Attachment 3

TREE PLANTING STRATEGY

TORONTO

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INTRODUCTION

THERE ARE OVER 11.5 MILLION TREES IN TORONTO THAT MAKE UP OUR URBAN FOREST. IT SPANS OUR STREETS, PARKS, YARDS, COMMERCIAL ZONES, AND OUR EXTENSIVE RAVINES AND NATURAL AREAS.

It is critical green infrastructure that supports and sustains our health and well-being, whether it's through shade, beautification, storm water management, or any number of fundamental ecosystem services. These ecosystem services includes creating oxygen and removing pollutants from the air we breathe, reducing energy costs, improving water quality, and providing food and habitat for the many birds, insects, amphibians and mammals.

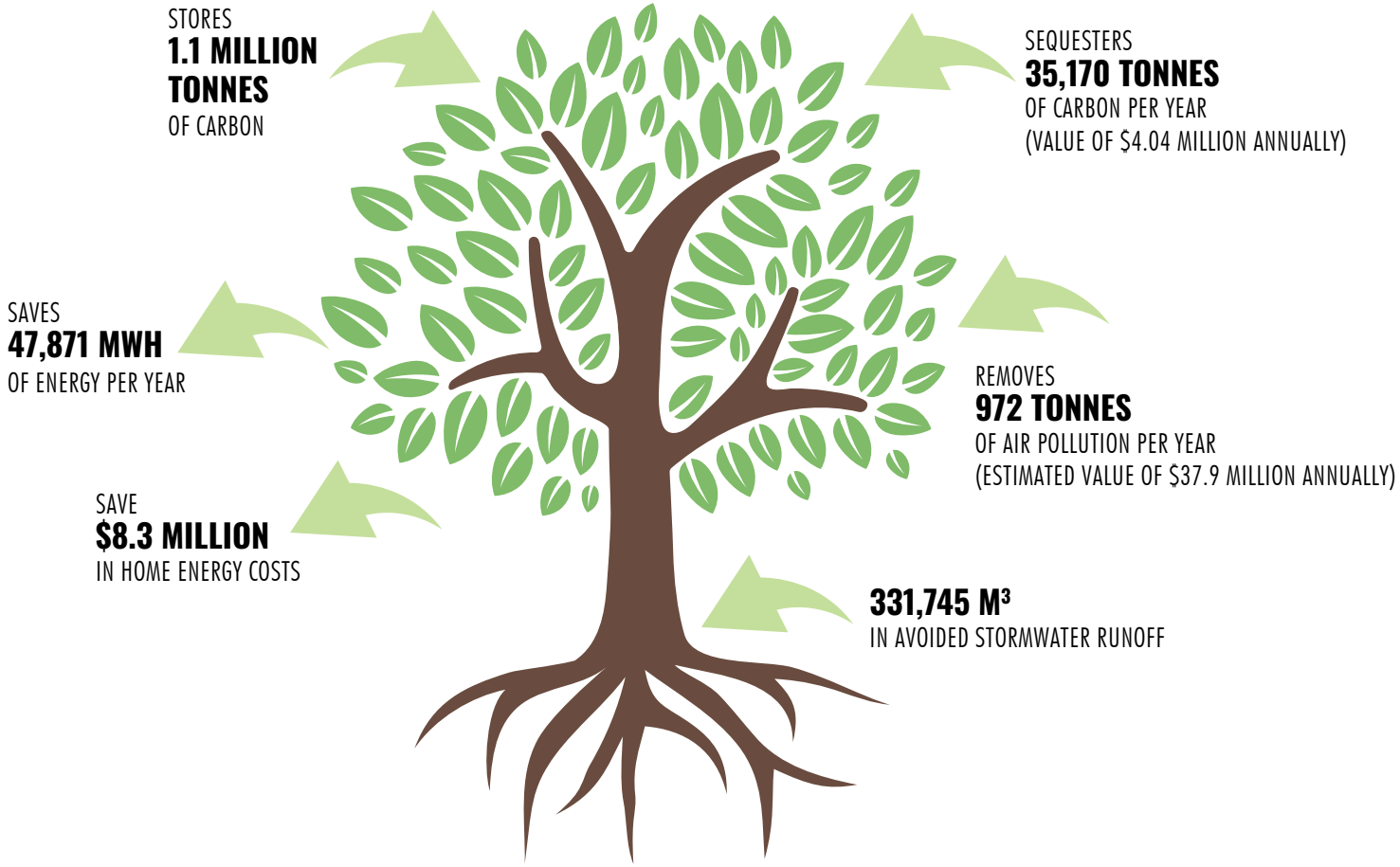
OUR URBAN FOREST

Research has shown that Toronto's urban forest has a structural value of approximately $7 billion and provides over $55 million worth of environmental benefits and cost savings each year. Our trees store 1.1 million metric tonnes of carbon annually, the equivalent annual carbon emissions from 733,000 cars, and they are estimated to reduce energy use by 47,871 MWH per year.

We know that cities will be heavily impacted by extreme weather caused by climate change. Close to two-thirds of the world's carbon emissions are tied to activities occurring in cities and urban areas and the impacts of climate change are taking a toll on our natural environment. Healthy trees and a healthy urban forest are vital to protecting us against some of the worst effects of climate change. Trees reduce flooding during heavy storms by intercepting rain and capturing stormwater runoff. Their root systems reduce soil erosion and they reduce the urban heat island effect. What is more, trees have been sequestering carbon for close to 350 million years. Through photosynthesis, they convert carbon dioxide into energy that fuels their growth, sequestering large amounts of carbon in their wood in the process. In short, a healthy urban forest is fundamental to climate change resilience.

In healthy natural forests, trees are typically able to regenerate and reproduce naturally. However, with the realities of a growing population and the mounting pressures of climate change, urban development, air pollution, soil compaction, and invasive species, we cannot rely on natural regeneration alone to sustain our urban forest. Active management and investments in tree planting are critical to a healthy urban forest.

BENEFITS AND HEALTH OF OUR TREES



DID YOU KNOW?

Did you know The Toronto Green Standard (TGS) is Toronto's sustainable design requirements for new private and public developments? The Toronto Green Standard applies to new planning applications and has the potential to greatly enhance the number and quality of tree planting locations on public and private property as part of the development process. It sets performance measures to enhance the urban forest and minimize the impact of new development on ecological systems. Some of these requirements include creating landscapes that support tree growth; protecting, restoring and enhancing Ravine & Natural Feature Protected Areas; and enhancing native plant and animal populations along with their habitat and ecosystems

WHAT IS THE TREE PLANTING STRATEGY?

