

Urban Tree Canopy Assessment for the City of Westminster

Key Stats



Current Tree Canopy is 58%



Potential Planting Area is 287 acres



13,364 more small trees (20 ft diameter crowns) can be planted



15,295 more large trees (40 ft diameter crowns) can be planted



Potential Tree Canopy could be 75%



The City's goal is to maintain its 58% canopy cover over the next 20 years.

Key Strategies

- Focus tree plantings and future built green infrastructure within the downtown district.
- Reactivate the Tree Board.
- Apply for Tree City USA membership.
- Include trees in the site plans for the park being developed.
- Partner with TreesUpstate on grants to plant trees in low-income neighborhoods and improve access to nature for residents.

June 2024



Executive Summary

The City of Westminster is a small community nestled in the foothills of the Blue Ridge Mountains in the Upstate region of South Carolina. Mostly surrounded by a mix of rural and agricultural land, the city is being impacted by regional population growth and new urban development as the state experiences a boom in new migration.

Westminster's Tree Canopy Goal is to maintain their 58% canopy over the next 20 years.

In order to achieve this goal, local government will need to plant 40 trees per year on public land for a total of 800 trees over the course of the next 20 years. Tree plantings on private land will total 3,200. Maintaining a 58% tree canopy is a good goal but will be a challenge as the state and region are rapidly growing as new people move to the area. Reducing overall tree loss from development pressure through tree preservation or conservation will support the city's goal. Another factor the city needs to consider is that its 58% tree canopy is not equally distributed across the city. The downtown district has a much lower tree canopy than the surrounding area and also has much higher percentage of impervious surfaces. Encouraging more trees within the downtown area while also focusing tree plantings in lower income neighborhoods will be a key feature of Westminster's goal to maintain its tree canopy.



Natural spaces can improve the health and well-being of residents, raise property values and provide ecosystem services such as air filtration, stormwater uptake and water purification.

Strategies for the Urban Canopy

Focus tree plantings on public spaces within the downtown district.

Strategy 1: Include trees in the current plans for a new park within the city boundaries.

Strategy 2: Plant trees along entrance corridors into the downtown district and in public spaces that currently lack trees.

Strategy 3: Plant trees in lots or in parks that have unused lawns.

Partner with local nonprofits to get trees planted on private land.

Strategy 1: Continue to partner with TreesUpstate to plant trees in priority neighborhoods.

Strategy 2: Focus tree giveaways in priority neighborhoods as a way to lower energy costs for low-income homeowners.



Strategy 3: Partner with the University of Clemson's Bradford Pear bounty to remove invasive pear trees and replace them with natives.

Apply for Tree City USA designation.

Strategy 1: Reinvigorate the Tree Board. Recruit new members and to begin a regular schedule of meetings.

Strategy 2: Prioritize tree code enforcement to preserve, conserve and replace trees during development.

Strategy 3: Conduct an audit of tree related codes and ordinances and identify ways to strengthen them.

Strategy 4: Continue to celebrate Arbor Day as a community and combine elements such as tree giveaways or educational workshops on tree care and their benefits.



Westminster's rights-of-way are great places to plant trees to beautify entrances and corridors into the city for both visitors and locals.



Trees provide shade which can lower electricity bills in urban and suburban areas by lowering temperatures at ground level.



Trees like this Bald Cypress pictured above can add beauty to public and private property while also filtering the air and taking up stormwater.

