

# Living Green Master Plan

## 2012 Progress Report

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## Mississauga is working to become a world-class green city

### 1 Introduction

#### 1.1 Living Green Master Plan

The Living Green Master Plan (LGMP) was adopted by Mississauga City Council on January 18, 2012 and was developed through extensive consultation with residents, businesses, civic leaders and City staff. As Mississauga's first environmental master plan, the Living Green Master Plan is a clear signal that the environment is a priority in Mississauga.

The LGMP is a roadmap for the City to work towards achieving Mississauga's environmental goals. It is the City of Mississauga's action plan for doing business and providing services in an environmentally sustainable way. It also provides residents, community groups and businesses with the information they need to live green.

#### 1.2 Living Green Master Plan Vision

Through the process of developing the LGMP, the following vision was created for the City of Mississauga:

Mississauga is a world-class green city.

Its innovative approaches to carbon emission reduction have inspired the world. Smog advisories are a thing of past. As a net exporter of clean, renewable energy, Mississauga's energy cost certainly attracts talent and businesses from around the world and ensures economic prosperity.

Mississauga has built a great public transit system. Every neighbourhood has fast, reliable public transit and cycling routes.

Redevelopment and intensification have created energy-efficient, compact, mixed-use developments to accommodate people and businesses. People walk to work, recreation and shopping. People have a strong sense of community and are proud of Mississauga's clean air, land and water. The actions of every resident and business conserve water, reduce waste as well as nurture and support the environment.

Mississauga's rivers and streams teem with fish. New wetlands and natural areas along with a regenerated off-shore waterfront provide habitat for indigenous aquatic species and wildlife.

Mississauga is a healthy place where people choose to live, work and play.

## 2 Putting the Plan into Action

The LGMP is an action plan that prioritizes policies and programs into actions to meet the environmental objectives of the Strategic Plan. The LGMP identifies 49 actions for the City and the community to implement over 10 years. The actions are grouped under the following three categories:

### Setting an example: Making a case for sustainability

As a City, we're in a much better position to speak about behavioural changes if we are setting an example of change ourselves. By demonstrating best practices, we can encourage others to take action.

### Encouraging others: Moving forward together

Encouraging residents, community groups and businesses to change their behaviour and live green requires the effort and experience of every resource available to the City. Simply stated, the City of Mississauga cannot do it alone. Partnerships ensure we move forward efficiently and collaboratively.

### Compelling others: A balanced approach

The LGMP also speaks to the role of the City, when needed, to compel others to act. It means using the

City's regulatory and statutory powers to raise the minimum level of environmental performance in Mississauga buildings and communities.

Of the 49 actions in the LGMP, 33 actions were scheduled to begin by 2012, of which:

- Four actions were completed;
- 24 actions are underway; and
- Five actions were delayed.

In addition, four actions scheduled for 2013 and beyond are ahead of schedule and were underway in 2012. A total of **32** actions were underway in 2012, of which **four** were completed.

Section 3 highlights accomplishments achieved in 2012 and Table 1 lists the LGMP actions and their status.

Section 4 discusses indicators and targets for measuring Mississauga's environmental performance as set out in the LGMP.

### 3 Delivering on the City's Green Vision

#### 3.1 Transportation

Mississauga continues to invest in the expansion of [MiWay](#) (Mississauga Transit). The MiWay express network is in place and the transit system is constantly being monitored, measured and adjusted to provide the best service possible.

In addition, construction of the [Mississauga Bus Rapid Transit](#) Project, which is a dedicated east-west transitway across Mississauga, is well underway. Phase 1 will include four new stations from Mississauga City Centre Transit Terminal to Dixie Station and will open in the fall of 2013. Plans are also underway for the design of the [Hurontario-Main Light Rail Transit project](#) which will extend from Port Credit to Main Street in Brampton.

In addition, Mississauga continues to lobby both the federal and provincial governments to ensure a better regional transportation system.

Transportation Demand Management (TDM) is the use of policies, programs, services and products to shape the economic and social factors that influence whether, why, when, where and how people travel. The goal is to support and encourage travel by transit, carpooling, cycling, walking and travel avoidance (e.g. telework). Mississauga continues to work with Smart Commute Mississauga on the delivery of commuter services to local employers and the City received

Smart Commute Gold Workplace distinction in 2012. A car-share pilot program was launched in 2012 and 184 AutoShare members participated.

