## PLAIN, OHIO 2011-2021 Tree Canopy Summary

### Community & County Overview

Plain Township has an estimated population of 1,977 residents and encompasses an area of 9 square miles. In Plain, 32.4% 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>.

## Plain 299,100

Estimated total trees

#### +323 Acres

Area change in tree canopy from new plantings & incremental growth (433.9 acres of gain - 111.3 acres of loss).

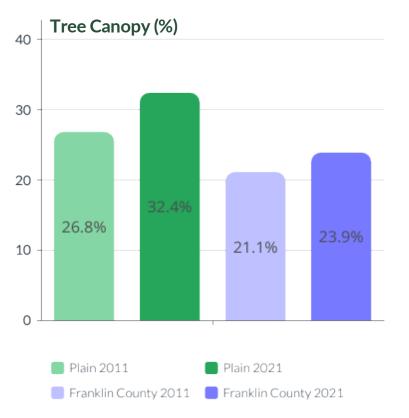
## +5.6% Change in tree canopy area

# Franklin County 12.8 Million Estimated total trees

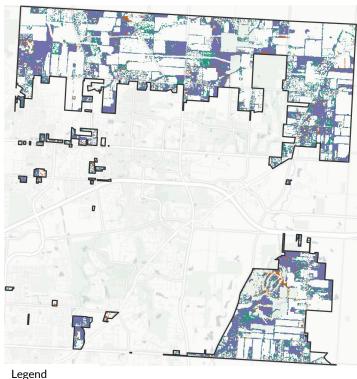
### +9.712 Acres

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



#### Legena

No Change

Gain

Loss

#### **Key Terms**

Tree canopy is defined as the layer of leaves, branches, and stems



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



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



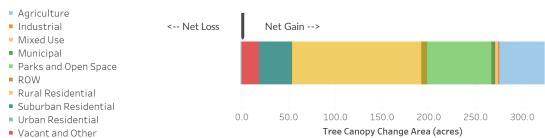
**Change in Tree Canopy** - the percentage point change between the two time periods.

¹ Population and area milage from 2021 Mid-Ohio Regional Planning Commission and Franklin County Engineer's Office data. ²Ecosystem 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 Township of Plain gained the most canopy on Rural Residential land use and had a net loss in canopy on Urban Residential land use.



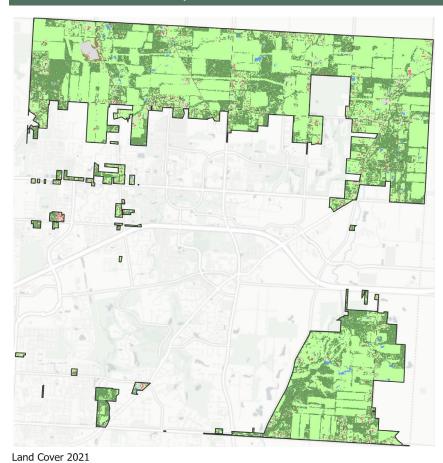
## Possible Tree Canopy

In Plain, 62% 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.

## **Environmental Equity**

- Tree Canopy: The extent of canopy cover in Plain is 32.4% of its total land area while it is 23.9% for Franklin County.
- Temperature: The average high in °F for Plain is 86 (max. 95), 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 Plain are 8.69 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: Plain has a median household income of \$100,833, 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 socioeconomically vulnerable groups.

## 2021 Land Cover Map



## economically vulnerable

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.

Tree Canopy

Grass/Shrub

Bare Soil

Buildings

Roads/Railroads

Other Paved

Water



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