Westminster, South Carolina
 Classified Land Cover
 Final

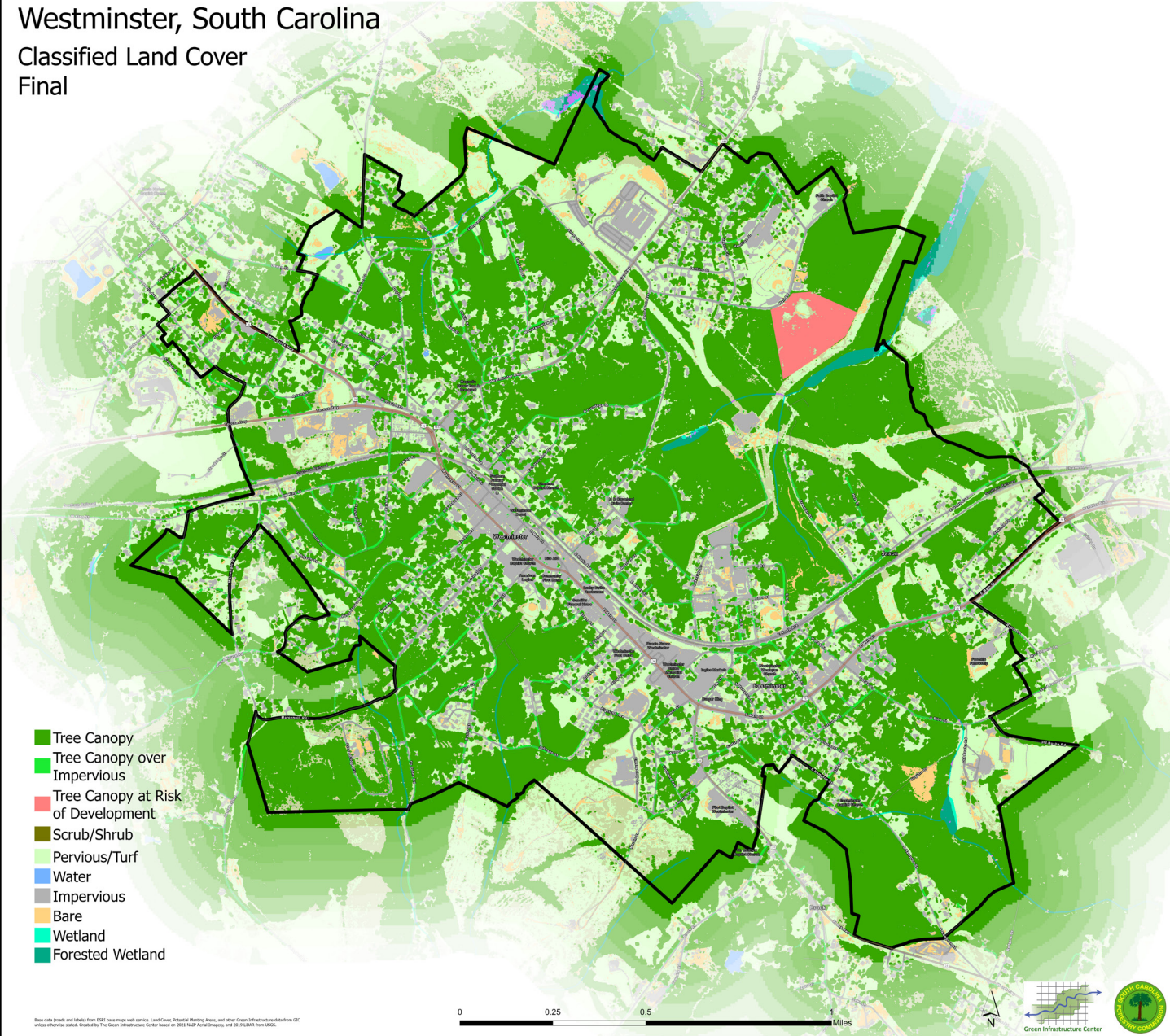


Figure-1: A map of land cover in Westminster based on the 2021 National Agricultural Imagery Program (NAIP).



