



Sustainable Barrie



JUNE 2019

PURPOSE



Sustainable Barrie is the City's Sustainable Development Strategy. The City currently engages in a wide variety of initiatives that contribute to creating a sustainable community for current and future residents. This strategy investigates, makes policy recommendations, and implements process and regulatory changes intended to encourage the development of sustainable and resilient neighbourhoods across Barrie.

The City of Barrie has many successes that support making Barrie more sustainable for its residents and visitors. The Waterfront has been protected and recognized as a premier public asset; the City has developed a Climate Change Adaptation Strategy and Energy Management Plan; facilities such as the Barrie Fire Station No. 1 have been built to LEED Silver Certification standards; the Water Pollution Control Centre produces renewable power; and so much more.

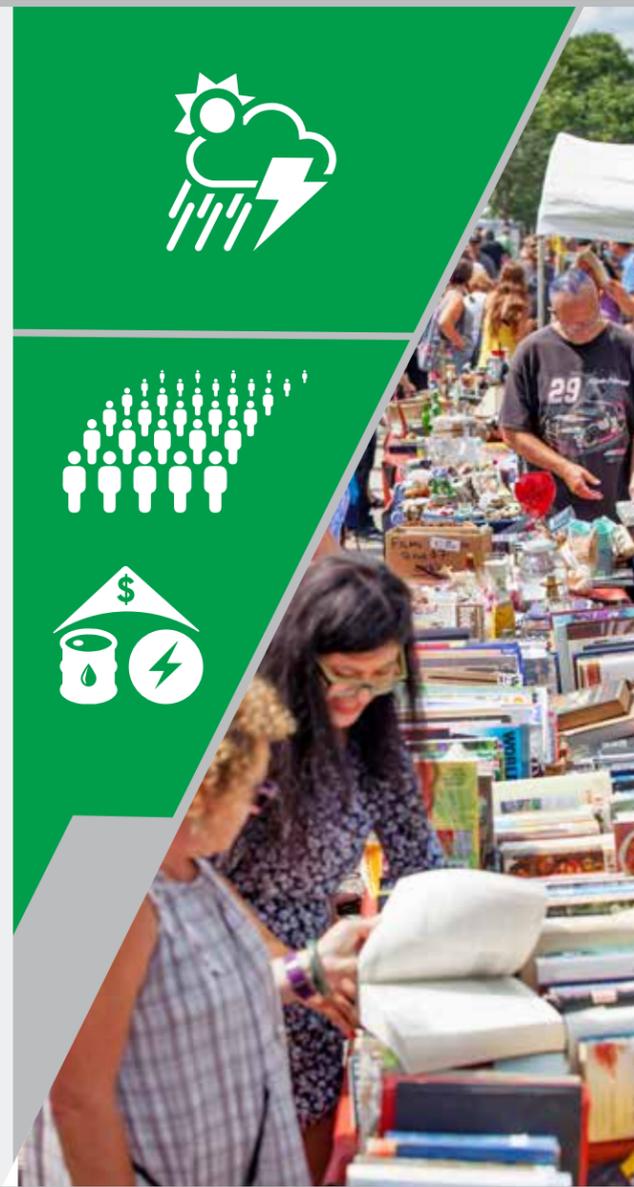
Sustainable Barrie includes information about:

Policy integration	Education & training
Leading practices	Tourism
Urban lifestyle	Renewal
Civic spirit	Inclusive community
Natural systems	Financial sustainability & partnership
Economic prosperity	

This strategy will advance progress for sustainable development creating synergies among various City departments, stakeholders and residents to support an exceptional quality of life for all. It sets out areas of focus and targets for tracking performance. It is intended to be a living document, flexible by design, to address emerging issues and changes deemed to support sustainability for the City of Barrie.



WHAT IS SUSTAINABILITY?



* Put simply, the goal of sustainability is to prosper today without jeopardizing tomorrow. Sustainable development, according to one widely used definition, is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Sustainable development aims to address each of these dimensions using a holistic, comprehensive, and balanced approach. Actions taken to protect the environment, for instance, should not be made at the cost of continued economic, social, or cultural development. Rather, we need to find solutions that can balance all of the components of sustainability.

As public concern continues to grow over the challenges posed by climate change, both present and in the future, municipalities are becoming increasingly mindful of the importance of sustainable development. Changing demographics, continuing migration and population growth, increasing pressures on natural systems, disruptive changes in our economic systems, rising oil and energy costs, and increasingly severe weather events all contribute to the urgency of making our communities more sustainable.

What Does Sustainability Mean for Barrie?

For Barrie, sustainability means celebrating our community's rich history while embracing the potential that the future holds. It means protecting the assets we value (Natural Systems, Urban Lifestyle, Economic Prosperity, Civic Spirit & an Inclusive Community) so that future generations can also enjoy them.

* SOURCE: International Institute for Sustainable Development 2019. <https://www.iisd.org/topic/sustainable-development>

CHALLENGES RELATED TO SUSTAINABILITY



Growth

GROWTH

It is expected that, by 2031, an estimated 210,000 people will call Barrie home, a number that is projected to increase to 253,000 people by 2041. By 2031, the city will contain an estimated 114,000 jobs and that is projected to grow by an additional 15,000 by 2041. The ways in which we meet this growth will have a lasting impact on the future of the city. A city made up of homogeneous neighbourhoods with primarily low-density, ground-related housing and completely dependent on the private automobile is not sustainable.

The City of Barrie is responding to the need for a more compact urban form and the demand for more mixed-use development by updating its Official Plan, Zoning By-law, and Urban Design Guidelines. The City is also making changes to its Infrastructure Planning while consulting the development community and the general public.

MOBILITY

As Barrie continues to grow, the importance of achieving a well-balanced, sustainable transportation network to serve the City's residents and visitors increases. In order for our growth to be sustainable, regional transportation, local public transit, cycling, and walking need to be viable alternatives to private automobile use, incorporating supportive technological changes.

CLIMATE CHANGE

The effects of climate change pose a challenge for communities across the globe. Extreme weather events are becoming more frequent and intense while the extent of their impact is becoming less predictable. The City of Barrie has prepared a Climate Change Adaptation Strategy (CCAS) (to build community resilience to the local risks we face because of climate change) and an Energy Management Plan (EMP). The goal moving forward will be preparing an implementation plan and coordinating action among various partners.



Mobility



Climate Change



Competition in a Global Economy

COMPETITION IN A GLOBAL ECONOMY

Barrie offers an established economic base and opportunity for an outstanding quality of life. Innovation, small businesses, and niche manufacturers continue to drive the area's economic growth. In today's global economy, it is becoming increasingly important that the city's economy be diverse and flexible enough to respond to shifts in global markets and that job creation keep pace with population growth. The city should support local made products for local utilization and build local enterprise from within the community.

DIVERSITY, INCLUSIVENESS & IDENTITY

A vibrant community with its own rich history, the City aims to recognize that Barrie consists of a number of diverse communities and, where appropriate, it is important to identify and involve these communities in decision-making and the creative planning process thereby encouraging civic pride.



Diversity Inclusiveness & Identity

HEALTH

It is becoming increasingly important to consider the effects that our built environment has on the community's health and wellness. Monitoring the health of our neighbourhoods from different perspectives will help us make incremental changes that will benefit the community in the long term. The planning of communities and buildings should take into consideration total wellness and health.



