



Developing a Pan-Canadian Strategy on Urban Forests

Recommendations from the Think Tank on Urban Forests

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The purpose of this report is to provide a written synthesis of the discussions and recommendations generated as part of the think tank on Urban Forests. It is not an endorsement of the ideas nor the official position of Natural Resources Canada, the Canadian Forest Service, or participating institutions. Information contained was accurate at time of writing. Some timelines or information may no longer be current, however, the insights still hold value for contemporary thinking.

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Think Tank Context Setting

In October 2020, the Canadian Forest Service (CFS) launched a think tank to share new ideas on what a pan-Canadian strategy on urban forests might look like and the most beneficial method for delivering such a strategy. The think tank also discussed ways to find synergies and develop collaborations to advance urban forest actions across Canada. This included the identification of themes and priority areas to improve the health of urban forests in Canada. The CFS convened diverse experts from industry, academia, non-government organizations, and municipal and federal departments regularly over eight weeks to discuss the challenges and opportunities for urban forests in Canada. The think tank considered a range of topics, including challenges associated with establishing and maintaining urban forests, and developed recommendations on how to best address these challenges.

This report presents the findings and recommendations produced by this think tank. They are meant to be considered by the CFS senior management team in the context of the CFS' current role in urban forests.

Canadian Forest Service Role in Urban Forests

Over the past 10 years, the CFS has assessed and re-prioritized its work on urban forest science and policy. This effort has resulted in increased awareness of the importance and relevance of urban forests in advancing policy priorities within the federal government. More recently, the Minister of Natural Resources Canada has received the mandate to:

- Help cities expand and diversify their urban forests.
- Invest in protecting trees from infestations and, when ecologically appropriate, help rebuild our forests after a wildfire.
- Support research and provide funding so that municipalities have access to domestic sources of climate-resilient and genetically diverse trees that will increase the resilience of our urban forests.

Efforts to broaden the urban forest agenda within the government of Canada focused on increasing strategic, national-level urban forest science and policy in Canada through:

- Co-leading a science and policy community of practice in partnership with Health Canada and being an active member of the North American Forestry Commission Urban Forests Programs Working Group to foster information exchange, raising awareness and facilitating collaboration with communities across Canada.
- Informing federal policy positions on nature-based solutions to climate change, public health, and well-being, including supporting the urban component of the Growing Canada's Forest program.
- Research work on green infrastructure and urban forest restoration.
- Increasing the awareness and relevance of forests and forestry to urban Canadians in collaboration with long-standing partners.

Introduction

Recent international trends show that more and more cities and peri-urban areas are turning to nature-based solutions to climate change. Urban forests are an integral part of nature-based solutions that expand on tree-based urban ecosystems to address societal challenges, provide biodiversity benefits and ecosystem services for the well-being of urban citizens who are now more numerous than rural ones in Canada. Generally, when people think about forests, the first image that comes to mind is often not an urban setting. However, forests and trees are present in most communities across Canada, and their population enjoys the benefits that urban forests provide daily, including reducing heat, purifying air, creating habitat for wildlife, sequestering carbon, and offering spaces for recreation. Despite these benefits, the value of urban forests remains largely overlooked.

The effects of a changing climate on communities have underscored the importance of trees in urban settings, making them a necessary part of the solution going forward. This has motivated decision-makers across private and public sectors to explore mechanisms that can best manage and utilize urban forests to optimize the social, economic, and ecological values that contribute to quality of life for citizens within communities. The importance of urban trees is also evidenced by an increase in research and development activities related to urban forest practices, as well as additional efforts in coordination across the country to share knowledge, experiences, and insights aimed at improving health and well-being from urban forests.

