

# HILLIARD, OHIO

## 2011-2021 Tree Canopy Summary

### Community & County Overview

The City of Hilliard has an estimated population of 37,094 residents and encompasses an area of 14.39 square miles. In Hilliard, 17.7% of land is covered by tree canopy compared to 23.9% of land in Franklin County<sup>1</sup>.

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<sup>2</sup>.

**Hilliard**  
**251,000**  
 Estimated total trees

**Franklin County**  
**12.8 Million**  
 Estimated total trees

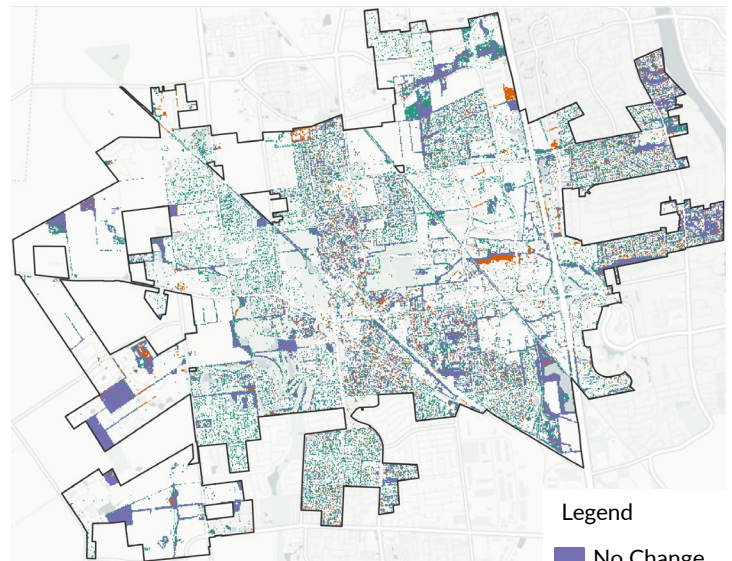
**+366 Acres**  
 Area change in tree canopy from new plantings & incremental growth  
 (537.4 acres of gain - 171.5 acres of loss).

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

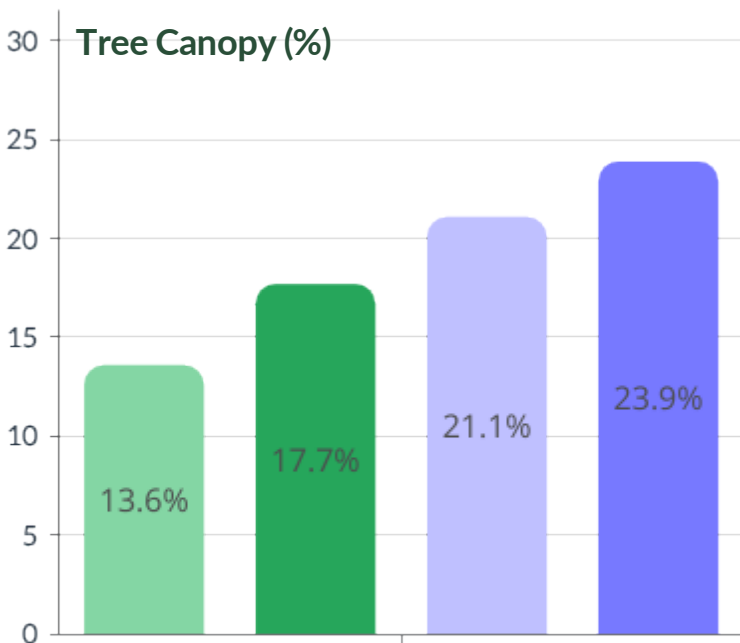
**+4.1%**  
 Change in tree canopy area

**+2.8%**  
 Change in tree canopy area

### 2011-2021 Tree Canopy Change Map




**Legend**  
 No Change  
 Gain  
 Loss




### 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.

 Hilliard 2011     
  Hilliard 2021  
 Franklin County 2011     
  Franklin County 2021