Mississauga is building the knowledge and capacity to ensure new land development does not contribute to increased traffic congestion. By integrating TDM plans into new land development proposals, single occupancy vehicle trips will be minimized and more people will be encouraged to use alternate forms of transportation. The new Sheridan College - Hazel McCallion Campus in downtown Mississauga is implementing a TDM plan. A recent commuter study determined that, in part, due to its central location, 51 per cent of Sheridan College students at the Hazel McCallion Campus currently use public transit. The college also provides secure bicycle lock up, showers and change facilities for students, faculty and staff.

Investment in the expansion of alternative forms of transportation is growing. In 2012, close to 30 kilometres (km) of bicycle and pedestrian routes were installed in Mississauga including:

- 7.1 km of bicycle lanes (dedicated space for cyclists);
- 1.3 km of sharrows (road markings that tell motorists and cyclists to share the road);
- 11.1 km of multi-use trails;
- 2.5 km of signed routes; and
- 7 km of new sidewalks.

### 3.2 Land Use Planning and Green Development

Mississauga's new [Official Plan](#) is based on sustainability principles and provides the framework and policies for future growth. In addition, the [Green Development Strategy](#) has been leading the way to new environmentally sustainable developments in Mississauga. In 2012, development applications were approved with many green features including:

- 20 bioswales;
- 38 permeable surfaces;
- one green roof;
- 99 bicycle parking spaces;
- 366 preserved trees; and
- 847 new trees.

By incorporating green features into developments, Mississauga is building resilience to climate change.

The [Mississauga Urban Design Awards](#) judging criteria were revamped in 2012 to strengthen the Living Green and Innovation criteria. The City's own O'Connor Park received the [Award of Merit](#) for the following criteria: Community Scale, Living Green, Innovation and Execution. The park design preserved, enlarged and enhanced the site's natural features including a wetland area and an open meadow. The plantings for the park include a variety of native trees, shrubs and wildflowers. The park's stormwater runoff is

directed to a collection system which helps to maintain the water balance to the wetland. In addition, there are specially designed refuge areas for wildlife including a turtle island. Many low impact development (LID) features have been installed, including a subsurface infiltration system below the soccer fields, permeable pavement, a bioswale to capture runoff from the parking lot, and rainwater recycling. Other green features include recycled rubber safety surfacing in the playground and living retaining walls.

### 3.3 Natural Heritage and Urban Forest

Development of the [Natural Heritage and Urban Forest Strategy](#) commenced in 2012 and has engaged stakeholders and the public to develop a plan that will provide implementation tools to ensure that the city's natural areas and urban forest system is protected and enhanced. Based on best practices and the current science, opportunities for enhancement, restoration and expansion will be identified for implementation. The Natural Heritage and Urban Forest Strategy is scheduled for completion in 2013.

Mississauga is also compelling others to protect and enhance existing tree cover within the city. The [Private Tree Protection By-law](#) was amended to strengthen the protection of trees on private property, while respecting landowners' rights to make changes to the landscape of

their property in an environmentally responsible manner. The by-law regulates tree removal and requires replacement plantings.

### 3.4 Water

The Stormwater Quality Control Strategy Update is well underway and is scheduled for completion in 2013. It will ensure Mississauga is implementing best approaches for managing stormwater runoff to protect water quality. LID techniques are one of the ways to manage stormwater. LID is an innovative approach to land development that mimics the natural movement of water in order to manage runoff close to where it falls. Many LID features have been implemented in development applications and in the City's own development of parks and facilities. Bioswales have been installed in a boulevard in the Lakeview neighbourhood. Lakeside Park and O'Connor Park have both incorporated numerous LID features including permeable pavement, bioswales and rainwater recycling.

Building resilience in the city's drainage network to protect life, property and infrastructure is an ongoing commitment by the City. In 2012, the Cooksville Flood Evaluation Study was completed. The study identifies flood mitigation infrastructure projects to minimize the risk and impact of riverine flooding along Cooksville Creek. In addition, monitoring and enforcement of the Erosion and Sediment

Control By-law has been increased and is ongoing.