There are several recent examples of non-government organizations (e.g., Tree Canada, Trees Please Winnipeg), and parliamentarians (the Standing Committee on Natural Resources, federal MP motion calling for the creation of a Federal Urban Forest Strategy) calling for an increased federal role in the management of forests and green spaces in urban areas to counter the impacts of climate change. Further, the Prime Minister has requested in the mandate letter to the Minister of Natural Resources Canada that the Minister help cities expand and diversify their urban forests, protect trees from infestations and, when ecologically appropriate, help rebuild forests after wildfire. As well, the Minister is committed to support research and provide funding so that municipalities have access to domestic sources of climate-resilient and genetically diverse trees that can increase the resilience of Canada's urban forests. In addition, academic institutions and the United States Forest Service have shown interest in collaborating with the Canadian government to conduct research on issues affecting urban forests, organize pilot projects in communities to develop and test new technologies, and develop guidance and decision support tools for urban forests.

Overview of Findings

Think tank members agreed that urban forests are key to nature-based climate solutions and to advancing current policy priorities by improving equitable access to the benefits that urban forests provide. They also recommended that a pan-Canadian strategy for urban forests be more than an operational how-to guide of best practices for urban forest managers. A strategy could provide an opportunity to develop a business case for urban forests, advocate for sustainable development of green infrastructure, and validate methodologies to support increased spending on urban trees and forests.

The recommendations produced seven recommendations, which were then grouped under the following three themes: guiding principles, strategy pillars, and results and monitoring.

Guiding Principles

1. Building on ongoing efforts, think tank members are calling on the CFS to lead the development of a pan-Canadian strategy for urban forests to increase integration across organizations and professions. Such a strategy should be grounded in equitable development principles with early targeted actions aimed at reducing disparities in communities, small towns, and cities.
2. Encourage the development and adoption of fiscal frameworks that include standard methodologies for the valuation of social, economic, and ecological benefits of urban forests and green infrastructures to allow green infrastructure to be considered as a financial asset.

Strategy Pillars

1. A pan-Canadian strategy should support municipal landscape development strategies that strive to complement green and grey infrastructures for sustainable service delivery that is ecologically grounded (i.e., optimizing biodiversity, watershed health, and conservation of wildlife and sensitive ecosystems).
2. Foster the development of regional and national networks to expand awareness of the benefits of urban trees and forests, including developing local urban forest expertise and facilitating long-term planning.
3. A pan-Canadian strategy on urban forests should support the development of digital architecture to facilitate knowledge transfer, data storage, and information retention. This may include the development of a “compendium/templates/resources” at the federal level of resources related to the implementation of a pan-Canadian Strategy on urban forests.

Results and Monitoring

1. Facilitate the establishment of the first national view in real time of urban forests in Canada by enabling access to standardize urban forestry data across Canada and inform targeted actions and responses.
2. Explore appointing a “national urban forester,” “national advocate for green infrastructure,” etc. independent from governments but responsible for providing advice to federal, provincial, territorial, and municipal governments.

Think Tank Recommendations for Developing a Pan-Canadian Strategy on Urban Forests

Focus on Increasing Equity and Quality of Life

Climate change has a disproportionate effect on individuals and communities across Canada, negatively affecting quality of life. A changing climate exacerbates social, environmental, and economic disparities within and between communities. Urban trees and forests have potential to reduce inequity by contributing to a healthier environment. A pan-Canadian strategy would facilitate actions taken across Canada to improve overall quality of life.

Developing and maintaining urban forests is not a new challenge or unique to any single community. Efforts by Tree Canada to provide operational guidance to communities on techniques and technology for urban forest maintenance, public education, and capacity building are reflected in that organization's own [Canadian Urban Forest Strategy](#). However, there is no overarching policy framework in Canada to help communities make better-informed decisions relating to urban forests. Think tank members recognized that a pan-Canadian strategy would help build a stronger case for investments and action in urban forests toward increasing equity between and within communities and improving the overall quality of life for individuals and communities in the context of a changing climate.

[The World Resources Institute](#) continues to raise global awareness on the need to focus on vulnerable individuals and communities being affected by climate change. Low-income communities, which often emit low greenhouse gas (GHG) emissions, suffer disproportionately the consequences of high GHG emissions. While urban trees and forests will not solve this discrepancy, they can be used to decrease vulnerabilities and protect individuals and their quality of life. To this end, public health institutions are increasingly bringing to the attention of governments the disproportional vulnerabilities and disadvantages of individuals living in areas where heat islands are frequent. Moving forward, the expansion of urban forest cover will be a critical part of the solution. [The Food and Agricultural Organization of the United Nations \(FAO\)](#) has outlined the ways urban forests can be used to protect communities, such as through cooling the air by up to 2°C, by regulating and improving water flow, and by filtering air pollutants.

