

TREES ON PUBLIC AND PRIVATE PROPERTY

Recommendation

That the October 29, 2024, Urban Planning and Economy report UPE01925, be received for information.

Requested Action	Information Only		
ConnectEdmonton's Guiding Principle	ConnectEdmonton Strategic Goals		
CONNECTED This unifies our work to achieve our strategic goals.	Climate Resilience		
City Plan Values	PRESERVE		
City Plan Big City Move(s)	Greener as we Grow	Relationship to Council's Strategic Priorities	Climate Adaptation and Energy Transition
Corporate Business Plan	Transforming for the Future		
Council Policy, Program or Project Relationships	<ul style="list-style-type: none"> • Community Energy Transition Strategy (2021) • Urban Forest Management Plan (2012) • Urban Forest Asset Management Plan (2022) • Zoning Bylaw 20001 • Climate Resilience Policy (C627) 		
Related Council Discussions	<ul style="list-style-type: none"> • August 24, 2021, Urban Planning and Environment report UPE0667, Landscaping Requirements for Low Density Residential Development • June 14, 2022, Urban Planning and Environment report UPE00664, Tree Preservation on Private Property • May 2, 2023, City Operations report CO0138, City Plan - New Urban Trees • February 28, 2024, Urban Planning and Economy UPE01841, City Plan Measurements - Update on Targets • October 29, 2024, Urban Planning and Economy report UPE02420, Landscape Securities Process Changes 		

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Previous Council/Committee Action

At the May 16, 2023, City Council meeting, the following motion was passed:

That Administration provide a report outlining the roadmap of current programs, projects and initiatives to support the planting (expansion), maintenance and retention of trees on public and private property including data collection, ongoing monitoring and reporting.

Executive Summary

- Further to the originating motion, at the October 16-20/23, 2023, City Council Public Hearing meeting, the following motion was passed: That Administration, as part of City Operations report CO01925, Trees on Public and Private Property, explore opportunities on private land to continue the advancement of achieving the City's tree canopy goals, including and not limited to enhanced tree retention incentivization in Charter Bylaw 20001.
- The City Plan and the Urban Forest Management Plan outline targets for growing Edmonton's urban tree canopy, including planting new urban trees and expanding the urban forest canopy. The Urban Forest Asset Management Plan (UFAMP) further provides a tangible plan for how the 20 per cent canopy cover goal will be reached by 2071.
- This report provides a full summary of current programs, projects, and initiatives to grow, preserve, maintain and monitor trees on public and private land.
- Administration has identified opportunities for future work that have the greatest potential impact to achieve the City's tree canopy goals, such as greater rates of landscaping compliance, programs to support planting and further support to increase tree retention.
- Urban Planning Committee may choose to direct Administration to explore further opportunities for future programs, projects and initiatives on private land.
- Additional work would be required to fully understand the benefits, risks and costs of potential future programs or initiatives, including conducting additional research, feasibility studies and engagement, which may currently be unfunded.

REPORT

Edmonton's urban forest provides many environmental, ecological, economic and social benefits, such as improving air quality, enhancing biodiversity and reducing urban heat. These outcomes contribute directly to the long-term livability of the city and make Edmonton a healthier and more resilient place to live.

A robust urban forest is crucial for combating climate change, fostering community well-being and ensuring a sustainable future. It is essential to balance efforts to grow and retain Edmonton's urban forest with development and density objectives, as both are crucial to achieving broader climate resiliency goals.

There are two key interdependent goals for growing Edmonton's urban tree canopy:

- The City Plan's Big City Move, Greener As We Grow, sets a target to plant two million new urban trees by the time Edmonton's population reaches two million people.

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- The Urban Forest Management Plan sets a target to have 20 per cent urban forest canopy cover and the Urban Forest Asset Management Plan targets the 20 per cent urban forest canopy cover to be reached by 2071.

Achieving the targets outlined in The City Plan, the Urban Forest Management Plan and the Urban Forest Asset Management Plan will require adding trees and naturalization throughout Edmonton's parks, public realm and on private property. Modelling suggests that to reach 20 per cent urban forest canopy cover by 2071 and to plant two million net new urban trees and shrubs to meet the City Plan target the following would need to be achieved:

- Planting 421,500 new maintained boulevard and open space trees on public property.
- Adding 1,900 hectares of naturalization, in part by planting shrubs and trees on public property.
- Incentivizing private property owners to create an additional 2,900 hectares of new canopy on private land (allowing the growth and preservation of existing trees).
- Adding 1,400 hectares of natural areas to the City's inventory.

