

# Urban Forest Strategic Management Plan

**Council meeting**  
**March 25, 2024**

**Forestry Section**  
**Parks and Open Space Department**  
**Town of Oakville**

## **Climate Change and Sustainable Urban Forest Management**

- **Climate change is one of our most pressing global challenges, impacting all types of communities, including urban areas.**
- **Climate change mitigation remains an important goal to which Canada's urban forests can make an important contribution.**
- **Urban tree canopy reduce the urban heat island effect, reduce cooling and heating costs, filter air pollution, generate oxygen, provide habitat for birds and other fauna, increase property values, reduce storm water run-off, and add living beauty to communities, making cities healthier and more livable.**
- **Sustainably managed forests are among our most important tools for addressing Climate change.**

# Scope:

The plan reviews the current status of urban forest, assess the implementation progress against recommendations since the first urban forest study, delivered in 2005, and provide strategic direction and recommendations to achieve:

1. A sustainable and healthy urban forest
2. 40% urban forest canopy cover target by 2057

# UFSMP Team:

- **Consulting team members**

- KBM resource Group
  - Lallemand Inc./BioForest
  - Dillon Consulting Inc.
  - Natural Resource Solutions Inc.

- **Core working group members**

- Forestry Services
  - Transportation and Engineering
  - Development Services
  - Planning Services
  - Economic Development and Corporate Strategy
  - Strategy, Policy and Communications






- **Stakeholder focus groups**

- External Non- Government Organizations
  - External Government Organizations
  - Developers Liaison

# Progress: 2005-2019

2005	<ul style="list-style-type: none"><li>•First UFORE and Canopy Study (Oakville's Solution to Our Pollution)</li></ul>
2007	<ul style="list-style-type: none"><li>•Mayor sets official goal to achieve 40% tree canopy by 2057</li></ul>
2008	<ul style="list-style-type: none"><li>•South Oakville Urban Forest Strategic Management Plan</li><li>•First Private Tree Protection By-law</li></ul>
2009	<ul style="list-style-type: none"><li>•First tree inventory</li><li>•Revised Town tree protection by-law</li><li>•Revised Tree protection Policy and Procedure</li></ul>
2012	<ul style="list-style-type: none"><li>•North Oakville Urban Forest Strategic Management Plan</li><li>•Canopy Cover Plan Required for Site Plan and Plan of Subdivision Applications</li></ul>
2014	<ul style="list-style-type: none"><li>•"Livable by Design" manual Part A (urban design guidelines) references NOUFSMP</li></ul>
2015	<ul style="list-style-type: none"><li>•Forestry Services Review Project</li></ul>
2016	<ul style="list-style-type: none"><li>•Second Canopy Study, (Growing Livability - A Study of Oakville's Urban Forest)</li></ul>
2017	<ul style="list-style-type: none"><li>•Revised Private Tree Protection By-law</li><li>•Improved Forestry Customer Service Level Standards</li></ul>
2018	<ul style="list-style-type: none"><li>• 2015 Forestry Services Review and Internal Audit Report</li><li>• Town wins Local Planning Appeal Tribunal appeal to increase landscape widths in the zoning by-law</li></ul>
2020	<ul style="list-style-type: none"><li>•Consolidated Urban Forest Strategic Management Plan</li></ul>

# Report card on urban forest canopy growth and sustainability:

Indicator	Change	Status
Urban Forest Canopy%	Increased from 26.5% in 2005 to 27.8 in 2015 and 32.6% in 2018 South of Dundas. The Town's overall canopy 31.2% in 2018.	
Total number of trees	Increased from 1.9 million in 2005 to over 2 million in 2015	
Average tree condition (% of crown dieback)	Trees in good and excellent condition increased from 76.8% in 2005 to 83% in 2015	
Woodland health	Showing some positive response to management activities like spongy moth and fall cankerworm treatment	
Invasive Species	Presence and abundance of European buckthorn population increased from 2% in 2005 to 10.6% in 2015	