The Tree Planting Strategy is our roadmap for action towards achieving our 40% tree canopy target and the overall objectives of the Strategic Forest Management Plan (SFMP). It supports our vision of "a healthy and expanding urban forest incorporating sound urban forestry practices and community partnership," as articulated in the SFMP, and it guides future action and investment around sustaining and renewing our urban forest through tree planting, stewardship, education, leadership and innovation.

WHAT ARE WE DOING NOW?

Urban Forestry actively plants trees on public land with the aim of maintaining and expanding our tree canopy cover across the city. Over 1 million trees and shrubs have been planted since 2005 and as of 2019, over 120,000 trees and shrubs are planted per year on our streets, parks and ravines. As part of these efforts, Urban Forestry has also engaged over 23,000 volunteers in over 1,000 community tree planting and stewardship events since 2013. Thousands of trees have also been planted across school grounds in Toronto as part of a partnership with the Toronto District School Board and the Toronto Catholic District School Board in which Urban Forestry helps supply and plant trees. Over 3,000 trees have been planted with the Toronto District School Board since 2011 and over 1,600 have been planted with the Toronto Catholic District School Board since 2010.

Urban Forestry is also actively involved in encouraging tree planting through the development process, capital infrastructure projects, and through various policies and guidelines, including more recent developments such as the Toronto Green Standard. Also, under the City's tree by-laws, replacement plantings are required and included as a condition in all removal permits. Urban Forestry works closely with its partners, such as City Planning, to maximize tree planting opportunities and to improve tree planting conditions to best support newly planted trees through to maturity.

DID YOU KNOW?

There are approximately 20,000 trees in hard surfaces on commercial streets across Toronto? Hard surface boulevards are some of the most challenging places for trees to grow. Maintaining these trees is vital to the survival and growth of our tree canopy in areas with hard surfaces.

On private land, Urban Forestry has developed public-private partnerships with not-for-profit organizations to provide various options and opportunities for community-based tree planting and stewardship in support of the 40% canopy cover target. In partnership with the City, LEAF delivers its award-winning backyard tree planting program at a subsidized cost, which has resulted in the planting of 1,779 trees and shrubs since 2016. This program helps homeowners plant the right tree in the right place through various options, including a full service option which includes on-site consultation with an arborist and full planting service, and a do-it-yourself option. The City has also supported LEAF's Adopt-A-Street Tree program since 2015, and Adopt-A-Park Tree since 2016.

The City has piloted various tree planting and stewardship grants. This includes free trees and micro-grants to community groups and matching funding for community-led tree planting and stewardship on private land.

Urban Forestry established an Urban Forest Working Group (UFWG) in 2017, composed of various stakeholders, to promote and develop private land tree planting and stewardship programs with a view to understanding how to best support our communities. Engagement with the UFWG includes working together to identify potential projects and partnership opportunities, engaging the UFWG in the development of this Tree Planting Strategy.

PUBLIC VS. PRIVATE LANDS

For the purposes of this strategy "public" refers to the city road allowances or right of way, parks, ravines and natural areas under management by the City of Toronto. "Private" refers to lands that are not covered under the definition of public land, including lands owned by City agencies or corporations, or other government entities

DID YOU KNOW?

Local Enhancement and Appreciation of Forests (LEAF) offers low cost full service and do-it-yourself backyard tree planting programs. They will help you select the right tree for your yard, deliver it and plant it for you.

WHY DEVELOP A TREE PLANTING STRATEGY?

The Tree Planting Strategy was developed in response to Council direction in 2016 to develop a Tree Planting Strategy based on the recommendation in the report *Action to Grow Toronto's Tree Canopy* and to work with an Urban Forest Working Group composed of key stakeholders in developing the strategy. The Tree Planting Strategy is a blueprint for action that reinforces the aims and objectives of the Strategic Forest Management Plan (2012-2022) and will inform the Urban Forestry Service Plan through the identification of additional private land forestry programs and services.

The Tree Planting Strategy will support strategic decision-making around tree planting and stewardship actions and investments. It will ensure evidence-based management and value for money in all that we do. It will help align and coordinate current tree planting and stewardship initiatives and identify gaps, and help address the expectations and values of our public, stakeholders, and employees. Moreover, it is about making the right choices for a healthy and expanding urban forest that is vital to our quality of life.

The Tree Planting Strategy closely aligns with the Official Plan, the Strategic Plan, and various strategies and plans, including the Parks Service Plan, Ravine Strategy, Wet Weather Flow Master Plan, and other key initiatives around public health, climate change and resilience.

HIERARCHY OF PLANS AND STRATEGIES

WHAT WE'VE HEARD

To ensure that the needs and views of our community and stakeholders were reflected in the Tree Planting Strategy, Urban Forestry engaged with the community through extensive consultations with the public, and with internal and external stakeholders in developing the strategy. A consultant was retained in the fall of 2015 to facilitate a series of workshops and to develop recommendations that would support and foster tree planting and stewardship across the city. These workshops took place alongside an online survey which sought input and feedback from residents and stakeholders on how to improve and expand tree planting and stewardship on private land.

The key messages that came out from the consultations were:

- Improve and expand outreach and education
- Build on existing city programs and tools
- Build on existing partnerships and organizations
- Provide a range of new programs targeting different groups

The feedback went on to inform the 16 recommendations developed by the consultant in its report, *Actions to Grow Toronto's Tree Canopy* which was adopted by Council in November 2016. The Tree Planting Strategy is built of many of these recommendations and is informed by the lessons learned from pilot projects along with the input and guidance of the Urban Forest Working Group and a Technical Working Group composed of subject matter experts from the City of Toronto and the Toronto and Region Conservation Authority

TIMELINE

MARCH 2015
City Council directed Urban Forestry to allocate $0.05 million to help direct future investments in the Forestry Service Plan

MAY 2015
Various stakeholders invited to provide guidance and direction on the development of a tree planting strategy to meet the 40% tree canopy target

SEPTEMBER 2015
Urban Forestry hired a consultant to lead stakeholder and public meetings in the fall of 2015 and to produce a report with recommendations for increasing the tree canopy

NOVEMBER 2015
Urban Forestry and consultant held 2 stakeholder workshops, 3 public open houses

NOVEMBER 2015
Urban Forestry launched the communications campaign (webpage, online survey, e-invites, news releases, social media posts)

OCTOBER 2016
Consultant's report, Actions to Grow Toronto's Tree Canopy is submitted to the Parks and Environment Committee

