BEAT THE HEAT

NORCROSS, GEORGIA

Green Cities = Cool Cities

Demographics

Top Five Racial and Ethnic Groups*

23.9%	White (Non-Hispanic)
21.9%	Other (Hispanic)
21.0%	White (Hispanic)
17.2%	Black (Non-Hispanic)
11.0%	Asian (Non-Hispanic)
$48,175	Median Household Income

*Source: 2018 Data USA, at: https://datausa.io/profile/geo/norcross-ga

Urban Forest

38.0%	Current tree canopy
44.7%	Potential tree canopy
6.7%	Potential canopy increase
42.3%	Impervious surfaces
151	Acres of Potential Planting Area (PPA)

Urban Heat

107°F Average surface temperature*

Projected future days above 100°F**

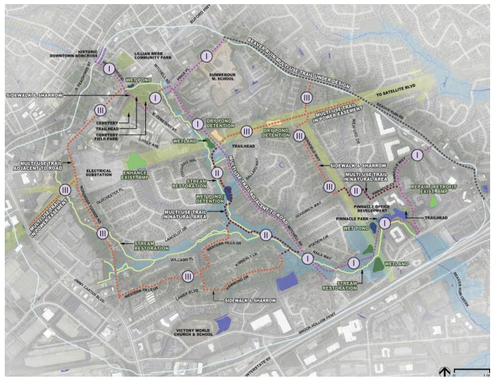
4 days	Historically	(1971 – 2000)
42 days	Mid-century	(2036 – 2065)
77 days	Late century	(2070 – 2099)

*across study area on July 17, 2017
** Data source: Union of Concerned Scientists, Killer Heat in the United States, at: https://www.ucsusa.org/resources/killer-heat-united-states-0

Overview

Many older cities, such as Norcross, Georgia, founded in 1869, have largely developed their available open space. This leads to less plantable spaces within those neighborhoods that have become a high priority for adding tree canopy cover. The Step 1 and Step 2 map graphics, at right, show an example of a low-income neighborhood with a majority of people of color (POC), Census Block Group (CBG) that also has a mix of multi-family housing and commercial and institutional lands.

The proximity to the commercial and institutional lands with their higher area of impervious surfaces increases the overall risk of heat exposure for residents in this CBG. With a maximum of 4.5% possible canopy increase in this CBG, plantable areas are limited. This is where other green infrastructure solutions can come into play. In this example, the CBG does have a continuous block of forest cover along Beaver Ruin Creek. The city is currently working on a greenway plan for multiple sections of Beaver Ruin Creek. They are seeking trail easements to develop a greenway network. While this will not cool specific buildings or houses, it does provide a refuge from hot summer days for residents and nearby workers to walk along the creek or use it to commute to work. Walking and jogging are the most common natural outdoor recreation activities for Georgians[1] (Longstreth et al., 2015). The greenway could connect to a nearby pond, which acts as a thermal sink and could connect a series of trails around anchors of cooling features on the landscape.



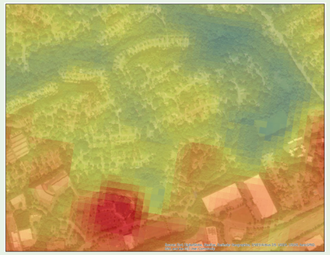
GIC has developed a tool to show the most advantageous places to plant trees to cool buildings. Contact GIC at www.gicinc.org to learn more.

1 Longstreth, M, Barner, JR, Rogers, SM & Wright, TA, "Survey of Georgia residents on outdoor recreation and use of public outdoor recreation areas". Carl Vinson Institute of Government. University of Georgia: Athens, GA. (2015).

Step-Wise Strategy

to Identify Communities and Mitigation Opportunities

1. Use maps to identify hot spot(s) In the city with low canopy.

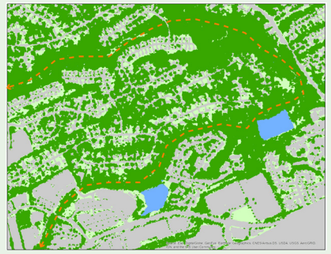


2. Identify vulnerable or underserved populations of interest.

3. Prioritize areas that meet the first two criteria.

4. Outreach and engage with the community.

5. Identify existing green infrastructure on the landscape.



6. Scope potential uses and connections.[1]

7. Engage with residents, businesses and institutions on enhancing green infrastructure amenities