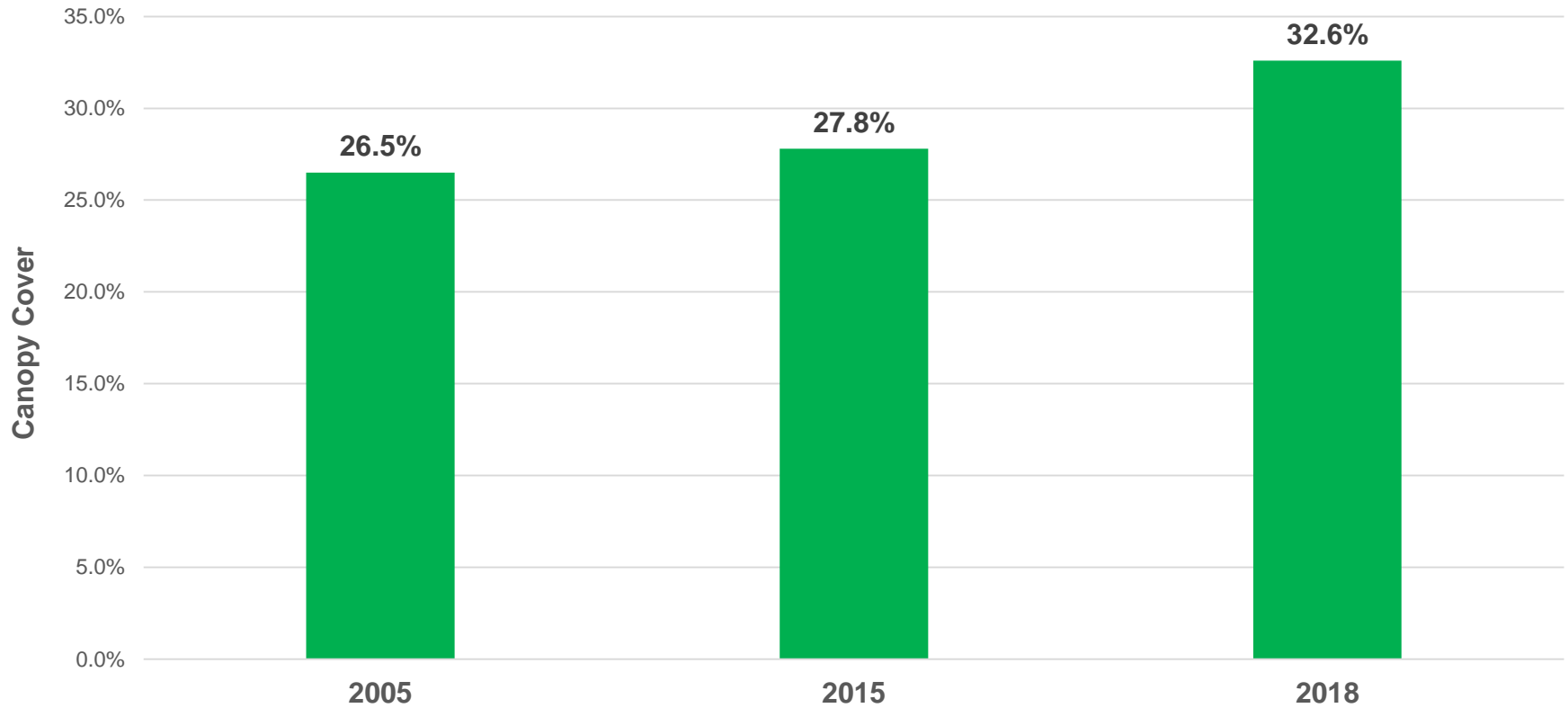


**Improved**

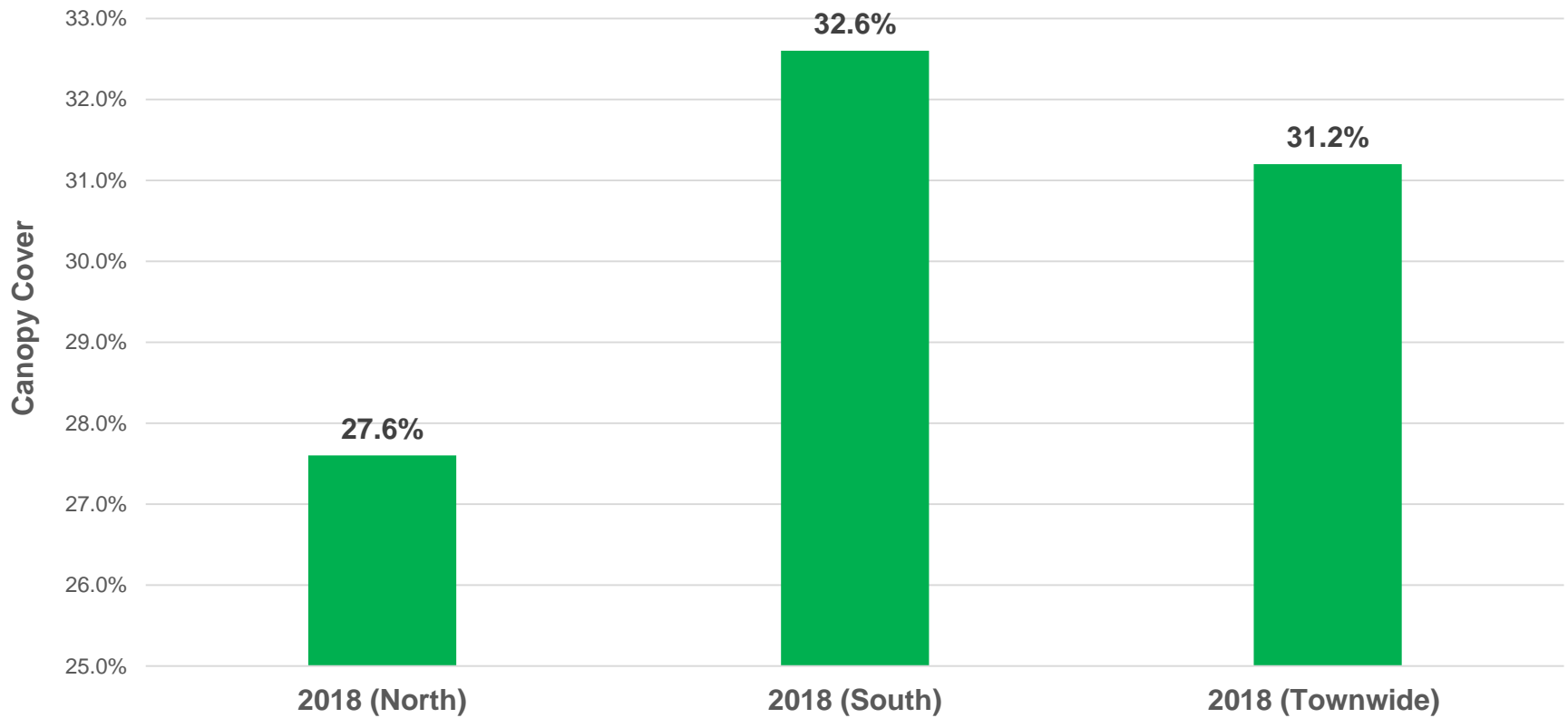


**Presence and abundance increased**

## Urban Forest Cover Trends: South Oakville



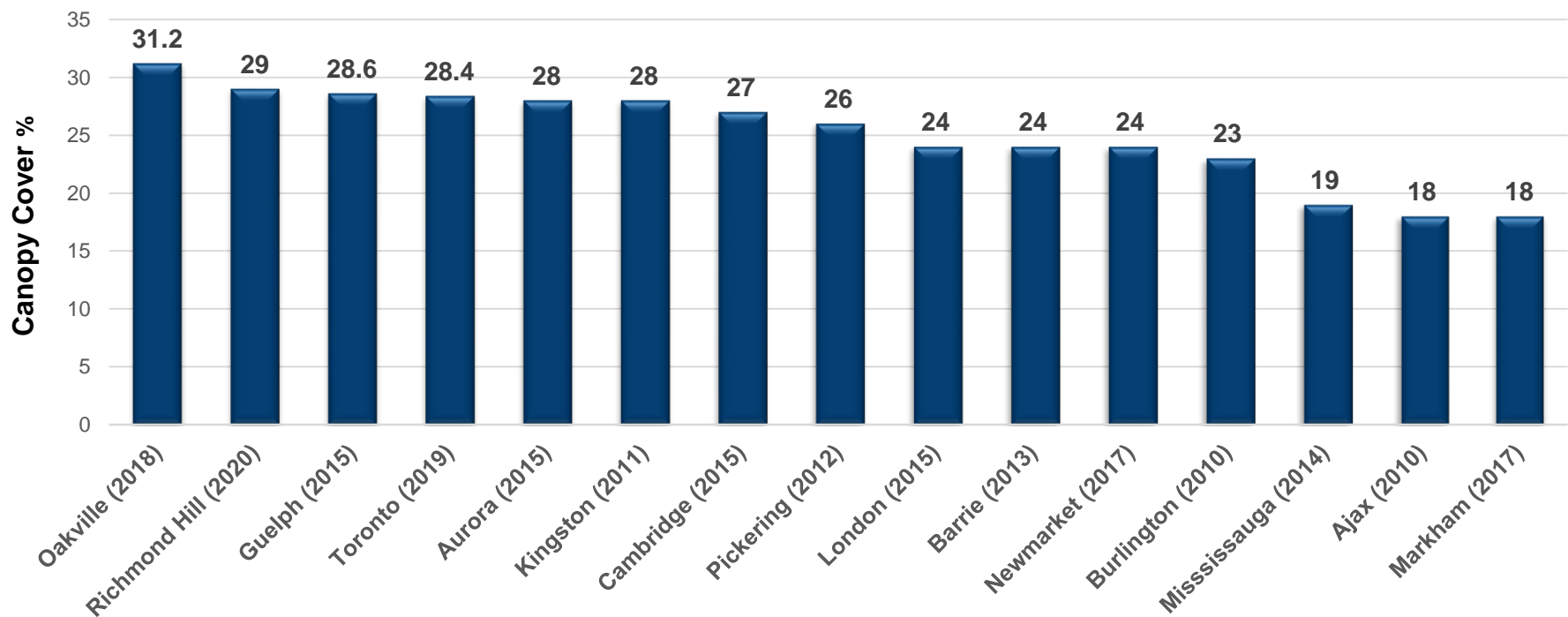
