

What's a tree canopy?

Nashville's tree canopy includes all of the trees in Davidson County. The Urban Tree Canopy (UTC) assessment determines the extent of trees that cover the ground when viewed from above.

Why is it important?

Measuring the tree canopy is the best way to determine the location, size and extent of the county's urban forest. This will increase the city's understanding of its urban forest resources:

- How much tree canopy now exists
- How many more trees we can plant

How does it work?

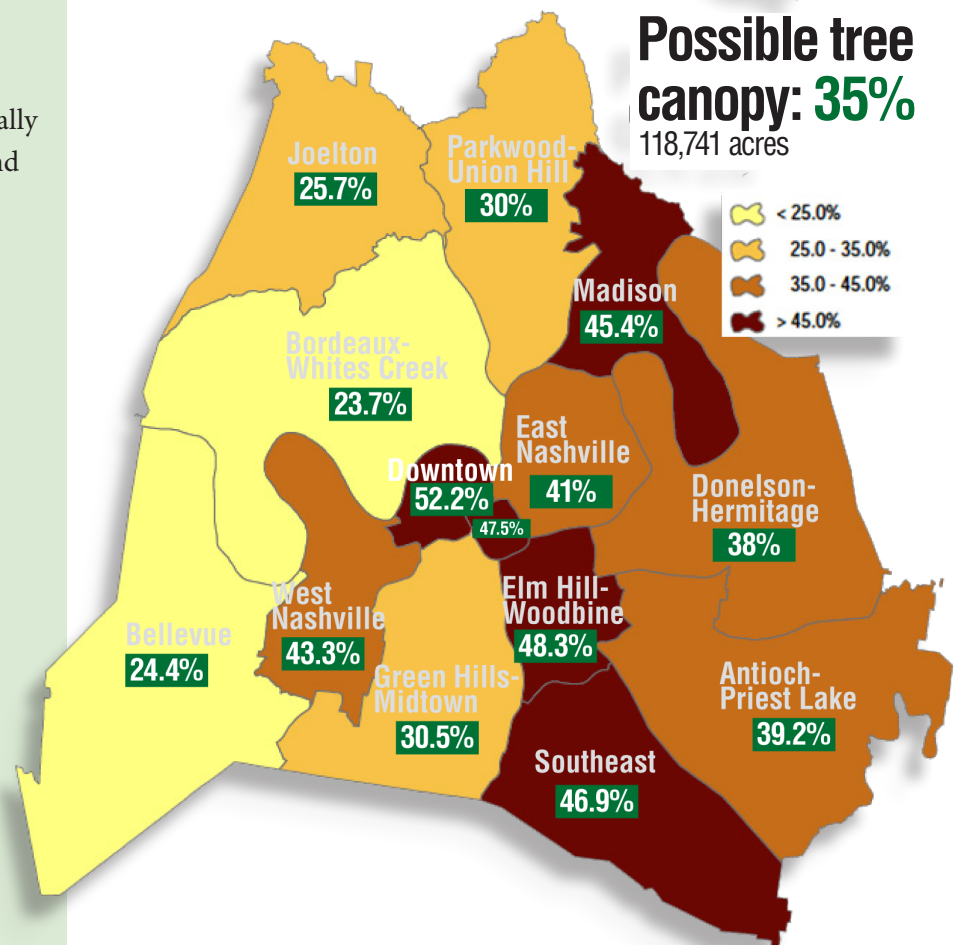
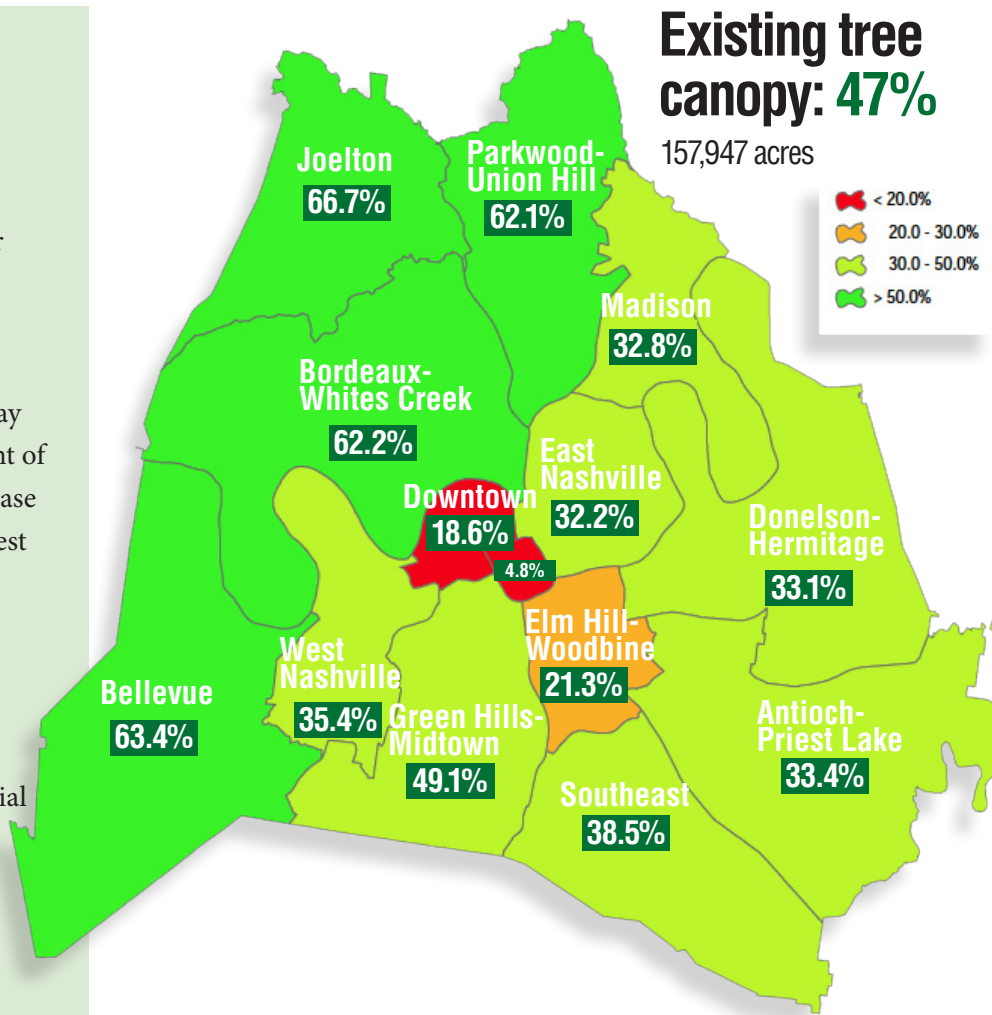
The survey analyzes high-resolution aerial imagery, categorizing Davidson County into tree canopy, grass/open space, agriculture, impervious surfaces, soil, and water.