NOVEMBER 2016
City Council adopts Actions to Grow Toronto's Tree Canopy

APRIL 2017
Inaugural Urban Forest Working Group meeting

JUNE 2017
Urban Forest Working Group meeting

SEPTEMBER 2017
Urban Forest Working Group meeting

MARCH 2018
Urban Forest Working Group meeting

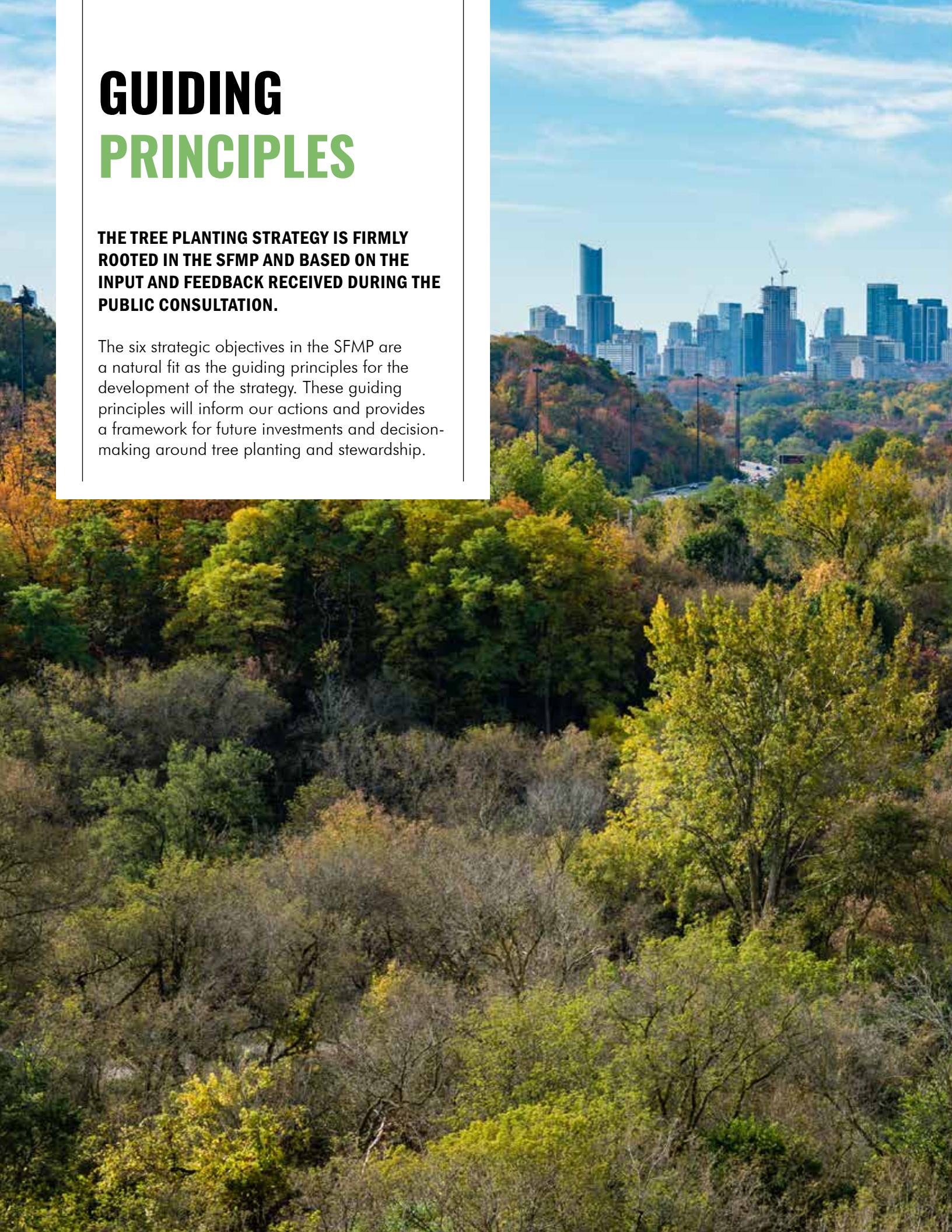
APRIL 2018
Urban Forest Working Group and Technical Working Group meetings

MAY 2018
Final Urban Forest Working Group and Technical Working Group meetings

GUIDING PRINCIPLES

THE TREE PLANTING STRATEGY IS FIRMLY ROOTED IN THE SFMP AND BASED ON THE INPUT AND FEEDBACK RECEIVED DURING THE PUBLIC CONSULTATION.

The six strategic objectives in the SFMP are a natural fit as the guiding principles for the development of the strategy. These guiding principles will inform our actions and provides a framework for future investments and decision-making around tree planting and stewardship.



INCREASE CANOPY COVER

Protect, maintain and expand the urban forest to achieve a healthy, sustainable forest with a canopy cover of 40%.

INCREASE AWARENESS

Increase awareness of the value of trees, the natural environment and the sensitivity of these resources.

ACHIEVE EQUITABLE DISTRIBUTION

Achieve equitable distribution of the urban forest, increasing canopy where it is most needed.

PROMOTE STEWARDSHIP

Promote stewardship and education of the multiple benefits of the urban forest and build collaborative partnerships for expanding the forest.

INCREASE BIODIVERSITY

Increase biodiversity to improve urban forest resiliency and respond to climate change.

IMPROVE MONITORING

Improve information management systems and enhance the ability to inventory, monitor and analyze the urban forest.

INCREASE CANOPY COVER

PROTECT, MAINTAIN AND EXPAND THE URBAN FOREST TO ACHIEVE A HEALTHY, SUSTAINABLE FOREST WITH A CANOPY COVER OF 40%

Tree canopy cover is the layer of leaves, branches and stems that cover the ground when viewed from above. The amount of canopy cover is directly linked to the many benefits that we enjoy from our trees. Planting trees is one of the ways of sustaining and increasing canopy cover. It is a necessary investment to ensuring a sustainable and healthy urban forest.

Not all canopy cover is desirable. Some invasive species provide considerable canopy cover but are detrimental to biodiversity and the health of our forest ecosystems. For our ravines and natural areas in particular, tree planting is part of a wider restoration effort that often requires the removal of large invasive trees, and the planting of various trees, shrubs and ground cover species to support a healthy and sustainable forest. In other words, quality canopy cover is needed to truly increase canopy cover.

DID YOU KNOW?

True locally sourced native plant material is best adapted to survive and grow in our local environmental conditions. While they typically cost more than non-locally sourced plant material, they are absolutely crucial when planting in natural areas, particularly in Environmentally Significant Areas (ESAs). Proper site preparation, maintenance and regular watering can increase upfront costs but will ultimately improve survival and reduce costs over the long term.

Maintaining and protecting trees and the existing canopy is equally important to increasing canopy cover and cannot be overlooked in favour of planting alone. In fact, as trees grow, so do the benefits they provide, which makes it all the more crucial that we follow through and ensure that the trees we plant are maintained and protected to ensure that we are maximizing their benefits and functions and getting the best possible return on our investment. Without adequate maintenance and protection, tree planting alone is not sustainable.

