District 9
2011-2021 Tree Canopy Summary

Council District Overview

Columbus Council District 9 has an estimated population of 100,855 residents and encompasses an area of 30.1 square miles. In this district, 19.1% 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[1].

Council District 9

603,200
Estimated total trees

+674 Acres
Area change in tree canopy from new plantings & incremental growth
(1,080.4 acres of gain - 406.7 acres of loss).
+3.6%
Change in tree canopy area

Columbus
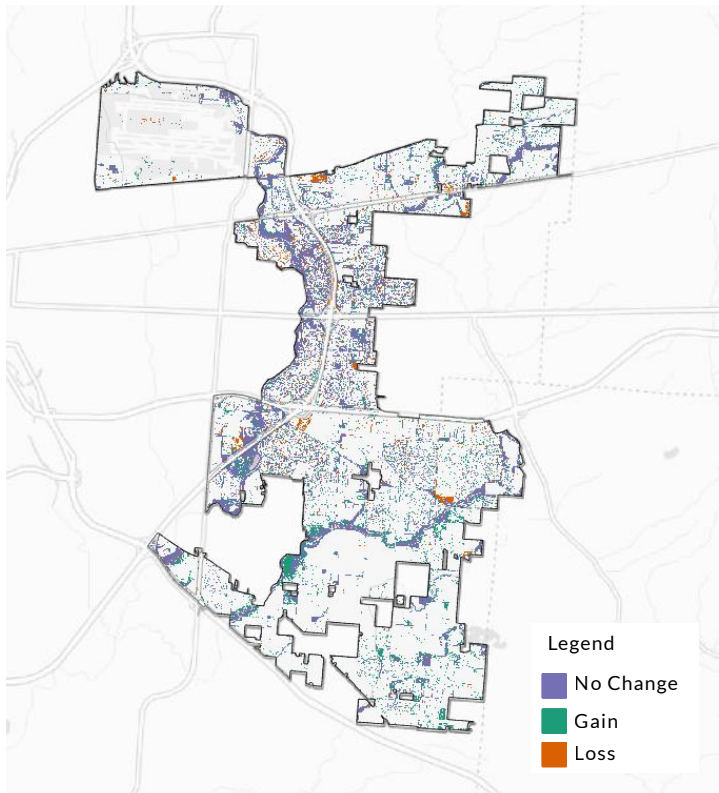
4.8 Million
Estimated total trees

+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

2011-2021 Tree Canopy Change Map

Legend
- No Change
- Gain
- Loss

Tree Canopy (%)

15.5%   19.1%   19.6%   22.0%

- District 9 2011
- District 9 2021
- City of Columbus 2011
- City of Columbus 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.

[1]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.

Canopy Change by Land Use

Council District 9 gained the most canopy on Parks and Open Space land use and had a net gain in canopy across all types of land use.

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

<-- Net Loss   Net Gain -->

Tree Canopy Change Area (acres)

Possible Tree Canopy

In Council District 9, 46% 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.
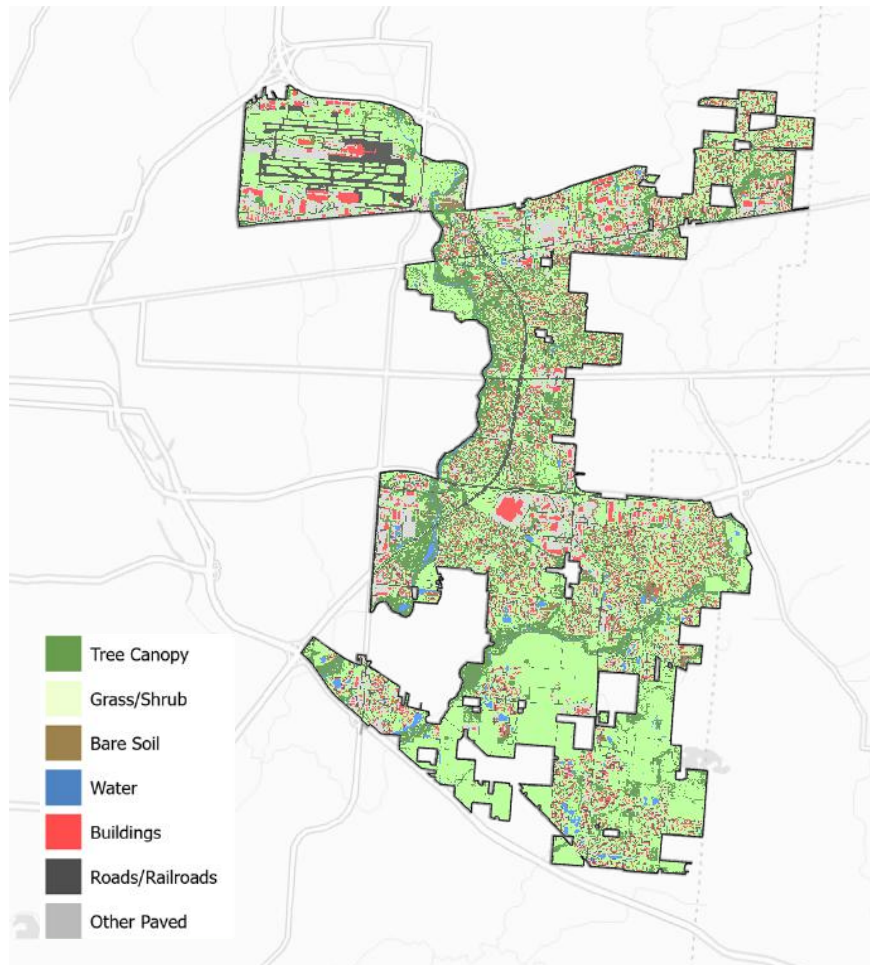
Environmental Equity

- **Tree Canopy:** The extent of canopy cover in Council District 9 is 19.1% of its total land area while it is 22.0% for the City of Columbus.
- **Temperature:** The average high in °F for Council District 9 is 95 (max. 100), 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.
- **Asthma Rate:** Average asthma rates per 1,000 residents in Council District 9 are 9.27 while this value is 10.48 for the City of Columbus. Combining this information with tree canopy values allows us to understand the role trees could play in removing pollutants from the air.
- **Income:** Both Council District 9 and the City of Columbus have a median household income of $45,675. 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

- 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 the City of Columbus and its communities to help manage trees.