communities are one of the most promising areas of stewardship. Encouraging people to support a healthy and sustainable environment are helping to grow conservation and restoration efforts. Educating the community about technical and financial assistance programs available to landowners for conservation and land management will help to build a community consciousness that supports long-term land conservation, management of important natural resources, while protecting and conserving biodiversity.

**Goals:** We will preserve, enhance and restore our natural assets to maintain ecological health.

**Priority Action:** Identify and help access financial incentives for environmentally sound land stewardship practices.

**Status**: Complete - Kawartha Land Trust completing this task. The priority action is outside of the scope and capacity of Sustainable Peterborough.

#### **Community Results:**

Financial incentives for land stewardship activities are available and communicated to local landowners through a variety of media.

Types of financial incentives for environmentally sound land stewardship practices may include<sup>34</sup>:

- tax incentives through stocks, bonds and mutual funds,
- capital gains tax exempt when donations are made to KTL with securities,
- credits on final estate income tax return; and,
- charitable donation receipts,
- financial assistance, technical support may also be available.

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<sup>&</sup>lt;sup>34</sup> Kawartha Land Trust.

- Top Conservation Properties Award Winner: two of Kawartha Land Trust's protected properties and their respective land donors-Big (Boyd/Chiminis) Island and East Syndicate Island were selected for special recognition for the habitat conservation efforts of the properties, as a part of Canada's 150th anniversary of confederation celebration34.
- Kawartha Land Trust currently has 13 protected properties totaling 3,217 acres with a monetary value totaling approximately \$6.9 million<sup>34</sup>.
- The Kawartha Land Trust acquired Big (Boyd/Chiminis) Island through a generous Environment Canada Ecological Gifts Program donation in 2015. It is the largest undeveloped island in the Kawarthas. The Island holds significant cultural value to Curve Lake First Nation, and was once farmed by one of the first families to settle in the area- The Boyd family. It is referred to as Big, Boyd, or by its indigenous peoples' name, Chiminis<sup>35</sup>.
- In 2017, Otonabee Conservation received funding for conservation and stewardship initiatives from the following sources:
  - Great Lakes Guardians Community Fund for shoreline planting
  - City of Peterborough for shoreline planting and tree planting
  - Tree Canada for tree planting
  - TD Friends of the Environment Foundation for tree planting
  - Funding received from Biodiversity Education and Awareness Network for pollinator garden planting
  - Funding received from Camp Kawartha for tree planting and pollinator garden planting
  - Collaboration with Ontario Turtle Conservation Centre for pollinator planting
  - And installation of pollinator gardens and habitat at various schools.
- Funding from Ontario Trillium Foundation, individual donors and private foundations allowed Kawartha Land Trust to offer stewardship assistance to landowners who manage land in or adjacent to priority natural lands identified in the Kawarthas, Naturally Connected Natural Heritage System. This funding enabled the following activities:
  - 18,560 trees were planted,
  - o managed to remove over 20 acres of invasive plants, and
  - seeded 2 acres of pollinator habitat<sup>33</sup>.

<sup>&</sup>lt;sup>35</sup> Kawartha Land Trust. Big (Boyd/Chiminis) Island.

- Availability of skilled volunteers to complete funding applications, and conservation programs.
- Public education regarding land-gifting programs, and the benefits.
- The number of landowners interested in donating property.

- Support access to funding for securement organizations.
- Support information sharing and research that benefits conservation.



# **Transportation**

On and off-road cycling trails make people healthier, are beneficial for the environment, creates social communities, and boost the economy. Active transportation provides a number of benefits to both individuals and communities over motorized forms of travel, including a decrease in greenhouse gases, significant improvement in a number of health indicators and less infrastructure needed. Expanding the short-term cycling network throughout the City and connecting through to the County trails will increase the capacity for active transportation and improve the interconnectedness across the Greater Peterborough Area.

**Goal:** We will have an accessible transportation network that places priority on active transportation.

**Priority Action:** Complete the proposed Short-Term Cycling Network as outlined in the City of Peterborough's Comprehensive Transportation Plan Update and integrate it to the greatest extent possible with existing and new cycling trails in the County of Peterborough.

Status: Underway.