### 3.5 Air

A cornerstone of the proposed new national Air Quality Management System is the recognition that municipalities, local organizations, businesses, industry and the community can work together to improve local air quality. Mississauga is a municipal partner of the Oakville-Clarkson Air Zone Management Advisory Committee to achieve ongoing improvements in air quality and help inform the Ministry of the Environment as they develop a plan for Ontario's air zones. The committee has developed a comprehensive understanding of the local air quality, air emissions and actions undertaken by all sectors to improve air quality. Development of a new website is underway to share information with the community.

Mississauga has taken significant steps to improve air quality and has over a dozen initiatives that address issues identified for municipal action in the [Southwest Greater Toronto Area Air Quality Task Force Action Plan](#). Initiatives underway include:

- Increased street sweeping - a higher quality sweeper is used in the Southdown area;
- Ensuring road shoulders are paved on City streets;
- Reducing dust from unpaved yards - by working with

the Ministry of the Environment to require businesses to place a hard surface on unpaved portions of their work yards;

- Enforcing the Idling Control By-law (see below);
- Investing in transit (see Section 3.1);
- Encouraging use of alternate modes of transportation (see Section 3.1);
- Greening City fleet vehicles (see below);
- Let Your Green Show public awareness campaign (see Section 3.7) - all phases contribute to reducing energy use and improving air quality;
- Requesting an Air Quality Study as part of development applications, when appropriate;
- Updating Corporate and community greenhouse gas and criteria air contaminant inventories (in process and will be reported on in 2013); and
- Participating on the Oakville-Clarkson Air Zone Management Advisory Committee and three subcommittees.

Mississauga is also participating in the Region of Peel's air modelling and monitoring program which commenced in 2012. This program will be used to assess air quality across Peel.

The City of Mississauga is leading by example by reducing greenhouse gas emissions from City vehicles through a program called Greening Our Fleet. Since 2006, the City has maximized fuel efficiency of 128 vehicles by matching

the right type of vehicle for the required use and replacing vehicles with fuel efficient, hybrid or electric vehicles, when possible. There are now 67 hybrid vehicles and two electric vehicles in the City's vehicle fleet. Greening Our Fleet has increased efficiency of City vehicles and avoided approximately 300 tonnes of equivalent carbon dioxide, which is equal to taking approximately 60 cars off the roads.

A three month pilot program was launched in 2012 for proactive enforcement of the City's Idling Control By-law. The results were successful and will be reported on in 2013. In addition, Mississauga continues to encourage idle-free practices through education with the goal to make Mississauga an idle-free zone.

### **3.6 Energy**

Mississauga continues to implement its Corporate Energy Management Plan. In 2012, Mississauga committed to converting the City's 49,000 street lights to Light Emitting Diode (LED) lighting, which will reduce the City's street lighting carbon footprint and energy consumption by 50 per cent. It will also reduce light pollution and increase pedestrian and vehicular safety, while reducing maintenance costs.

Mississauga continues to generate renewable energy at the



Hershey Centre, where there are solar panels on the roof. In addition, Mississauga Council showed their commitment to renewable energy by passing a resolution supporting rooftop solar power projects applying to the Provincial Feed-in Tariff program. Mississauga is also investigating community energy initiatives such as District Energy.

### 3.7 Community Action

The [Let Your Green Show](#) campaign was launched in 2012. It is an environmental awareness campaign encouraging Mississauga residents to take environmental action. Upon choosing an action, residents get rewarded with a greenback and help turn their neighbourhood green in the Greenest Ward challenge. Launched July 1, 2012 by the City of Mississauga, in partnership with the [Region of Peel](#), over 500 residents participated in the 'grow local/eat local' challenge. From growing their own food and planting trees to supporting local farmers, over 600 environmental actions were completed from July through October 2012. Ward 1 won the first Greenest Ward Award for completing the greatest number of environmental actions. Phase 2 was launched across the Region of Peel on March 22, 2013 and focuses on actions that help residents use less water.

