2nd World Forum on Urban Forests

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Digging into Tree Equity Score

Presented by

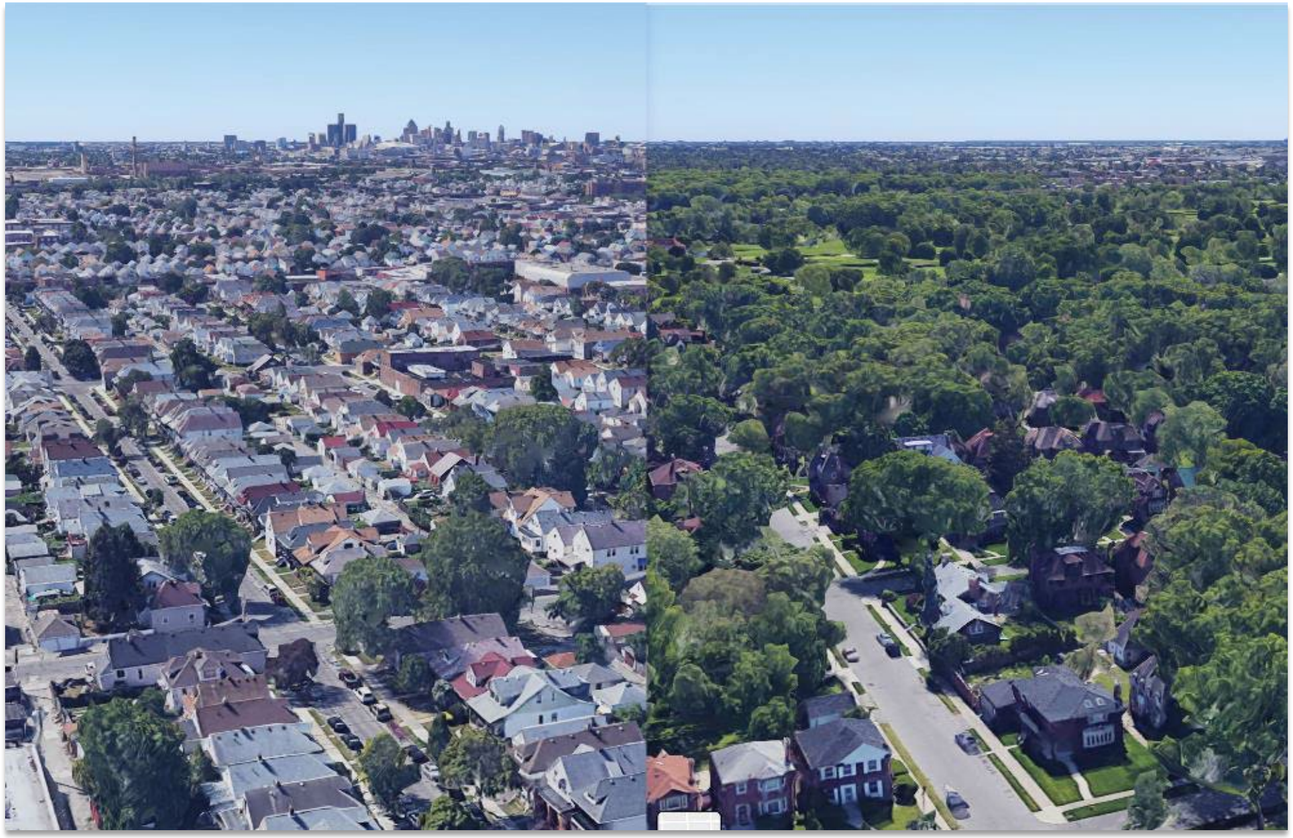
American Forests

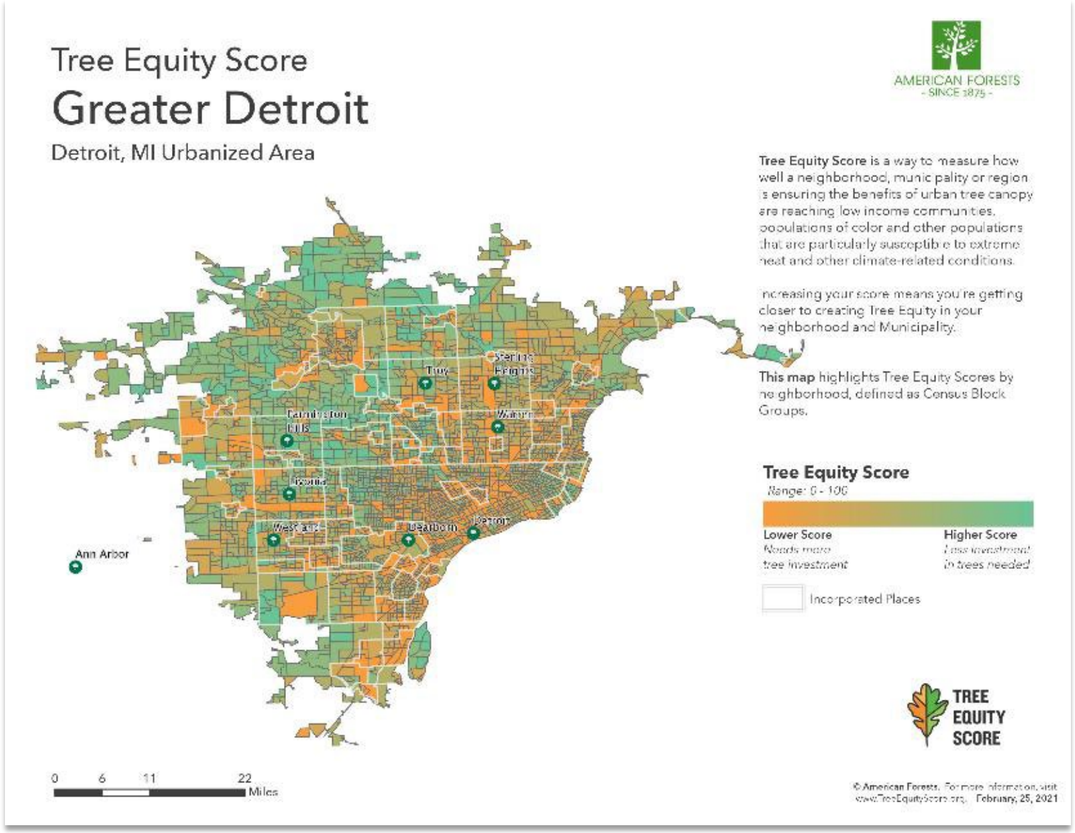
Chris David, Vice President of GIS & Data Science

Mushtaaq Ali, Senior Manager, GIS & Data Science

American Forests is the oldest national nonprofit conservation organization in the United States.

Our Roots Run Deep





We Need Tree Equity in Cities

- 2023 was the **hottest** summer on record
- **9 times** more heat-related deaths annually by 2100, mostly in cities

