

# Impact Summary

Downtown Louisville Tree Canopy Improvement  
 Louisville, KY  
 TreesLouisville, Inc.



## Project Goals

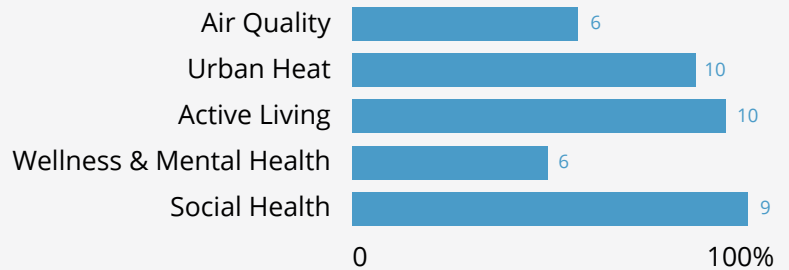
TreesLouisville, in partnership with Bulleit Bourbon, American Forests, and the City of Louisville, planted 35 trees along East Witherspoon Street in Louisville’s Central Business District (CBD). The CBD currently has the lowest tree canopy cover of any neighborhood, measuring only 9%. Trees will provide shade along a wide pedestrian pathway, mitigate stormwater in an area with a higher-than-average percentage of impervious surfaces, and intercept air pollutants and particulate matter emitted from the highway. It will allow residents greater access to green space and create a more welcoming environment for thousands of individuals and families to play, exercise, and travel.



## Human Health



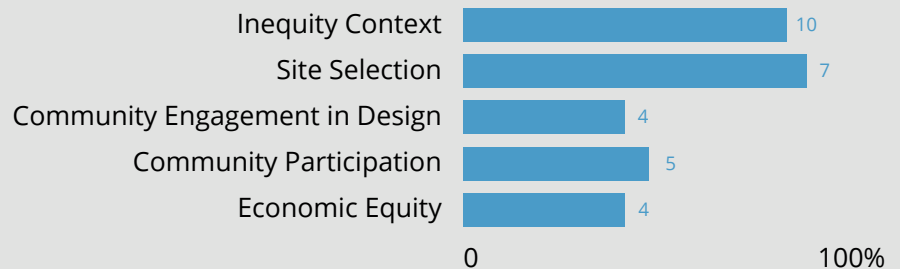
**41/50**  
 Exceptional



## Social Equity



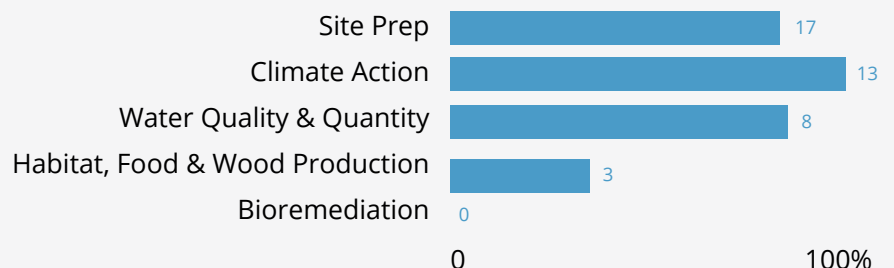
**30/50**  
 Excellent



## Environment



**41/50**  
 Exceptional



# Impact Summary

## Downtown Louisville Tree Canopy Improvement



Credits: TreesLouisville

### Provide shade, filter air, and promote recreation

This planting ties into a larger, concentrated effort by Louisville Metro Urban Forestry to strategically increase tree canopy in the Central Business District. Louisville has been ranked the fifth-unhealthiest city in the U.S. by the American College of Sports Medicine, in large part due to the high rates of obesity among its residents. Improving quality of and access to green spaces will encourage active lifestyles and a respite from busy city life. The broad, dense canopy of the Swamp White Oaks will cool and clean the air, and the Green Giant Arborvitae will buffer noise and air pollution from nearby high-traffic roads.

### UN Sustainable Development Goals

<p><b>3</b> GOOD HEALTH AND WELL-BEING</p>	<p><b>6</b> CLEAN WATER AND SANITATION</p>	<p><b>8</b> DECENT WORK AND ECONOMIC GROWTH</p>	<p><b>10</b> REDUCED INEQUALITIES</p>	<p><b>11</b> SUSTAINABLE CITIES AND COMMUNITIES</p>
<p>Improve health and well-being for residents and trail users</p>	<p>Mitigate stormwater runoff</p>	<p>Support local businesses</p>	<p>Increase tree canopy and benefits for all</p>	<p>Promote wellness and livability</p>
<p><b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p><b>13</b> CLIMATE ACTION</p>	<p><b>15</b> LIFE ON LAND</p>	<p><b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p><b>17</b> PARTNERSHIPS FOR THE GOALS</p>
<p>Reduce urban heat and energy needs</p>	<p>Deliver local climate action, quantify benefits</p>	<p>Support wildlife, climate resilience</p>	<p>Enhance downtown improvement efforts</p>	<p>Multi-partner project, community based tree care</p>

### Quantified Benefits

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

#### Carbon Sequestration

35.95 metric tons of CO<sub>2</sub>  
 \$898.83 (at \$25/ton)

#### Rain Interception

541.49 m<sup>3</sup>/year  
 \$886.89 per year

#### Air Quality

O<sub>3</sub> - 0.010 t/yr  
 NO<sub>x</sub> - 0.002 t/yr  
 PM<sub>10</sub> - 0.004 t/yr  
 \$30.42 per year

#### Energy Savings

Electricity - 3,026.04 kWh/yr  
 Natural Gas - 8,244.59 kBtu/yr  
 \$285.46 per year