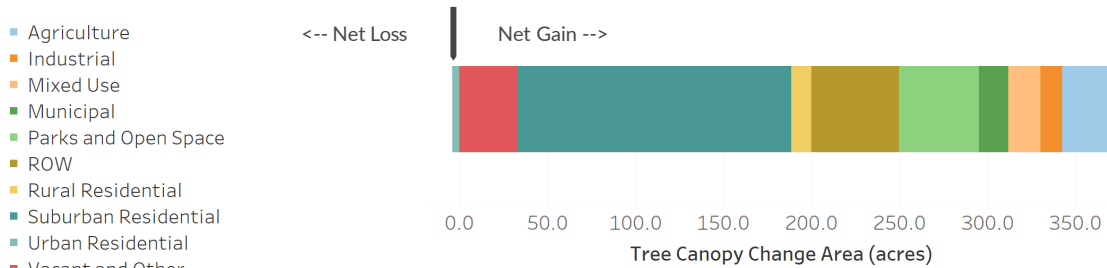
<sup>1</sup> Population and area mileage from 2021 Mid-Ohio Regional Planning Commission and Franklin County Engineer's Office data. <sup>2</sup>Ecosystem services calculations are based on the iTree Eco methodology and values for Franklin County. Nowak, D.J., 2021. Understanding i-Tree: 2021 summary of programs and methods. US Department of Agriculture, Forest Service, Northern Research Station.

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### Canopy Change by Land Use

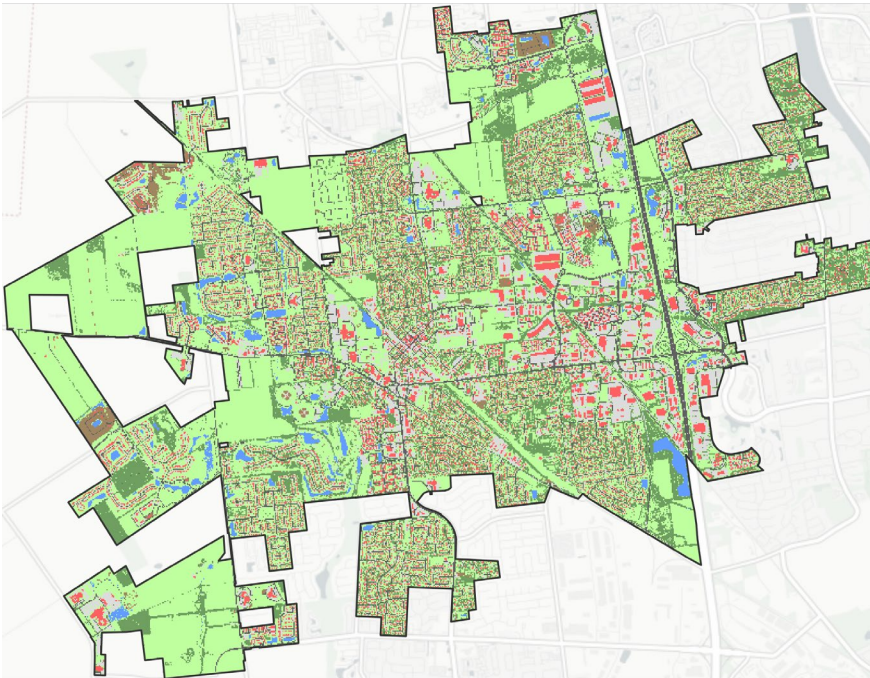
The City of Hilliard gained the most canopy on Suburban Residential land use and had a net loss in canopy on Urban Residential land use.



### Possible Tree Canopy

In Hilliard, 51% of land could be planted with additional trees, compared to 48% in Franklin County. Tree canopy is one of seven classifications from 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.

### 2021 Land Cover Map



### Environmental Equity

- **Tree Canopy:** The extent of canopy cover in Hilliard is 17.7% of its total land area while it is 23.9% for Franklin County.
- **Temperature:** The average high in °F for Hilliard is 92 (max. 99), 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 Hilliard are 9.07 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:** Hilliard has a median household income of \$82,386, 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.



### 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.