Program development commenced for [One Million Trees Mississauga](#) in 2012 and many community tree planting events were held where approximately 34,000 trees and

shrubs were planted. One Million Trees Mississauga will be launched to the community in 2013 and will engage schools, residents and the business community to promote tree planting on both public and private lands.

Mississauga is a partner in [Partners in Project Green](#) (PPG), which is a growing community of businesses working together to green their bottom line by creating an internationally-recognized eco-business zone around Toronto Pearson Airport. Mississauga businesses outside of the PPG area have joined in and are able to participate in PPG programs. Mississauga continues to promote PPG to its business community and look for opportunities to expand to other business areas.

### 3.8 City of Mississauga Facilities and Operations

Mississauga continues to lead by example by employing environmentally responsible techniques and practices.

The Environment Division, established in 2012, provides Corporate environmental leadership to strengthen and champion the City's environmental actions. The Environment Division is responsible for driving implementation of the LGMP and acting on emerging environmental issues. The Environment Division works in collaboration with all other departments and divisions through various environmental teams to ensure

environmental actions are included in business planning and budgeting, and environment is considered in projects, reports and policies.

Mississauga is conscious of its procurement practices and provides opportunities to purchase green and ethical goods and services through its procurement policies and guidelines. These opportunities are continually highlighted in the City's ongoing procurement training.

A new fire and paramedic station on Tomken Road was built to high sustainability standards. The building is 45 per cent more energy efficient than a standard building and has many energy and water efficiency features. A geothermal renewable energy system extracts heat from the ground to provide heating for the building. The sustainable design of the building will lower electricity and natural gas costs and reduce greenhouse gas emissions by 75 tonnes per year, which is equivalent to removing 23 cars from the roads.

The new [Garry W. Morden Centre](#) opened in 2012 and was built to Leadership in Energy and Environmental Design (LEED) Silver standards. Some of the green features include radiant heating, energy efficient HVAC system, water-saving showers and rainwater harvesting.

At the Hershey Centre, an ammonia waste heat recovery system from ice making operations is being installed to provide hot water and heating. In addition, design is underway for LED lighting to be installed in the Hershey

Centre parking lot.

LED lighting has also been approved city-wide for street lighting, as well as for three community tennis courts and several parking lots.

**Table 1: 2012 Status of Living Green Master Plan Actions**

Category	LGMP Action #	Description	LGMP Scheduled Timeframe	2012 Status
<b>Set an Example</b>				
<b>Transportation</b>	1	Maximize <b>investment</b> in the expansion of <b>public transit</b> in areas where transit-supportive development exists or is planned for the future.	2011-2021	Ongoing
	2	<b>Lobby for funding</b> to improve the <b>regional transportation</b> system.	2012-2021	Ongoing
	3	Evaluate <b>Transportation Demand Management (TDM)</b> initiatives to date and existing modal split; and work collaboratively to implement TDM measures across the City of Mississauga.	2011-2016	Underway
	4	Invest in the expansion of <b>alternative forms of transportation</b> including cycling, walking and car-sharing.	2011-2021	Ongoing
	5	Develop <b>targets for modal splits</b> in the Transportation Strategy.	2012	Delayed Transportation Strategy to be developed in 2014-2015
	6	Develop guidelines that advance new or rehabilitated <b>transportation infrastructure</b> that <b>supports natural ecological functions</b> .	2013-2014	
	7	Study the <b>efficiency of the transit network</b> on priority corridors to speed up the system and make it more competitive and more attractive to commuters.	2013-2014	Ongoing