Health

POLICY INTEGRATION

Planning Act

The *Planning Act* is the foundation for land use planning matters in Ontario and provides the legal framework within which planning decisions are made. The *Planning Act* includes explicit language to support sustainable development, specifically “to promote sustainable economic development in a healthy natural environment within the policy and by the means provided under this Act.”

Furthermore, section 2 of the Act requires anyone who makes a planning decision (or otherwise carries out responsibilities under the Act) to “have regard to” matters of Provincial interest, which include “the promotion of development that is designed to be sustainable, to support public transit and to be oriented to pedestrians.”

The Act also provides municipalities with the authority to approve plans or drawings before any development can take place on a given site, and to consider as part of the approval process a building’s architectural features and exterior design, including sustainable design.

Other *Planning Act* provisions that address sustainability include:

- support for intensification, including control over density and building heights;
- support for renewable energy projects and technologies;
- the protection and conservation of natural resources and ecological systems;
- the efficient use and conservation of energy and water resources;
- the conservation of significant cultural and historical features; and
- the provision of adequate employment opportunities.



Provincial Policy Statement

Provincial Policy Statements, or PPSs, are issued under section 3 of the *Planning Act* and set out specific policies relating to matters of Provincial interest as they pertain to land use planning and development in Ontario. Under the *Planning Act*, any planning decision made must be consistent with the Provincial Policy Statement.

The most recent PPS was issued in 2014 and it is considered a foundational policy document that supplements the legislative framework provided by the *Planning Act*. The Vision for Ontario’s Land Use Planning System, articulated in Part IV clearly states that the province’s long-term prosperity and well-being depend on “planning for strong, sustainable and resilient communities for people of all ages.”

The policies in the PPS provide strong support for several of the principles of sustainable development by promoting complete communities, compact and efficient land development patterns, intensification and redevelopment, a range and mix of land uses, and the protection of significant natural features. Natural heritage features, natural linkages, and drinking water sources are to be preserved and maintained.

The PPS defines Natural heritage as a system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. These systems can include natural heritage features and areas,

federal and provincial parks and conservation reserves, other natural heritage features, lands that have been restored or have the potential to be restored to a natural state, areas that support hydrologic functions, and working landscapes that enable ecological functions to continue.

The PPS also supports long-term economic prosperity by calling for the enhancement of downtowns and main streets, the redevelopment of brownfield sites, and the provision of an efficient multi-modal transportation system. Social, health, and well-being needs are to be addressed by ensuring (among other things) that a range of housing types and densities are provided in order to meet both present and projected needs. There are also policies to promote increased energy efficiency and improved air quality through the use of alternative and renewable energy sources.

POLICY INTEGRATION

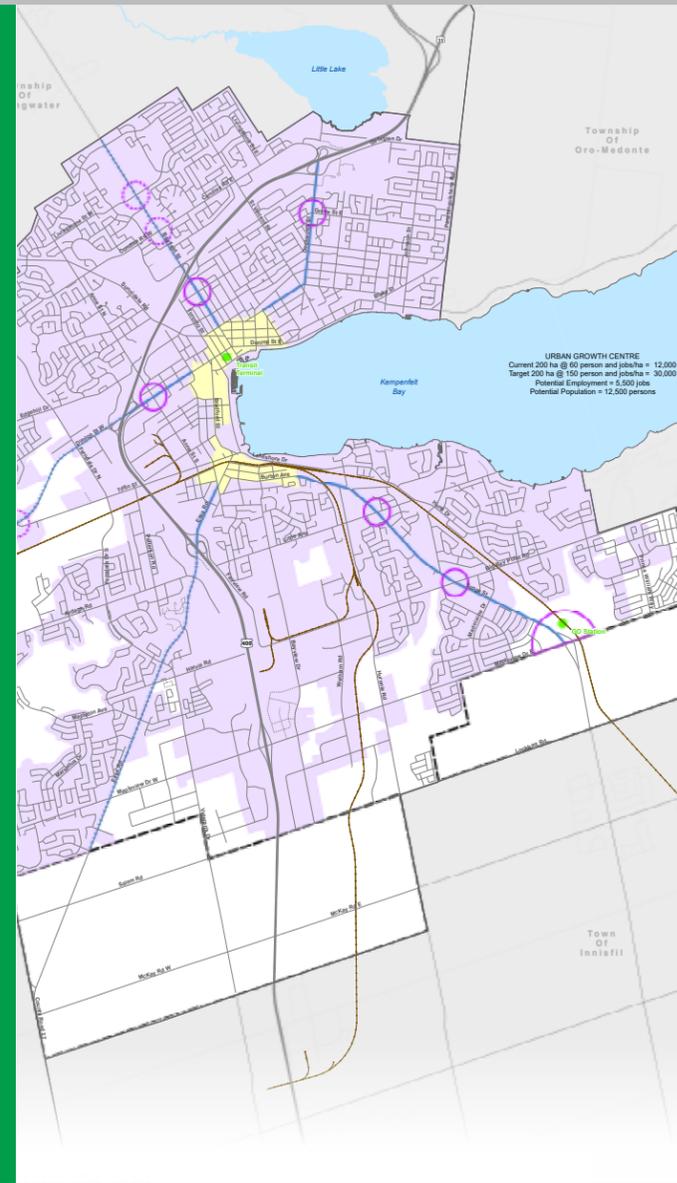
Places to Grow Act and the Growth Plan for the Greater Golden Horseshoe

Barrie contains the only Urban Growth Centre within Simcoe County designated in the Growth Plan, making the city an area of focus for sustainable development featuring high-density intensification, compact urban form, and efficient land use.

The *Places to Grow Act* came into effect on June 13, 2005, and authorizes the province to prepare “growth plans” for designated “growth plan areas.” Growth plans may contain population projections, strategies to manage growth, and policies and goals regarding a variety of planning matters, such as intensification and density, settlement area boundary expansions, transportation planning, energy conservation, affordable housing, and community design.

The Growth Plan for the Greater Golden Horseshoe—commonly referred to simply as the “Growth Plan”—was originally put in place in 2006, then updated in 2017. It is one of the most significant documents supporting sustainable development policies across Ontario. Approved under the *Places to Grow Act*, the Growth Plan is a Provincial plan under the *Planning Act*, and thus any decision affecting a planning matter must conform with (or not conflict with) the Growth Plan.

Principal among the Growth Plan’s policies are density targets for various municipalities that concentrate development within urban settlement area boundaries, as well as policies to encourage higher-density intensification within designated Urban Growth Centres. The overall intent of the Growth Plan is to curb urban sprawl and discourage greenfield development, in line with the *Places to Grow Act*’s recognition of the importance of “making efficient use of existing infrastructure and preserving natural and agricultural resources.”