Visualization: NASA;
Mortality Projections:
Duke University

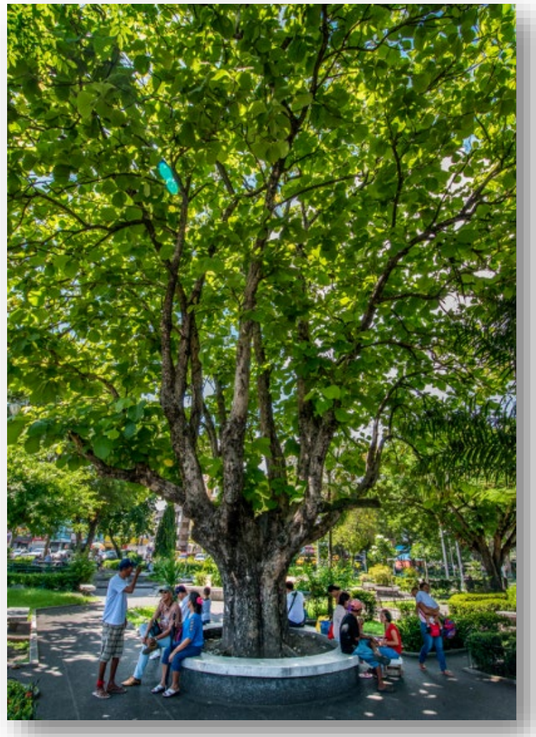
Temperature Change (F)
0
3
6
9
12
15

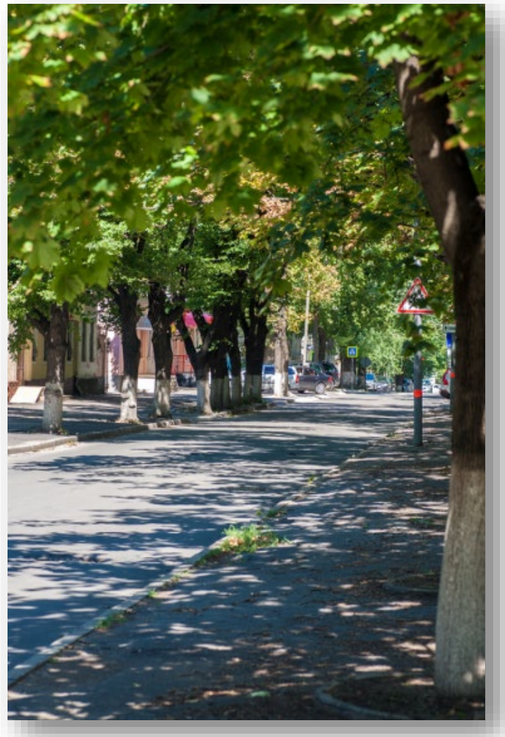
Heat Risk: Lower temperatures by up to 10 degrees F at street level

Air Quality: Avoid millions incidents of respiratory illness annually