At the current pace of planting on public land at 120,000 trees and shrubs per year, the more favourable and accessible planting locations will eventually be planted and further investments will be needed as we look to planting opportunities in more challenging locations that require more extensive site preparation and remediation to support much needed trees and canopy cover. We will need to look beyond just the quantity of trees and shrubs planted and really emphasize the quality of these plantings and their overall benefit and impact to the canopy.

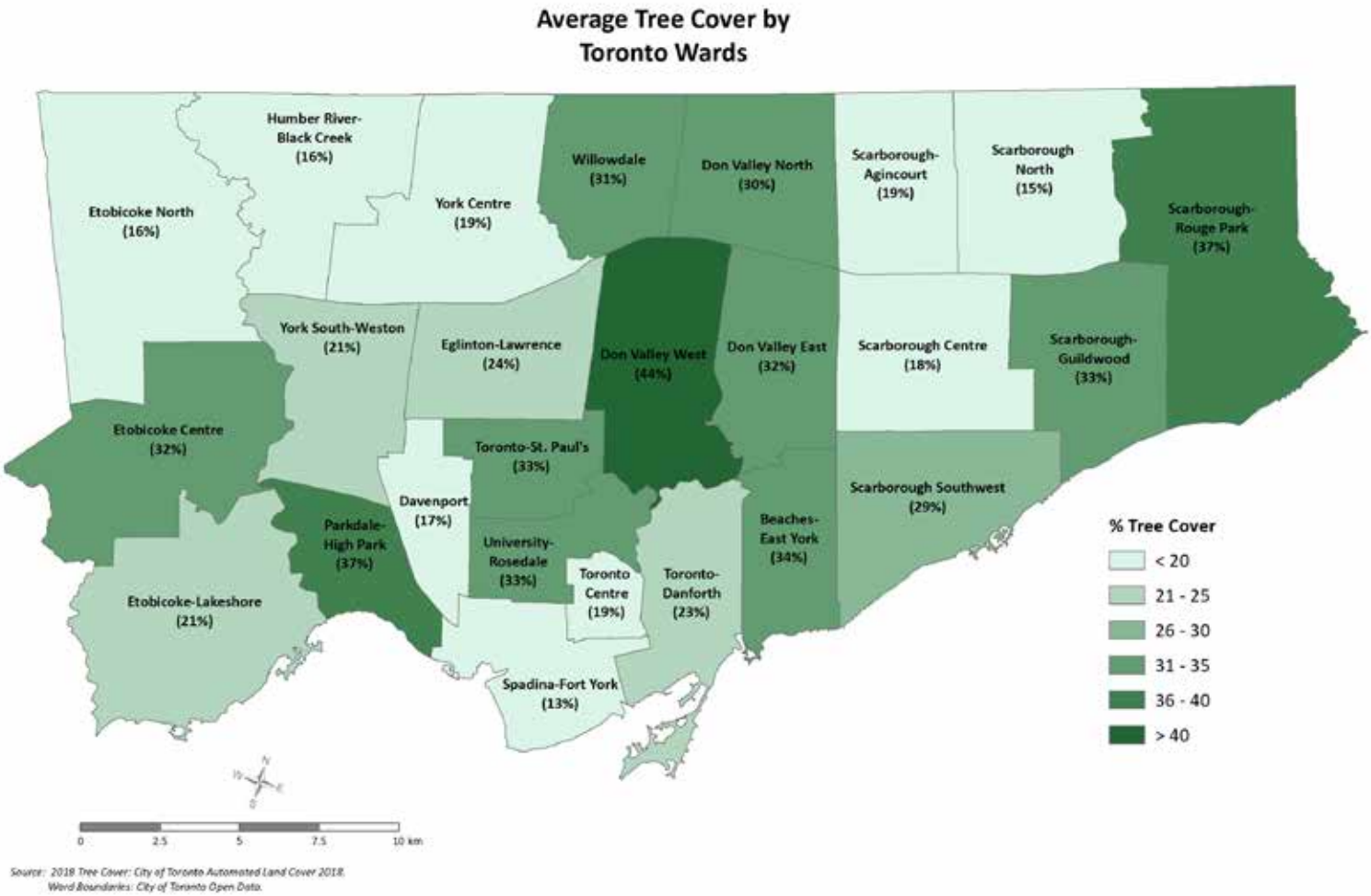
With over half of the city's land base being private property, increasing canopy cover cannot be done on public lands alone. The City needs to actively seek, support and sustain multi-partner collaborations that include the private sector, non-governmental organizations and government agencies to expand our capacity for tree planting on private land. Additional investments are needed to provide residents with programs and services.

LIFECYCLE OF A TREE

ACHIEVE EQUITABLE DISTRIBUTION

ACHIEVE EQUITABLE DISTRIBUTION OF THE URBAN FOREST, INCREASING CANOPY WHERE IT IS MOST NEEDED

Distribution of tree canopy cover varies across Toronto based on the type of land use and site conditions. For example, the average canopy cover in parks and open spaces, which includes our river valleys and ravines, is 52%, while the average canopy cover on industrial, commercial and institutional lands is between 4 – 17%. Factors such as competing land uses, conflicts with infrastructure, and local site conditions will greatly influence and determine where tree planting is feasible. There is also an important socio-demographic dimension to achieving equitable distribution of the urban forest. Careful thought and consideration must be given to under-represented groups, and strategies to ensuring that programs and services are accessible and inclusive. Making the most of available planting opportunities in areas with lower canopy cover is crucial to achieving equitable distribution. This might include using guidelines and best practices to optimize planting opportunities and seeking innovative and creative solutions to plant trees when conditions are less than ideal, but still suitable for planting. It means we have to be pragmatic and make smart choices.



INCREASE BIODIVERSITY

INCREASE BIODIVERSITY TO IMPROVE URBAN FOREST RESILIENCY AND RESPOND TO CLIMATE CHANGE

Biodiversity refers to the natural variety and variability of living organisms that inhabit the earth. These organisms and ecosystems are interconnected and interdependent, and directly linked with the water we drink, the air we breathe, and the land and soils upon which we depend for our food and natural resources. It is much more than just the number of tree species that we plant. It is about having climate-ready tree species that are suited for present and future growing conditions. It means that our desire to plant trees must be taken within a broader context of ecosystem management. It needs to take into account forest health threats such as Dutch elm disease, emerald ash borer, Asian Long-horned beetle, and newer threats such as sudden oak death and oak wilt. There should also be recognition that species diversity may not be possible or desirable in all circumstances, particularly in challenging sites and harsh environments where our choice is between having a non-native tree or no tree at all. We need to make the most of the planting opportunities that we have in parks, natural areas, and more favourable sites to support biodiversity across the landscape as a whole. A resilient and healthy urban forest and tree canopy will support and increase biodiversity.