# Urban Forest Cover Trends: Oakville



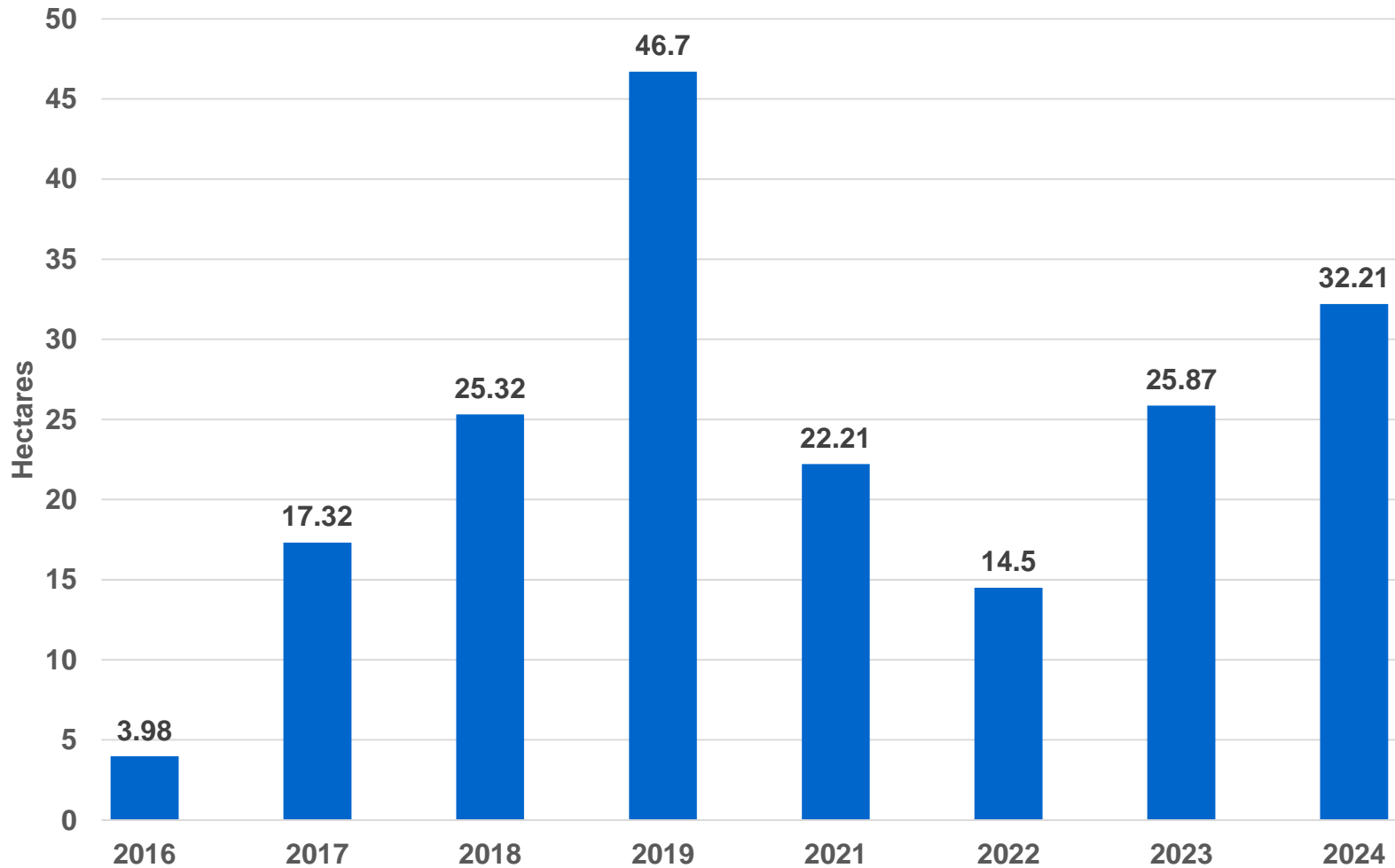


# Urban Forest Cover: Status of Ontario Municipalities

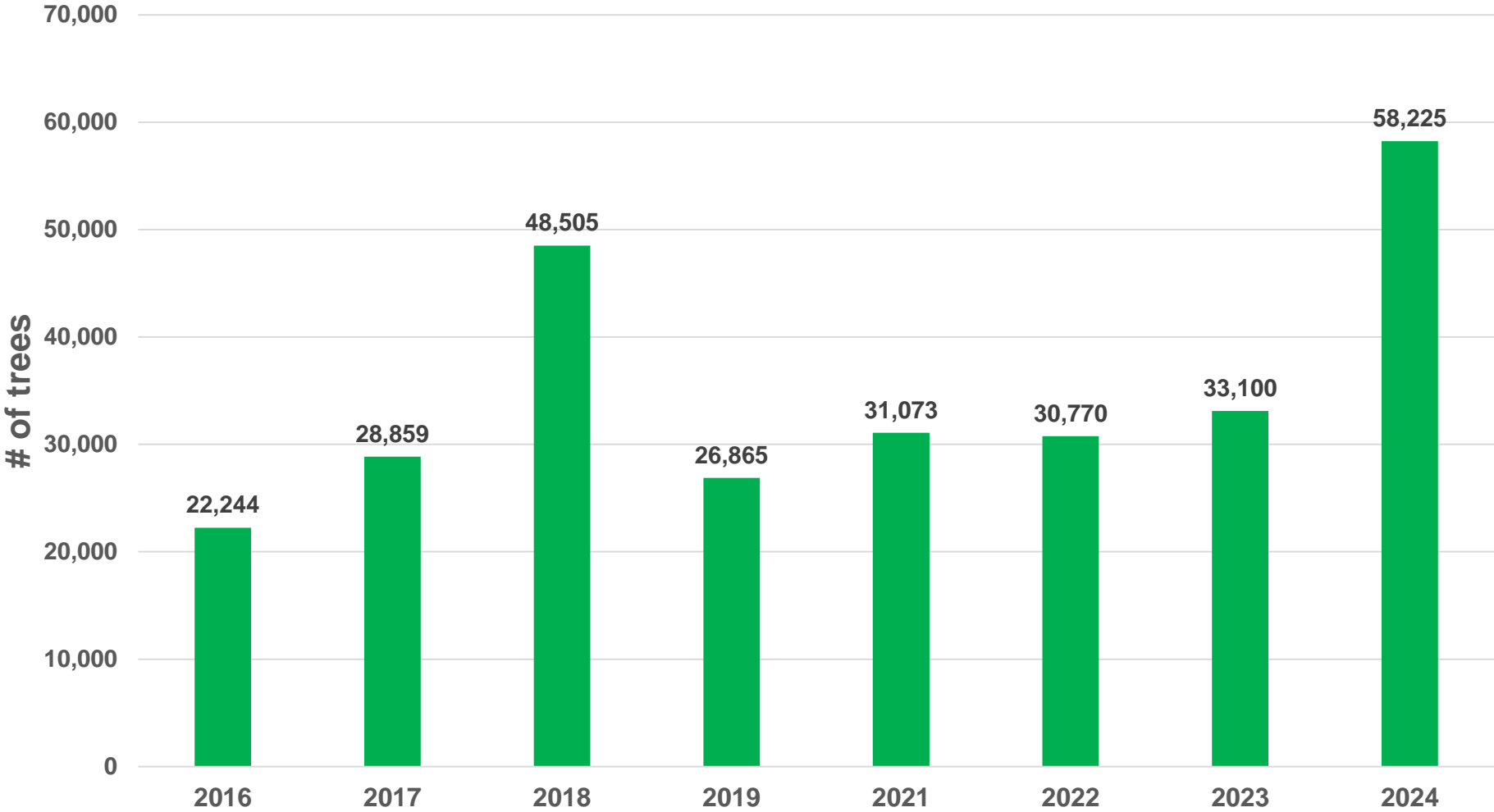
**Percent Urban Forest Cover - Ontario Municipalities**  
*(as of most recent study data publicly available)*



## Woodland Regeneration - Buckthorn removal and treatment



# Woodlands Regeneration- Trees planted



# **UFSMP Overview: 6 Priorities**

1. Forest Protection
2. Tree Planting and Establishment
3. Forest Health and Resilience
4. Risk Management
5. Communications and Outreach
6. Adaptive Management

## 2020 Canopy cover target by land Use – South Oakville

Land Use	South Oakville Current UTC (%)	South Oakville Overall Targets UTC (%)	Current Private Land UTC (%)	Private Land Canopy Targets (%)
Commercial and Mixed Use	6.3	20	5.5	19
Employment	9.4	20	8.9	20
Open Space and Parkway	34.3	50	28.6	21
Public Use	12.6	20	12.4	18
Residential Class A	44.2	45	43.3	35
Residential Class B	22.1	30	21.0	25
Transportation Corridor	5.9	15	7.9	11
Woodlots & Natural Heritage System	64.6	90	39.8	32