OFFICIAL PLAN
Schedule I
Intensification Areas
Office Consolidation
January 2018

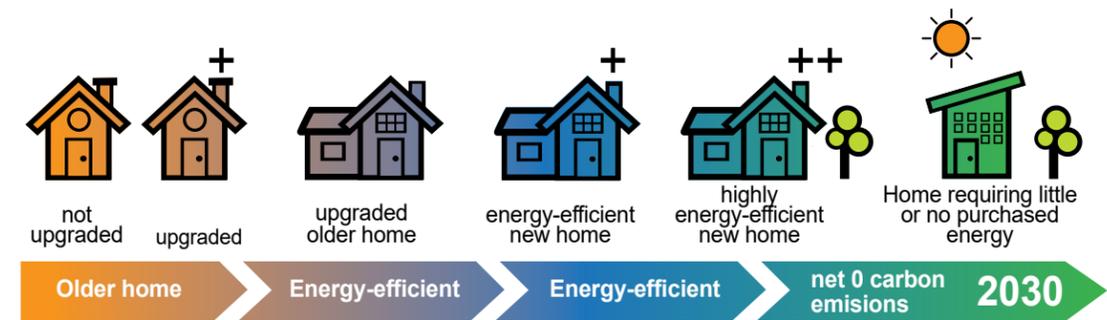
- Major Transit Stations (50-120 units per ha)
- Primary Node/Major Transit Node (50-120 Units per ha)
- Secondary Node (50-120 Units per ha)
- Primary Corridor (50 Units per ha)
- Secondary Corridor (50 Units per ha)
- Urban Growth Centre (150 persons/jobs per ha)
- Built-up Area

Ontario Building Code

Ontario’s Building Code is typically reviewed every five to seven years. Interim amendments to the Building Code are sometimes made between editions to reflect advances in technology, to support government priorities, and to address emerging issues.

The latest edition of the Building Code was published in 2012, it includes the greatest increase to the energy efficiency requirements for new houses and buildings to date. The changes introduced included requiring new houses to meet an EnerGuide rating of 80 or less through either prescriptive or performance measures.

Since 2012, further increases in energy efficiency have been incorporated, such as requiring new houses to exceed an EnerGuide rating of 80 (under the previous 0–100 scale) by not less than 15%.



POLICY INTEGRATION

Excess Soil Management

Excess soil is defined as soil that has been dug up, such as during construction activities, that cannot be reused on site and must be moved to another site. The Provincial government has a new regulation for on-site and excess soil management. The purpose of the Excess Soil Management policy is to ensure that excess soil is properly characterized and relocated to an appropriate reuse site. The policy is related to sustainable excess soil management and reuse. With this proposal, it would clarify that “project leader” is responsible for managing and relocating excess soil generated by the project. The goal of the proposal is to: clarify where excess soil can be reused, enhance responsibility and accountability of excess soil generators, improving transparency and public accountability, and reduce burden related to brownfields redevelopment.

Climate Change Policy

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

The Pan-Canadian Framework on Clean Growth and Climate Change is Canada’s plan. It was developed with the provinces and territories and in consultation with Indigenous peoples to meet emissions reduction targets, grow the economy, and build resilience to a changing climate. The plan includes a Pan-Canadian approach to pricing carbon pollution, and measures to achieve reductions across all sectors of the economy. It aims to drive innovation and growth by increasing technology development and adoption to ensure Canadian businesses are competitive in the global low-carbon economy. It also includes actions to advance climate change adaptation and build resilience to climate impacts across the country.

The City of Barrie recognizes the threat that climate change poses, both to its community and to City operations. The City is already undertaking mitigation efforts to reduce greenhouse gas emissions and planning adaptation efforts to increase local resilience to the consequences of climate change.

The purpose of the Climate Change Adaptation Strategy is to mainstream adaptation actions into City operations and to reduce the risks climate change poses to Barrie’s physical, economic, social, and ecological systems.

Metrolinx 2041 Regional Transportation Plan and Provincial Transportation Policy

The Metrolinx 2041 Regional Transportation Plan sets out a vision, goals and strategy for addressing transportation across the Greater Toronto and Hamilton Area. Although Barrie is not within the designated area covered by this plan, the City does form part of the regional transportation network. As part of this network, the City can benefit from the strategic direction provided by the Metrolinx plan, which among other things reinforces the importance of sustainable urban development.

MTO is carrying out a planning study to develop a long-term transportation plan for the Greater Golden Horseshoe.

The plan will inform policy and investment decisions that support the government’s goals of addressing climate change, supporting economic development and promoting new technology. The plan will also help guide work with municipalities and transit agencies to improve highways, rail and bus networks, border crossings, airports and more.



POLICY INTEGRATION

City of Barrie Official Plan

The Official Plan for the City of Barrie contains a number of policies that promote and support the principles of sustainable development. The “Community Context” section of the plan recognizes the importance of the city’s high-quality natural environment and its role in the health, well-being, and quality of life of the city’s residents.

Alongside commitments to protect the natural environment, the City’s Official Plan states: In implementing the goals and policies of this Plan, the City will strive for “sustainable development”, defined as development that does not jeopardize opportunities for future generations. Development which is sensitive to the environment can be achieved through sound land use planning and transportation policies; through the development of energy and resource conservation programs; through the integration of waste management programs and the application of environmentally sensitive engineering, such as Best Management Practices.

The Community Vision set out in Section 2.2 of the Official Plan relies upon the principles of sustainability, including:

- an ecologically sensitive and environmentally balanced community;
- the sustainable use of land, water and air resources and;
- a diversified, balanced, and socially responsible economy.

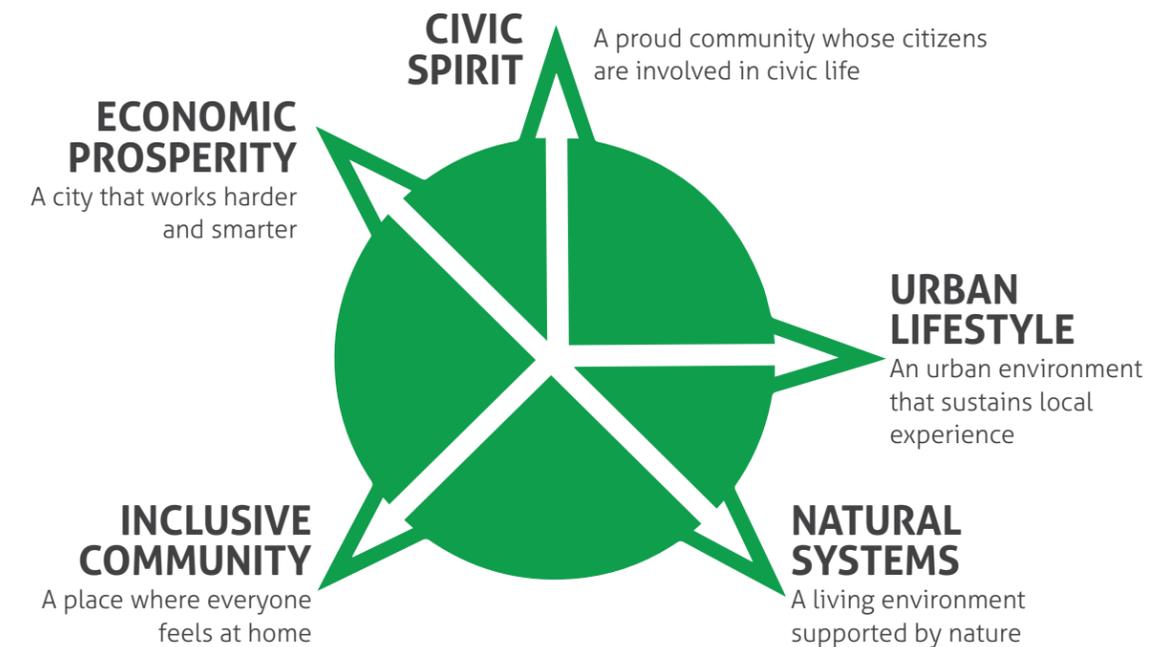
As well, numerous policies found throughout the Official Plan strive in a variety of ways to encourage and promote sustainable development. The current Official Plan has policies to support:

- growth management and balanced development;
- greater density and intensification;
- the provision of affordable housing;
- the protection and enhancement of natural heritage features;
- the conservation of cultural heritage resources;
- the protection of surface water and groundwater; and
- the remediation and redevelopment of brownfield sites.