Restoring our ravines and natural areas is critical to increasing biodiversity. Invasive species pose a serious threat to our ravines and natural areas and their removal is often required if we hope to restore our natural environment. We recognize that the removal of invasive trees that often have large canopies is necessary and required to increase biodiversity and the long term health and resilience of our urban forest.

INVASIVE SPECIES VS. NON-NATIVE SPECIES

Invasive species are harmful non-native species that have invaded an area. They displace native species and can negatively impact the environment, the economy, and even our health. However, many non-native species are not invasive or harmful. In fact, many non-native species provide valuable ecosystem services and benefits in some of our most challenging sites and harsh environments where native species might not survive.

DID YOU KNOW?

The Emerald Ash Borer, an invasive insect from Asia, has killed close to a million trees in Toronto alone? New invasive pathogens are approaching Toronto every year. Careful selection of tree plantings using this knowledge is critical to planting the successful urban forest of tomorrow.

INCREASE AWARENESS

INCREASE AWARENESS OF THE VALUE OF TREES, THE NATURAL ENVIRONMENT AND THE SENSITIVITY OF THESE RESOURCES

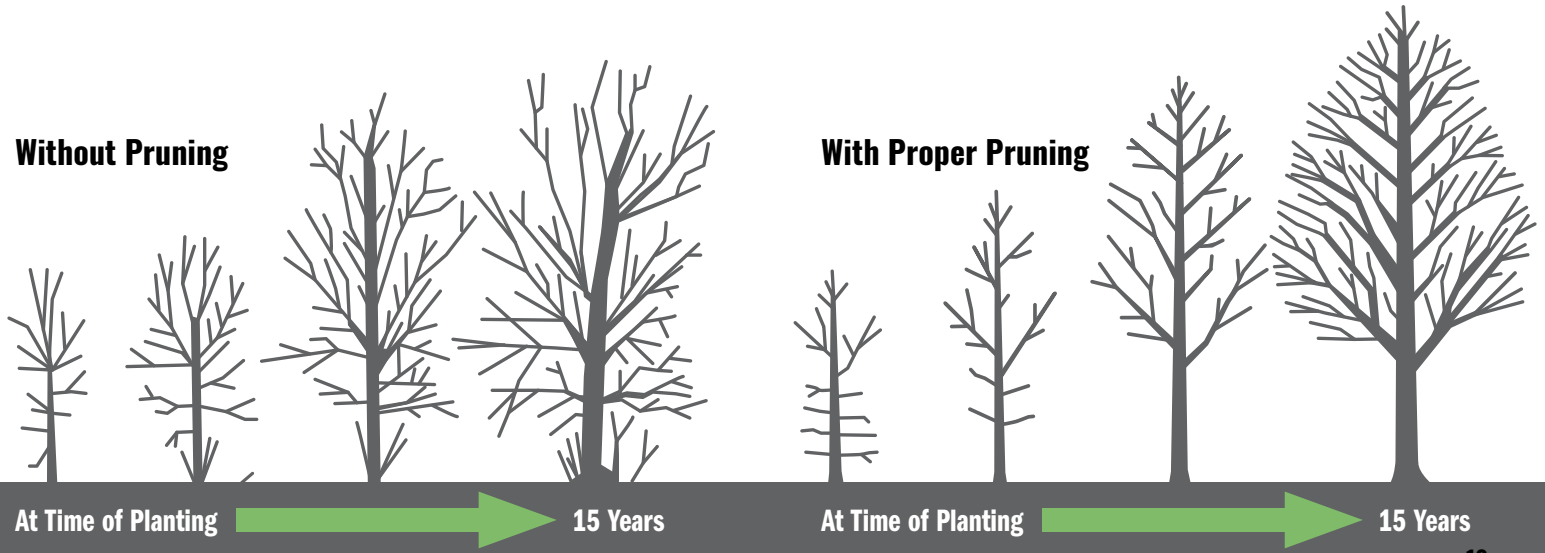
Awareness is the crucial first step towards life-long engagement. With over 50% of trees in private ownership, broad community awareness and engagement is needed to maintain and expand our urban forest. We need to be inclusive and accessible in our engagement with residents and businesses if we hope to inspire action across the city. No one can go it alone, and the City has a key role in providing the necessary leadership to ensure that our communities have the collective capacity and knowledge to inspire action.

We cannot exploit our natural environment at the expense of future generations and we all have a collective responsibility towards caring for our environment. This concept of intergenerational equity is fundamental to increasing awareness and engagement that is essential to on-the-ground action through stewardship.

DID YOU KNOW?

Urban Forestry holds free community tree planting and stewardship events across the City from May to November every year. Volunteers learn how to plant native trees and shrubs, and help grow our urban forest! Throughout the season educational workshops are also offered on different topics for volunteers to improve their environmental science skills and knowledge. Include an image of a City-run community tree planting/stewardship event.

THE IMPORTANCE OF PROPER PRUNING



PROMOTE STEWARDSHIP

PROMOTE STEWARDSHIP AND EDUCATION OF THE MULTIPLE BENEFITS OF THE URBAN FOREST AND BUILD COLLABORATIVE PARTNERSHIPS FOR EXPANDING THE FOREST

Stewardship means caring for our natural environment including our trees and forests and understanding how we affect the natural processes on which life depends. With increased awareness, we need to empower and mobilize people in support of tree planting and stewardship. Our residents and business can be agents of change, and the City has a key role to play in providing the tools, opportunities and resources to lead, support, and sustain on-the-ground action. Central to this is the seeking, transfer, and sharing of knowledge to enable and catalyze new and existing efforts around stewardship of our trees and urban forest. Meaningful stewardship opportunities can build life-long connections and commitment to caring for our trees and the urban forest.

A range of methods need to be used to engage our communities and stakeholders as stewards of the urban forest. There is no one-size-fits-all solution, and the strategies we use to engage residents and non-for-profits may not be the same as those we use to engage businesses and the industrial, commercial, and institutional sectors.

DID YOU KNOW?

Every year between May and September, Urban Forestry runs the Community Stewardship Program in natural areas across the city? Volunteers participate in weekly environmental stewardship activities such as invasive species removal, native species planting, monitoring site conditions, and maintaining trails.

IMPROVE MONITORING

IMPROVE INFORMATION MANAGEMENT SYSTEMS AND ENHANCE THE ABILITY TO INVENTORY, MONITOR AND ANALYZE THE URBAN FOREST

Monitoring is critical to adaptive management, continuous improvement and our ability to measure our performance. It helps us better understand the outcomes and impact of our work and supports strong and robust mechanisms for accountability and transparency. Quality rather than quantity needs to be at the heart of what we do, and the City has a key role in ensuring and facilitating quality in the programs and services provided by its partners. In particular, we must recognize that quality community engagement is critical to building life-long engagement in tree planting and stewardship, which in turn will help sustain and grow our canopy. With monitoring comes lessons learned and best practices, and the City plays a vital role in gathering and sharing this knowledge. It needs to integrate new knowledge into its policies and practices, and share new knowledge with its partners to support collective capacity building.