# **Community Results:**

- Cycling network development: 300 kms of rural road guide signage, tour loops from 47 to 98 kms
- 4 new Cycling Network projects underway in 2018

Figure 9.1: Timing for Cycling Network in the GPA<sup>36</sup>

Trail Type	2012		
Multi-use Trail	47.07 kms		
Shared Path	6.39 kms		
Bike Lane	22 kms		

<sup>&</sup>lt;sup>36</sup> Sauve, Susan. City of Peterborough Trails and Bikeways.

Figure 9.2: Trail development in the GPA:

Trail Type	2012
Multi-use Trail	47.07 kms
Shared Path	6.39 kms
Bike Lane	22 kms

- Implementation of the City's Short-Term Cycling Network is progressing.
   Medium- and Long-Term projects are also being implemented when other roadway projects enable their early completion. Funding to support the ongoing implementation of the City's Ultimate Cycling Network has been consistently approved in municipal budgets.
- In June 2017 the County of Peterborough completed an Active Transportation Master Plan and is beginning to implement priority projects<sup>37</sup>.
- In 2014, the Active Transportation & Health Indicators Report was created to provide a framework for benchmarking, and to increase our understanding of the local relationship between travel patterns and key health outcomes<sup>38</sup>.
- Annual pedestrian and cyclist counts are undertaken to support consistent benchmarking and to evaluate the impact of infrastructure interventions. This is done as a partnership between the City of Peterborough, GreenUP, Trent University, and the Trent Community Research Centre.
- In 2017, the City of Peterborough received \$841,499 in Provincial funding to support cycling infrastructure, while the County of Peterborough received \$300,090.
- There has been 1.5 kilometers of sidewalk development in Otonabee-South-Monaghan township.
- The City and County of Peterborough, Peterborough & the Kawarthas Economic Development, and Shimano Canada partnered to create designated cycling routes called the Peterborough & the Kawarthas Classics Road Cycling Routes totaling 160 signs.
- The Cycling Network includes multi-use trails, on-road cycling lanes, marked cycling routes and share the road signs.

<sup>&</sup>lt;sup>37</sup> County of Peterborough Active Transportation Master Plan. 2017

<sup>&</sup>lt;sup>38</sup> 2014 Peterborough City and County Active Transportation & Health Indicators Report.

The following projects are underway for 2018<sup>39</sup>:

- George Street and Water Street Cycling lanes: George Street cycling lane
  extension to Lake Street. Water Street cycling lane will extend to Sherbrooke
  Street. The cycling lanes on Sherbrooke Street between George Street and
  Water Street complete a new cycling network downtown.
- Lansdowne Street multi use trail between River Road and Ashburnham Drive
- Crawford Trail: the 2018 extension will see an extension to the downtown along the former CP Rail line to Townsend Street.
- Parkhill Road: reconstruction between Wallis Drive and Akinson road will see a multi-use trail that will link to Jackson Park and on-road cycling lanes.
- More than 4,000 children participate in Active and Safe Routes to School Peterborough programming each year.
- More than 500 children per year receive on-bike cycling education through programs offered by GreenUP and B!KE each year.
- Active Transportation By-Law dictates where active transportation users are
  permitted to travel in the City of Peterborough 39.
   Peterborough Strava Activity in 2016 created a map showing the heaviest
  traveled cycling routes throughout the City and County of Peterborough,
  providing indicators for the heaviest traveled routes. The City of Peterborough is
  collecting data at several locations around the city using Eco-counters to count
  the amount of cyclists and pedestrians. This data will be used to evaluate
  infrastructure improvements and trends for walking and cycling39.

# Implementation Challenges:

- Infrastructure funding is limited.
- For some types of facility, ongoing maintenance can be a concern.
- There are competing priorities within an often limited right-of-way for cycling networks.
- Challenges around snow clearing and poor trail connectivity between trails and sidewalks for accessibility.
- Hazardous trail crossings and intersections.

- Support implementation of the City's Ultimate Cycling network.
- Support Implementation of the County's Active Transportation Plan.

<sup>&</sup>lt;sup>39</sup> City of Peterborough.

- Support for school, workplace, and community cycling education and active transportation programs.
- Support further exploration for rural transportation services.
- Support road infrastructure planning provisions for paved shoulders.
- Support the integration of complete street design into municipal planning processes.