**Significance of importance of Landuse to achieve 40% canopy cover target**

	Residential		Woodlands and NHS	
	South Oakville	North Oakville	South Oakville	North Oakville
<b>Percentage of Total Area</b>	<b>44.3%</b>	16.5%	13.1%	<b>29.9%</b>
<b>Canopy Cover Contribution</b>	<b>37%</b>	8.3%	29.5%	<b>67.8%</b>

## Challenging land-uses to achieve the canopy Cover Targets

	Residential				Woodlands and NHS	
	Residential A.		Residential B.		Current CC%	Target CC%
	Current CC%	Target CC%	Current CC%	Target CC%		
<b>South Oakville</b>	43.3%*	<b>35%*</b>	21%*	<b>25%*</b>	64%	<b>90%</b>
<b>North Oakville</b>	8.5%	20%	8.5%	20%	27%	<b>90%</b>

Note: Residential A. and B. are only used for South Oakville

# Current Challenges and Opportunities

Increased urban density requires different solutions to grow canopy cover and meet the 40% canopy cover target

Limited town owned lands for tree planting South Dundas– requires strategic partnership with other landowners and community groups and shift focus to private properties and other public lands (i.e. school boards, MTO lands, hospitals lands).

The Town will only be able to achieve 40% canopy cover by 2057 through implementing the newly adapted targets for residential landuses in South Oakville as well as other canopy cover targets in different landuses throughout the town

Invasive species have substantially increased in presence/abundance on both private and public lands

The impact of development on canopy cover can be assessed once the data of trees removed and planted in development applications are available



## Recommendations:

- **Implement recommended canopy cover targets for North and South Oakville to support the Town's overall 40% canopy cover goal.**
- **Amend Criteria and Indicators for private trees regulated under private tree protection by-law to minimize removal of healthy trees and enforce tree replacement, where possible, rather than accepting cash in lieu of tree replacement.**
- **Utilize all available data on tree removal and tree planting in non-development and development applications to make evidence based decision on canopy cover impact in Oakville.**

## Recommendations:

- **Continue maximizing tree planting on public land and private land and application of enhanced rooting environment techniques to ensure that tree roots can benefit from sufficient growing space.**
- **Develop an Invasive Species Management Plan and implement interim management actions to address high priority areas and early response actions.**
- **Dedicate resource to outreach and partnership development, manage mutually beneficial and effective strategic business arrangements/ agreements with external partners.**

# Conclusions

- Oakville has made progress on its strategic forestry goals by following through on past plan recommendations and study findings
- Demonstrated leadership through meaningful integration of tree cover targets in plan review (canopy plans)
- Foundational work has been completed and incremental improvements are ongoing (inventories, monitoring, adjusting land use targets and improving service level standards)
- The progress shows the Town is on the right track to achieve 40% tree canopy by 2057



**Thank you**

**Private tree data comparison  
Before and after by-law enhancement**

	<b>2011 - 2016</b>	<b>2018-2023</b>
<b>Ash Trees Removed</b>	<b>877</b>	<b>1,381</b>
<b>Dead trees Removed</b>	<b>1,344</b>	<b>2,086</b>
<b>High risk trees Removed</b>	<b>745</b>	<b>1,037</b>
<b>Other Trees Removed</b>	<b>7,789</b>	<b>4,718</b>
<b>Canopy cover removed</b>	<b>379,758 m<sup>2</sup></b>	<b>166,678 m<sup>2</sup></b>
<b>Trees preserved</b>	<b>2</b>	<b>345</b>
<b>Canopy Cover Preserved</b>	<b>547</b>	<b>11,914</b>
<b>Trees planted</b>	<b>232</b>	<b>5,127</b>
<b>Cash in lieu for tree replacement</b>		<b>5,439</b>

