

# Executive Summary

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This report identified best practices for larger Ontario municipalities to develop urban forest management plans (UFMPs). The report addressed the following research question:

**What lessons can large Ontario municipalities learn from London and Mississauga's urban forest management plans?**

Urban forests are urban ecosystems that benefit urban environments and their inhabitants by providing valuable ecosystem services; however, North American urban forests are facing increasing pressures from intensification, invasive pests, and climate change. Some municipalities have developed UFMPs to address these threats and to maintain and enhance their urban forests.

A UFMP is a planning document that outlines a long-term strategy to manage and maintain, and in some cases to enhance and expand, a defined urban forest or portion thereof. Municipalities in Ontario have only recently begun to adopt UFMPs. This has occurred in the context of a lack of leadership and involvement in urban forest management by the provincial and federal governments.

London and Mississauga were chosen as case studies because they are the first and only Ontario municipalities with populations between 200,000 and 750,000 to adopt UFMPs. As such, they can provide a model for other large Ontario municipalities to follow in the management of their own urban forests.

Existing research by forestry experts has already explored best practices for urban forest management planning from a forestry perspective. To complement the existing literature, this report studied urban forest management planning from a planning perspective.

The methodology for this report comprised document analysis of the two case study plans, a literature review, and semi-structured interviews with three academics with expertise in the field of urban forestry.

The document analysis evaluated case study UFMPs using twelve criteria which were adapted from those developed by Julia Cziraky in her 2012 report *A Comparative Case Study of Urban Forest Planning in Oakville and Kingston, Ontario*. The twelve criteria are divided into four categories as follows:

#### Category A: Context and Goal-Setting Process

1. Defining the urban forest
2. Scope of the plan
3. Setting effective goals

#### Category B: Incorporation of Ecological Principles

4. Conducting an inventory of existing trees and associated ecosystems
5. Identification of plantable space
6. Identification of threats and disaster management

#### Category C: Stakeholder Involvement and Collaboration

7. Inclusion of public input into visioning process and final plan
8. Collaboration among groups
9. Public education efforts and ongoing citizen participation strategies

#### Category D: Implementation Strategies

10. Active adaptive management techniques
11. Identification of groups responsible for implementation
12. Regulatory instruments

Both plans satisfy all twelve of the evaluation criteria, to differing degrees. London's plan was somewhat weak on defining key terms and setting effective targets by which to measure success.

A key strength of London's plan was its strong public consultation process. Mississauga's plan

could have been strengthened by a more effective consultation with the general public as part of plan development. The key strengths of Mississauga's plan are its highly detailed implementation strategy and its emphasis on active adaptive management.

The analysis of the case study plans, combined with the literature review and interviews with urban forestry experts, provided the following lessons for large Ontario municipalities that are considering adopting an urban forest management plan:

1. All municipalities with urban forestry programs can benefit from adopting an urban forest management plan.
2. Clearly define the terms of reference and scope of the plan.
3. Conduct a thorough inventory of the urban forest to provide data on which to base the plan.
4. Set targets that will be effective in achieving the vision for the urban forest.
5. Utilize regulatory instruments as one of many means to protect trees.
6. Include the public and key stakeholder groups in the development and implementation of the plan.
7. Adopt an "active adaptive management" approach to maximize plan effectiveness.
8. Adopt a collaborative approach to urban forest management, internally and externally.

Additional lessons were identified for planners, as well as for Ontario provincial policy makers:

1. Lessons for planners:
  - a. Become educated in the basics of urban forestry, and consider forestry concerns early in the planning process.
  - b. Explore how planning tools, such as zoning by-laws, can support urban forestry efforts.
2. Lessons for Ontario provincial policy makers:
  - a. Develop policies to guide municipal urban forest management.
  - b. Support municipal urban forest management by taking a lead role in research to inform active adaptive management practices.

This report found that urban forest management plans can be beneficial for municipalities of any size that have the capacity to implement them, and that large municipalities in particular should have this capacity and stand to benefit from UFMP adoption.

As intensification, climate change, invasive pests, and other factors place increasing pressures on urban forests, large Ontario municipalities can look to the example set by London and Mississauga for lessons in how to develop their own urban forest management plans. By

implementing such plans, these municipalities can address the pressures facing their urban forests and work towards securing a healthier urban forest ecosystem in the future.