# **Transportation – Complete short-term cycling network**

Access to transportation contributes to the economic development, health, and quality of life of rural communities. Reliable transportation is needed for rural residents to access healthcare services, social services, as well as employment and educational opportunities. Access to sustainable transportation has been deemed one of the largest barriers to education, training and employment for rural residents.

**Goal:** We will have an accessible transportation network that places priority on active transportation.

**Priority Action:** Assess innovative solutions to the mobility challenges facing people in the Greater Peterborough Area.

Status: Underway.

## **Community Results:**

- Handi-Van Ridership service has grown 25% since 2013.
- The City of Peterborough Sidewalk Strategic Plan is on target for completion of Priority 1 and 2 site; 403.8 kms of sidewalk are complete in the City of Peterborough-.
- The rural transportation pilot in Curve Lake First Nation, known as Safe Travels, was launched to provide rural transit between Curve Lake, Selwyn and the City of Peterborough.
- Fleming College offers community transit connections between Frost Campus in Lindsay and Sutherland Campus in the City of Peterborough.
- GO bus connection increased mobility options for Trent University students.
   Considering adding a Fleming College GO bus connection as well.

Figure 9.1. Change in sidewalk coverage growth from 2008-2016 in the City of Peterborough<sup>40</sup>

Road Classification	% with Sidewalks 2008	% with sidewalks 2016
Arterial	51%	61%
Collector	60%	65%
Local	41%	44%
Overall	47%	52%

- Lack of rural transportation was identified as one of the largest barriers for education, training, and employment in Curve Lake First Nation. As a result, the Safe Travels pilot program began in 2017 as a strategy to address transportation challenges identified by residents of Curve Lake First Nation. The routes expand opportunities to access employment, extra-curricular programs, transportation to medical and social services, alleviates the demand on Community Care service, connects to GO Transit, Via Rail and Greyhound transportation. As well as, provides stops from Curve Lake First Nation to Lakefield, Bridgenorth, and Ennismore. The routes also provide further access into the City of Peterborough with stops at Trent University, and Portage Place. The pilot has been deemed successful and will continue throughout 2018, and used a framework for further rural transportation development.
- Fleming College introduced a U-Pas program, which has enabled significantly enhanced service to the Peterborough campus.
- Fleming College also has inter-campus bus service, which travels between the
  Peterborough and Lindsay campuses, and is available for both staff and
  students. The shuttle provides weekday and weekend services with stops in
  downtown Peterborough, and runs in conjunction with GO transit and Greyhound
  Bus schedules to further transportation network connections for students.
- Fleming College and the City of Peterborough partnered to introduce a bike sharing program called Zagster to the community, with locations at GreenUP, Venture North, and Fleming College Sutherland Campus.
- A new booking system for Handi-Van Service was implemented in 2015, increasing trip capacity by 15%<sup>41</sup>.
- Introduction of the 2018 Peterborough Transit Community Bus. The aim of the community bus is to increase accessibility to transportation services.

<sup>&</sup>lt;sup>40</sup> City of Peterborough Sidewalk Strategic Plan Revue. 2016.

<sup>&</sup>lt;sup>41</sup> City of Peterborough Accessibility Status Report 2014 & 2015. 2016.

- Accessible outdoor play spaces- accessible paths with easy access to amenities, and engineered wood fiber with rubber systems at pathway zones.
- All of the City of Peterborough's new signalized intersections include audible and vibro-tactile walk indicators<sup>41</sup>.
- In 2014-2015, Beavermead Campground was retrofitted for accessibility within the campground<sup>41</sup>.
- A \$5.4-million-dollar project converted Brealey Drive in the City of Peterborough into a complete street design. The new design infrastructure included two-way bicycle trail along the west side of the road separated from traffic by a grass strip, sidewalks on both sides of the street, two signalized pedestrian crossings midblock, curb ramps with tactile paving to improve accessibility<sup>42</sup>.
- Accessible Resource Maps tool identifies accessible parking, washrooms in City
  of Peterborough facilities, and accessible playgrounds<sup>43</sup>.
- Bethune Street Project Streetscape design vision will accommodate pedestrians and cyclists of all abilities, as well as slow moving, local vehicular traffic within a park-like linear corridor that is designed to maximize greening, public spaces, pedestrian realm, programming, and parks and trails connectivity<sup>44</sup>.
- The City of Peterborough received funding from the Community Foundation of Greater Peterborough to install LED lighting along the Rotary Greenway Trail link<sup>45</sup>.
- GO bus transit options for students at Trent University.
- The City of Peterborough announced the generous support of the Rotary Club of Peterborough-Kawartha and the Rotary Club of Peterborough to bring the first Adult Outdoor Gym to Beavermead Park in Peterborough.
- A fully accessible trail link at Beavermead Park beach with and accessible ramp to the water.
- Approval of the Age-Friendly Plan that recommends affordable and flexible rural transportation options, improved public transit in the City; a safe and wellmaintained road network as well as connected active transportation network; adequate & accessible parking; and complete community design that includes a mix of housing, services, and recreation spaces support older adults. A host of key directions support aging in place and advocating for the needs of older adults when setting programs, levels of service, and infrastructure<sup>1</sup>.