Many communities that have accepted the power of urban forests to mitigate inequities from adverse climate change impacts have taken action to increase their local canopy cover to reduce heat island effects and pollution (see Box 1).

Box 1: Urban Forest Developments in Canada

- In 2019, the Winnipeg mayor launched a challenge to plant an additional 1 million trees in conjunction with Tree Canada.
- As of 2019, the National Capital Region of Canada has a robust urban forest with a canopy coverage of 46%.
- As of 2020, 15 Canadian cities have received the *Tree Cities of the World* designation from the FAO and the Arbor Day Foundation.

A pan-Canadian strategy focused on improving equity and the quality of life of Canadians through the development of urban forests would offer municipalities and decision-makers a collective vision to develop urban forests for the benefits of all.

Recommendation 1:

Building on ongoing efforts, think tank members are calling on the CFS to lead the development of a pan-Canadian strategy for urban forests to increase integration across organizations and professions. Such a strategy should be grounded in equitable development principles with early targeted actions aimed at reducing disparities in communities, small towns, and cities.

Support Municipal Decision-Making

Better access to data about the tangible social, ecological, and economic benefits provided by urban forests will support local decision-makers' ability to make long-term investments in urban forests. Currently, many decision-makers consider the use of municipal resources and funding to develop urban forests to be an expense, rather than an investment. This perception is a barrier to increasing and maintaining urban forest cover in communities.

The establishment and subsequent maintenance of urban forests require significant, long-term investment by local governments and decision-makers. While some communities are better able to allocate the resources necessary to conduct research and to employ highly qualified personnel to care for local

urban forests, others do not have the resources, capacity, or full understanding of the upfront investment needed to develop a robust and healthy urban forest together with other green infrastructure projects. In large part, this lack of resources and understanding results in urban forests being viewed as less “valuable” or less of a priority compared to other municipal assets.

The current accounting and financial framework, which municipalities work within, does not easily allow for the accounting of the full benefits of urban forests or other green infrastructure assets. Municipalities do not typically see financial returns from investments in their urban forests. Nor do they see the financial gains resulting from the long-term savings of the ecosystem services and the other benefits urban forests provide. Since urban forests and green infrastructure often compete with other municipal priorities for funding and resources, better understanding of the value that urban forests provide as an asset that can save more than they cost would help shift the common practice of inadequately resourcing urban forest projects in fear of high upfront and downstream costs related to maintenance. This shift would help rebalance the decision-making process and more accurately reflect the overall costs of establishing and maintaining urban forests. The sufficient allocation of resources would also allow strategic investments in decreasing tree mortality rates and maximizing benefits derived from urban forests. This plan is grounded in evidence from a peer-reviewed paper published in 2021¹ that demonstrates the link between a lack of knowledge and awareness of the ecosystems' value to human health and overall well-being and ecosystem degradation.

