

City Tree Resource Analysis

Terms to Know

10 -20 -30 Rule - A well accepted rule that states that no species should represent more than 10%, no genus represent more than 20%, and no family should represent more than 30% of a population.

Air Pollutants - Gaseous compounds that can be harmful to human health, including ozone (O₃), sulfur dioxide (SO₂), and nitrogen dioxide (NO₂), PM_{2.5} and PM₁₀ (particulate matter less than 2.5 microns and 10 microns respectively).

Avoided Energy (Generation) - Reduction of emissions from power generation by reducing energy consumption.

Avoided Runoff - The absorption, capture, or 'slowing' of stormwater runoff (by trees and roots) that has the potential to cause erosion of soils and to transport point-source pollutants to creeks, streams, and other bodies of water.

Canopy Cover - The layer of leaves, branches, and stems of trees that cover the ground when viewed from above.

Carbon Sequestration - The removal of carbon from the air by plants.

Carbon Storage - The amount of carbon bound up in the above-ground and below-ground parts of woody vegetation.

Community Forest (Also see Urban Forest) - All publicly and privately-owned trees within the city, its open space areas, and surrounding planning area(s).

Community Tree Resource - The collection of publicly owned trees and woody shrubs that grow within an urban area including trees along streets, trees in parks, greenbelts, and open spaces, on city property or easements.

DBH or Diameter at Breast Height - The diameter of the tree when measured at 1.4 meters (4.5 feet) above ground (U.S.A. standard).

GIS or Geographic Information System - A powerful computer system tool that creates, manages, analyzes, and maps all types of data.

Land Cover Classes - A birds-eye view of the entire community that establishes a baseline for the different types of land cover including tree canopy, impervious surfaces, permeable surfaces (e.g., grass and other low-lying vegetation), bare soil, and open water.

Leaf Area - Crown dimensions and percentage of crown canopy missing.

Stocking Level - The measure of the number of planting sites occupied by trees, relative to the total number of potential planting sites.

iTree Tools - A computer program with tools used to determine the costs and benefits of urban trees based on inventory data, operations costs, and other factors.

Potential Planting Sites - Sites that could be used to plant a tree that are either vacant or contain a stump.

Replacement Value - The estimated value of a tree equal to the cost of replacing the tree in its current state.

Resource Analysis - A document that provides a detailed and quantified analysis of the current structure, function, benefits, and value of the community tree resource.

Species Diversity - The proportion of species representing the total community tree resource.

Tree Canopy - See canopy cover.

Tree Condition - A rating that gives an indication of how well trees are managed and how well they are performing in the region and in each site-specific environment (e.g., street, median, parking lot, etc.).

Tree Inventory - The collection of information about community trees including location, species, size, maintenance needs, and historic maintenance performed.

TreeKeeper Canopy - An interactive web-based planning tool that helps identify locations that would receive the most environmental and social benefits from the addition of a tree.

Unique Species - An individual/discrete species. In this analysis a species includes all subspecies, varieties, and cultivars.

Urban Forest/Urban Forest Resource - The collection of privately owned and publicly owned trees and woody shrubs that grow within an urban area.