Category	LGMP Action #	Description	LGMP Scheduled Timeframe	2012 Status
Natural Heritage	8	<p>Include in the <b>Natural Heritage System Strategy</b> guidelines to:</p> <ul style="list-style-type: none"> <li>• Develop neighbourhood green system and naturalization targets that support the Natural Heritage System Strategy;</li> <li>• Involve a wide range of private and public stakeholders;</li> <li>• Develop a strategic restoration strategy;</li> <li>• Identify an action plan and resources to implement recommendations in existing studies;</li> <li>• Develop an Invasive Species Management Plan that identifies priority management areas for invasive plant and insect species; and includes replanting strategies and preventive programs; and</li> <li>• Increase minimum vegetation protection zone setbacks for regulated areas and natural area features.</li> </ul>	2012-2014	<p>The Natural Heritage and Urban Forest Strategy is underway</p> <p>Scheduled for completion in 2013</p>
City Facilities Green Building Standards	9	<b>Audit corporate water usage</b> in City operations and City-owned and operated facilities; and develop <b>strategies to reduce water use</b> .	2015-2016	
	10	<b>Audit City buildings and properties</b> to assist retrofitting and planning for new facilities to <b>achieve the standards</b> the City requires for private developments as per the <b>Green Development Strategy</b> .	2013-2014	
	11	Develop guidelines that require <b>low-impact development</b> features (including the use of indigenous species in landscaped areas) <b>for all</b> (existing and new) <b>City projects</b> .	2015-2016	

Category	LGMP Action #	Description	LGMP Scheduled Timeframe	2012 Status
Stormwater Management	12	<p>Ensure that the <b>Stormwater Quality Control Strategy</b> Update addresses:</p> <ul style="list-style-type: none"> <li>• Ways that stormwater management infrastructure can protect and enhance the natural areas system;</li> <li>• Increased requirements for Pollution Prevention Planning for businesses with the potential for discharge of contaminants;</li> <li>• Adopting and promoting the use of green infrastructure (as set out in the Stage One Green Development Strategy) to treat stormwater run-off before it flows into the city's natural water bodies;</li> <li>• Updating stormwater management criteria based on standards developed by the conservation authorities;</li> <li>• Impacts of erosion and prioritizing watercourse erosion works; and</li> <li>• Identifying stormwater funding opportunities.</li> </ul>	2011	Underway Scheduled for completion in 2013
Flood Management	13	Expand and develop additional <b>flood management plans</b> .	2013-2014	Cooksville Flood Evaluation Study completed in 2012
Water Conservation	14	Conduct a <b>water-use analysis</b> to understand <b>patterns of water usage</b> in Mississauga; and <b>develop land-use and associated strategies for water conservation</b> .	2013-2014	
Waste	15	Conduct a <b>corporation-wide waste audit</b> including parks, public spaces, community facilities and special event venues to establish a baseline against which corporate <b>waste reduction and recycling efforts can be measured</b> .	2013-2014	
	16	Develop a plan to <b>increase diversion rates for recyclables and organic material</b> from City parks and forestry operations and from City-owned and operated facilities.	2013-2014	
Greenhouse Gas Inventory	17	Update corporate and community <b>inventories</b> for <b>Greenhouse Gas emissions</b> and <b>Criteria Air Contaminants</b> .	2011-2012	Underway Scheduled for completion in 2013

Category	LGMP Action #	Description	LGMP Scheduled Timeframe	2012 Status
Corporate Energy	18	Continue to identify, invest in and implement <b>energy efficiency</b> and <b>renewable energy</b> actions outlined in the City's <b>Corporate Energy Management Plan</b> (2009); and report on <b>revenue generated from renewable energy</b> and on cost <b>savings</b> from corporate <b>energy-efficiency</b> measures.	2012	Ongoing
Procurement	19	Include <b>training</b> on <b>green procurement</b> options as part of staff training on existing procurement policies and procedures.	2012-2014	Underway
	20	Determine <b>corporate priorities</b> regarding the <b>procurement of green goods and services</b> and develop the <b>culture, policies and practices</b> to support these priorities.	2012	Delayed
Corporate Policy	21	Review and <b>update</b> the <b>Corporate Policy and Procedure</b> on Corporate Environmental Principles (09-00-01).	2012	Underway Scheduled for completion in 2013
Corporate Reports	22	Ensure that all <b>corporate reports include</b> a mandatory <b>Strategic Plan section</b> for all five Pillars for Change, including Living Green.	2012	Action modified Include voluntary environment section in corporate reports
Mississauga Environment Office	23	<b>Rename</b> the Environmental Management Section of the Community Services Department as the Mississauga <b>Environment Office</b> , a division of the Community Services Department.	2012	<b>COMPLETE</b>
	24	Establish a <b>Director</b> position to lead the Mississauga Environment Office (MEO)	2012-2014	<b>COMPLETE</b>
	25	<b>Report</b> through the business planning and budget process on a <b>new staff and reporting structure</b> for the MEO.	2012	<b>COMPLETE</b>
Steering Team	26	Create an interdepartmental <b>LGMP Steering Team</b> chaired by the MEO Director.	2012	Action modified Environment teams created