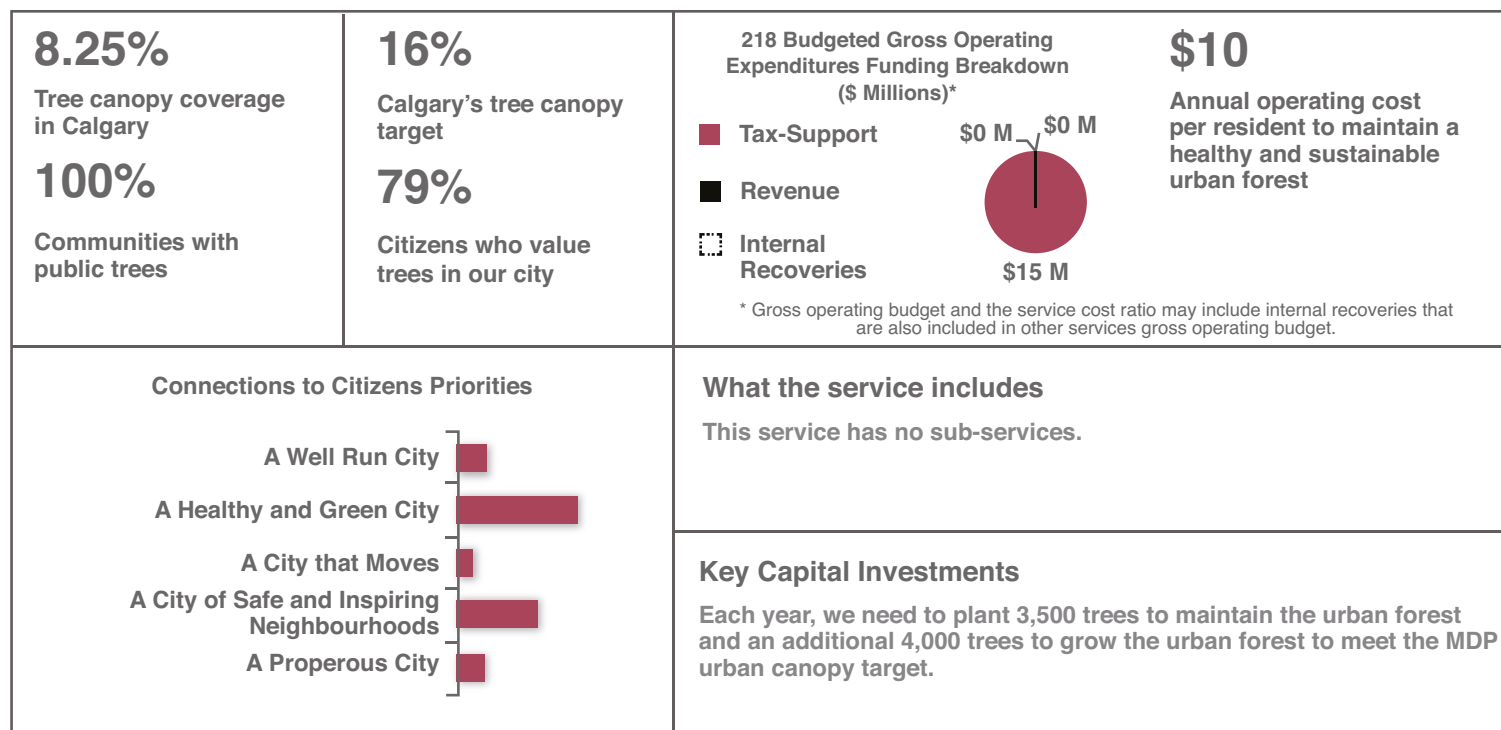
As seen in Figure 1 below², public opinion data on citizens' priorities is key in securing resources toward urban forest development. The image highlights the cost per resident of maintaining local urban forests and the alignment to public priorities. An overwhelming majority of citizens consider trees as an important factor in their quality of life and see urban forests as an indicator of healthy and green cities. This type of public opinion data was instrumental in supporting Calgary's efforts to increase tree maintenance, including pruning, investigating alternative methods for watering young trees during droughts, and identifying future planting areas to expand tree canopy coverages.

¹ L'Ecuyer-Sauvageau C, Dupras J, He J, Auclair J, Kermagoret C, Poder TG (2021) The economic value of Canada's National Capital Green Network. PLoS ONE 16(1): e0245045. <https://doi.org/10.1371/journal.pone.0245045>

² From *One Calgary Service Plans and Budget*

Figure 1. Public Opinion Survey Data on the Service Value of Urban Trees and Forests in Calgary

Current state service value



Research can also provide important and necessary data to support development of urban forests. For example, a [Wood and Human Health](#) research project from the University of British Columbia and FPInnovations explored the links between forest and forest products to human health, which included reduction in stress levels, increased recovery times for health issues, improved attention, and general healthy living. One of the specified benefits of the study was that people living in close proximity to plants and wood-finished furniture were less likely to take and need short-term sick leave. It is difficult to quantify and articulate the benefits of urban forests, including decreased use of sick leave and increased productivity, but it is important to do so.