Planting two million net new urban trees is a City project already underway and supported by federal funding. The project started in 2021 with a baseline of zero new trees planted and the target of two million new trees planted is expected to be reached in 2030 under the project parameters.

In 2019, a review of Edmonton's canopy cover was undertaken using Light Detection and Ranging (LiDAR) and aerial imagery, with results showing an existing canopy coverage of 13 per cent city-wide. A subsequent review of canopy coverage is scheduled for 2025.

A wide range of work is already underway to meet canopy targets on both public and private land. Attachment 1 provides a roadmap of current programs, projects, and initiatives to grow, preserve, maintain and monitor Edmonton's urban forest.

Opportunities for Future Work

This report does not explore a private tree bylaw as an opportunity for future work. A report exploring the potential for a private tree bylaw was presented to Urban Planning Committee (CO01328) on May 2, 2023 and through it Administration did not recommend a private tree bylaw and was not directed to pursue future work.

Administration has identified opportunities for future work to continue the advancement of the City's tree canopy goals on private property. Future programs, projects and initiatives which Council may choose to explore further are summarized in Attachment 2. Attachment 2 categorizes opportunities for future work according to whether they apply to private property, the intended outcome on Edmonton's urban forest (grow, preserve, maintain or monitor), the level of effort required and the anticipated impact of the program, project or initiative on Edmonton's canopy targets.

Attachment 2 was informed by preliminary engagement with internal and external stakeholders and exploratory research conducted in partnership with the University of Alberta. This work included a jurisdictional scan of other Canadian municipalities.

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Additional analysis would be required to fully understand the benefits, risks and costs of opportunities for future work. This may include conducting further research, feasibility studies and stakeholder engagement, which may currently be unfunded.

Enhanced Zoning Bylaw Incentives

Zoning Bylaw 20001 contains minimum tree planting requirements for new residential, commercial and industrial development. It also includes incentives to preserve mature trees by allowing the retention of existing trees to substitute for planting new trees.

During the October 16-20/3, 2023, City Council Public Hearing, City Council provided direction following the adoption of the new Zoning Bylaw to explore opportunities on private land to continue the advancement of achieving the City's tree canopy goals, including and not limited to enhanced tree retention incentivization in Charter Bylaw 20001. Administration explored opportunities to enhance the existing tree retention incentive in Zoning Bylaw 20001. Two potential options emerged:

- Developing additional regulations for reduced setbacks where trees are preserved. For example, reducing the rear setback requirement where a tree is preserved in the front yard.
- In addition to waiving the requirement for a new tree (which the Zoning Bylaw already allows), waive the requirement for four shrubs where a tree is preserved for small-scale residential development on lots less than eight metres wide.

Attachment 3 provides an overview of these two potential options and considerations for the viability of each. While Zoning Bylaw text amendments could be advanced to implement these enhanced incentives, the analysis and feedback received suggest that their potential effectiveness may be limited.

High-Impact Opportunities for Future Work

Administration has identified the following opportunities for future work as having the greatest potential impact to achieve the City's tree canopy goals on private land:

Improving Landscaping Compliance Rates for Small Scale Residential Development

Current state: Increasing compliance with minimum landscaping requirements in the Zoning Bylaw is important to meeting canopy targets on private property. Work is underway to develop a more effective process for collecting and returning landscaping securities to increase rates of compliance for non-residential, mixed-use and residential development over five dwellings.

Administration does not collect landscape securities or conduct landscaping inspections or compliance activities for small scale residential development aside from cluster housing developments.

Opportunities for future work: Explore opportunities to expand the landscaping securities, inspection and compliance program to include small scale residential development, for implementation in 2026. Expansion of the program would require operational programming and resourcing to address the need for inspections, compliance and landscape security administration, and development of the program would require stakeholder engagement including with development industry stakeholders.

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Despite the high effort, expanding the program would be expected to yield significant benefits and advance urban forestry goals.

Education and Stewardship Programs

Current state: Edmontonians play a crucial role in meeting the City's canopy targets, particularly on private land. Administration offers a variety of stewardship and volunteer programs, special events, education and incentives that empower Edmontonians to get involved in growing and retaining the urban forest.