Westminster, South Carolina
Potential Planting Areas (PPA)
Final

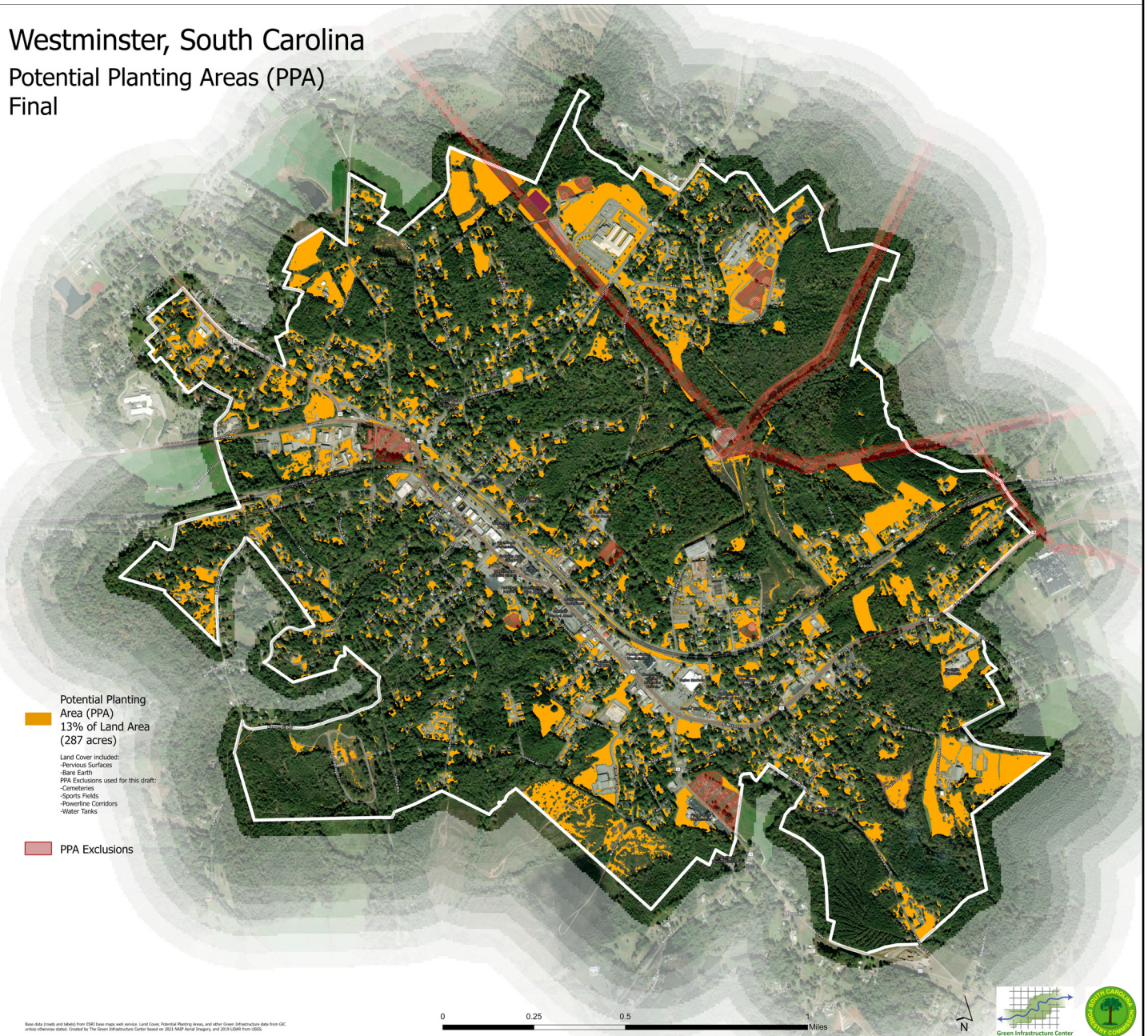
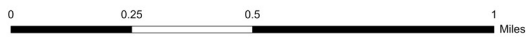
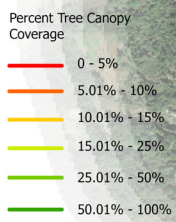


Figure-2: A map of Potential Planting Areas (PPA) in Westminster.

Westminster, South Carolina

Percent Street Tree Canopy



Base data (roads and labels) from ESRI base maps with service, Land Cover, Potential Planting Areas, and other Green Infrastructure data from GIC unless otherwise stated. Created by The Green Infrastructure Center based on 2021 NAIP Aerial Imagery, and 2019 LCMR from USGS.



Figure-3: A map of percent tree canopy within 50ft of road centerlines in Westminster.