New Official Plan Project

The City of Barrie is embarking on a project to create a new Official Plan. The project is anticipated to take 18 months. Sustainable Barrie will act as a starting point for crafting new policies to further support and promote sustainable development in the city.

BARRIE’S SUSTAINABILITY STRATEGY DEVELOPMENT



As a symbolic centre for the city, the Five Points is more than a physical location: it is an intersection of ideas to ensure that all members of the community are included and engaged in creating a future that all residents can enjoy. The Five Points has served as inspiration for Sustainable Barrie and is used as a visual representation of the strategy’s five themes.

Each of the five themes is described through Goals, Action Items and measures. The action items are specific tasks that the City can work on collectively to create a more sustainable community and the measures will be used by different departments to monitor and report our success. This is the purpose of the strategy.

LEADING PRACTICES

Sustainable cities come in all shapes and sizes — there are many different ways to be sustainable, depending on local needs and context. Ultimately, being a sustainable city comes down to making sound long-term decisions, decisions that are in keeping with the overall definition of sustainability.

The sustainable city looks for ways to enhance its residents' quality of life. Policies and initiatives will make its use of resources more efficient, its impact on the environment less disruptive, and its ability to compete in a global market more robust and tenable. It looks for ways to be home for a diverse population, to ensure all members of society are included, and to make its citizens happier, more active, and more engaged. Maintaining flexibility to foster resiliency and using monitoring and performance measures will also ensure outcomes are met. The following cities are examples of leaders in this regard.



Richmond, BC

As part of Metro Vancouver, the City of Richmond expects to grow by 80,000 people by 2041, requiring an additional 42,000 housing units within a limited land base. The City's Official Community Plan, adopted in 2012, identified the "high and rising cost of living," including significant increases in housing prices, as a significant challenge to be addressed.

Richmond's Affordable Housing Strategy 2017–2027 seeks to address gaps in purpose-built rental housing, low-end market rental housing, family-friendly two- or three-bedroom units, low- and no-barrier housing. The strategy received a 2018 Award for Planning Excellence Merit (Social Planning) from the Canadian Institute of Planners, which cites its "unique partnership between all three levels of government and five non-profit housing providers" as a "best practice model for municipalities to develop affordable housing."

Some of the strategy's policy highlights include:

- low end of market rental (LEMR) units are secured as affordable units in perpetuity through an agreement, registered on title, restricting maximum rent and tenant eligibility by income; developers provide a cash-in-lieu contribution when the threshold for LEMR units is not met;
- contributions collected through cash-in-lieu and through rezoning applications for townhouses, single-family and apartment dwellings with 60 units or less are deposited into an Affordable Housing Reserve Fund, and are subsequently used to create affordable units or purchase land for affordable housing projects; and

- developers are provided with a number of financial incentives, including the waiving of development charges and of planning application and permit fees.

Policies also exist to facilitate the creation of non-market and non-profit housing developments, and the strategy's action items include criteria for fast-tracking City-supported non-profit projects.



RICHMOND AFFORDABLE HOUSING STRATEGY 2017-2027

LEADING PRACTICES

Diversity. PEOPLE. PRACTICES. COMMUNITY.

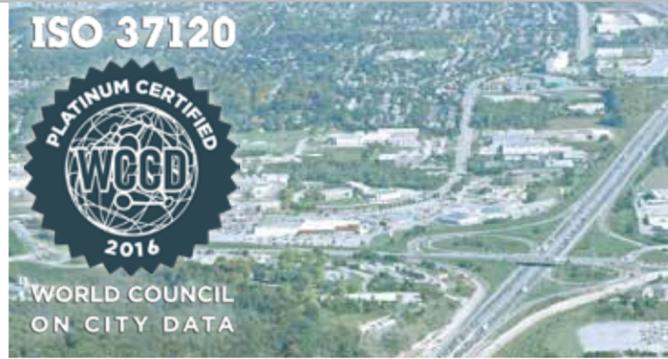


Guelph, Ontario

The City of Guelph Diversity Strategy has been developed as an action item within the People Practices Strategy, which serves as the framework that supports The City of Guelph's goal of becoming recognized as a top employer within the community.

Diversity within this strategy is not defined just by race or gender. It also encompasses the whole human experience — age, culture, education, personality, skills and life experiences. Research shows that organizations require flexibility, creativity and imagination to thrive in the current economy. These are things that can be achieved by nurturing a diversity of viewpoints bringing different voices and perspectives to the table.

The City of Guelph provides over 300 different services to residents, visitors and businesses each day. It is important that these services are developed and delivered in a way that demonstrates respect for the community as interests change over time.



Cambridge, Ontario

On Friday, December 16, 2016 the World Council on City Data (WCCD) officially recognized the City of Cambridge with ISO 37210 Platinum certification. The City becomes the third and smallest city in Ontario, and only the sixth in Canada, to receive this internationally-recognized certification. It is awarded to cities who reach the highest standard in collecting and sharing data, and using it for effective decision making.

The WCCD is the global leader in standardized city data that helps create smart, sustainable, resilient and prosperous cities. Cambridge's membership in the WCCD gives the City the opportunity to compare best practices with other cities and actively participate in a worldwide organization that uses standardized metrics to find solutions to shared problems.

The City of Cambridge uses open data to improve citizen engagement and enhance the transparency and accountability of local government. Open data encourages government transparency and keeps citizens informed. Open data also opens up communication between local government and their citizens, helping to improve online customer service strategies.

Waterloo, Ontario

Waterloo Region is 1,369 square kilometres in size and has a population of 535,154 people. ION is the Region of Waterloo's rapid transit system and is made up of light rail transit (LRT) and ION buses. The light rail system travels between Conestoga station in Waterloo and Fairway station in Kitchener. It consists of 19 stations along a 19-kilometre route. The bus system is a 17-kilometre route from the Ainslie Street terminal in Cambridge to the Fairway station in Kitchener. ION bus began operating in September 2015 and Stage 2 intends to convert the bus route to LRT, creating a seamless route of light rail that stretches from Cambridge to Waterloo.

London, Ontario

Since 2003, the City of London has used energy efficiency and conservation practices to tackle air quality and climate change. The City of London is an active participant within the Federation of Canadian Municipalities' Partners for Climate Protection program and the Global Covenant of Mayors for Climate & Energy program. This includes tracking and reporting on energy use and associated greenhouse gas (GHG) emissions in London through an annual Community Energy & Greenhouse Gas Inventory report. As of 2015, London's total GHG emissions are eight percent below 1990 levels.

In 2014, the City of London has updated its community-focused strategy, through The Community Energy Action Plan. This plan aligns London's emission reduction goals to Ontario's goals, including a 15 percent reduction in total GHG emissions from 1990 levels by 2020.

London is also committed to reduce its own environmental impact. The City's energy-related GHG emissions are now over 50 percent lower than they were in 2007. Through its Corporate Energy Management Program, the City is aiming to reduce its total energy use by 10 percent from 2014 levels by 2020.