DID YOU KNOW?

Urban Forestry is working to implement a new Enterprise Work Management Solution (Maximo Asset Management) which will modernize and streamline the planning, tracking and reporting on work (such as tree planting and maintenance) through the use of newer technology.

Urban Forestry works with volunteers and community groups to monitor local flora and fauna population in natural areas.

PUTTING THE STRATEGY INTO ACTION

IN ORDER TO ACHIEVE OUR VISION OF "A HEALTHY AND EXPANDING URBAN FOREST INCORPORATING SOUND URBAN FORESTRY PRACTICES AND COMMUNITY PARTNERSHIP," ACTIONS HAVE BEEN ORGANIZED INTO FOUR "ACTION AREAS" THAT REFLECT THE KEY PRIORITIES AND DIRECTION OF THE TREE PLANTING STRATEGY.

Tree Planting on Public Land

Urban Forestry is directly responsible for managing 40% of all trees in Toronto. This includes more than 600,000 street trees and 3.5 million trees in parks and natural areas. We will continue to plant trees on public land because of the benefits that trees provide and to achieve our vision of a healthy and expanding urban forest. We will emphasize quality over quantity.

PUBLIC VS. PRIVATE LANDS

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SHORT TERM ACTIONS

1 TO 2 YEARS

- Review and update tree planting targets using the latest research and data to ensure targets are appropriate, achievable and realistic.
- Assess the progress of tree planting to-date through an updated tree canopy analysis
- Continue to plant trees along the City's right of ways, and in parks and natural areas
- Continue to collaborate with the Toronto and Region Conservation Authority around tree planting and stewardship initiatives
- Continue to encourage tree planting through the development process and through the administration of the tree by-laws.
- Continue to protect and manage environmentally sensitive areas (ESA) through increased tree plantings where appropriate
- Continue to provide care and maintenance to newly planted trees to ensure successful establishment and long term survival
- Integrate forest health care and pest management strategies into species selection and tree planting decisions
- Monitor the quality and survival of tree plantings to ensure continuous improvement and value for money
- Continue to ensure that strategies, policies and bylaws are supportive of tree planting and identify possible areas of conflict to be addressed
- Use best practices when selecting sites for planting to ensure that adequate spacing and offsets are met to minimize conflict with utilities and infrastructure
- Facilitate interdivisional collaboration and cooperation around the Tree Planting Strategy
- Continue partnership with Forest Ontario and the Forest Gene Conservation Association around tree seed diversity to support genetic diversity of planting stock and the long-term health of the urban forest.
- Monitor and manage invasive species and their impact on tree planting and forest health
- Continue to remove and replace invasive species with native and/or appropriate non-invasive species, particularly in ravine and natural areas

MEDIUM TERM ACTIONS

3 TO 4 YEARS

- Develop guidelines, procedures, resources, and tools to support City staff in tree planting
- Explore opportunities to align tree planting with corporate climate change resiliency initiatives
- Explore opportunities to partner with private donors to support tree planting on public land
- Explore opportunities for tree planting at City-owned properties and facilities, including City agencies and corporations
- Explore opportunities to create additional planting space through restoration and the management of invasive species
- Explore opportunities to enhance the watering and maintenance of newly planted trees through the innovative use of technology
- Promote the development and use of appropriate infrastructure for trees in hard surfaces that supports long term tree growth and maintenance
- Work with City Planning, Transportation Services, Toronto Water, and other City divisions to maximize existing opportunities and to identify new opportunities for tree planting and to encourage the use of best practices.
- Use best practices around tree species selection to promote and support biodiversity and to address climate change vulnerabilities.
- Advance arboricultural best practices and new techniques and technologies relating to tree planting, particularly as it relates to street tree planting in hardscapes.
- Investigate opportunities to plant along municipal expressways, such as the Don Valley Parkway and the Gardiner Expressway

LONG TERM ACTIONS

5+ YEARS

- Use the results from a prioritized tree planting tool to inform tree planting opportunities
- Host an interdivisional urban forestry symposium to promote collaboration, cooperation, best practices around tree planting and the Tree Planting Strategy
- Explore opportunities to improve the quality planting stock through partnerships or pilot projects with nurseries and growers
- Explore possible alignment of parkland acquisitions with increasing canopy cover through tree planting
- Assess opportunities to develop formal policies or to obtain Council direction around homeowner objection to tree planting on the public right of way

Tree Planting on Private Land

With 60% of all trees in Toronto located on private property, support for tree planting on private land is vital to growing our canopy and in supporting a healthy urban forest. We will encourage, educate, and enable tree planting on private land, and ensure that we work with residents, businesses, and stakeholders. Broad community engagement is essential to successful tree planting on private land and major industrial, commercial, and institutional landowners have an important role to play.

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SHORT TERM ACTIONS

1 TO 2 YEARS

- Provide technical expertise, tools and resources to residents and businesses on best management practices for tree planting and establishment
- Dedicate funding for community-based tree planting initiatives on private land
- Continue existing partnerships with the Toronto District School Board and the Toronto Catholic District School Board
- Continue existing partnerships with LEAF on the backyard tree planting program
- Monitor and evaluate the success of partnerships against program deliverables and alignment with the Tree Planting Strategy and Urban Forestry's goals and objectives.
- Continue to engage and consult with community groups, experts, academia, stakeholders, and other municipalities to advance pest practice and collaboration.
- Continue to regulate the removal and replacement of trees on private land
- Encourage best practices around tree species selection to support biodiversity
- Expand donation, partnership and sponsorship opportunities for private land planting
- Encourage successful and effective tree planting on private land that would include regular watering, and necessary maintenance.
- Explore opportunities to build new partnerships to increase organizational resilience and capacity

MEDIUM TERM ACTIONS

3 TO 4 YEARS

- Develop appropriate tree planting targets that are realistic and achievable
- Explore possible partnerships with the Conseil scolaire Viamonde and the Conseil scolaire catholique MonAvenir
- Explore new partnership opportunities with organization such as the Toronto and Region Conservation Authority to expand offering of private land tree planting services
- Explore new partnership opportunities with large landowners to increase tree planting in publicly-accessible spaces and capitalize on private investments and funding.
- Identify opportunities to increase tree planting on industrial, commercial, and institutional lands
- Identify opportunities for collaboration with other closely-aligned City strategies and objectives to support biodiversity
- Use the results of a tree planting prioritization tool to inform priority planting areas on private land and equitable distribution of canopy
- Explore opportunities to engage commercial retailers around tree planting on private land
- Explore opportunities to leverage planned investment in infrastructure and utilities to increase tree planting on private land
- Explore the feasibility and viability of incentives to encourage tree planting

LONG TERM ACTIONS

5+ YEARS

- Explore opportunities for the use of innovative financing tools and mechanisms, such as crowdfunding, to support private land tree planting initiatives
- Explore opportunities to improve the maintenance cycle in natural areas to maintain and expand tree canopy cover

Stewardship and Education

Stewardship and education is fundamental to a healthy urban forest. When people are aware of the importance trees and the urban forest and are inspired and empowered in taking an active role in its care, they understand the connection between the urban forest and their well-being. We will champion stewardship and education on public and private land as necessary for the long-term success and sustainability of our investments in tree planting.

