

Impact Summary

Growing Canopy & Community in South Providence
Providence, RI
Providence Neighborhood Planting Program (PNPP)



Project Goals

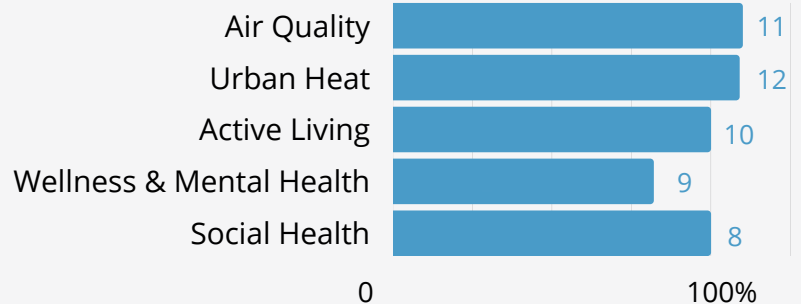
Between September 2021 and December 2022, PNPP, project partners, and community-members planted 190 trees in the Upper and Lower South Providence and Washington Park neighborhoods of Providence, Rhode Island. The main goal of this project was to directly address the disproportionate environmental health burdens that under-canopied and under-resourced areas face, with a focus on improving air quality, reducing urban heat island effect, empowering students and residents, and building more resilient communities.



Human Health



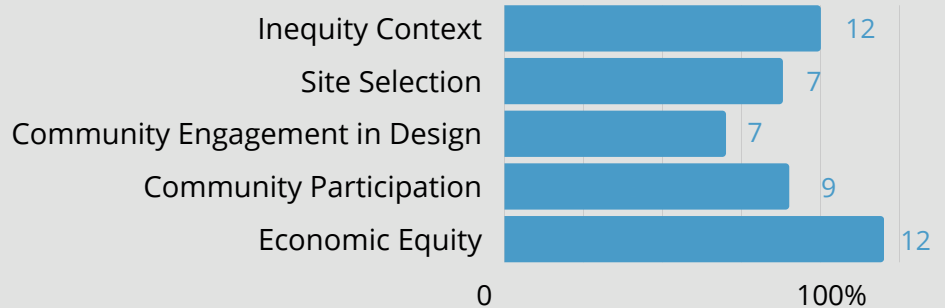
50/50
Exceptional



Social Equity



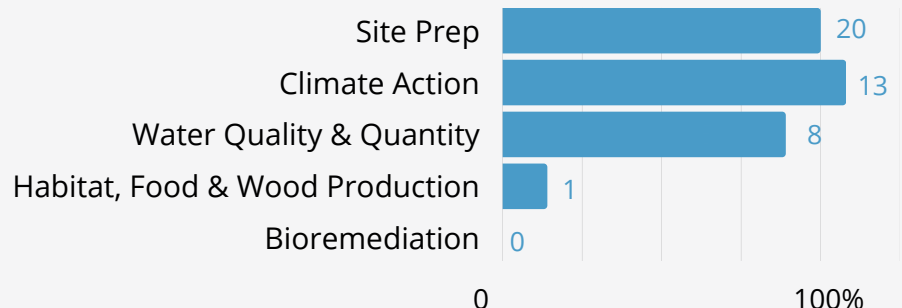
47/50
Exceptional



Environment



42/50
Exceptional



Impact Summary

Growing Canopy & Community in South Providence



Increase tree equity and build resilient communities

This project was a collaborative effort, including Providence Forestry Division, Groundwork Rhode Island, students and staff at participating schools, the Providence Housing Authority, members of the Providence Tree Plan Steering Committee, community members, and residents. Trees were planted at schools, at private homes and businesses, and on public housing properties. Project partners conducted extensive community engagement and outreach to design the project and provided volunteer and paid opportunities for youth and community-members to implement the tree planting. Students and community members were empowered to plug in, develop social capital and take ownership of the tree planting projects that will lead to increased health and resiliency.

UN Sustainable Development Goals

<p>3 GOOD HEALTH AND WELL-BEING</p>	<p>6 CLEAN WATER AND SANITATION</p>	<p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>10 REDUCED INEQUALITIES</p>	<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>
<p>Filter air and provide shade for improved health</p>	<p>Increase water capture and infiltration</p>	<p>Ongoing community-based tree care</p>	<p>Address past environmental injustices</p>	<p>Improve access to green spaces and livability</p>
<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>13 CLIMATE ACTION</p>	<p>15 LIFE ON LAND</p>	<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>17 PARTNERSHIPS FOR THE GOALS</p>
<p>Reduce heat and energy needs</p>	<p>Deliver local climate action, quantify benefits</p>	<p>Increase soil health and biodiversity</p>	<p>Inclusive, community-centric approach</p>	<p>Multi-stakeholder partnerships</p>

Quantified Benefits

Projected values (avoided costs) for ecosystem benefits per year in 25 years

Carbon Sequestration

154.4 metric tons of CO₂
\$3,680 (at \$25/ton)

Rain Interception

1,416.8 m³/year
\$2,994 per year

Air Quality

O₃: 0.0474 t/yr
NO_x: 0.0200 t/yr
PM₁₀: 0.0230 t/yr
\$1,117 per year

Energy Savings

Electricity - 18,121.5 kWh/yr
Natural Gas - 664,026.9 kBtu/yr
\$11,826 per year