Opportunities for future work:

- Expanding the reach of existing programs that support planting such as Root for Trees, resident driven planting programs and the Tree Donation Program.
- Developing new education, stewardship, incentives and grant programs to support planting on private land in partnership with nonprofits, industry, universities or research institutions.

There is currently demand from Edmontonians for many of the existing education and stewardship programs offered by the City to support planting. In addition, Insight Survey results indicate that 44 per cent of respondents would like more information from the City on how to plant and maintain trees.

Additional education and outreach may focus on:

- Tree planting and care including best practices for planting, species selection, watering, pruning and disease management.
- The benefits of trees, including financial benefits for property owners such as reduced energy bills in the summer due to the cooling properties of trees.

Preliminary research findings suggest that education and outreach are crucial to supporting increased tree retention and planting. By increasing access to knowledge of how to plant and maintain trees and through building awareness of the benefits of trees, including the economic benefits of trees for property owners, Edmontonians may be more likely to retain and plant trees on their property. Depending on the scale of these programs, additional resources to expand or enhance current educational programs would be required.

Budget/Financial Implications

Operating budget, capital profiles and grants were approved to fund projects and programs focused on expanding and maintaining trees primarily on public land, as well as existing educational and City-led programs focused on private land. With the approval of the Greener As We Grow Capital Profile and the federal government's 2 Billion Trees grant, Administration has the funding required to plant two million new urban trees and shrubs and to meet the UFAMP annual planting goals by 2030.

Although capital funding is approved to plant and establish more trees from 2023 to 2030, existing operational budgets and resources are insufficient for maintenance service levels of the current inventory. Costs associated with the development and implementation of future programs, projects and initiatives that are not presently part of current operations is unknown. Necessary operating impacts of capital for existing inventory will be brought forward as part of

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2027-2030 budget deliberations. Wherever possible, alternative sources of funding to tax levy will be explored. This may include grant funding, developing natural areas funds with contributions from the development industry or corporate partnerships.

Community Insight

Administration conducted preliminary engagement with Edmontonians through May 2024 which informed opportunities for future work. Engagement included targeted stakeholder interviews with development industry representatives and representatives from environmental stakeholder groups. An online survey was also distributed to the Edmonton Insight Community and made available on the City's website to gain an understanding of landscaping behaviour and preferences on private property, knowledge of existing programs and potential barriers to planting and retaining trees.

Attachment 4 provides a summary of Edmontonians' sentiments towards regulating trees on private property. Insight from Edmontonians will be critical to implement any of the opportunities for future work. Administration may leverage current engagement opportunities with Edmontonians.

GBA+

Administration approached the engagement for this report with a GBA+ lens and sought to provide diverse perspectives to inform this report.

Further GBA+ should be considered for any of the opportunities for future work that may be explored. This would include analysis of how the proposed program or initiatives may support equitable access to Edmonton's urban canopy and the benefits it provides.

Targeted engagement with Indigenous groups was not conducted during this phase of engagement. Administration and various stakeholders identified the need to incorporate Indigenous traditional ecological knowledge into the City's tree programs and initiatives to meaningfully inform future work. Any future public engagement activities should consider opportunities to include Indigenous engagement.

Environment and Climate Review

Carbon capture and nature-based solutions are an important pathway in The City Plan, the Energy Transition Strategy and the Carbon Budget. This carbon reduction pathway represents 17 per cent of emission reductions in the Energy Transition Strategy. Carbon sequestration from trees and natural infrastructure are both climate mitigation and adaptation measures, and also support biodiversity.

Recognizing the benefits of trees and natural infrastructure, in addition to the actions already noted, the City could also consider:

1. Ongoing communication work with Edmontonians to reinforce messages about the benefits of trees to maintain public support for increased tree canopy; this could include encouraging tree planting and retention on private property, as well as species diversity for improved resilience;

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2. Work to quantify the economic and environmental value of natural infrastructure to support communication of this value to Edmontonians;
3. Increased retention of tree stands and natural areas to achieve tree canopy goals in a faster and more cost-effective manner that also supports improved biodiversity;
4. Continued funding for technology to monitor tree and canopy objectives;
5. Continued incorporation of traditional ecological knowledge into the City's tree programs.

Additional information is provided in the Environment and Climate Review in Attachment 5.

Attachments

1. Current Programs, Projects, and Initiatives
2. Opportunities for Future Work
3. Enhanced Zoning Bylaw Incentives
4. Engagement Summary
5. Environment and Climate Review