<sup>&</sup>lt;sup>42</sup> Complete Streets. Brealey Drive, Peterborough. 2017.

<sup>&</sup>lt;sup>43</sup> Accessible Resource Maps.

<sup>&</sup>lt;sup>44</sup> Bethune Street Project. Bethune Street Streetscape Master Plan. 2016.

<sup>&</sup>lt;sup>45</sup> Rotary Greenway Trail Link Lighting Project. 2017.

- Funding to initiate programs, acquire busses, and establish new routes.
- Usage of Handi-Van has increased at a significant rate, placing pressure on service resources and capacity.
- Designation and construction of new sidewalks in existing developments is challenging.
- Trails available in the GPA- Trans Canada Trail, Lakefield-Peterborough Rotary Greenway Trail, BEL Rotary Bridgeneorth Trail, Victoria Rail Trail, Harold Town Conservation Area, Millbrook Valley Trails, Warsaw Caves Conservation Area, Ganaraska Hiking Trails, Adam and Eve Trail, and the Lakefield Trail.

- Support the development and implementation of complete streetscape design for inclusive planning (i.e. Bethune St.).
- Support further rural transportation development services based on the successful Safe Travels pilot in Curve Lake First Nation, Selwyn and the City of Peterborough.



# Waste- Expand reuse and recycling programs

According to the World Bank, the world produced 3.5 million tons of solid waste per day in 2010<sup>46</sup>. This amount is expected to double by 2025. That is not just a lot of garbage, but lost value in the raw materials and residual worth. Moving towards zero waste means embracing the concept of a "circular economy", moving away from the "take-make-dispose" approach to one where products are cycled back into the economic stream. A circular economy values the reuse and regeneration of materials by encouraging product design and handling that minimizes total environmental impact across the life cycle.

Goal: We will reduce the amount of waste we generate by using resources wisely.

**Priority Action:** Identify and promote opportunities for the reuse or recycling of reusable goods and materials.

**Status:** Underway – with the Provincial Extended Producer Responsibility (EPR) program scheduled to roll out shortly, traditional recycling programs will be transferred back to the producer for a "cradle to grave" responsibility.

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<sup>&</sup>lt;sup>46</sup> World Food Bank. 2013.

## **Community Results:**

Figure 10.1: Comparison of like-sized municipalities to the County of Peterborough Waste Diversion Rate from 2011-2015 to demonstrate increased diversion rates.

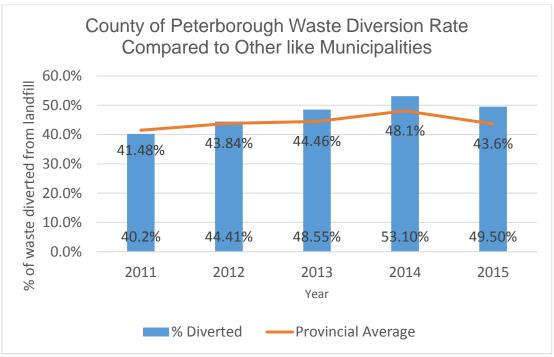


Figure 10.2: Comparison of City of Peterborough Waste Diversion rate to like-sized Municipalities from 2011-2015 to demonstrate increased diversion rates.