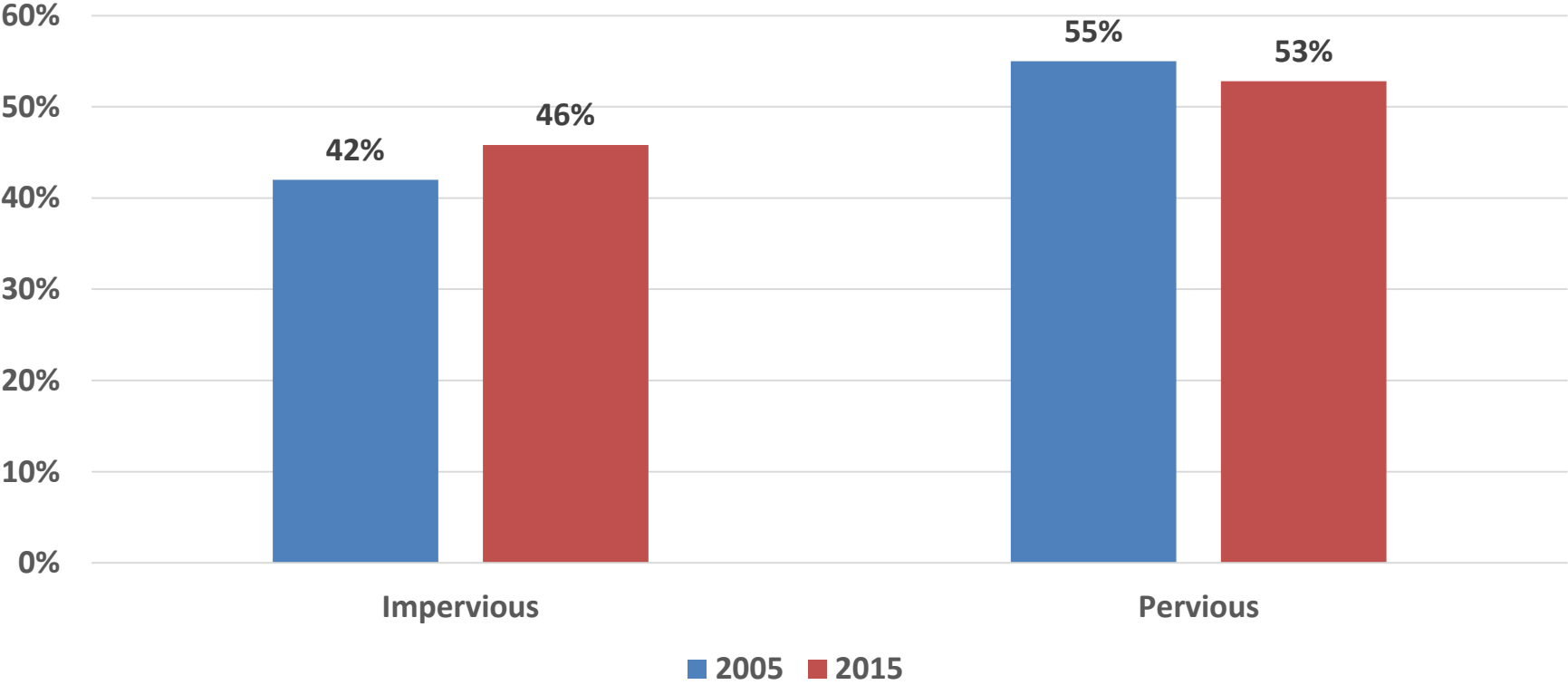


**Data Source:**  
**ZONING 2014\_014**

**LEGEND**

- RA=RL1, RL1-0, RL 2, RL 2-0 - 945.4 Ha.
- RB=RL 3,RL4,RL5,RL6,RL7,RL8,RL9,RL10,RL11 ,RL3-0,RL4-0,RL5-0,RL6-0,RL7-0,RL8-0 -- 3,011.7 Ha.

### Change in Land Cover: 2005-2015



# Retention and Protection is critical to success.

Retention of canopy remains critical to achieving our 40% goal in South Oakville.

Retention supports a diversified age class and structure within the Town, adding to the strength of the urban canopy.

