

# CITY OF MISSISSAUGA: URBAN FOREST CANOPY

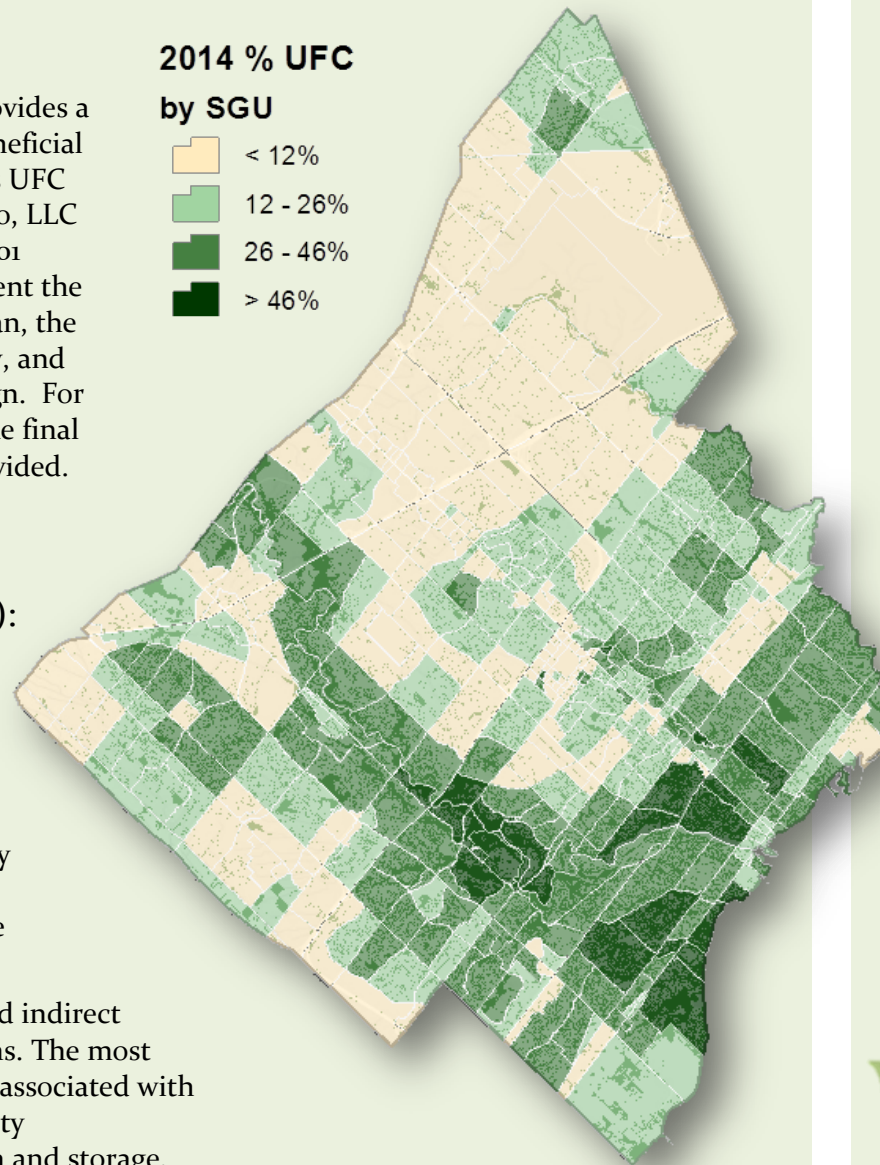
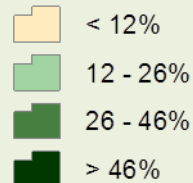
## Overview:

Urban Forest Canopy (UFC) mapping provides a baseline of areas where tree canopy is beneficial and where new trees can be planted. This UFC Assessment was conducted by Plan-It Geo, LLC for the City of Mississauga, Ontario (29,201 hectares). This assessment will complement the City's 2014 Urban Forest Management Plan, the Natural Heritage & Urban Forest Strategy, and Mississauga's One Million Trees Campaign. For complete methods and results, refer to the final report, GIS and other data, and tools provided.