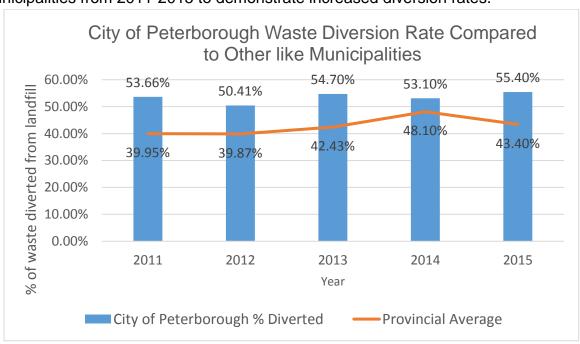


Figure 10.3 Blue Box Tonnage for the GPA:

Municipality/	2012	2013	2014	2015	2016	
First Nation	(tonnes)	(tonnes)	(tonnes)	(tonnes)	(tonnes)	
City of Peterborough	8,518	8,551	8,353	8,194	7,427	
County of Peterborough	4,707	4,868	5,152	5,057	4,896	
Curve Lake First Nation	78	42	83	94	82	
Hiawatha First Nation	16	19	17	9	14	

#### **Community Accomplishments:**

- In 2014, a Mattress Recycling Program was launched at the Peterborough County/City Waste Management Facility.
- In 2015, the City of Peterborough started a special Battery Collection Program through the Blue Box.
- In 2017, a Reuse Facility opened at the Peterborough County/City Waste Management Facility.
- Province-wide direction to move from a municipal provided blue box program to an Extended Producer Responsibility (EPR) program will transform tradition municipal blue box recycling programs, creating a "cradle to grave" accountability for producers of their waste materials.
- Free tire recycling for the GPA.
- Free household hazardous waste recycling at the designated Household Hazardous Waste Depots located throughout the City and County.
- Free electronic waste and equipment recycling.
- In 2016/2017, the Recycle Rangers Program (City of Peterborough, County of Peterborough, Northumberland County, and City of Kawartha Lakes funded, GreenUP implemented) offered an education program focused on electronics recycling to school children across the region.

#### Implementation Challenges:

- Timing, budgeting and planning for extended producer responsibility and how it will affect our local programs and service.
- A business case for new program roll out, education, and implementation.
- Volatile or non-viable markets for recyclables, i.e.: polystyrene is no longer viable to recycle and removed from blue box pick-up.

- Implementation of extended producer responsibility.
- Promote opportunities for reducing waste generation, support efforts to reduce packaging.
- Program proposal underway in partnership with Trent University to promote reuse of good condition clothing and launch a recycling program for all textiles.



# Waste - Implement a curbside organics collection program

The decomposition of waste is one of the largest contributors of greenhouse gases. To reduce this source of methane, municipalities are collecting and processing source separated organics that captures the methane released during the composting process. Organics are collected separately from garbage, and composted into a nutrient-rich soil amendment rather than buried as a waste stream. Collection and processing of curbside organics waste is a significant greenhouse gas emissions reduction action for municipalities.

Goal: We will reduce the amount of waste we generate by using resources wisely.

**Priority Action:** Establish a curbside organic waste collection program.

**Status:** Underway – Planning continues for a curbside organics collection program in the City of Peterborough to be implemented by 2022.

## **Community Results:**

- The City of Peterborough is scheduled to have a Source Separated Organics Program in place by 2022.
- County and Townships will be required to provide, at a minimum, a rural composter-based program with community access to a composting facility.

- In 2018, the City of Peterborough was awarded just under \$7.5 million external funding for the development and launch of a curbside source separated organic waste collection and processing program. However, the Municipal GHG Challenge Fund was canceled and the status of the project is unclear at this time.
- Ministry is mandating a curbside organics collection program for urban areas.
   Rural areas are mandated to provide by backyard composters and access to a composting facility.

 Proposal presented to Havelock- Belmont- Methuen for a Renewable Natural Gas Plant that could produce 50 new jobs, and process as much as 230,000 tonnes of organic waste yearly in an anaerobic digester<sup>47</sup>.

# Implementation Challenges:

- Budget and financial considerations for a \$15 million project.
- Change in waste collection routes.
- Procurement of collection trucks.
- Purchase kitchen containers and curbside carts.
- Extensive marketing and education program.

- Support the implementation of the City Waste Management Master Plan and County Waste Management Plan.
- Support innovative waste management strategies for the GPA, and advocate to key decision makers.

