PROVIDENCE, RHODE ISLAND

How the Providence Neighborhood Planting Program fostered community leadership in low-canopy communities

Background

Providence Neighborhood Planting Program (PNPP), a small non-profit partner of the City of Providence, R.I.'s Parks Department, works with the local community to replenish the urban forest by providing free street trees and training tree stewards. Since their inception in 1988, PNPP has planted over 14,000 street trees and engaged thousands of residents.

While these numbers are impressive, they tell only part of the story. According to the Rhode Island Tree Equity Score Analyzer (TESA), Providence contains several inner-neighborhoods where the poverty rate exceeds 80% and the Health Risk Index is high (70/100). In these places, canopy coverage barely stretches past 10%. Meanwhile, many perimeter neighborhoods meet or exceed canopy goals, offering a cooler, healthier environment to the city's wealthiest residents.

Providence Neighborhood Planting Program has prioritized planting in low-canopy neighborhoods for the past decade. In recent years, the organization has directed additional resources into growing partnerships and participation within those communities.

Approach

Providence Neighborhood Planting
Program's 2022 planting program
aimed to foster community
leadership without burdening
neighbors with the responsibility
of tree maintenance. To do so, the
organization pivoted from their
traditional planting model—providing
free trees at neighbors' request—
and proactively built community
leadership into the planting design
and decision making process while
offering wrap-around tree care
services.

They used American Forests' Rhode Island Tree Equity Score Analyzer (TESA) to support communication at each phase of their strategy. As part of this project, PNPP completed an impact certification . This project design tool evaluates and measures the human health, social equity and environmental impacts that each planting project has on the community. These impacts are linked to the 17 United Nations Sustainable Development Goals .















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Providence Neighborhood Planting Program faces tree inequity head on

In 2022, PNPP targeted South Providence as a key priority for the year. It's an area fractured by Route 95, where residents are almost exclusively people of color, and most live in poverty—which the Rhode Island TESA, American Forests' deep-dive mapping tool, defines as earning annual incomes below 200% of the federal poverty level. The section is composed of 13 block groups with a combined population of

14,161, according to 2020 Census data. Because surface temperature and health risks are among the highest in the city, South Providence has been designated a Rhode Island's Health Equity Zone (HEZ)—a district targeted by the state for improved health outcomes. Large sections of this neighborhood lack trees, and most of the census block groups have Tree Equity Scores below the citywide Tree Equity Score of 80.

CHALLENGE

Increase Tree Equity in South Providence, a designated HEZ district, by planting 120 trees in low-canopy areas during the spring and fall of 2022. Hurdles include lack of financial resources to maintain trees, lack of familiarity with trees and tree maintenance among residents, low homeownership rates, and language barriers.



ACHIEVEMENT

142 trees planted

trees planted over their goal

in the South
Providence HEZ



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-Candace Powning Program Coordinator for PNPP

trees," says Cassie Tharinger, executive director of PNPP. "We used TESA to show that those properties are also in neighborhoods where trees are needed most."

PNPP's approach



Identifying the focus area

PNPP knew they wanted to work within the South Providence HEZ. Using TESA, they identified which census block groups within that area were most in need of trees. They partnered with Providence Housing Authority (PHA), one of the neighborhood's main landlords, whose homes sit in Providence's lowest scoring block groups. By referencing Tree Equity Score, PNPP demonstrated PHA's potential impact on Tree Equity. "The Providence Housing Authority already knew their properties lacked



The organization anchored their community engagement efforts at 360 High School, where the Tree Equity Score is 74 and the adjacent neighborhood has a score of 60. They worked directly with staff, teachers and 10 students of the Green Alliance, an afterschool ecology club, to develop the neighborhood tree planting plan. "Using TESA helped us visualize the concept of Tree Equity with the students," says Candace Powning, then program coordinator for PNPP. "The students could see the areas where the color was more orange [lower Tree Equity Score] were near the highway and public housing properties. Later, we walked outside in those areas and talked about the heat island effect, asthma, and other consequences of the lack of trees."

Instead of relying on the usual sites for tree plantingsuch as bus stops or building entrances—PNPP asked students of the Green Alliance to incorporate TESA maps and outdoor observations to identify the best planting sites themselves. Equipped with real-world knowledge, these students acted as ambassadors to the broader community. They knocked on residents' doors to share how planting a tree would benefit the community, which resulted in six additional trees planted, and several requests for trees for the coming year. They led classroom discussions, and presented on Tree Equity to 150 students and neighbors during an Arbor Day celebration organized by PNPP. "We got to know the youth," says Tharinger. "They then talked to their families and communities, which helped build community buy-in and generate momentum."