## Terminology:

- **Urban Forest Canopy (UFC):** Comprises forests and individual trees when viewed and mapped from above.
- **Plantable Areas:** Area of grass and open space where tree canopy does not exist and it is biophysically possible to plant trees, after areas such as ball fields and airports were removed
- **Ecosystem Services:** Direct and indirect benefits provided by natural systems. The most widely assessed ecosystem services associated with urban trees and forests are air quality improvement, carbon sequestration and storage, energy conservation, and storm water mitigation.

### 2014 % UFC by SGU



Percent UFC by SGU  
(Small Geographic Unit)



## 19%

UFC% across Mississauga City Limits (5,614 Hectares)



## 28%

Average Residential UFC % in 2014 (2,396 Hectares)



## 2-4%

Estimated percent increase in forest canopy from 2007-2014



## Ward 2

Greatest canopy increase from 2007-2014 of all wards (203 hectares)



## 23%

Plantable area % across Mississauga City Limits (6,788 hectares)

## Benefits of Trees:

**Air Quality:** Trees naturally remove pollutants and lower air temperature

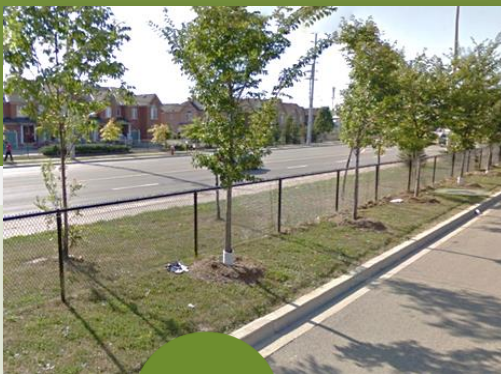
**CO<sub>2</sub> Sequestration:** Through photosynthesis, trees absorb atmospheric carbon and use it for new growth (stems, branches, roots and leaves), acting as a natural carbon sink

**Stormwater Mitigation:** Trees intercept stormwater, reducing runoff and filter out pollutants that would otherwise enter rivers and lakes

**Energy Savings:** Trees lower energy demand through summer shade and winter wind block

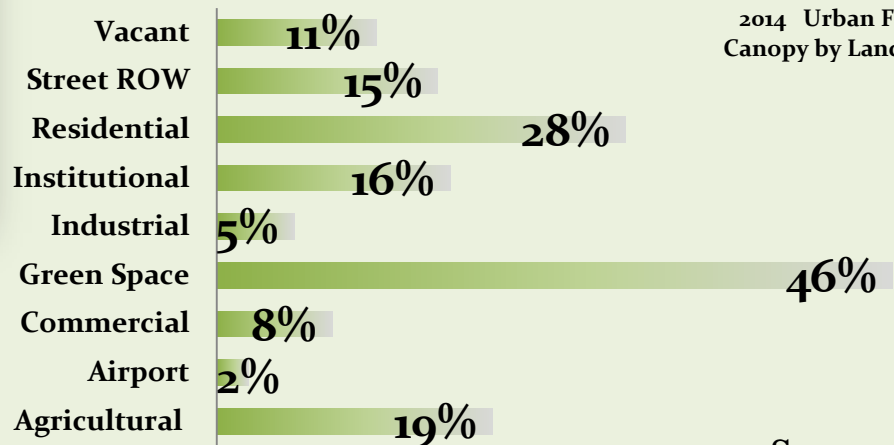
Ecosystem Benefit	Existing Conditions 19%	2024 Projection 22%
Carbon Sequestration	\$3,583,123	\$3,683,450
Air Pollution	\$123,050,310	\$126,495,718
<b>TOTALS</b>	<b>\$126,633,433</b>	<b>\$130,179,168</b>

Annual ecosystem services savings provided by Mississauga's Urban Forest



## Percent Forest Cover by Land Use Category

2014 Urban Forest Canopy by Land Use



## Summary:

Mississauga's Urban Forest is growing. Over 100,000 new trees have been planted by private and public entities and will require tree maintenance in years to come. The results from this assessment should be utilized to aid in implementation, protection and management of Mississauga's Urban Forest.

This study identified 1,821 hectares of potential space for growing and expanding canopy in street rights-of-way. Forestry staff can work with partners and residents to target canopy increases in appropriate areas throughout the City.