<sup>&</sup>lt;sup>47</sup> Freeman, Bill. 2017. <a href="https://www.northumberlandnews.com/news-story/7926534-havelock-renewable-natural-gas-plant-will-be-largest-in-canada/">https://www.northumberlandnews.com/news-story/7926534-havelock-renewable-natural-gas-plant-will-be-largest-in-canada/</a>



# Water – Establish water conservation & efficiency programs

In order to preserve and protect the water resource system, policies, programs, and regulations are established. They contain broad goals and objectives that aim to enhance long-term, sustainable water-use practices and management; promote water conservation and efficiency; improve monitoring and data sharing; and develop science, research, education, and outreach to help advance our water conservation efforts.

**Goal:** We will make wise use of our water to enhance its quality and quantity, ensuring that future generations will be able to use our water to drink, fish, and swim.

**Priority Action:** Establish a water conservation and efficiency program that motivates water consumers and makes available resources for water conservation.

**Status:** Underway - Local action moving the action forward.

**Indicators:** Establishment of a water conservation and efficiency program that motivates water consumers and makes available resources for water conservation.

#### **Community Results:**

Utilize Principles of integrated watershed management to promote and protect ecological health and sustainability within the Greater Peterborough Area watersheds. Local water conservation and efficiency programs:

- In 2013, Peterborough Utilities installed water meters across all users.
- GreenUP and Peterborough Utilities Group \$25 subsidy for purchasing a rain barrel at the GreenUP Store & Resource Centre.

In 2012, the City of Peterborough launched the Low-Flow Toilet Replacement Rebate Program with a \$50 rebate to replace an existing toilet to a WaterSense high efficiency toilet.

Figure 11.1: Summary of Toilet Rebates from 2012-2017 demonstrates the participation in the program, including liters of water conserved each year from program participation.

# **Summary of Toilet Rebates**

Year	# of rebate applications	# rebates awarded	# Multi Res	% Multi Res	# Single Family	% Single Family	Litres of Water Conserved each year
Program launched April 2012	343	899	4 buildings 505 units	56%	394	44%	59,558
2013 *Water meters started Sept 2013	362	867	2 buildings 400 units	46%	467	54%	75,060
2014	467	773	8 buildings 249 units	32%	524	68%	93,870
2015	595	816	5 buildings 13 units	2%	803	98%	73,609
2016	512	1,000	4 buildings 325 units	33%	675	68%	83,355
2017	517	575	0 buildings 0 units	0%	575	100%	52,759
Total	2,796	4,930	1,492	30%	3,438	70%	438,212

# **Community Accomplishments:**

Ongoing coordination of the Low Water Response Program, provided by
Otonabee Conservation and the Province. This program provides information
and resources to municipalities and community residents about drought
conditions, water conservation facts sheets and related information. Toilets
account for 30% of residential indoor water consumption. To reduce water
consumption, the City of Peterborough has created a Low-Flow Toilet
Replacement Rebate Program<sup>48</sup>. Residents can receive a \$50 rebate for
replacing an existing toilet with a WaterSense high efficiency toilet.

<sup>&</sup>lt;sup>48</sup> Low-Flow Toilet Replacement Rebate Program.

- The Water Wise Neighbour: Landscaping Recognition Program was offered to City of Peterborough residents in 2016, this program was offered by GreenUP in partnership with Peterborough Utilities Group to recognize the efforts of citizens taking steps to be water wise, using alternative landscaping methods in their front yards<sup>49</sup>.
- Depave Paradise is a project of Green Communities Canada that partners with local organizations, including GreenUP, to remove unwanted pavement to rejuvenate urban spaces, plant native species and increase the amount of permeable ground space for water absorption and run-off<sup>50</sup>.
- The Sustainable Urban Neighbourhoods program guides residents in setting priorities and participating in action plans to address a wealth of sustainability priorities including rainwater management, and flood prevention27.
- PTBO H<sub>2</sub>O Mobile Drinking Water Station is an accessible mobile water station that has 8 water fountains and 8 water bottle refill stations. The unit diverts 2,800 plastic bottles from waste, can provide a continuous supply of water when hooked to a municipal water system, and is solar powered<sup>51</sup>.
- Launch of City of Peterborough Rethink the Rain Program<sup>52</sup>.
- The Curve Lake First Nation Community Energy Plan and the Hiawatha First Nation Community Energy Plan both include water conservation initiatives and initiatives such as, monitoring use, upgrading fixtures, grey-water re-use and residential water use reduction<sup>53</sup>.