SHORT TERM ACTIONS

1 TO 2 YEARS

- Dedicate funding for community-based stewardship and education programs and services on private land
- Expand current stewardship and education initiatives with the school boards
- Continue to increase the availability and accessibility of stewardship and education programs to residents across the city.
- Strengthen alignment of partner communications and education with City priorities and key messaging
- Support and participate in local community events that promote the importance and benefits of trees and tree planting, to achieve 40% canopy coverage
- Enhance and increase public awareness of tree planting and stewardship programs and services on public and private land
- Undertake market research and analytics to better understand public attitudes and behaviours
- Continue to educate homeowners, developers and builders on how to best plant, protect and maintain trees to increase canopy cover
- Strengthen community granting to incorporate best practices and lessons learned

MEDIUM TERM ACTIONS

3 TO 4 YEARS

- Expand current stewardship and volunteer opportunities on public land, including programs such as the Park Naturalization Program, Community Stewardship Program, Tree Planting Captain, and Don Valley Brick Works Ambassador
- Investigate opportunities to develop online tools and resources to support awareness and education
- Engage youth in stewardship and education initiatives on public and private land
- Improve marketing and communication tactics across different social media platforms to support greater awareness and education of trees and their benefits
- Explore opportunities for partnerships with academic institutions to support stewardship and education
- Explore opportunities to integrate youth engagement into stewardship and education initiatives
- Enhance volunteer experience where possible to sustain long term engagement
- Enable community-led tree planting and stewardship initiatives on private land
- Ensure staff have the necessary resources for managing volunteers in accordance with the Parks, Forestry & Recreation Division's Volunteer and Placement Policy
- Use the results from a tree planting prioritization tool to enhance stewardship and education programming and initiatives
- Develop a stewardship strategy for public lands that is consistent with the Strategic Forest Management Plan, the Ravine Strategy and the Tree Planting Strategy, to manage the use of public lands for stewardship purposes

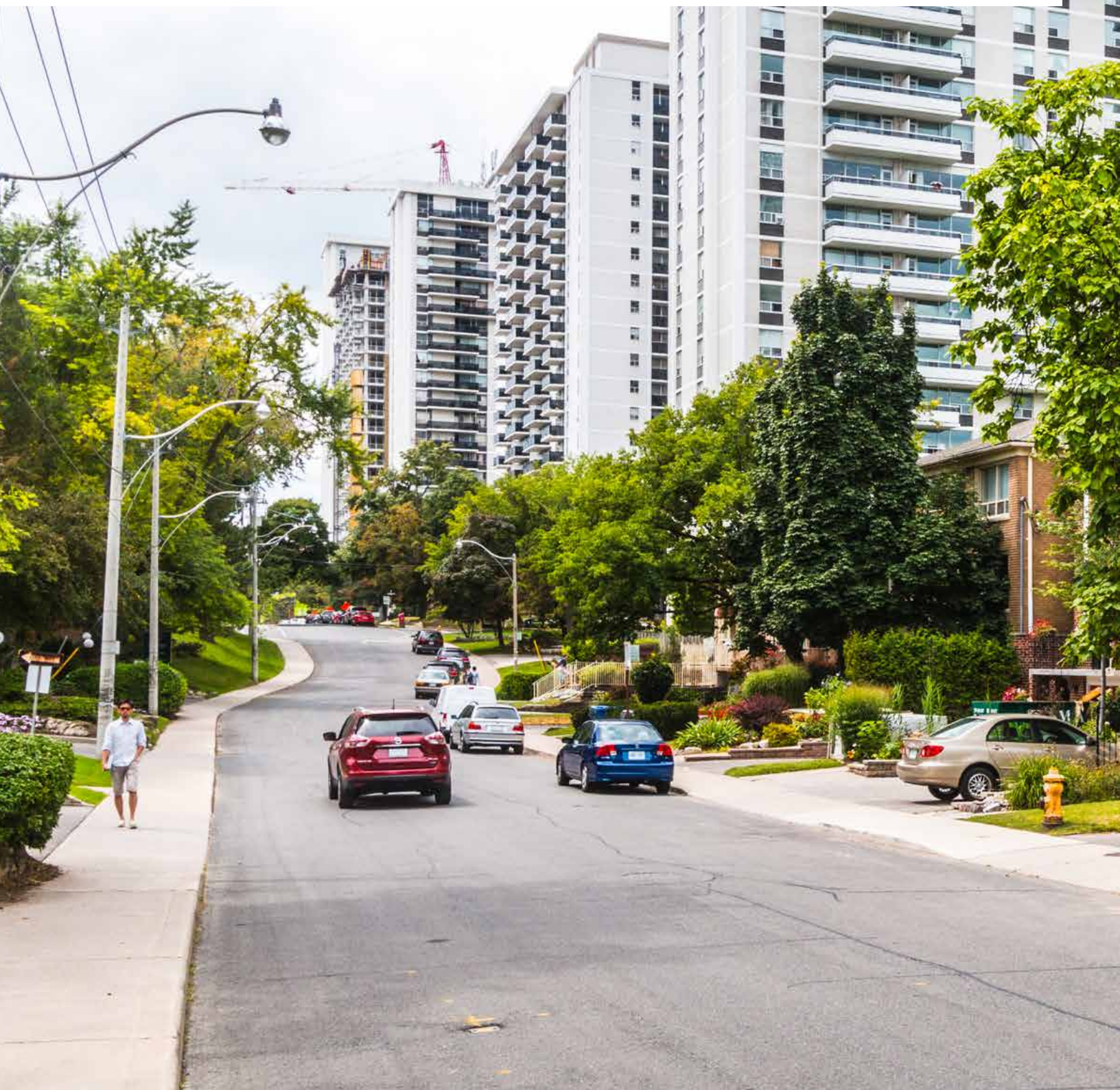
LONG TERM ACTIONS

5+ YEARS

- Implement an integrated communications strategy that delivers key messaging around tree planting and stewardship on public and private land through a variety of mediums and social media channels
- Accelerate the participation of residents and businesses across multiple sectors in stewardship and education initiatives
- Explore the possibility to increase availability of open data
- Provide access to Urban Forestry subject matter experts (SME) on a range of key urban forestry issues
- Create a mechanism or platform to share and pool resources amongst community organizations
- Provide greater opportunities for community organizations to partner with the City
- Explore potential models for community groups to undertake stewardship and outreach activities on public lands through licensing/ stewardship agreements that makes protecting the natural environment a guiding principle
- Expand the demographic and geographic reach of stewardship and education programs
- Explore opportunities for collaboration with First Nation partners

Leadership and Innovation

The City must lead by example and we must inspire and empower our staff, community, and partners to deliver on action. We will demonstrate leadership in tree planting and stewardship through our actions, policies, programs and partnerships. We will foster excellence and innovation as we encourage new ideas and approaches. We will seek continuous improvement and actively gather and share knowledge.