Category	LGMP Action #	Description	LGMP Scheduled Timeframe	2012 Status
<b>Encourage Others</b>				
<b>Green Development Strategy</b>	27	<p><b>Report to the Environmental Advisory Committee</b> every six months on the Stage One <b>Green Development Standards</b> implementation, specifically:</p> <ul style="list-style-type: none"> <li>• Stormwater management for roads, parking lots and buildings; and</li> <li>• Low-impact development techniques.</li> </ul> <p>And on efforts to develop:</p> <ul style="list-style-type: none"> <li>• Education materials for homeowners about what they can do regarding stormwater retrofits; and</li> <li>• Awareness and education materials to promote Stage One Green Development Standards.</li> </ul>	2011-2021	Underway
<b>Grants</b>	28	Create an Environmental <b>Community Grants Program</b> . Start by drafting <b>terms of reference and funding structure</b> to support and showcase community-based environmental initiatives.	2012	Deferred to 2013
<b>Sustainable Neighbourhood Retrofit Action Plan</b>	29	Develop a program to <b>expand</b> the Sustainable Neighbourhood Retrofit Action Plan ( <b>SNAP</b> ) to other neighbourhoods in Mississauga.	2011-2021	One SNAP is underway
<b>Community Gardens</b>	30	Support the development of <b>community gardens</b> and ensure that every neighbourhood has access to at least one community garden.	2012-2021	Ongoing
<b>Design Award</b>	31	<p>Launch a new <b>design award</b> to complement Mississauga's Urban Design Awards. The award would address two areas:</p> <ul style="list-style-type: none"> <li>• Investment in green infrastructure for the benefit of the public realm; and</li> <li>• Sustainable land-use management that integrates land-use, transportation and green infrastructure.</li> </ul>	2012	Deferred to 2014
<b>Eco-Industrial Parks</b>	32	Develop partnership opportunities to build on the success of Partners in Project Green and expand <b>eco-industrial parks</b> across the city.	2013-2014	Ongoing

Category	LGMP Action #	Description	LGMP Scheduled Timeframe	2012 Status
Air Quality	33	<b>Improve local air quality</b> and help develop a national Air Quality Management System as a municipal <b>partner</b> of the <b>Oakville-Clarkson Air Zone Pilot committee</b> .	2011-2014	Underway
	34	Continue to <b>implement</b> the recommendations targeted at the municipalities in the <b>Dr. Balsillie Task Force Action Plan</b> .	2011-2021	Ongoing
	35	<b>Evaluate</b> the effectiveness of the City's five-year " <b>Greening Our Fleet</b> " program (2006-2011) and <b>develop a plan</b> to further <b>reduce GHG emissions and air contaminants from City vehicles</b> over the next five years, as called for in the Dr. Balsillie Task Force Action Plan.	2011-2012	Underway
	36	Respond to repeated complaints about idling vehicles by providing enhanced <b>education</b> and more <b>enforcement</b> of the <b>Idling Control By-law</b> , as called for in the Dr. Balsillie Task Force Action Plan.	2011-2021	Underway
	37	<b>Support</b> the Region of Peel's efforts to establish an <b>air modelling and monitoring program</b> that will provide baseline data and an accurate picture of air quality in the geographical region of Peel, including the Clarkson Airshed.	2012	Underway
Energy Plan	38	Prepare an <b>integrated community energy plan</b> to establish roles and responsibilities in Mississauga's energy community and create a road map for advancing selected energy strategies.	2015-2016	
	39	Assess <b>energy efficiency and renewable fuel strategies</b> that are feasible in Mississauga as part of the <b>cost-benefit analysis</b> identified in the Peel Climate Change Strategy.	2013-2014	
	40	Determine how to optimize the use of <b>alternative energy</b> sources <b>through community energy planning</b> in Mississauga as part of the <b>feasibility study</b> identified in the Peel Climate Change Strategy.	2013-2014	
Infrastructure Vulnerability	41	Undertake an <b>infrastructure vulnerability assessment</b> .	2013-2014	
Public Education	42	Develop a Living Green <b>Public Education Campaign</b> that encourages community action in environmental priority areas.	2012-2021	<b>COMPLETE</b> Implementation underway