Currently, many municipalities lack appropriate tools and methodologies to be able to calculate and articulate the financial benefits provided by urban forests and green infrastructure. To date, in comparison to green infrastructure, the benefits derived from grey, industrial infrastructure (such as expected tax revenue and jobs created) are easier to quantify, and their outcomes more easily understood and integrated into municipal budget and policy decisions. While the benefits of a healthy urban forest and green infrastructure cannot always be accounted for using traditional economic measurements, they remain substantial benefits for communities that should be defined economically. For example, urban forests can reduce long-term health costs by improving air quality, reduce energy consumption by cooling the air and providing shade, and,

by connecting people with nature in urban areas, improve mental health. They also provide municipal services such as storm water management and drinking water quality. Clearly, municipalities require accounting methodologies and tools that are appropriate to supporting and integrating the financial benefits derived from long-term social, economic, and ecological impacts of green infrastructure and urban forests.

With appropriate accounting practices, municipal decision-makers will be better equipped to justify investment of public funds in urban forests. With adequate accounting tools, it will also be easier to communicate to local populations the benefits of investing in urban forests. Obtaining the social licence from constituents is critical in the ability of municipalities to build capacity and maintain urban trees and forests to ensure their long-term survival. The provision of such information will be foundational to achieving this goal in the long-term.

Recommendation 2:

Encourage the development and adoption of fiscal frameworks that include standard methodologies for the valuation of social, economic, and ecological benefits of urban forests and green infrastructures to allow green infrastructure to be considered as a financial asset.

Advocate for an Integrated Landscape Management Approach to Managing and Maintaining Urban Forests

Managing and maintaining urban forests are not dissimilar to other land-based management approaches. Consideration of the entire urban ecosystem, including existing green and grey infrastructure such as roads, buildings, parks, and people, would be beneficial for building urban forest resilience to climate change and other threats.

Forests, including urban forests, are much more than the trees we see. Trees are a reflection of the health of their surrounding environment, including the soil, water, air quality, and fauna. When the environment is affected by green and grey infrastructure developments, it can have a direct impact on the urban canopy. For example, buildings and roads can compact soil, making it more difficult for water and nutrients to make their way to trees' roots. Improved coordination efforts between urban forest management and other activities that may affect the urban ecosystem, including the quality of life within communities, are essential in ensuring sustainable economic, social, and environmental objectives are achieved.

It has been documented that trees not only interact with abiotic components of their environment, but they also interact with fauna, other flora, insects, bacteria, fungi, and other trees. For example, controlled experiments lead by Dr. Simard, a professor from the University of British Columbia³, have brought forward evidence that trees communicate with each other. While this was controversial initially, the evidence has mounted to support this finding. Trees primarily communicate through fungi networks in the soil about their needs and send nutrients from one tree to another through the soil. This contrasts with more traditional views suggesting that competition supersedes the collaboration between trees for resources.

³ Teste, F.P., Simard, S.W. Mycorrhizal networks and distance from mature trees alter patterns of competition and facilitation in dry Douglas-fir forests. *Oecologia* 158, 193–203 (2008). <https://doi.org/10.1007/s00442-008-1136-5>

Box 2: Communications are Key.

“All the trees here, and in every forest that is not too damaged, are connected to each other through underground fungal networks. Trees share water and nutrients through the networks and use them to communicate. To communicate through the network, trees send chemical, hormonal and slow-pulsing electrical signals, which scientists are just beginning to decipher. Trees also communicate through the air, using pheromones and other scent signals.”

Source: *Do Trees talk to Each Other?*
Grant, 2018.