SHORT TERM ACTIONS

1 TO 2 YEARS

- Set priorities and develop a periodic report on achievements and progress
- Undertake an assessment of the City's tree canopy to determine progress towards 40% canopy cover
- Actively collaborate with other municipalities, agencies, and partners to exchange ideas, and to share information and best practices around tree planting and stewardship
- Work in partnership with the community, the TRCA, neighbouring municipalities, other levels of government, property owners, utility providers and other stakeholders to create more opportunities for individuals and organizations to contribute to the forest canopy through tree planting and stewardship.
- Integrate the various private land tree planting and stewardship partnerships, programs and services into a dedicated program.
- Allocate funding for the establishment of a dedicated unit within Urban Forestry with staffing resources to lead the delivery and implementation of the Tree Planting Strategy, private land programs, partnerships and related programs and initiatives.
- Invest in professional development and training opportunities for staff
- Provide staff with opportunities to contribute to the direction and implementation of the Tree Planting Strategy
- Continue to advocate for policies, regulation and innovative approaches supporting the value and importance of tree planting and green infrastructure through participation in organizations such as the Green Infrastructure Ontario Coalition
- Keep current with best practices, industry standards, emerging trends, ideas and new research through attending and presenting at conferences, workshops and seminars

MEDIUM TERM ACTIONS

3 TO 4 YEARS

- Develop a tree planting prioritization tool to identify opportunities for tree planting and stewardship on public and private land
- Develop an award and recognition program to enable the City to recognize excellence in urban forestry, to acknowledge the contributions of individual staff, residents, community groups, and businesses, and to demonstrate its importance to the general public.
- Continue to identify and invest in technology to increase operational efficiency and monitoring data
- Explore opportunities to support tree planting through provincial and federal funding and partnerships
- Develop tools and innovative approaches to leverage external funding in support of Urban Forestry's priorities and objectives

LONG TERM ACTIONS

5+ YEARS

- Explore the opportunities to advance asset management of green infrastructure and better understand the life-cycle costs for trees and vegetation managed by the City.
- Lead or participate in joint applied research ventures with academia, research institutions, provincial and federal agencies or non-governmental organizations to expand scientific knowledge to support science-based decision-making and to help identify research priorities
- Explore opportunities to attract and retain staff, particularly in hard-to-recruit positions to strengthen workforce capacity with adaptable and high performing employees to meet future tree planting and stewardship needs

IMPLEMENTATION

THE TREE PLANTING STRATEGY WILL SERVE AS A BASIS FOR OUR DECISION-MAKING AROUND TREE PLANTING AND STEWARDSHIP. IT BUILDS ON THE FOUNDATION OF THE STRATEGIC FOREST MANAGEMENT PLAN AND WILL INFORM THE URBAN FORESTRY SERVICE PLAN. ACTIONS RELATING TO NEW AND EXISTING FORESTRY PROGRAMS AND SERVICES WILL BE INCORPORATED INTO OPERATIONAL WORK PLANNING, SERVICE DELIVERY AND BUDGET.

Urban Forestry will actively champion the Tree Planting Strategy in collaboration with internal and external partners. Successful implementation depends on the participation of all segments and sectors of the City. This includes other city divisions, residents and businesses, local communities, the Toronto and Region Conservation Authority and local community groups and non-governmental organizations.

APPROACHES TO IMPLEMENTATION

A variety of tools, mechanisms, and approaches are needed to ensure the successful implementation of the Tree Planting Strategy. Partnerships and agreements with not-for-profit organizations (NFPs) and external partners is one way of delivering on private land forestry programs. On public land, the City may deliver on action through the work of in-house staff, contractors, or consultants.

Community engagement and collective action is critical to the success of the Tree Planting Strategy. Urban Forestry and its partners will work on-the ground with communities to provide meaningful opportunities to engage with trees and the urban forest in support of the objectives of the Tree Planting Strategy.

Public-private partnerships between the City and not-for-profit organizations and the private sector is an important tool for collective action and can help sustain active community engagement and marshal private sector resources and additional funds in support of the Tree Planting Strategy. What is more, financial leveraging can amplify the original City investment and maximize impact and value for money.

Just as there is no one-size-fits-all solution when it comes to community engagement and collective action, no one partner can do it all and no one model is suitable for all circumstances. To that end, the successful implementation of the Tree Planting Strategy will rely on multi-partner collaborations that is firmly rooted in collective impact. Collective Impact uses an evidence-based approach where wide-ranging individuals and groups commit to a common agenda to solve a specific social or environmental problem. It is used in TO Prosperity: Toronto Poverty Reduction Strategy and is used in other cities around the world. Collective impact and the five conditions of collective impact will drive and guide the implementation of our Tree Planting Strategy, particularly as it relates to partnerships around private land planting and stewardship.

MEASURING AND REPORTING ON SUCCESS

Urban Forestry will track and measure our progress in the implementation of the Tree Planting Strategy, developing program deliverables and key performance indicators. The Tree Planting Strategy will be reviewed every five-years and as required to ensure that we are on the right track and to make refinements and adjustments as needed.

THE FIVE CONDITIONS OF COLLECTIVE IMPACT

Common Agenda

All participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions.

Shared Measurement

Collecting data and measuring results consistently across all participants ensures efforts remain aligned and participants hold each other accountable.

Mutually Reinforcing Activities

Participant activities must be differentiated while still being coordinated through a mutually reinforcing plan of action.

Continuous Communication

Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and create common motivation.

Backbone Support

Creating and managing collective impact requires a separate organization(s) with staff and a specific set of skills to serve as the backbone for the entire initiative and coordinate participating organizations and agencies.

Source: Hanleybrown, Kania and Kramer (Winter 2011). "Collective Impact." Stanford Social Innovation Review

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