Sustainable Barrie – URBAN LIFESTYLE

Buildings & Infrastructure

Goal	Action Item	Measurement	
Build municipal resilience to climate change	<ul style="list-style-type: none"> • Focus on flood management solutions identified in Master Drainage Plans • Work with Conservation Authorities to understand future implications for flood-prone areas • Address asset management and infrastructure resiliency (climate adaptation plan) • Develop urban design policy for changing temperatures (i.e. Urban Heat Island) • Increased Tree planting 	<p>Total Infrastructure Dollars spent per year</p> <p>Stormwater Infrastructure Dollars spent per year</p> <p>* 10% increase canopy cover by 2025 (base Urban Forest Strategy)</p>	
Expand the use of LID practices for new & existing developments throughout City	<ul style="list-style-type: none"> • Current: Development Services reviewing submissions with Low Impact Development (LID) in Interim Guidance document • Establish policies to Require LID for new development where appropriate (i.e. rain gardens, green roofs, bio-retention areas, etc.) • Establish policy to promote/encourage LID practices for existing development, especially in areas where sanitary inflow is identified (i.e. responsible disconnection of roof downspouts on lots where water can be directed to pervious or grassy areas) • Work with Engineering to incorporate LID practices into City projects where appropriate • Develop policies to encourage lot level (private) control of stormwater • Water Conservation Homeowner’s Guide (“Put a LID on it!”) • Support City Climate Change Strategy Action Item 2.4, 2.5 	<p>* Total area (m2) of green roof coverage for new development</p> <p>* Uptake of the City’s Disconnect to Protect Rebate Program (% disconnect)</p> <p>* Survey of homes experiencing flooding in Barrie annually during rain or snow. (metric in Climate Change Strategy)</p> <p>* Lake and creek water quality from CA reporting (improvement % target)</p>	
Increase the use of Sustainable Building Practices and support Green Technology (low carbon, alternative energy, etc.) throughout the City and in coordination with neighbouring municipalities	<ul style="list-style-type: none"> • Review policies to increase low carbon and energy efficient building practices including incentives & partnerships with development community • Include focus on sustainable low carbon and new technologies as part of economic development strategies • Address sustainability through Urban Design Guidelines to include priorities such as bike parking, electric vehicle infrastructure in accordance with the building code, trees etc. • Establish a City recognition program to highlight green building innovations and green technologies • Establish policies re: Sustainable Building Practices in new developments • Support greywater recycling & reuse in accordance with the building code • Establish green development standards within Official Plan • Encourage Green Roofs • Support City Climate Change Strategy Action Item 2.4 & 5.2 	<p>Number of new developments that incorporate green building elements (Target %100 of all New City Buildings)</p> <p>Number of companies/buildings recognized by award program</p> <p>Identify technology driven objectives for city sustainability and economic development</p> <p>Define targets for cycling, Electric Vehicle infrastructure, tree cover etc. city wide and at site level</p> <p>Define target for water reuse (areas of potential)</p>	
Enhance infrastructure in the existing built environment to support higher density development	<ul style="list-style-type: none"> • Upgrade servicing for intensification areas • Asset Management: continue to improve the City’s asset management practices to protect infrastructure investments and integrate with development land use policy and Master Plans 	<p>Number of capital works projects in UGC and intensification areas; amount spent on capital works</p> <p>Define asset management strategy – to get to target</p>	

* Measures currently being monitored by the City’s Climate Change Adaptation Strategy.

Sustainable Barrie – URBAN LIFESTYLE

Food & Wellness

Goal	Action Item	Measurement	
<p>Raise appreciation of the importance of local food production, celebrate the agricultural industry and support community gardens</p>	<ul style="list-style-type: none"> • Healthy Barrie Initiative will support local food by mapping access to local food (i.e. farmers' markets and local grocery) and potentially identifying "food deserts." • Promote urban agriculture and community gardens • Look for ways to support residents to start community gardens ("starter kit", park space) • City Climate Change Strategy Action Item 1.6- Partner with Simcoe Muskoka District Health Unit on food security programming and communications. • Promote edible landscapes on City property • Identify partnership opportunities such as the Urban Food Pantry Barrie • City Climate Change Strategy Action Item 7.6 & 1.6 	<p>Number of vendors at farmers' markets until at capacity (% increase)</p> <p>* Number of Community Gardens in Barrie (% increase)</p> <p>Number of fruit trees planted per year</p> <p>Area of fruit orchards created</p> <p>Number of volunteer garden plots</p>	
<p>Promote Health and Wellness Programs</p>	<ul style="list-style-type: none"> • Current: Support & maintain partnership with local Health Unit & Family Health Team; continue to promote community & social connections • Support development of community hubs that contain variety of supportive services (health, social, cultural, recreational and other resources) • Inclusive uses in Zoning Bylaw to promote health and wellness • Mental health support – include counselling as a use alongside medical, dental offices • Promote wellness in buildings and design • Usage of primary care as reported in the Healthy Barrie Neighbourhood Scorecard. 	<p>Usage of Primary Care as reported in Healthy Barrie Neighbourhood Scorecard.</p> <p>Target for hubs– number of services clustered (Target: 3 services per hub)</p> <p>Target municipal building pilot for wellness certification</p>	
<p>Provide opportunities for diverse Recreation and Sports</p>	<ul style="list-style-type: none"> • Proximity of residents to Parks (within 400 – 800m) 	<p>Proximity of residents to Parks (within 400m – 800m)</p>	
<p>Address extreme heat and cold with vulnerable populations</p>	<ul style="list-style-type: none"> • Annual usage of shelters in Barrie • Increase supply of Affordable Housing 	<p>Annual attendance at homeless shelters in the City of Barrie</p>	

* Measures currently being monitored by the City's Climate Change Adaptation Strategy.

Sustainable Barrie – URBAN LIFESTYLE

Connectivity

Goal	Action Item	Measurement	
Improve overall walkability and community connectivity	<ul style="list-style-type: none"> • Add Schedule to OP to illustrate Active Transportation Network • Focus on mixed-use development • Require increased bike storage, racks and building access to showers/lockers (consider the framework for the LEED Credits) • Promote pedestrian oriented activities and street design in key areas of downtown • Temporary road closure programs for cyclists & pedestrians (e.g., Lakeshore in conjunction with festivals or other areas along waterfront on long weekends) • Improve Walk Scores for residential units • Incorporate weather shelters along paths • Create safe paths for commuter cyclists and e-bikes 	<ul style="list-style-type: none"> * Kms of sidewalks and trails in Barrie Strava Data (Transportation) Km of bike lanes/connections 	
Improve Public Transit	<ul style="list-style-type: none"> • Advance Transit Hub and connectivity through multi-use network • Adopt Transit first principle to new development that can support transit • Improve access to bus stops & train stations • Explore possibilities for higher order transit • Establish transit supportive densities • Public bathroom in downtown area 	<ul style="list-style-type: none"> Number of transit users per year / transit ridership Number of students using transit system 	

Sustainable Barrie – CIVIC SPIRIT

Engagement

Goal	Action Item	Measurement	
Promote education/ awareness programs and activities related to the local environment and sustainability	<ul style="list-style-type: none"> • Develop Homeowners' Guide to Sustainable Improvements • Use City's social media accounts to highlight/ promote interesting sustainability/local environment stories • City Climate Change Strategy Action Item 4.4 - Establish a local best practice network (e.g. business continuity, green business practices, adaptation measures etc.) and provide guidance for businesses 	<ul style="list-style-type: none"> Number of new sustainable improvement projects that require a building permit. Number of public sustainability events per year (Target: 2 events) Number of residents participating 	
Support and promote opportunities for citizen engagement	<ul style="list-style-type: none"> • Civic Guide for residents so people know who their elected representatives are, what we do at City Hall • Build public engagement strategy to promote inclusive approach to development and programming 	<ul style="list-style-type: none"> Volunteer committees (number), volunteer hours, Spirit Award recipients 	

* Measures currently being monitored by the City's Climate Change Adaptation Strategy but is worth noting.