Westminster, South Carolina Surface Temperature (Fahrenheit)

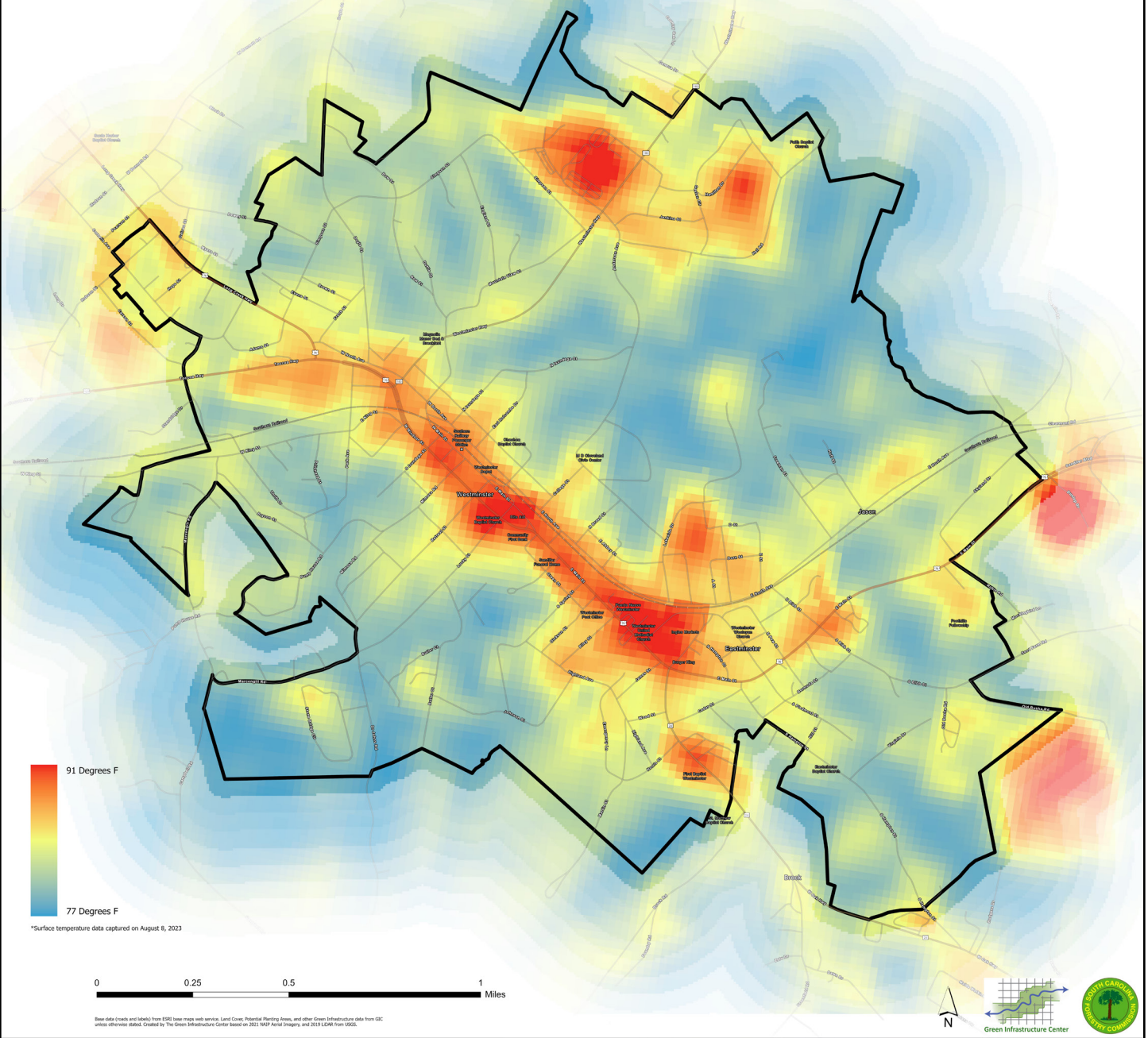


Figure-4: A map of surface temperature across Westminster. Collected August 8, 2023.



