



Tree Benefits

ENVIRONMENTAL

Cleaner, Cooler Air: Trees absorb carbon dioxide produced by the combustion of various fuels and trap lung-damaging dust, ash, pollen and smoke from the air. In addition, they provide shade for people and conserve energy.

- In respect to air pollution reduction, trees provide shade which reduces temperatures and helps keep pollutants already in the air from becoming even more volatile, while also intercepting many of the solid particulates that are airborne.
- Recent research has demonstrated that urban heat islands change weather patterns, altering the amount and duration of local and downwind rainfall patterns. Urban trees lessen the impact of the urban heat island effect and reduce changes in weather patterns.
- One acre of trees produces enough oxygen for 18 people every day.

Cleaner Water: Trees act as natural water filters and help to significantly slow the movement of storm water, which lowers total runoff volume, soil erosion and flooding. From an economic viewpoint, communities that utilize this important function of trees and canopy cover may spend less money developing additional stormwater management infrastructure.

- Each year about 54 acres of forest canopy is lost per day in the greater Atlanta area, while almost 28 acres of impervious surface is gained per day.
- Infiltration rates for forested areas are 10-15 times greater than for equivalent areas of turf and grass.
- Many municipalities are now charging businesses and homeowners a “stormwater utility” fee based on the amount of impervious surface at their location.

Urban noise is reduced by trees absorbing sound waves. Trees also provide wildlife habitat for many species.



ECONOMIC

Recent research reveals that many business owners regard the urban forest as an extension of their commitment to customer service improving the retailer's or company's overall image. In addition, the presence of trees has a positive effect on occupancy rates and residential home sales.

- Trees enhance community economic stability by attracting businesses and tourists. Customers are willing to pay as much as 10 percent more for certain goods and services if businesses are located on tree-lined streets.
- Neighborhood greenspaces typically increase the value of properties located nearby. Healthy trees can add up to 15 percent to residential property value.
- Strategically placed trees around a home can reduce summer cooling costs by as much as 30%, while winter heating costs can be reduced by a similar percentage by the use of trees as windbreaks.

HEALTH

Studies have found a correlation between community forests and the average amount of physical activity exerted by neighborhood residents (<http://www.herl.uiuc.edu>). People are more inclined to get outdoors and exercise when their surroundings are greener. Greater physical activity leads to fewer cases of obesity, which in turn may help reduce other health problems such as heart disease and diabetes.

- Attention/Focus: Children who spend more time outside pay better attention inside. Attention deficit/hyperactivity disorder (ADHD) children, in particular, are better able to concentrate, complete tasks, and follow directions after playing in natural settings.
- Asthma: Trees filter airborne pollutants and can reduce the conditions that cause asthma; asthma incidents increase in urban communities where trees are eliminated in favor of new roads, homes or commercial developments.
- Post-operative hospital stays are shortened when patients have a view of trees and open spaces.

SOCIAL

Studies have identified a direct correlation between the amount of trees and grass in community common spaces and the use of those common spaces by residents, which leads to more opportunities for informal social interaction and relationships between neighbors.

- Trees make communities livable for people and soften the outline of masonry, metal and glass.
- Trees can be associated with specific places, such as memories of past events or times, or a favorite tree climbed as a youth.
- Trees provide opportunity for physical fitness. Urban forests, parks, and open spaces have become increasingly popular as places to walk, run, bike, and hike.