GRANDVIEW HEIGHTS, OHIO 2011-2021 Tree Canopy Summary

Community & County Overview

The City of Grandview Heights has an estimated population of 8,078 residents and encompasses an area of 1.32 square miles. In Grandview Heights, 24.8% of land is covered by tree canopy compared to 23.9% of land in Franklin County¹.

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 pollution².

Grandview Heights 29.700

Estimated total trees

-11 Acres

Area change in tree canopy from new plantings & incremental growth (47.0 acres of gain - 57.5 acres of loss).

-1.2%

Change in tree canopy area

Franklin County 2011

Franklin County 12.8 Million

Estimated total trees

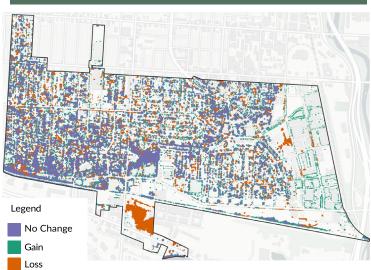
+9.712 Acres

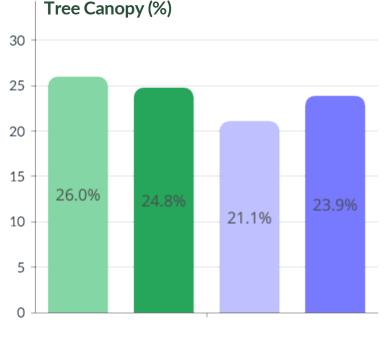
Area change in tree canopy from new plantings & incremental growth (19,202 acres of gain - 9,490 acres of loss).

+2.8%

Change in tree canopy area

2011-2021 Tree Canopy Change Map





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



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

Grandview Heights 2011 Grandview Heights 2021

Franklin County 2021

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 City of Grandview Heights gained the most canopy in Parks and Open Space and had the greatest net loss in canopy on Vacant and Other land use.

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



In Grandview Heights, 22% 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 Grandview Heights is 24.8% of its total land area while it is 23.9% for Franklin County.
- Temperature: The average high in °F for Grandview Heights is 99 (max. 102), 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 Grandview Heights are 8.55 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: Grandview Heights has a median household income of \$68,295, 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.

-14.0 -12.0 -10.0 -8.0 -6.0 -4.0 -2.0 0.0 2.0

Tree Canopy Change Area (acres)

2021 Land Cover Map





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.