



FACT SHEET

## Equitable Urban Forestry

### Green City

#### Climate Issue: Urban Heat Island

Urban areas experience higher temperatures than surrounding rural areas due to the Urban Heat Island (UHI) effect. The UHI effect is a critical concern for cities, because extreme heat can cause:

- Mortality and illness
- Loss of worker productivity
- Increased crime
- Damage to urban infrastructure.

Climate change will intensify the UHI effect and its impacts. These risks will not be distributed equally.

#### Extreme Heat: An Unequal Burden

- The science shows that the UHI effect impacts low-income and minority communities the most
- These communities often have fewer trees, less shade infrastructure and fewer resources available to escape dangerous heat (e.g. air-conditioning and swimming pools)
- This makes these communities more vulnerable to extreme heat.

Cities must implement  
cooling solutions to **protect**  
vulnerable communities  
from extreme heat

#### Solution: Equitable Urban Forestry

Tree planting is a powerful cooling solution. Planting trees in urban areas can increase climate resilience and build equity by:

- Reducing the impacts of UHI effect by providing shade and reducing surface temperature
- Providing local green economy jobs to plant and maintain trees
- Improving the physical and mental health of residents by providing easy access to nature.

In the United States, the Inflation Reduction Act made \$1.5 billion available to local communities to use trees to fight climate change. Now is the time for cities to implement equitable urban forestry programs.

#### IN A NUTSHELL

- In many cities, low-income and minority communities are most severely affected by extreme heat
- Extreme heat in urban areas will become worse with climate change
- To alleviate extreme heat, cities can implement equitable urban forestry programs
- Equitable urban forestry is essential to building climate resilience for all members of the community.

#### WHAT CAN YOUR CITY DO?

##### Create an Equitable Urban Forestry Masterplan

The first step to creating an Equitable Urban Forestry Masterplan is to identify where trees are most needed:

**IDENTIFY** areas in your community where temperatures are highest.

**CONSIDER** partnering with local research institutions to collect temperature data.

**IDENTIFY** areas where socioeconomic vulnerability (e.g. low-income) is the highest. These areas have the fewest economic means available to deal with extreme heat.

**FIND** the areas where high heat overlaps with high socioeconomic vulnerability. These areas have the highest vulnerability, and must be prioritized first for tree planting.

Prioritizing highly vulnerable areas will increase the equity and resilience of your tree planting.

To find out more information on this fact sheet, contact **Katie Lund** at [katie.lund@yale.edu](mailto:katie.lund@yale.edu).