Sequestration: 129M Mt/CO2e

Energy Savings: 7.2% average reduction in home heating & cooling, saving homeowners $$$$

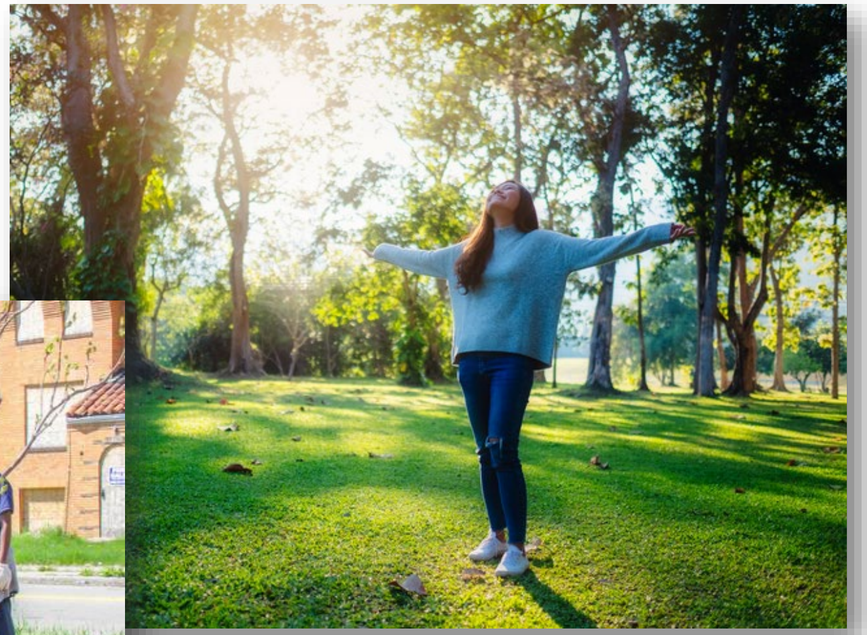




Tree Equity = Climate Action

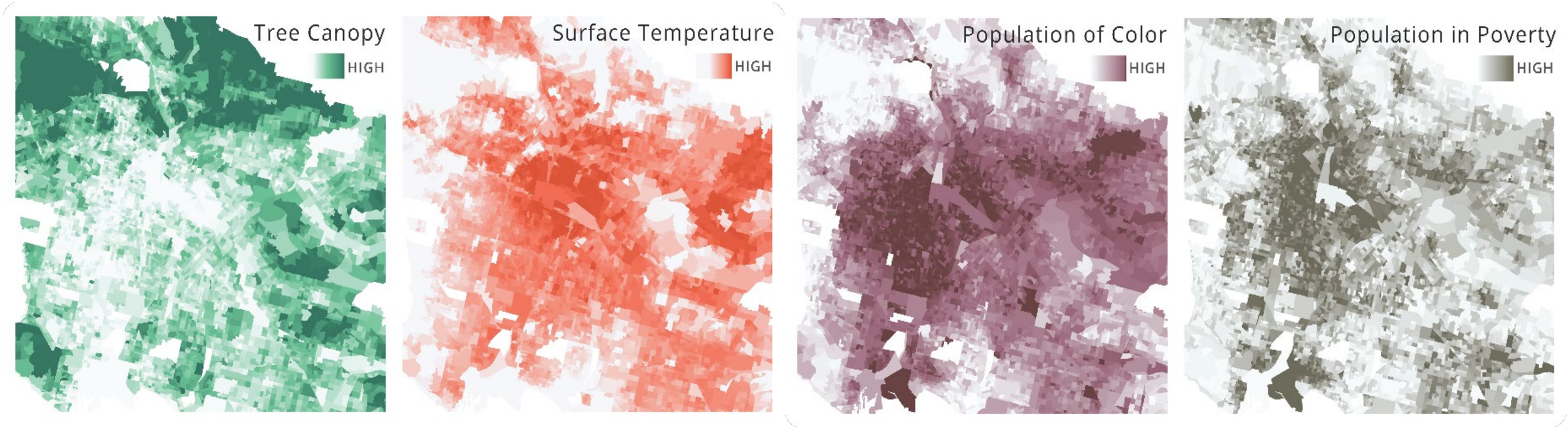
More time in natural environments leads to:

- Better overall health and well-being
- Reduced stress
- Enhanced social skills

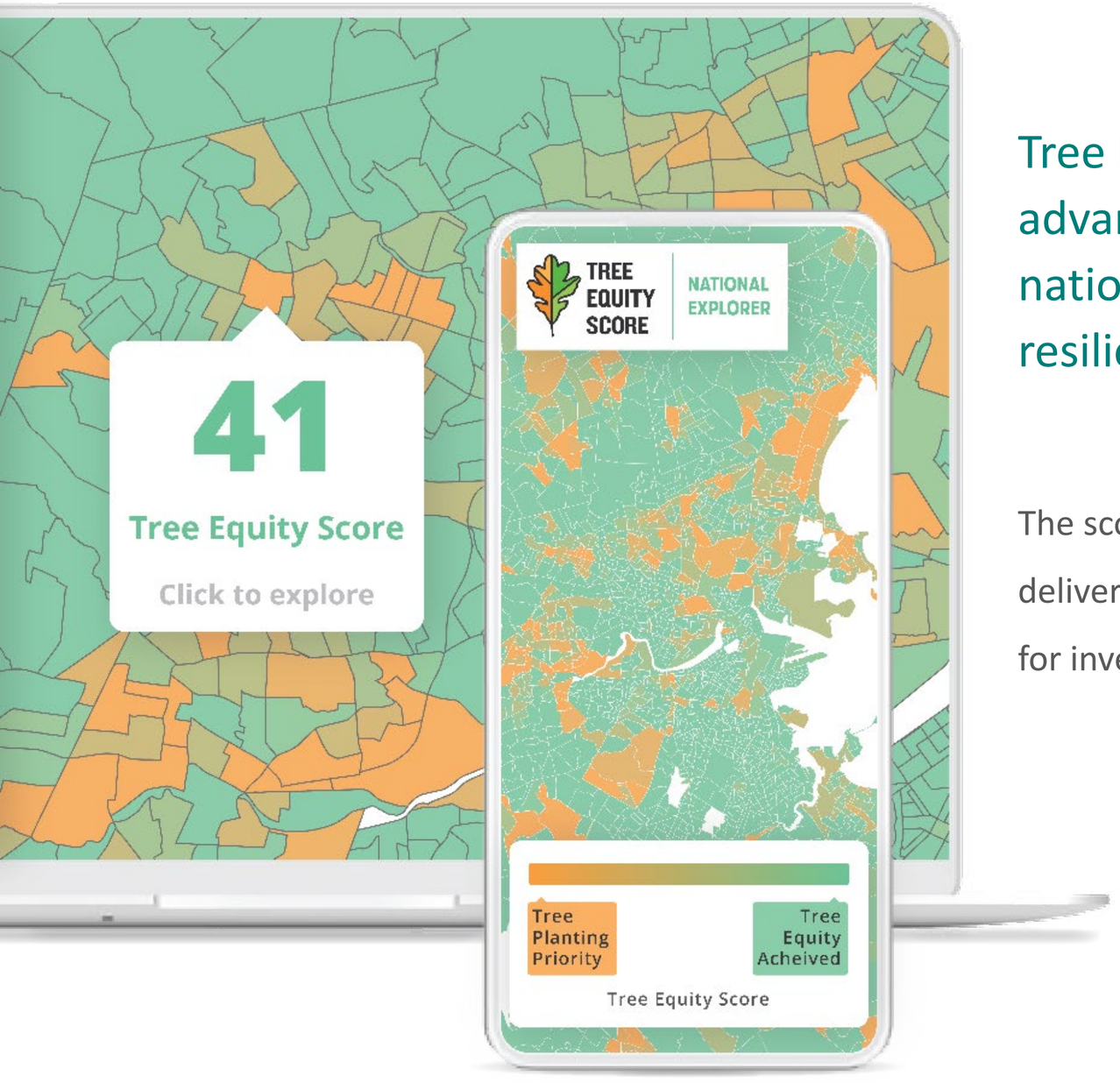


Tree Equity = Health Equity

What is Tree Inequity?