Sustainable Barrie – CIVIC SPIRIT

Cultural Heritage

Goal	Action Item	Measurement	
Identify and preserve cultural heritage resources	<ul style="list-style-type: none"> • Current: Heritage Barrie, walking tours, new Heritage Strategy, properties in secondary plan areas added to Heritage Register; Historic Neighbourhoods Strategy • Promote heritage property designations to protect Barrie’s built heritage • Consult on value and partnership to advance heritage designation uptake • Develop Heritage Urban Design guidelines • Celebrate First Nations history 	<p>Number of properties on the Heritage Register</p> <p>Attendance at Janes walk</p>	

Identity

Goal	Action Item	Measurement	
Encourage Public Realm based Public Art	<ul style="list-style-type: none"> • Develop public realm master plan for public art to indicate areas that are good candidates for public art installations and promote the unique history of the City (could include: have graffiti contests & mural programs) • Incorporate Public Art encouragement policies for new development with specific emphasis on local artists (local emphasis already exists to some extent) 	<p>Dollars invested in public realm art installations</p> <p>Number (%) of local art installations</p>	
Support community events that appeal to a broad range of the population including our visitors	<ul style="list-style-type: none"> • Focus on the cultural diversity of Barrie • Current: outdoor stage for creative programming; emerging artist program • Look for opportunities for creative/performance/ public spaces at local neighborhood level 	<p>Attendance at Barrie’s largest outdoor events</p> <p>Number of cultural events</p> <p>Number of new event spaces created</p>	

Sustainable Barrie – NATURAL SYSTEMS

Air

Goal	Action Item	Measurement	
Improve air quality and reduce greenhouse gas emissions	<ul style="list-style-type: none"> • Establish targeted tree canopy program as part of Urban Forest Strategy • Expand tree planting program in partnership with local school boards, CA’s, Fruit Share Barrie • Establish Urban Forest Management Plan (in accordance with City’s Urban Forest Strategy) • Expand municipal fleet of hybrid vehicles – target 50% in 10 years • Use Energy Saver program metrics from relevant utility providers; encourage participation • CIP renovations program • Identify transit service deserts • Complete Community Energy & Greenhouse Gas Mitigation Plan • Promotion of electric charging stations in public and private spaces 	<p>* Percentage of tree canopy cover</p> <p>Percentage of EP designated land</p> <p>Number of homes participating in energy savers program</p> <p>Report on how much \$\$ of the CIP program went towards building climate change resilience and improving energy efficiency (upgrading windows, furnaces, etc.)</p> <p>Work with Barrie transit to provide service to transit deserts (i.e. areas with no transit stops within 800m)</p> <p>Community GHG Emissions</p>	

* Measures currently being monitored by the City’s Climate Change Adaptation Strategy.

Sustainable Barrie – NATURAL SYSTEMS

Water

Goal	Action Item	Measurement	
Continue to protect Kempenfelt Bay as the City's Premier Resource	<ul style="list-style-type: none"> • Make this a focal point of the City's Planning documents & encourage stewardship of waterfront • OP review: consistency with LSPP policies • City Climate Change Strategy Action Item 1.2 – Work towards blue flag certification for all of Barrie's beaches 	<p>Area (sq. m.) of public ownership along the waterfront</p> <p>Reduction in number of beach closures due to water quality per year</p>	
Reduce impacts of salt from parking lot management on receiving Watercourses and Aquifers	<ul style="list-style-type: none"> • Encourage underground parking for large sites where appropriate • Enhance mitigation measures to reduce salt run-off from operation yards • Public awareness campaign for business owners to educate on impact of salt on freshwater resources to reduce use • Celebrate contractors with Smart About Salt certification 	<p>* Volume of anti-icing/de-icing materials used by Traffic Services fleet</p>	
Enhance Water Conservation & Sustainable Stormwater Management Strategies	<ul style="list-style-type: none"> • Establish water conservation guidelines for all water use – promote circular water system approach • Current: Rain barrels available during Public Works Week – expand promotion, awareness • Explore introduction of Water Conservation section to OP • Explore incorporating more greywater reuse in City-owned facilities • Create guidelines to include more water conservation measures (rain barrels, greywater recycling) into new residential developments • Prepare homeowner's Guide to Water Conservation 	<p>Indicator: water usage reduction (from meter readings)</p> <p>* Number of rain barrels given out</p> <p>* Percentage grey use target for municipal buildings/uses</p>	
Ensure sustainable wastewater management practices both publicly and privately	<ul style="list-style-type: none"> • Require low-flush toilets in new developments • City asset requirement - assess current practices and look for opportunities to improve efficiency • Take measures to reduce Inflow & Infiltration in the sanitary collection system and laterals • Explore residential backflow devices to protect the cities drinking water 	<p>Municipal buildings target for sustainable wastewater management practices</p> <p>Number of building permit applications that incorporate sustainable wastewater management practices</p> <p>Wastewater Treatment Facility effluent water quality</p>	

* Measures currently being monitored by the City's Climate Change Adaptation Strategy.

Sustainable Barrie – NATURAL SYSTEMS

Land

Goal	Action Item	Measurement	
Identify, protect and enhance natural heritage systems/features (creeks, woodlots, forests)	<ul style="list-style-type: none"> Integrate park definitions related to Regional, District, Community, Neighbourhood and Village Squares in New OP to guide decisions related to form, function and distribution of future parks Create "Urban Park" category in new OP as part of City's classification system (as residential intensification continues) OP Bonusing policies to explicitly list additional parkland contributions as a public benefit Develop urban forestry/canopy cover strategy 	<p>Total hectares of parkland and protected areas as a percentage of total municipal area</p> <p>Increase park size</p> <p>Park amenities , use objectives</p> <p>Implement urban forestry/canopy cover strategy</p>	
Enhance Solid Waste Diversion Practices	<ul style="list-style-type: none"> Promote, encourage and expand green bin use – marketing program (work with Environmental Services) City Staff frequently check recycling on waterfront Reduce wait time at City Landfill for non-garbage items, will promote more use of proper diversion Introduce green bin program at all City buildings and fix labelling/signage on City Hall blue bins to support recycling of all blue box items Explore program with local grocery stores regarding waste, donate quality foods before it goes to waste 	Tonnage of residential waste diverted	
Enhance the Natural Heritage Policies in the New Official Plan	<ul style="list-style-type: none"> Develop greening strategy - Introduce policy to establish provision to grow and enhance the secured and environmentally managed portion of the natural heritage system (e.g., through conservation easements, stewardship agreements or acquisitions) Introduce policy to acknowledge the importance of cross-jurisdictional communication and co-operation regarding natural heritage systems (e.g., County, Province, CAs, etc.) 	<p>Area (Km²) of Environmentally Protected Land through easement/acquisition</p> <p>Connections to cross-jurisdictional Natural Heritage systems</p>	
Support, maintain and enhance biodiversity and ecosystem functions	<ul style="list-style-type: none"> Encourage Backyard Stewardship - tie to Homeowner Guides, rain garden promotion (CAs) Increase benefits of vegetation by maximizing planted areas both indoors/out Promote native vegetation for resiliency and habitat corridors Look for opportunities to enhance linkages within Natural Heritage System Encourage Green Driveways 	<p>Number of street trees within intensification areas</p> <p>Number of Green walls & Green Roofs</p>	
Encourage the use of excess soil on site or within the municipality	<ul style="list-style-type: none"> Prepare a strategic and long-term management plan to anticipate soil generation and soil demand projects as well as temporary storage sites Establish municipal policy – See Caledon, City of Toronto or Kingston example 	Tonnage of excess soil leaving a development site (reduction)	
Encourage the responsible redevelopment of Brownfield sites	<ul style="list-style-type: none"> Separate the Tax Increment Financing Grant from the regular CIP budget 	<p>Number of applications for Redevelopment CIP Grant that assist Brownfield Redevelopment</p> <p>Dollars invested in Redevelopment CIP Grant that assist Brownfield Redevelopment</p>	