"Our core stakeholders are already sold on the carbon sequestration benefits of trees. When we talk about Tree Equity, we want to also talk about all of the human aspects-race, income, heat, health outcomes. Having a succinct Tree Equity Score that takes all of those metrics into account allows us to more clearly and emphatically make the case for allocating the majority of our funds to where they're needed most."

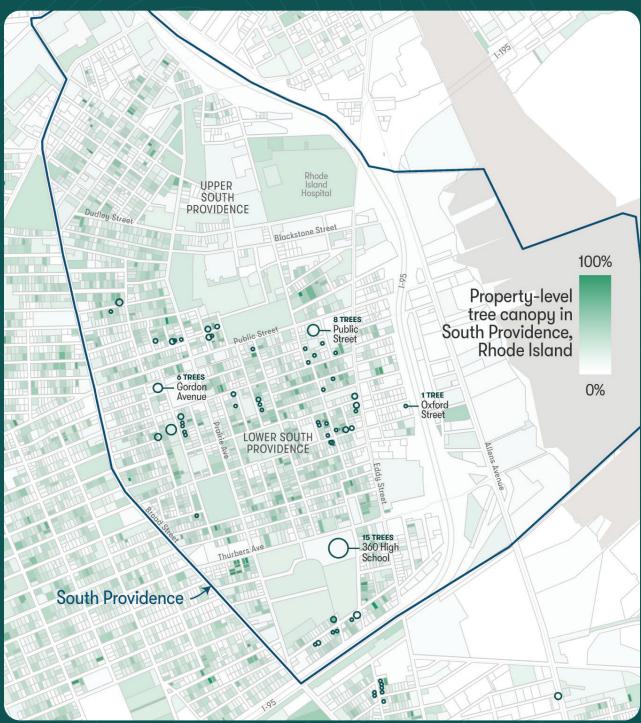
-Cassie Tharinger
Executive Director of PNPP





Raising money

The project was paid for by a grant from the USDA Forest Service which was awarded to the Forest Environment Division of the Rhode Island Department of Environmental Management and matching funds from PNPP, the City of Providence and Groundwork Rhode Island. To take full advantage of this framework, PNPP staff needed to inform and grow the confidence of funders and other stakeholders. They used TESA to justify their target block groups and identified compelling metrics—such as surface temperature and air quality—to inspire decision-makers. "Our core stakeholders are already sold on the carbon sequestration benefits of trees" says Tharinger. "When we talk about Tree Equity, we want to also talk about all of the human aspects-race, income, heat, health outcomes. Having a succinct Tree Equity Score that takes all of those metrics into account allows us to more clearly and emphatically make the case for allocating the majority of our funds to where they're needed most."



PNPP Fall 2021-Fall 2022 Planting Map

Providence Neighborhood Planting Program planted 142 trees in 10 block groups in the South Providence area during their 2022 fall and spring planting seasons. Using TESA, the organization has estimated that these trees, which include 45 unique species, will add nearly 3 acres to the urban canopy once matured.

Ongoing results

Partnerships

PHA Emerging partners, including and Groundwork Rhode Island, a green-collar jobs training program that collaborated with PNPP on the plantings and provided tree maintenance, are committed to continue working with PNPP to reforest South Providence. The Juanita Sanchez Educational Complex, which houses 360 High School, is expanding their partnership with PNPP to develop an edible food forest and educational conifer grove on the campus. At the close of the 2022 planting season, PNPP held a debriefing with participating students and teachers who expressed excitement for next year's program. Students said they enjoyed having an active role in the future of their community and school, and appreciated the opportunity to teach community members and fellow students about Tree Equity. PNPP plans to continue their working partnership with the Green Alliance Ecology Club and to engage new teachers and students.



Funding opportunities

Thanks to the success of the 2022 planting season, which focused on growing Tree Equity Scores in a targeted neighborhood, PNPP won additional grants to continue working in South Providence. This includes an additional \$18,000 grant through the Arbor Day Foundation to increase planting in Eddy St, a key residential area in the students' target block group. The grant proposal used TESA maps and key metrics to demonstrate the importance of PNPP's ongoing work in that area.

Lessons learned

The 2022 planting program proved PNPP's hypothesis that cultivating community leadership by working with anchor institutions like schools, faith centers and PHA, can have greater impact than approaching residents on an individual basis. In 2023, PNPP will look to expand their approach by identifying additional ways tree planting can tie into school curriculum, and continue to identify additional funding sources.

rovidence Neighborhood Planting Program plans to continue using TESA to support these goals. "There are no shortcuts to this work," says Tharinger. "It takes a lot of time to do things this way, but it's worth it and necessary. We see TESA as key to socializing our plan with stakeholders and funders."



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