

VALUE OF URBAN TREE CANOPY

What is Tree Canopy?

Tree canopy is the sum of all the leaves, branches and trunks of trees that cover the ground surface if viewed from above. Tree species vary in the height that they will ultimately achieve, but overstory trees are the largest—they form the bulk of the canopy in an urban or natural forest.

Why is Tree Canopy Important?

A healthy tree canopy offers many community benefits: storm water and erosion control, cooling and protection from wind, which reduces energy consumption, habitat and food for wildlife, carbon sequestration, privacy screens, enhancement of aesthetic and property value, and air quality. See the [Casey Trees tree benefits calculator](#) to calculate the economic and ecological benefits that your trees provide.

Status of Takoma Park Tree Canopy

In 2009, the City of Takoma Park commissioned a detailed analysis of the tree canopy within the city's boundaries using a sophisticated type of optical remote sensing (LIDAR). The analysis found that 59% of the city is covered with tree canopy, bolstering Takoma Park's status as a "Tree City U.S.A." An additional 25% of land area is theoretically available for tree planting. The report noted that most of the available land for tree planting is in private hands, and urged education about the importance of trees and incentives for tree planting in order to maintain the canopy for future generations. More details of the report can be found here:

Generational Planting is Key to Maintaining a Healthy Canopy

- **Filling in canopy gaps**

Many of the magnificent old trees that give the City such charm started growing shortly after the Civil War, and are reaching the end of their lifespan. Unfortunately, many homeowners have not replaced trees after they have died, or have replaced them with fast-growing, short-lived trees such as ornamental cherries or Bradford pears. However, large trees are far more effective at stormwater mitigation and cooling and far less likely to lose limbs in a storm. Because it takes many human generations to replace large old trees, it is essential to begin planting trees now, before the balance of the existing forest is gone. This will help create a continuing urban tree canopy for future generations and achieve a healthy demographic balance of trees in a range of age categories.

- **Mitigating impervious surfaces**

Impervious surfaces, such as roads, buildings and parking lots, degrade water quality and ultimately the Chesapeake Bay ecosystem by increasing pollutant-bearing water runoff. Establishing tree canopy near impervious surfaces such as streets (street trees) and parking lots will significantly reduce storm water runoff and improve water quality.

- **Importance of native tree species**

Native tree species, such as northern and southern red, white, and chestnut oaks, the American beech and eastern sycamore, are particularly desirable because they are adapted to local conditions and usually more pest and disease resistant than introduced species, such as Norway maple. Using native or non-reproducing exotic species prevents the negative effects that invasive species have on local ecosystems. In addition, it is desirable to maintain a mix of species in along a street or in a yard, to avoid the 'Dutch elm disease effect', i.e., to avoid the planting of monocultures that succumb all at once to diseases. That said, not every tree planted has to be native; some, such as the maidenhair tree and dawn redwood, make wonderful disease resistant street trees and are not invasive.