DUBLIN, OHIO
2011-2021 Tree Canopy Summary

Community & County Overview

The City of Dublin has an estimated population of 49,221 residents and encompasses an area of 24.9 square miles. In Dublin, 25.9% of land is covered by tree canopy compared to 23.9% of land in Franklin County[1].

Trees provide essential ecosystem services. Franklin County's trees save $10 million by absorbing stormwater, $8 million by storing carbon, and $15 million of avoided healthcare costs from air pollution[2].

Dublin
612,000
Estimated total trees

+723 Acres
Area change in tree canopy from new plantings & incremental growth
(1,182.1 acres of gain - 458.6 acres of loss).

+4.7%
Change in tree canopy area

Franklin County
12.8 Million
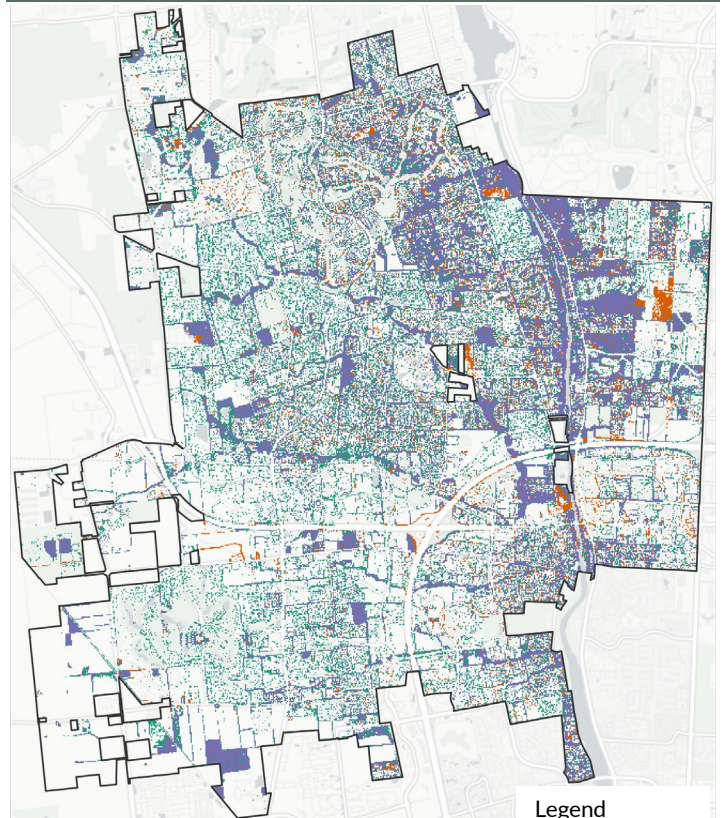Estimated total trees

+9,712 Acres
Area change in tree canopy from new plantings & incremental growth
(19,202 acres of gain - 9,490 acres of loss).
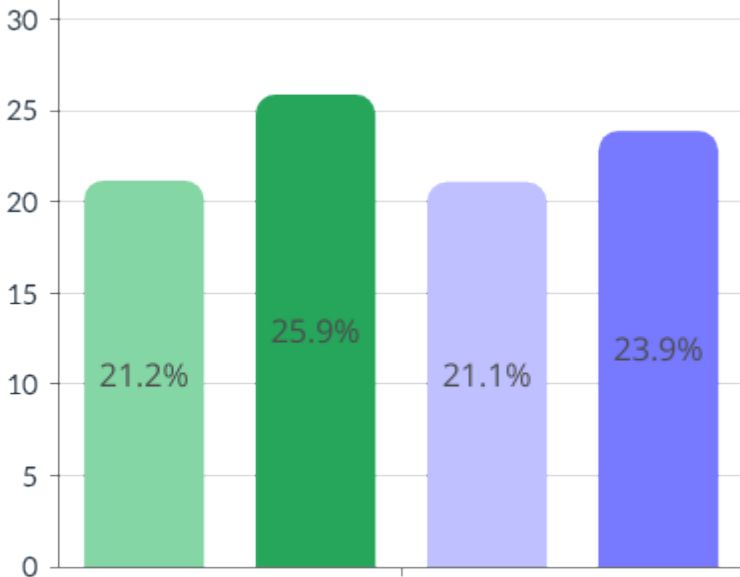
+2.8%
Change in tree canopy area

2011-2021 Tree Canopy Change Map

Legend
- No Change
- Gain
- Loss

Tree Canopy (%)

- 21.2% Dublin 2011
- 25.9% Dublin 2021
- 21.1% Franklin County 2011
- 23.9% Franklin County 2021

Key Terms

Tree canopy is defined as the layer of leaves, branches, and stems that provide tree coverage of the ground when viewed from above.

Existing Tree Canopy - The amount of tree canopy present when viewed from above using aerial or satellite imagery.

Possible Tree Canopy - Vegetated: Grass or shrub area that is theoretically available for the establishment of tree canopy.