* Measures currently being monitored by the City's Climate Change Adaptation Strategy.

Sustainable Barrie – ECONOMIC PROSPERITY

Keeping and Creating New Jobs

Goal	Action Item	Measurement	
Ensure that the economy creates and supports more high quality careers, leading to continued increases in quality of life	<ul style="list-style-type: none"> • Foster job growth in the target areas and areas of future growth opportunities (i.e. Data Warehousing) • Identify types of high-quality careers that are currently well represented and develop ways to support & grow these • Work with Georgian College to explore increasing local co-op and internship opportunities & connections 	<p>Total employed labour force & participation rate</p> <p>Percent employed in green tech sectors (per NAICS) – Census data</p> <p>Number of new green business start-ups</p>	
Work to reduce retail vacancies within the Downtown and in commercial areas	<ul style="list-style-type: none"> • Current/near future: retail background study as part of new OP process • Current/near future: Mixed Use zoning • Require retail impact study for ZBA's for new commercial space (outside of UGC) • Our OP policies could also put a limit (size and number in a given area) on commercial uses in residential areas • Encourage increased event programming in the Downtown • Encourage & continue to promote Barrie as hub for commerce • Public bathroom in Downtown area 	<p>Commercial land vacancy rate</p> <p>Number of commercial projects supported by CIPs</p> <p>Strategic land use policies in New OP regarding retail development</p> <p>Diversity of uses in commercial areas (%)</p>	
Support development of an economy that can withstand changes in economic conditions and global competition	<ul style="list-style-type: none"> • Support maintaining mixed use development and economic vitality through planning tools and programming • Current/near future: Employment Lands (includes looking at recent trends locally & more widely) • Monitor global trends, and establish practices that allow staff to be proactive/respond quickly to change • Ensure land use planning system in Barrie is easy to navigate/is not perceived as a 'big government roadblock' but a community partner • Look for opportunities to diversify economic base & support existing employment sectors 	<p>Number of businesses in the City of Barrie (number registered in Chamber of Commerce directory)</p>	
Be a premier destination for business investment	<ul style="list-style-type: none"> • Work towards providing protected, shovel-ready employment lands; designating areas as "Prime Employment" • Create georeferenced database of employment lands with attributes such as servicing (water and electrification), brownfield opportunities, distance to highways, railways, and airport • Support the development of new highway interchange off of the 400 to support access to new employment lands in secondary plan areas • Explore cash-in-lieu of parking as part of new OP process/review 	<p>Number of new business licenses obtain in the City of Barrie annually</p>	
Attract young professionals and retain young people	<ul style="list-style-type: none"> • Support opportunities for youth employment and affordable rental housing • Increase promotion of local amenities such as the Waterfront, Dunlop St. Community Hub/ theater venue 	<p>Distribution of the labour force by occupation type</p> <p>Number of visitors</p>	
Support a vibrant Urban Growth Centre and Waterfront destination	<ul style="list-style-type: none"> • Maximize the benefits of and participation in the CIPs • Revise, update, create new CIPs • Work to create awareness of Barrie's Festivals and events outside of Barrie • Encourage Live/Work units within the Mixed Used zones to create alternative business spaces within the City • Add flexibility to the zoning by-law 	<p>Annual attendance at City Programed events on the Waterfront</p>	
Support local businesses	<ul style="list-style-type: none"> • Current program specifically to support small businesses (Economic Development) • Continue to listen to what small businesses' needs are and make sure policy adequately addresses those needs • Ensure that policies continue to reflect changing nature of employment in contemporary economy 	<p>Number of local businesses listed with the Small Business Centre</p>	<p>PICTURE BARRIE 2017: JOANNE BLACK</p>

Sustainable Barrie – EDUCATION AND TRAINING

Goal	Action Item	Measurement
Advocate for education and training opportunities to complement formal public system (partnerships between institutions & industry)	<ul style="list-style-type: none"> • Develop awareness campaign (i.e. web ad, etc. & highlight "success stories") • Promote apprenticeship/mentorship programs (i.e. skilled trades) • Identify specific growing economic sectors & ensure their training/education needs are being met 	<p>Number of internship opportunities in the City of Barrie realized with Georgian College Students</p> <p>Number of summer students hired by the City of Barrie annually</p>
Advocate for increased Educational Institutions	<ul style="list-style-type: none"> • Preserve land for postsecondary campus and/or facilities • Demonstrate rationale for a postsecondary institution in the City of Barrie to the Ministry of Training, Colleges and Universities • Attracting a University to Barrie • Continue to advocate for enhanced GO Transit Service 	<p>Percentage of residents with post-secondary education</p>



Sustainable Barrie – TOURISM

Goal	Action Item	Measurement
Promote Tourism	<ul style="list-style-type: none"> • Encourage more independently managed cultural events to take place in Barrie • Promote lake and waterfront as a destination for visitors 	<p>Annual Tourism Revenues</p> <p>Number of permits for cultural events issued (i.e. number at Kempenfest)</p>



Sustainable Barrie – RENEWAL

Goal	Action Item	Measurement
Plan for the renewal cost of public infrastructure	<ul style="list-style-type: none"> • Include lifecycle costs in City projects • Focus on renewal & early life preservation 	<p>Infrastructure Dollars spent per year</p>
Keep resources in use for as long as possible	<ul style="list-style-type: none"> • Consider circular economy principles within City procurement policies 	<p>Lifespan of City Infrastructure</p>



Sustainable Barrie – INCLUSIVE COMMUNITY

Creating a Sense of Belonging

Goal	Action Item	Measurement	
Encourage an inclusive environment where all residents enjoy a sense of belonging & participate in shaping the City	<ul style="list-style-type: none"> • Encourage a diversity of events to provide the community with opportunities to learn more about diverse groups • Provide training for staff and volunteers on inclusive practices • Creative public engagement and outreach to solicit input (i.e. City initiatives, development approvals) • Make the City more family friendly through programming 	<p>Number of events throughout the City</p> <p>Develop public engagement strategy</p>	
Provide safe, healthy, diverse and affordable housing	<ul style="list-style-type: none"> • Work with Simcoe County to explore creative opportunities to provide affordable housing • Find ways to better ensure that affordable housing remains affordable in medium to longer term (e.g., agreements) 	<p>Number of affordable Housing Units in the City according to Affordable Housing Report</p> <p>10% of all units affordable</p> <p>Pilot alternative housing formats</p>	
Continue to foster a safe urban community	<ul style="list-style-type: none"> • Establish safety and security design standards for public areas • Current: Crime prevention through environmental design • Establish ground floor design standards • Ground-floor glazing standards, discouraging housing dominated by garage at front – promote “eyes on the street” • Install emergency contact towers • Introduce sensor lighting 	<p>Animation of City Streets at Night</p>	