Westminster, South Carolina

Percent Tree Canopy Coverage by Catchment Basins

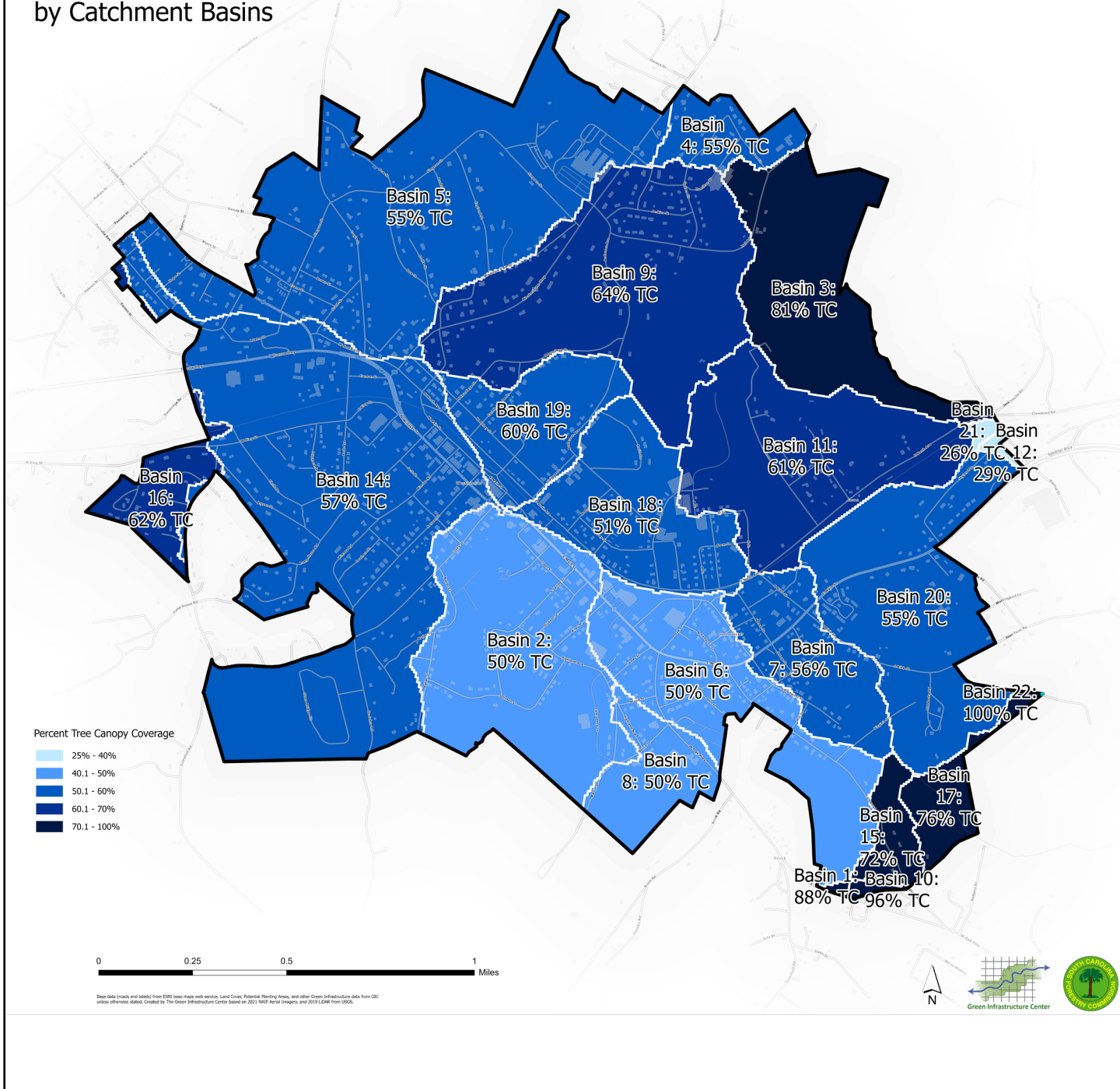


Figure-5: A map of percent tree canopy by National Hydrologic Dataset (NHD) catchment in Westminster.