In addition, most infrastructure development projects focus on anthropogenic aspects such as buildings, parking, bike paths and picnic tables. Consideration of nature and the environment are often incorporated as an afterthought. This limits the benefits of landscape development for improved quality of life within communities. Better harmonization of infrastructure development with sustainability considerations would mitigate impacts on biodiversity, water retention, habitat for insects and wildlife, and the ability for trees to communicate (see Box 2). As a means to better integrate environmental factors into infrastructure projects, the think tank suggests that landscape projects further shift toward equal consideration of ecological and non-ecological factors at the landscape level, including urban forest management. Approaching green and grey infrastructure development with a landscape management approach would not only improve the health of individual trees, but it would also improve the benefits they provide to their communities.

One approach that may contribute to this objective could be to make use of landscape performance methodologies as a measure of success. This would entail measuring the effectiveness in which actions taken in an area are contributing to shared purposes and/or goals, such as decreasing GHG emissions and/or providing ecological services. The approach uses key outcome indicators such as reduced pollutants in the air, improved storm water and wastewater management, or the carbon offsets of an infrastructure project to measure value and benefits of targeted strategies and actions. Landscape performance can be adjusted to measure success at a municipal level, all the way down to individual infrastructure projects, such as parks or neighbourhood developments. Landscape performance requires the establishment of interdisciplinary teams to optimize performance, including landscape architects, urban planners, ecologists, arborist, horticulturist and others, depending on the project.

Recommendation 3:

A pan-Canadian strategy should support municipal landscape development strategies that strive to complement green and grey infrastructures for sustainable service delivery that is ecologically grounded (i.e., optimizing biodiversity, watershed health, and conservation of wildlife and sensitive ecosystems).

Support and Expand Urban Forest Management Networks Beyond Municipal Boundaries to Facilitate the Sharing of Knowledge and Strategies Across Regions

More comprehensive actions than are currently practised at a regional scale are required to support healthy urban forests. This can be achieved by building and expanding existing networks to facilitate the sharing of expertise and resources. Currently, there is an opportunity to strengthen regional governance mechanisms to better integrate organizational knowledge, resources, and data across municipal boundaries. A pan-Canadian strategy for urban forests could help bridge the gap between local and national networks by clearly articulating the role and contributions of regional networks.

Facilitating integration among municipalities through strengthened urban forest networks is expected to alleviate some of the pressures that individual communities currently face. In practical terms, by better coordinating regional research, municipalities can increase return on investment and generate broader interest in region-specific research topics such as pest infestations and regional climate changes. Coordinating research across entire regions would also encourage the increased use of standard operating procedures, common language, and data sharing.

Coordination between municipalities can also lead to better informed and more robust local and regional urban forest strategies that are complementary, both in approach and in objective. Coordination might also have a positive impact by reducing the vulnerability of urban forests to threats present in many municipalities. As previously noted, urban trees function within ecosystems, and as those ecosystems change, adaptive management approaches (e.g., hazard and vulnerability mapping, early warning and response systems, integration of Indigenous climate observations, and regionally based adaptation plans) must be examined and implemented as well. Regional coordination will create efficiencies in adoption of adaptive management approaches through sharing resources and data.

To achieve coordination of knowledge transfer, data storage, and information retention, common platforms built for urban forest communications will need to be developed. Currently, many communities try to adapt existing infrastructure and communication tools developed for other purposes to store and share urban forest data, which limits the usefulness of the data. Developing digital infrastructure built for urban forest data will make it easier to coordinate actions across regions. Such a platform would be a “one-stop shop” for aggregated information and data that could decrease the barrier to entry for communities that have limited capacity. Creating a digital space that is easily accessible and includes a compendium of resources, data, and other relevant information related to urban forests will enable communities to develop regional as well as local strategies.

The think tank identified existing networks that could be expanded upon to support regional actions, such as the Canadian Urban Forest Network (CUFN), a program from Tree Canada. Currently, the CUFN supports the exchange of information about urban forests, increases awareness about the issues facing Canada’s urban forests, and facilitates the development of regional urban forestry action plans. Further support for networks such as the CUFN and other regional networks can build on existing networks to create more opportunities for communities to start, or continue, to build urban forest expertise and capacity.

