# Mid East 2011-2021 Tree Canopy Summary

### **Community & City Overview**

Mid East has an estimated population of 54,891 residents and encompasses an area of 11.8 square miles. In Mid East, 26.4% of land is covered by tree canopy compared to 22.0% of land in the City of Columbus.

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>1</sup>.

Mid East 297,200 Estimated total trees Columbus

4.8 Million Estimated total trees

#### +128 Acres Area change in tree canopy from new plantings & incremental growth (434.7 acres of gain -306.8 acres of loss).

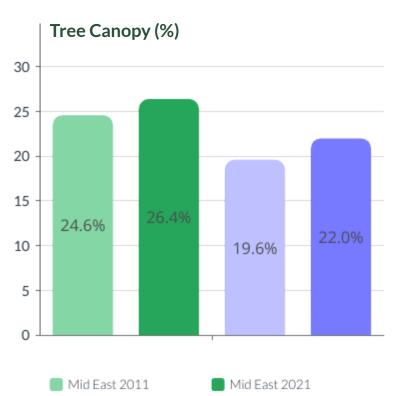
+1.7%Change in tree canopy area

#### +3.353 Acres

Area change in tree canopy from new plantings & incremental growth (7,871 acres of gain -4,518 acres of loss).

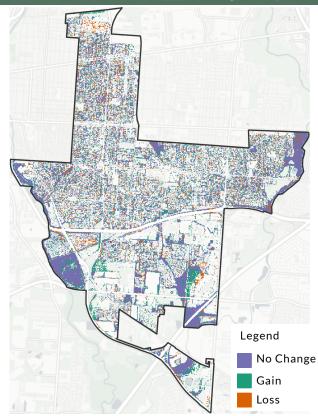
> +2.4%Change in tree canopy area





City of Columbus 2011 City of Columbus 2021

2011-2021 Tree Canopy Change Map



#### Key Terms

Existing Tree Canopy - The amount of tree canopy

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

Change in Tree Canopy - the percentage point change ŝ

<sup>1</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

<-- Net Loss

Mid East gained the most canopy on Vacant and Other land use and had a net gain in canopy across all types of land use.

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

 Net Gain -->

 0.0
 20.0
 40.0
 60.0
 80.0
 100.0
 120.0

 Tree Canopy Change Area (acres)

## Possible Tree Canopy

In Mid East, 35% of land could be planted with additional trees, compared to 37% in the City of Columbus. 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

- 1. **Tree Canopy:** The extent of canopy cover in Mid East is 26.4% of its total land area while it is 22.0% for the City of Columbus.
- 2. **Temperature:** The average high in °F for Mid East is 97 (max. 101), and 96 (max. 107) for the City of Columbus. Combining this information with tree canopy values allows us to understand the role trees could play in reducing heat islands.
- 3. Asthma Rate: Average asthma rates per 1,000 residents in Mid East are 8.33 while this value is 11.86 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: Mid East has a median household income of \$35,991, while the City of Columbus has one of \$45,675. Combining this information with tree canopy values allows us to understand the role trees could play in promoting equity for socioeconomically 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 the City of Columbus and its communities to help manage trees.

### 2021 Land Cover Map