# **Challenges for Implementation:**

- Lack of funding to support water conservation programs.
- Limited education and outreach capacity for incentive programs to engage citizens and encourage participation in the GPA.

- Consider rebates for property owners who install water conservation techniques and tools on site to process surface water.
- Develop greater communication promoting resiliency for property owners to prepare for flooding and drought through adaptation strategies.

<sup>&</sup>lt;sup>49</sup> GreenUP. Water Wise Landscape Recognition Program.

<sup>&</sup>lt;sup>50</sup> DePave Paradise. <a href="http://www.depaveparadise.ca/peterborough.html">http://www.depaveparadise.ca/peterborough.html</a>

<sup>&</sup>lt;sup>51</sup>Peterborough Utilities Group. PTBO H2O Mobile Drinking Water Station.

<sup>52</sup> Rethink the Rain. 2017. <a href="https://sustainablepeterborough.ca/wp-content/uploads/2017/12/Peterborough-Rethink-the-Rain-Presentation\_Sept28\_17\_SPCC\_Final.pdf">https://sustainablepeterborough.ca/wp-content/uploads/2017/12/Peterborough-Rethink-the-Rain-Presentation\_Sept28\_17\_SPCC\_Final.pdf</a>

<sup>&</sup>lt;sup>53</sup> Curve Lake First Nation Community Energy Plan. 2017.



# Water - Shoreline and wetland restoration

Natural vegetation along shorelines of water bodies plays a crucial role in protecting water quality, preventing soil erosion, and preserving the ecological balance of aquatic environments. Shallow water along the shoreline where land and water meet forms a rich and complex habitat that is essential to the survival of many species. However, much of the natural vegetation around Ontario lakes and rivers has been cleared or replaced with non-native species. This has resulted in the loss of wildlife habitat, soil erosion and reduced water quality.

**Goal:** We will make wise use of our water to enhance its quality and quantity, ensuring that future generations will be able to use our water to drink, fish, and swim.

**Priority Action:** Find funding that will enable the inventorying and identification of shoreline and wetland areas in need of ecological restoration.

**Status:** Underway. Many local organizations and landowners have identified shoreline and wetland areas that would benefit from restoration or stewardship activities. Efforts have also been initiated by many organizations to complete shoreline and wetland restoration projects with a variety of partners.

#### **Community Results:**

- Landowners are aware of funding opportunities, technical advice and partners to undertake stewardship projects on public and private land.
- Many organizations locally and provincially are involved in restoration and stewardship projects.

Figure 11.1: Otonabee Conservation Report Card Data 2013-2018<sup>54</sup> 55

	2013	2018	
Forested	15%	42%	
Watershed			
Forest interior	8%	14%	
Forested	27%	56%	
Riparian Zone			
Wetland	11% covers 207 km <sup>2</sup> of which 9% or	11%	
	177 km² has been evaluated as		
	provincially significant		
Water Quality	Ranging from good to fair.	Ranging from good to	
	Urbanization significantly impacted	fair. Urbanization	
	the quality of surface water in the	significantly impacted	
	most developed watersheds.	the quality of surface	
		water in the most	
		developed watersheds.	
		Common ground water	
		quality indicators such	
		as chloride, nitrate and	
		nitrite levels have	
		consistently met	
		provincial guidelines	
		from 2012-2016.	

#### **Community Watershed Accomplishments:**

- Watershed report cards were completed by all conservation authorities 2013, and updated in 2018 to evaluate the health of a watershed including information on surface water quality, forest cover, ground water resources and wetlands.
   Otonabee Conservation released the first Watershed Report Card in 2013, using the standards developed by Conservation Authorities across Ontario. The report card listed approximately 15% of the watershed is forested, 8% is forest interior and 27% is forested riparian zone54.
- Local information available related to the health of the environment from many organizations the Watershed Report Card published every 5 years by Otonabee Conservation.