Westminster, South Carolina

Percent Tree Canopy Coverage by Census Block Groups

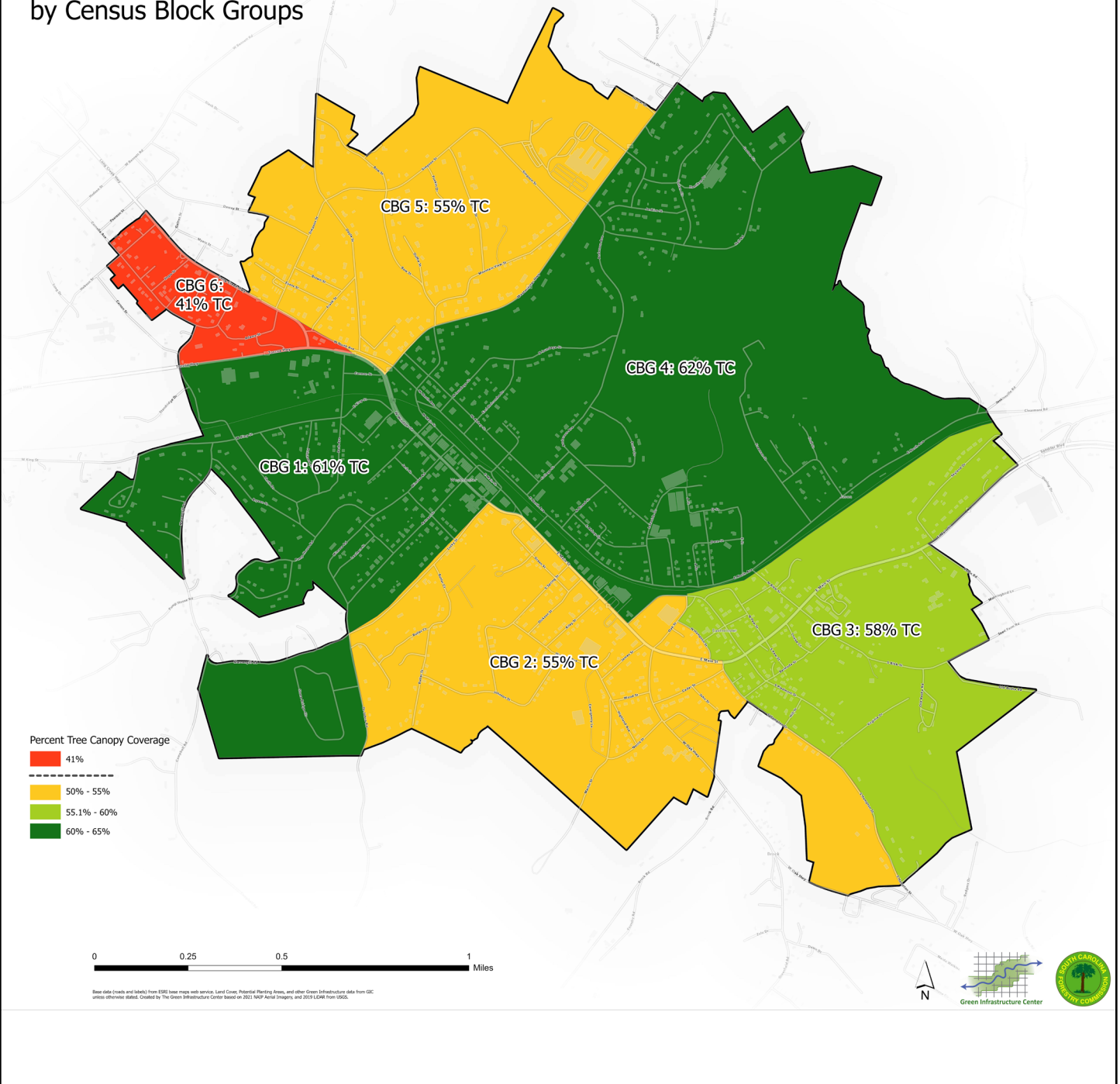


Figure-6: A map of percent tree canopy by Census Block Group in Westminster.