Category	LGMP Action #	Description	LGMP Scheduled Timeframe	2012 Status
Research	43	Investigate opportunities for <b>research partnerships</b> .	2012-2021	ongoing

Compel Others				
Transportation Demand Management and Development approval	44	Integrate <b>Transportation Demand Management</b> measures into the <b>development approval process</b> .	2013-2014	Underway
Development Urban Form	45	<b>Apply land-use principles</b> that enhance the public realm and establish vibrant urban life and sustainable land management for new developments in areas identified for <b>intensification</b> . In <b>stable neighbourhoods</b> , ensure new developments respond to the characteristics and environmental conditions of each neighbourhood, while contributing to <b>environmental performance</b> city-wide.	2011-2021	Ongoing
Green System By-laws Regulations	46	<b>Amend the Street Tree By-law</b> and the <b>Tree Permit By-law</b> to include single trees and further measures to restrict tree removals and ensure consistency with the Official Plan.	2012-2021	Private tree by-law amended Development of public tree by-law underway
	47	Consider introducing a <b>regulatory tool to protect and enhance the green system</b> .	2013-2014	
	48	<b>Modify the Nuisance Weeds and Tall Grass Control By-law</b> and the <b>Property Standards By-law</b> to ensure that they do not unduly restrict naturalization efforts on private property.	2012	Deferred to 2013
Erosion Control	49	Increase <b>monitoring and enforcement</b> of the <b>Erosion and Sediment Control By-law</b> .	2011-2021	Underway

#### **4 Measuring Mississauga's Environmental Performance**

One of the six priorities identified in the LGMP is collecting baseline data to measure environmental performance. To this end, the LGMP offers 18 indicators to measure and track Mississauga's environmental performance in the areas of transportation, urban form, natural heritage, air, water, energy and waste. 2012 was the first year of collecting data for most of the performance indicators.

For 2012, data are available for 10 performance indicators. For the remainder of the performance indicators, collection of data is in progress or the method of data collection is under development.

The LGMP identifies that targets be established for all the performance indicators. Two of the performance indicators have targets established: park proximity through the Official Plan; and waste diversion by the Region of Peel. The remaining 16 targets will be established through more specific master planning exercises such as the Transportation Strategy, the Natural Heritage and Urban Forest Strategy, the Stormwater Quality Control Strategy Update and the Community Energy Plan.

Table 2 shows the performance indicators, targets and the data for 2012. Sections 4.1 to 4.4 provide a summary of the indicator data collected in 2012.

Table 2: 2012 Performance Indicators and Targets

Sector	Indicator	Target	2012 Indicator Data
Transportation	MiWay rides per capita and annual revenue ridership	n/a	46.42 revenue rides per capita <sup>1</sup> Annual revenue ridership – 34.7 million (34,761,489)
	Number of vehicles per household	n/a	1.61 vehicles per household (2006 data) <sup>2</sup>
	Cycling and pedestrian ridership on key routes	n/a	1.5 million users per year on area trails
	The active transportation modal split for Mississauga residents	n/a	8.11% of Mississauga residents travel by active transportation in the a.m. peak period (2006 data) <sup>2</sup>
Urban Form	Daily destination proximity	n/a	71% of residents live within 400 metres of a daily destination <sup>3</sup>
	Natural area proximity	n/a	Data not available
	Park proximity	100%	100% of residential areas are within 800 metres of a City park
Natural Heritage	Tree canopy intensity	n/a	15% of land area in Mississauga is covered by urban forest <sup>4</sup>
	Natural Heritage System coverage	n/a	8.1% of land area in Mississauga is covered by natural areas and residential woodlands
Air	Criteria air contaminants	n/a	Data not available
	Respirable particulate matter (PM2.5) concentration	n/a	Data not available
Energy	Renewable energy generation in Mississauga	n/a	Data not available
	Greenhouse gas emissions for buildings and transportation	n/a	Data not available
Water	Impervious surface intensity	n/a	Data not available
	Water quality protection	n/a	15% of Mississauga employs water quality controls (stormwater management ponds)
	Potable water consumption	n/a	96.04 m <sup>2</sup> of water used per capita <sup>5</sup>
Waste	Corporate waste management performance	n/a	Data not available
	Neighbourhood waste diversion	70% <sup>6</sup>	Data not available

