

Promoting Equity in Urban Forestry: Ottawa's Tree Equity Analysis Webinar Summary

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Urban tree canopy distribution often mirrors socio-economic inequalities, with neighbourhoods with lower canopy coverage typically home to equity-deserving communities. To support equitable access to the urban forest canopy, the City of Ottawa will conduct a tree equity analysis and use its findings to prioritize tree planting under the City's Tree Planting Strategy. In this webinar, Martha Copestake and Zoe Bedford from the City of Ottawa discussed Ottawa's approach to addressing tree inequity.

Presenters

- ☉ Martha Copestake, Senior Planning Forester, City of Ottawa
- ☉ Zoe Bedford, Planning Forester, City of Ottawa

Key Findings

- ☉ The objective of Ottawa's Tree Planting Strategy is to provide the residents of Ottawa with equitable access to urban forest canopy cover through proactive tree planting.
- ☉ The causes for tree canopy inequity include a lack of funding, poor integration of trees in planning, and weak engagement in low canopy neighborhoods.
- ☉ The City of Ottawa is currently working on implementing the American Forest Tree Equity Score, a method used to identify and prioritize tree planting in areas of the city where trees are needed the most. The score ranges from 0 to 100, with a lower score indicating lower tree equity and a greater priority for tree planting

Presentation Overview

Background and Legislative Context

- ☉ The first management period of the Urban Forest Management Plan focused on redevelopment of the Tree Protection By-Law. The second management period focuses on tree planting and growing canopy covers.
- ☉ The objective of the Tree Planting Strategy is to provide the residents of Ottawa with equitable access to urban forest canopy cover through proactive tree planting.
- ☉ The Tree Planting Strategy is a set of principles and the development of programs, actions, changes and policies to meet those principles over time.

- ☉ Ottawa's Tree Planting Strategy includes a shift from a reactive to a proactive approach, increasing tree species diversity, and using a neighborhood lens to prioritize planting in areas with the greatest need.
- ☉ The work aligns with Council's strategic objectives, was approved by Council under the Urban Forest Management Plan, and helps to meet Official Plan objectives of achieving 40% canopy cover.

Tree Equity Analysis

- ☉ The distribution of urban tree canopy is often associated with socioeconomic factors, with neighborhoods containing higher proportions of equity-deserving groups often having less access to the urban forest and its benefits. The tree equity score approach aims to prioritize planting in areas that can most benefit from increased canopy cover.
- ☉ The historic and current causes for tree canopy inequity include a lack of funding for the urban forests, poor incentives for planting on private land, and weak engagement in low canopy cover neighborhoods.
- ☉ Another cause is a lack of integration of the value of trees in the planning process. This means that when planning neighborhoods, trees are not being integrated as valuable pieces of green infrastructure as other gray infrastructure would.
- ☉ Tree equity can be used to help target tree planting initiatives in priority areas; provide community context and tailor planting programs to fit needs and interests; gain understanding of neighbourhood challenges and how canopy cover can help alleviate them; and kickstart partnerships with the public.
- ☉ The American Forest Tree Equity Score uses socioeconomic health and canopy cover data at the census block level to evaluate the equitable distribution of tree canopy throughout cities.
- ☉ The score ranges from 0 to 100, with a lower score indicating lower tree equity and a greater priority for tree planting. A score of 100 doesn't mean that the neighborhood has 100% canopy cover. It means that the neighborhood has either met or surpassed its local tree canopy goal.
- ☉ Tree equity score is calculated by taking the goal tree canopy and subtracting existing tree canopy from it and then multiplying it by a priority index comprised of socioeconomic and health factors. This formula is applied at the neighborhood level by using census level data inputs.
- ☉ The American Forest Tree Equity Score uses a tree canopy goal that's been adjusted for building density by considering the proportion of the neighborhood that's covered by buildings.
- ☉ The goal canopy cover for the forest biome will either increase or decrease depending on the area's building density.
- ☉ Existing canopy cover is used to calculate the tree canopy gap (the proportion of area in the neighbourhood that could be planted to reach the planting goal).

- The priority index accounts for the socioeconomic dimensions of the tree equity score. It's comprised of 7 equally weighted climate, health and socioeconomic indicators (such as age, employment-unemployment rate, health, race, and more).
- This index produces a score for each neighborhood that ranges from 0.1 to one, where one represents the greatest priority possible.
- A higher priority index means that there's a greater proportion of at risk populations or equity-deserving groups within the neighborhood.
- The American Forest Tree Equity Score is neighborhood level data, the scores from the neighborhood can be combined to produce a citywide score that's responsive to changes that are made on the ground. It is dynamic, not static.

Discussion

- Large-scale consultation occurred to support development of the Urban Forest Management Plan. This involved many residents who are vocal about their passion for trees and engage in regular conversations with Councillors. Additionally, data on tree canopy cover loss in certain neighbourhoods was leveraged to demonstrate the need for the tree bylaw, so by the time tree equity conversation surfaced, Council was educated and aware.
- Ottawa is experiencing an increase in major windstorms and is adjusting maintenance quality standards and increasing staff capacity to prepare for weather events.
- Ottawa is developing a recommended tree species list.
- Building density does not include other impervious surfaces such as roads and parking lots.

Additional Resources

- [The American Forest Tree Equity Score Tool](#)
- City of Ottawa's [Tree Equity Analysis staff report](#)
- City of Ottawa's [Environment and Climate Change Committee Agenda](#) (June 18, 2024)
- [Private Land Tree Planting Program Research Briefing](#)
- Nature Canada's [Bringing the Nature to All](#)
- Green Municipal Fund [Tree Planting Funding](#)

Contact Information

Please reach out to us at any time with questions, input, or for additional information.

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