

Urban Tree Canopy Assessment of Chatham County, GA

Across Chatham County trees constitute a valuable urban and community forest, a critical element of the region's green infrastructure. Urban forests provide triple bottom line benefits – social, economic, and environmental – yet tree canopy is being lost faster than it is being replaced. To manage, monitor, protect and enhance the quality and stream of benefits received from the urban forest, the



36% Average UTC
in Chatham County based on 112,250 out of 308,336 acres



44% Average UTC
in the City of Savannah. UTC comprises forests and individual trees as mapped from above.



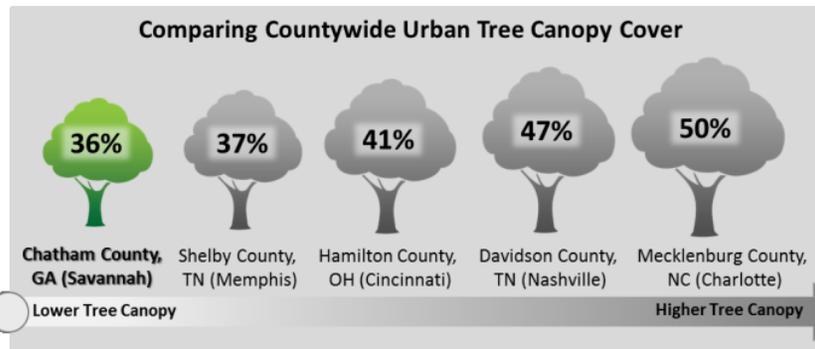
23% Projected UTC in 2050 in Chatham County if "Business as Usual" canopy loss trends continue (40,392 acres additional loss).



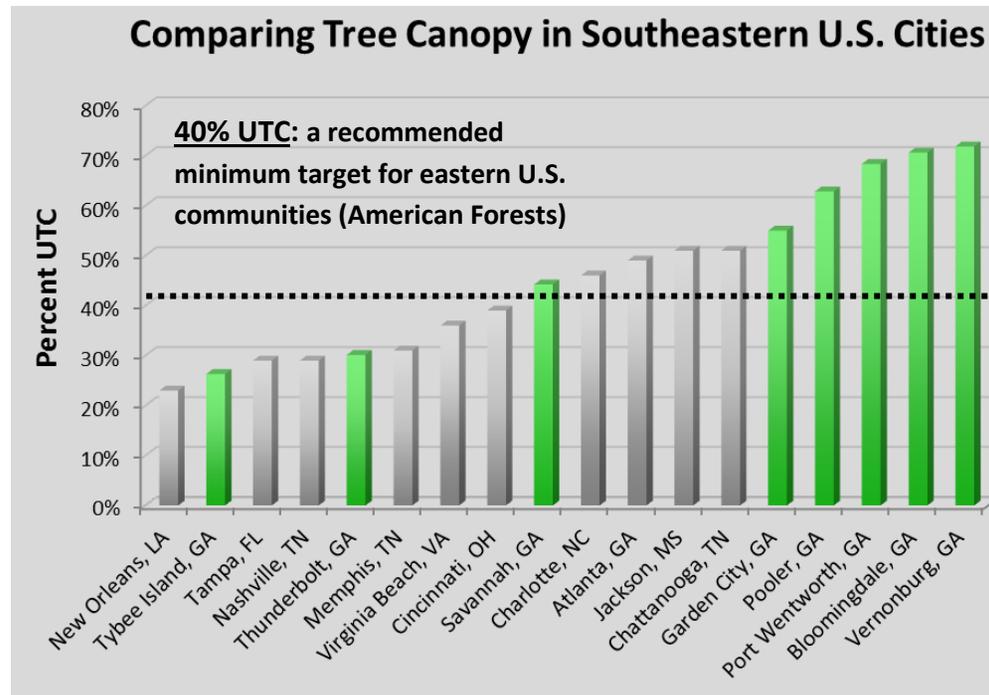
3 Football Fields average area of tree canopy loss in Chatham County every day from 1999-2014 (21,437 ac)



44,417 Acres of Tree Planting Potential between grass / open space and hardscape paved areas like parking lots.



Savannah Tree Foundation initiated this study to assess the extent of current Urban Tree Canopy (UTC), trends in canopy cover over time, and priority areas for tree planting, restoration, and protection.



“To be good stewards, we need to know what we have.”

Savannah Tree Foundation

Key Terms & Methods

UTC: Urban tree canopy = tree cover when viewed from above

PPA: possible planting areas

Percentages at the county-level are based on total area including water and marshland. At the municipal level they are calculated by land area only (excludes water).

Countywide Land Cover

Land Cover Type	Acres	% of County
Tree Canopy	112,205	36%
Marsh / Wetland	96,489	31%
Water	36,531	12%
Grass / Open Space	33,976	11%
Other Impervious	9,966	3%
Building	6,327	2%
Road	5,962	2%
Parking Lot	4,853	2%
Soil / Dry Vegetation	2,027	1%
TOTAL	308,336	100%

For More Info:



Preserve. Protect. Plant. Since 1982.

An Urban Tree Canopy Assessment determines existing and potential tree canopy and offers data which can be applied to enhance tree canopy across Chatham County to address economic, environmental, and community needs. Five focus topics were identified using the UTC data as areas for improving tree canopy: **public health, water resources, environmental equity, schools, and parking lots.**

Public Health: Trees help to create safer, more walkable neighborhoods and reduce air pollution. These benefits and services help to offset obesity and asthma rates. The UTC data can be used to target planting and maintenance in active, populated areas of Chatham County communities.

Schools: Students with views of trees score better on tests, and outdoor classrooms encourage learning. *Groves HS has just 8% tree cover but 3 parking lots covering 21% of the property.*

Parking Lots: Trap heat, increasing the *Urban Heat Island Effect*. Trees shade, cool, and beautify urban areas. Parking lots cover 1.6% of the County, or 4,853 acres. Tree canopy averages just 16% on parcels with parking lots but averages 36% countywide.

Environmental Equity: Tree canopy is not distributed equally in Chatham County. UTC data can help target neighborhoods with low canopy and be used to secure funding for planting projects. For example, 24 out of 187 neighborhoods have less than 20% UTC.

Watersheds: Trees filter, intercept, and capture stormwater, decreasing sedimentation and polluted runoff from entering marshes and source water. Tree canopy in drainage basins ranges from 35% to 85%.

Karen Jenkins, Executive Director
912-233-8733
Karen@Savannahtree.com

Ian Hanou, Principal, Plan It Geo
720-988-2048
Ian@planitgeo.com