<sup>1</sup> Revenue rides per capita are the number of paid trips divided by population. A trip may involve transfers where a passenger boards a different bus several times using the same fare.

<sup>2</sup> Source: Transportation Tomorrow Survey, 2006

<sup>3</sup> Daily destination includes uses such as small convenience stores, dry cleaners, pizza shops, grocery stores, pharmacies, restaurants, coffee shops, etc.

<sup>4</sup> Source: Region of Peel Urban Forest Strategy, July 2011. Urban forest consists of trees and shrubs.

<sup>5</sup> Region of Peel, Public Works

<sup>6</sup> Region of Peel target - 70% reduction of waste to disposal by 2016

## 4.1 Transportation

[MiWay](#) (Mississauga Transit) revenue rides per capita have been increasing steadily as population increases. To illustrate, in 2006, the population of Mississauga was 704,000 and the revenue rides per capita was 41.22. In 2012, the population increased to almost 750,000 and the revenue rides per capita has increased to 46.42. It is estimated that 60,000 Mississauga residents use MiWay.

Alternate forms of transportation are also on the rise. In 2011, the City's trail count stations identified over 1.2 million users per year on area trails. In 2012, cycling and pedestrian traffic increased to approximately 1.5 million users on area trails.

## 4.2 Urban Form

Transportation and urban form are key to a sustainable Mississauga. Reducing car trips by providing services close to where people live is one of the goals of the [Official Plan](#), Mississauga's land use policy framework that guides the city's growth and development.

In 2012, 71 per cent of residents lived within walking distance (400 metres) of a daily destination such as a convenience store, pharmacy or coffee shop. In addition, 100 per cent of residents live within 800 metres of a City

park. As Mississauga continues to grow, the goal is to make the city more pedestrian friendly and more sustainable.

## 4.3 Natural Heritage

The natural heritage and urban forest system provides vital benefits to everyone who lives, works and plays in Mississauga. It cleans the air, provides shade, moderates temperature, helps reduce flooding, cleans stormwater runoff, and supports active living and community well-being. Presently, 15 per cent of Mississauga is covered by trees and shrubs and 8.1 per cent of the land area is covered by natural areas and residential woodlands. The [Natural Heritage and Urban Forest Strategy](#), that is currently being developed, will provide the framework to protect, enhance and grow natural areas and the urban forest.

## 4.4 Water

Fifteen per cent of Mississauga's stormwater is controlled by stormwater management ponds. The upcoming Stormwater Quality Control Strategy Update will provide a framework for treating more of the stormwater runoff and improving water quality.

In 2012, the number of cubic metres of water used per capita was 96.04. This indicator has been tracked through the Strategic Plan in since 2008. The amount of water used per person has been rising steadily since 2008, when it was 93.41 cubic metres per capita. The LGMP recommends conducting a water-usage analysis and developing land use and associated strategies for water conservation.

Mississauga will be working with the [Region of Peel](#) to deliver on this LGMP action in an effort to reduce water consumption.

## 5 What Can You Do?

### 5.1 Be Green with Knowledge!

Subscribe to the Mississauga Living Green Blog.

Visit [mississauga.ca/livinggreen](http://mississauga.ca/livinggreen) for timely news and information to keep you connected to the greening of our city.



### 5.2 Get Involved!

Let Your Green Show!

Choose an action, get a reward and help turn your neighbourhood green.

Register at [letyourgreenshow.ca](http://letyourgreenshow.ca).



### 5.3 For More Information

Visit [mississauga.ca/livinggreen](http://mississauga.ca/livinggreen)

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