Recommendation 4:

Foster the development of regional and national networks to expand awareness of the benefits of urban trees and forests, including developing local urban forest expertise and facilitating long-term planning.

Recommendation 5:

A pan-Canadian strategy on urban forests should support the development of digital architecture to facilitate knowledge transfer, data storage, and information retention. This may include the development of a compendium/templates/resources at the federal level of resources related to the implementation of a pan-Canadian strategy on urban forests.

Strengthen the Connection Between Citizens and Urban Forests so They Become an Integral Part of Their Community's Infrastructure Improving Quality of Life

Creating deeper cultural connections to urban forests is an essential component for ensuring the long-term growth and sustainable development of urban trees and forests. This can be achieved by increasing citizen engagement through education and involvement of citizens in urban forest activities to cultivate the relationship between the community and urban forest ecosystems.

Increasing a communities' connection to urban forests is not as simple as it sounds. There is no "one size fits all" solution to building meaningful and long-lasting connections. Bonds need to be established and cultivated over time to deepen roots within communities. However, once these deeper roots are established, the social licence for regular maintenance and upkeep comes naturally. There is an opportunity to improve awareness and engagement by providing an array of information to trigger the curiosity and engagement of community members. This includes hosting tree planting and park events that provide, for example, knowledge on seed and species provenance, organizing educational field trips in collaboration with schools, and involving local businesses, museums, non-government organizations and others to find more ways for the community to get involved.

A recent case study of Mississauga, Ontario,⁴ found that sharing knowledge and providing updates on threats to urban forests motivates citizens to engage in urban forest issues. Organizations such as [EcoSchools Canada](#) have demonstrated that early education and awareness of the environmental impacts of our actions and of the need for early adoption of sustainability-focused habits to reduce ecological impacts create future leaders. Additionally, Tree Canada has begun mapping [Canada's urban forestry footprint](#), which provides publicly available information about local urban forests, including their stewardship, policy inputs, and management activities. Integrating this information into interactive maps results in a tool that can incentivize citizen engagement.

A pan-Canadian strategy for urban forests should aim to amplify these types of initiatives and explore other avenues to share knowledge and connect citizens to their local urban forests. Specifically focusing on public education and knowledge exchange about the benefits of urban forests and biodiversity to the health and well-being of the local populations will allow communities to be active and engage with local initiatives and understand the importance of urban forests.

⁴ Butt, Smith, Moola, Conway, The Relationship Between Knowledge and Community Engagement in Local Urban Forest Governance: A Case Study Examining the Role of Resident Association Members in Mississauga, Canada, Urban Forestry & Urban Greening, 2021.

Further, expanding the public's awareness and involvement (by actively reporting forest change and sharing information about perceived threats) can contribute to improved forest maintenance and reduced costs. A study on the quality of citizen science contributions to development of tree inventories⁵ found that citizens can be an efficient source of inventory information if provided some instruction on the area of research they are supporting. The study found citizens with some knowledge in tree identification could estimate the diameter of tree stems to within 2.54 cm of actual value and that their ability to accurately identify tree species was only about 10% less than that of experts.

Recommendation 6:

Facilitate the establishment of the first national view in real time of urban forests in Canada by enabling access to standardize urban forestry data across Canada and inform targeted actions and responses.

The Canadian Institute of Forestry has offered leadership in advancing this recommendation.

⁵ Roman, Scharenbroch, Östberg, Mueller, Henning, Koeser, Sanders, Betz, Jordan, Data quality in citizen science urban tree inventories, Urban Forestry & Urban Greening, Volume 22, 2017.

Explore bold new opportunities to advance urban forests and green infrastructure.

Think tank members recognize the need for immediate and urgent actions that will contribute to developing urban forests across Canada. Members also recognize that the timing is conducive to creating new opportunities and exploring how to better integrate urban forests into the daily well-being of Canadians.

A pan-Canadian strategy for urban forests would not only build a strong business case for prioritization of urban forests at multiple scales but would improve equity and the quality of life of Canadians. A strategy could also increase opportunities for urban forests to be used to address many of the great challenges faced by Canada. While near-term and immediate actions can produce tangible results such as development of capacity to grow and maintain urban forests, there is also space to become more pro-active in creating opportunities rather than taking advantage of existing ones.