Accommodating All Ages and Abilities

Goal	Action Item	Measurement	
Encourage a community that is inclusive to Youth	<ul style="list-style-type: none"> • Continue to build on our current status of “Youth Friendliness” from Playworks • Explore creating a youth-focused festival (specifically geared towards children) in waterfront area • Attract child/day care providers to Downtown area. City could initiate with program for staff 	<p>Status of “Youth Friendliness” rating from Playworks</p> <p>Number of events that cater to Youth</p>	 
Ensure older adults are incorporated into active, healthy communities	<ul style="list-style-type: none"> • Continue to promote recreational opportunities for older adults (such as 55+ programs) • Continue to create opportunities for passive recreation by enhancing & promoting trail network • Ensure that transit & similar services address older residents’ mobility needs – explore alternatives to better address these needs • Look to change zoning to permit assisted living facilities in more places or co-housing 	<p>Total participants for 55+ recreation programs</p> <p>Percent of mobility vehicles or users target</p> <p>Numbers of New assisted living facilities developed</p>	
Encourage a barrier-free community	<ul style="list-style-type: none"> • Work to ensure accessibility is accounted for in all municipal buildings and facilities beyond basic statutory requirements • Continue to promote accessibility (i.e. in Renovation Grant (Built Boundary Community Improvement Plan) and similar programs) • Develop an accessibility standard for the City • Make it easier for businesses that want to become more accessible to do so • Promote accessibility so that residents understand clearly what it means (more than elevators & ramps) 	<p>Number of businesses to adopt to Stop Gap program</p> <p>Percent of CIP grants that contain an accessible component</p>	

FINANCIAL SUSTAINABILITY & PARTNERSHIPS

Although many City budget decisions about services are made annually, it is important for Barrie to ensure there is adequate funding available over the long term. Because Sustainable Barrie is a long-range vision, it will be critical to plan for its implementation. In order to do this, a coordinated effort with staff, residents, businesses and other partners is needed to determine Barrie's long-term priorities.

While many strategies in this plan can be implemented through the action of one partner alone, working together on select initiatives would continue to benefit the region as a whole. Areas where these initiatives could be found include:

- Transportation, transit and infrastructure;
- Watershed and natural heritage planning;
- Waste management; and,
- Economic development, culture and tourism.

Emerging Trends

Cities are complex systems with great potential to transform in response to new challenges and to evolving economic, environmental, and social circumstances. In order to adapt and respond in the face of climate change, our cities will need to look for new and innovative ideas. Moreover, cities themselves have the power to create change by shaping the ways in which we live our daily lives.

In an interconnected world, it is important to keep an eye on emerging trends in sustainable urban development, innovations with the ability to enhance and transform the city's economic foundations as well as its built and natural environments. Above all, it is important to put planning for people at the focal point of developing sustainable and resilient communities.

The public sector can help achieve Low-Carbon & Net-Zero Retrofits by:

- leading by example by improving the performance of public buildings,
- improving the energy efficiency standards for appliances and,
- making strategic use of public funds to catalyze private investment in energy efficiency.

Smart Cities

We live in the age of Technology. Rapid advancements in information and communication technologies over the past few decades are now reshaping our vision of how technology can be woven into the fabric of our cities.

New ways of gathering and sharing information are starting to affect many different aspects of city life. Municipal governments are increasingly sharing open data online with residents. The face of retail is changing as more and more people shop online. Transit agencies share real-time information with customers, and crowd-sourcing apps provide traffic updates for users. In the future, we could see autonomous buses carrying commuters to and from work, wireless networks offering free internet access for an entire city, and devices to monitor air quality and energy use. To help ensure that residents can access and benefit from new technologies, governments and public agencies will need to invest in planning, infrastructure, resources, and training. While they do present some challenges, these innovations also offer remarkable opportunities for those working to improve their communities.

Low-Carbon & Net-Zero Retrofits

The ongoing shift to energy-efficient, low-carbon homes and buildings will help Canada achieve its long-term emissions targets and climate goals, as well as reduce energy costs for Canadians. The building sector has many initiatives underway intended to promote net-zero buildings and sustainable design and construction practices.

However, making new buildings more efficient is only one part of the story: improving the performance of existing buildings, replacing or upgrading systems and equipment where necessary, can make a significant contribution towards reaching Canada's long-term goals. A Roadmap for Retrofits in Canada, released by the Canada Green Building Council in 2017, concludes that improving the performance of large buildings (25,000–200,000 sq. ft.) and "deep retrofits" for buildings over 35 years old could reduce CO2 emissions overall by 4.1 megatonnes.



FINANCIAL SUSTAINABILITY & PARTNERSHIPS

Urban Villages

Many surveys have shown that residents place a higher value on homes located within walking distance of stores, public spaces, and places of employment. Developers and planners need to design urban sites that can be assembled into a compatible pattern of mixed uses to create these “urban villages.”

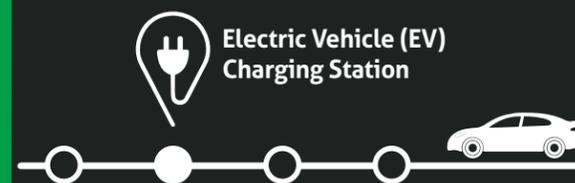
“Villages within the city” create a sense of identity for submarkets within an urban area, encourage resident involvement at a human scale, and create loyalties to neighbourhood businesses.

Clean-Power Vehicles

Eco-friendly cars are becoming a reality as the technology becomes more affordable and as their popularity continues to rise. At the moment, the average electric vehicle runs around 50–150 km on a single charge, so frequent recharging is necessary. However, fast-charging stations are becoming more widespread and efficient. For the average commuter, who doesn’t travel more than 50 km in a day, an electric vehicle is becoming a realistic option. The City already has a number of charging stations, including at the Public Library and Retail plazas. New options for transportation, like ride-sharing apps and other vehicle-sharing options, could soon become a part of daily life as we move towards a future of clean-power vehicles.

As a modern, connected, and diversifying city, Barrie has tremendous opportunities to capitalize on emerging trends and place its people at the forefront of sustainable growth and development. We know now that we cannot continue to build cities the way they were built in the past. Imagining where our city will be in 10 or 20 years will require new strategies and new ideas.

Building a sustainable and resilient community will help ensure that Barrie remains a premiere waterfront community in Ontario — a city that balances prosperity and economic well-being with social and environmental responsibility and one that maintains an outstanding quality of life for its residents.



CONCLUSION

The City of Barrie is already on the right path to creating a sustainable community. Council’s direction to prepare a Sustainable Development Strategy, address issues such as Climate Change and support a wide variety of sustainable initiatives signals that corporate sustainability is a priority. Many of the goals and actions within this strategy focus on building upon a strong foundation that currently exists and strengthening coordination among the City’s various departments. Key to achieving sustainability is ensuring a balance between all five themes in the way we do business.



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Prepared by Planning & Building Services