<sup>&</sup>lt;sup>54</sup> Otonabee Region Watershed Report Card. 2013

<sup>&</sup>lt;sup>55</sup> Otonabee Region Conservation Watershed Report Card. 2018

- Otonabee Conservation is a part of the Ontario Low Water Response Program
  that works collaboratively with local municipalities, water management agencies,
  tourism, cottage and agricultural sectors, Provincial and Federal agencies, and
  First Nations to analyze conditions on a monthly basis.
- Opportunities for private landowner to participate in stewardship activities including the purchase of trees through programs such as the tree seedling sales program offered by Otonabee Conservation
- East Central Farms Stewardship Collaborative works with landowners to complete stewardship projects including wetland restoration
- KLT offers workshops/events for community members to participate in stewardship activities
- Existing Legislation in place to protect wetlands and natural areas including the conservation Authorities Act, Planning Act and Provincial Policy Statement.

- Availability of resources and capacity.
- No clear responsibility for inventorying and identification process. (Wetland Evaluation is directed by the Province).
- Lack of understanding related to provincial, municipal legislation and the opportunities for local action.

- Support the inventory and identification of shoreline and wetland areas projects.
- Support Citizen Science programs assist in documenting ecological health.
- Support implementation of restoration/rehabilitation projects.
- Identify opportunities for funding support and technical advice for stewardship and restoration activities.



# Water - Establish water conservation & efficiency programs

A watershed is the land area that drains in to a lake, river or stream and includes its tributaries. Its boundaries are determined by the height of the land, and a watershed includes the air, water, land and all living organisms. Watershed Management is a holistic approach to managing water resources for quantity and quality, impacts, and change over time.

**Goal:** We will make wise use of our water to enhance its quality and quantity, ensuring that future generations will be able to use our water to drink, fish, and swim.

**Priority Action:** Establish an integrated watershed management plan to promote ecological health and sustainability within the Greater Peterborough Area watersheds.

**Status:** This action is outside of the capacity, and scope of Sustainable Peterborough. However, there are local initiatives underway to positively impact the ecological health and the overall sustainability of watersheds within the GPA.

**Community Results:** Utilize principles of integrated watershed management to promote and protect ecological health and sustainability within the Greater Peterborough Area watersheds.

- Environmental Education Programs related to water delivered by many organizations including the Wonders of Water, Be a Watershed Steward Program, Peterborough Children's Water Festival.
- World Water Day events and recognition throughout the GPA.
- Creek Management Plans developed by the City of Peterborough to direct activities related to watercourse management throughout the City.
- Trent Source Protection Plan, developed under the Clean Water Act, 2006 includes policies to protect the sources of municipal residential drinking water and was developed using the ecological unit of the watershed for the Trent River.

 Complex local environment comprised of many partners and users including TSW, OPG, PUC, Otonabee Conservation, municipalities and residents using water for many purposes Hydro generation, drinking water, fishing, drinking, swimming, recreation, navigation.

#### **Next Steps for Sustainable Peterborough:**

 Connect, and promote local initiatives for knowledge sharing opportunities and wise use of resources within local watersheds.

#### Summary

It is important to re-evaluate the unique needs of the community to ensure that the GPA is on track to meet the 25-year vision of the Sustainable Peterborough Plan. In summary the following recommendations moving forward emerged from the creation of the Progress Report.

- Schedule a refresh of the Integrated Community Sustainability Plan.
- Revisit each of the 19 priority actions to reconfirm their relevance to the overall goal of the Plan moving forward. A number of priority actions have made substantial progress and are complete, while others are underway, and a couple are beyond the capacity of Sustainable Peterborough. It is important to keep in mind that to identify progress, gaps, and challenges the priority actions must be measurable, clear, and easily communicated to illustrate their impact.
- To further the above recommendation, and for future strategic planning purposes, each priority action should be assigned metrics and indicators at the time of the Plan refresh. By coupling this process at the beginning, will reduce ambiguity and provide a deeper measurement process.
- Designate a Sustainable Peterborough staff point person to gather, monitor and provide the collective data for measurement. Develop a centralized location, such as a database separate from the partner initiatives database, where indicator data may be stored and updated regularly. A central location with a point person collecting the data provides continuity and transparency. It would also improve accuracy, effectiveness and efficiency of measurement that is core to communicating the value, progress and impact of Sustainable Peterborough.
- As sustainability is more engrained within planning processes, explore
  connections with community agencies working in similar areas to expand network
  connections, knowledge and skill base. One opportunity is for a crossover
  Working Group with the Housing and Homelessness Plan, as the Ministry of
  Housing has recently included sustainability as a requirement for the Review of
  Service Managers' 10-year Housing and Homelessness Plans.

# Our future... Our legacy