One such idea raised by think tank members was the establishment within the federal government of a national advocate for urban forests and green infrastructure. The advocate would have a mandate, in collaboration with provinces, territories and municipalities, to assess opportunities and recommend actions intended to increase green infrastructure developments. The intention would be to improve urban forests in a way that would advance the concept of equitable access to urban forest benefits across government portfolios. Establishing a national advocate would create a champion focused on increasing visibility and strategic direction of urban forest issues within the government of Canada.

These types of positions or appointments are not uncommon and can be found in Canada. For example, Canada has had, for several years, a National Science Advisor, and currently has a Chief Science Advisor with a mandate to ensure consideration of evidence-based decision-making in federal policies, programs, and regulations. In other countries, elected officials have been

appointed to unique functions that address social and health-related issues. In 2018, the United Kingdom's Prime Minister Theresa May appointed a Minister of Loneliness to improve social isolation. India appointed a minister to promote Indian traditional medical practices and yoga. A key success for this minister was the organization of International Day of Yoga in 2015 when more than 35,000 people practiced yoga together. While some of these types of actions are created as short-term responses intended to tackle a single problem, others are intended to have lasting impacts and create institutional infrastructure that can proactively organize, increase, and create opportunities.

This type of approach might also contribute to linking aspirational goals of a pan-Canadian strategy on urban forests to actions needed to achieve results domestically and internationally. Doing so would signal to Canadians that an ongoing commitment to urban forests and green infrastructure development had been initiated.

A national advocate, or a similar function, is just one example of the type of institutional innovation needed to achieve the ideas and objectives of a pan-Canadian strategy for urban forests. Moving forward, as the merits and elements of a strategy are decided, additional conversations about this type of infrastructure will be needed to fulfill the potential outcomes.

Recommendation 7:

Explore appointing a “National Urban Forester”, “National advocate for green infrastructure”, independent from governments but responsible for providing advice to federal, provincial, territorial, and municipal governments.

Next Steps

The federal government has in the past decade shown increased interest and initiated actions related to urban forests, resulting in better awareness, research collaboration, and collaboration. However, further action, using an urban forest lens, is needed to address current challenges relating to climate change and equitable development. The CFS recognizes the opportunity to further support municipalities and institutions with a strong business case for urban forests and tools to optimize the value of urban forests as a compelling contributor to social, economic, and ecological prosperity.

The government of Canada recently launched the Growing Canada's Forest program with the intended purpose of planting 2-billion trees incremental to current reforestation levels, over the next 10-years as part of an approach that uses nature-based solutions to address climate change. A pan-Canadian strategy on urban forests could help municipalities and other jurisdictions and organizations ensure that urban tree planting efforts have lasting benefits for communities.

The recommendations from the think tank will be presented to the CFS leadership to further the conversation and advance urban forest priorities with CFS partners and collaborators.

Conclusion

The think tank members concluded that development of a pan-Canadian strategy on urban forests would benefit urban communities across Canada. Federal leadership can play a key role in enabling communities to expand urban forest cover and increase urban forest survival. While this report provides a picture of the potential outcomes and themes for a pan-Canadian strategy on urban forests, further engagement with relevant federal, provincial, territorial, and municipal departments and agencies, as well as other stakeholders, will be required.

The recommendations developed by the think tank are offered as guiding principles for a pan-Canadian strategy on urban forests. However, further exploration of the ways that urban forests can support equity within and between communities and enhance the quality of life for Canadians should be at the heart of any strategy. There exist many resources on urban forest best practices that can help to develop capacity and deliver “on the ground” results. As solutions for dealing with the adverse effects of climate change emerge, a pan-Canadian strategy on urban forests will provide municipalities and Canadians with strong, timely options to address challenges and improve the lives of urban Canadians. Ultimately, think tank members agree that a pan-Canadian strategy on urban forests will improve decision-makers’ ability to make sound decisions that support urban forests.