Change in Tree Canopy - the percentage point change between the two time periods.
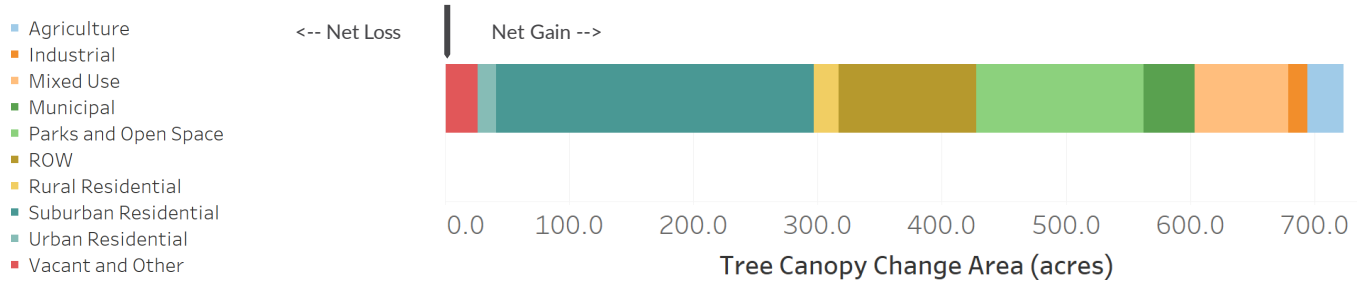
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[1] Population and area milage from 2021 Mid-Ohio Regional Planning Commission and Franklin County Engineer's Office data. [2]Ecosystem services calculations are based on the iTree Eco methodology and values for Franklin County. Nowak, D.J., 2021. Understanding i-Tree: 2021 summary of programs and methods. US Department of Agriculture, Forest Service, Northern Research Station.

DUBLIN, OHIO
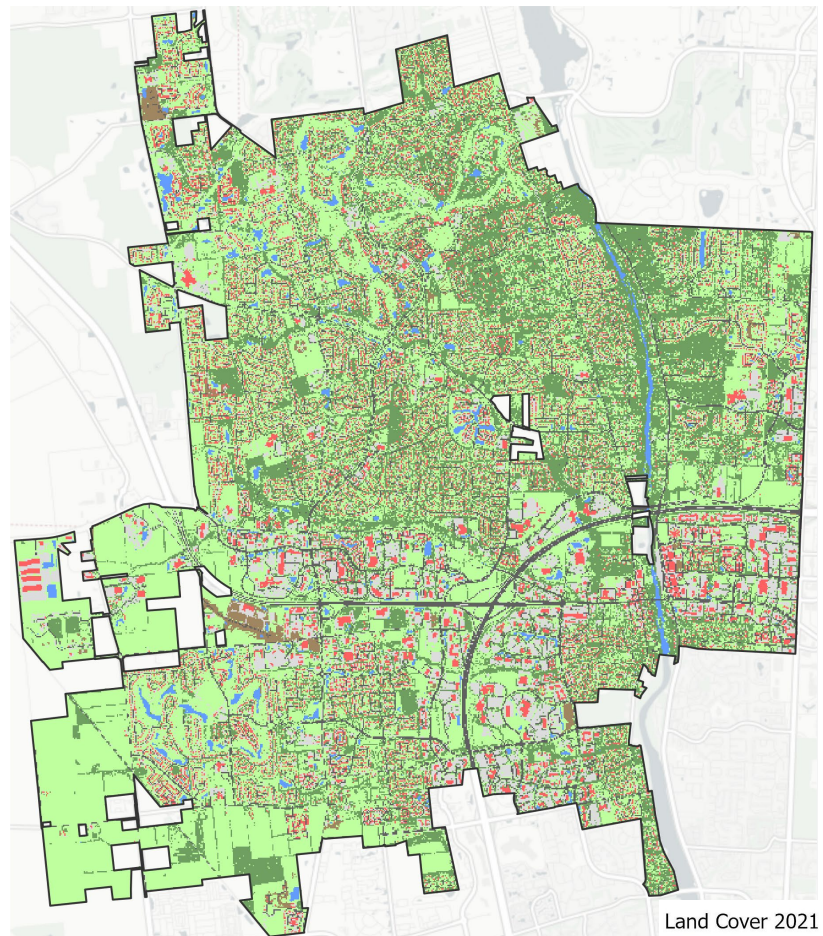# 2011-2021 Tree Canopy Summary

Canopy Change by Land Use

The City of Dublin gained the most canopy on Suburban Residential land use and had a net gain in canopy across all types of land use.

- Agriculture
- Industrial
- Mixed Use
- Municipal
- Parks and Open Space
- ROW
- Rural Residential
- Suburban Residential
- Urban Residential
- Vacant and Other

<-- Net Loss   Net Gain -->

0.0   100.0   200.0   300.0   400.0   500.0   600.0   700.0

Tree Canopy Change Area (acres)

Possible Tree Canopy

In Dublin, 45% of land could be planted with additional trees, compared to 48% in Franklin County. Tree canopy is one of seven classifications from the the high-resolution land cover map (right) that forms the foundation of this project. In this assessment, any areas with no trees, buildings, roads, or bodies of water are considered Possible Tree Canopy and represent locations in which trees could theoretically be established without having to remove paved surfaces.

Environmental Equity

- **Tree Canopy:** The extent of canopy cover in Dublin is 25.9% of its total land area while it is 23.9% for Franklin County.
- **Temperature:** The average high in °F for Dublin is 96 (max. 105), and 93 (max. 107) for Franklin County in 2021. Combining this information with tree canopy values allows us to understand the role trees could play in reducing heat islands.
- **Asthma Rate:** Average asthma rates per 1,000 residents in Dublin are 8.33 while this value is 9.93 for Franklin County. Combining this information with tree canopy values allows us to understand the role trees could play in removing pollutants from the air.
- **Income:** Dublin has a median household income of $84,428, while Franklin County's is $59,097. Combining this information with tree canopy values allows us to understand the role trees could play in promoting equity for socio-economically vulnerable groups.

2021 Land Cover Map

Land Cover 2021
- Tree Canopy
- Grass/Shrub
- Bare Soil
- Water
- Buildings
- Roads/Railroads
- Other Paved

Recommendations

Preserving existing tree canopy is the most effective means for securing future tree canopy, as loss is an event but gain is a process.

Plant new trees in areas where tree canopy is low or in locations where there has been tree canopy removed to help grow canopy.

Refer to the full Tree Canopy Assessment and corresponding geographic data available by Franklin County and its jurisdictions to help manage trees.