What are the results?

47% of Nashville is covered by trees. An additional 35% of Nashville could potentially have trees. This includes nearly 27% of land with vegetation and 7% with impervious surfaces.

What can we do with the results?

- Establish a baseline to help manage the city's urban canopy
- Protect existing trees and plant more
- Make informed decisions on the best places to focus planting efforts to achieve such goals as reducing the urban heat island effect, improving water quality, saving energy, lowering temperatures, reducing air pollution, enhancing property values, providing wildlife habitat, facilitating social and educational opportunities, and providing aesthetic benefits.



UTC metrics

Total County Area	Total Acres	Acres Not Suitable	Existing UTC Acres	Existing UTC %	Possible UTC Vegetation Acres	Possible UTC Vegetation %	Possible UTC Golf Course Acres	Possible UTC Golf Course %	Possible UTC Agricultural Acres	Possible UTC Agricultural %	Possible UTC Powerline Acres	Possible UTC Powerline %	Possible UTC Impervious Acres	Possible UTC Impervious %	Total Possible UTC Acres	Total Possible UTC %
Metro	336,268	59,579	157,947	47.0	89,806	26.7	924	0.3	440	0.1	4,525	1.3	23,046	6.9	118,741	35.3

Conclusions

With 47% existing UTC, Metro Nashville has average or above-average tree canopy cover compared with other metropolitan and suburban areas in the United States. With this robust canopy cover, goals and objectives should focus on:

- Preserving tree canopy where it is high to maintain ecological benefits
- Improving or enhancing tree canopy in specific areas with significant possible UTC.

These results and data products should be used by Metro Nashville and other stakeholders involved in green infrastructure development as a starting point for more detailed environmental studies, comprehensive planning, GIS analyses, targeted urban forestry implementation and continuing outreach and education programs.

Opportunities

Parking lot / garage land use represents 960 acres excluding most parking lot area within commercial and industrial properties. With 19% possible vegetation UTC and 60% possible impervious UTC, this land use offers significant opportunities to increase UTC over impervious surfaces even without replacing significant portions of parking lots with trees.

Commercial and Industrial properties average only 15% existing UTC but have 27% possible vegetation UTC and an additional 36% possible impervious UTC.

Single family residential property has an average 44% existing UTC but 37% possible vegetation UTC. Public involvement is often the most cost-effective means to increase UTC.

Downtown has 4.5% Existing UTC but 16% possible vegetation UTC and an additional 31% possible impervious UTC.

Public rights-of-way represent 9% of the land area yet contain only 3% of UTC.

By the numbers

Atlanta	27%
Baltimore	27%
Boston	29%
Dallas	30%
Los Angeles	21%
Milwaukee	21%
Nashville (total)	47%
Nashville (urban)	29%
Providence	23%
Salt Lake City	14%
Seattle	23%
St. Louis	26%
Washington DC	35%

Acknowledgments

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