Tree Equity is about ensuring that all people experience the health, economic and other benefits that trees provide.



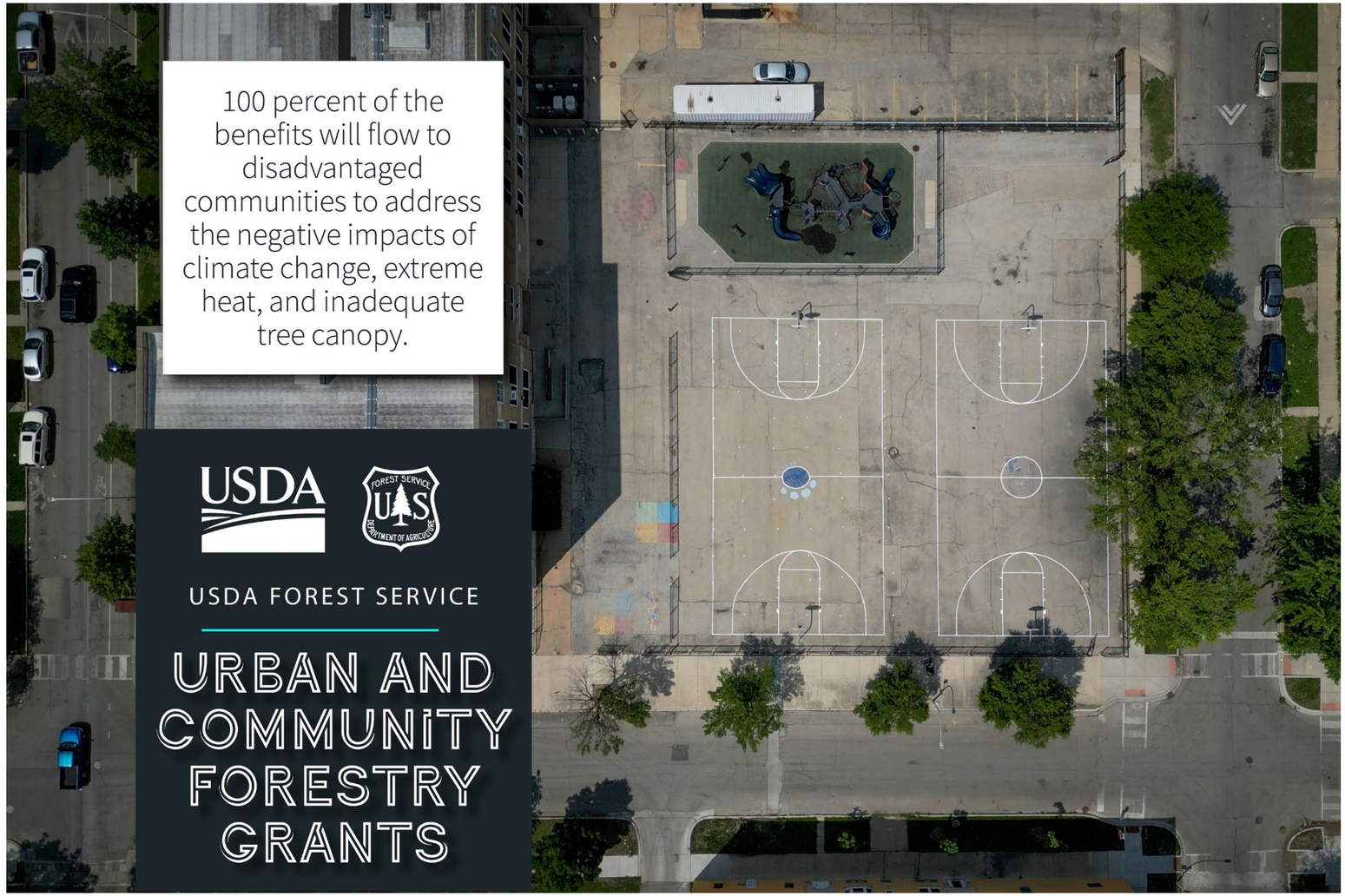
Tree Equity Score offers a course of action to advance Tree Equity in urban communities nationwide to make cities more inclusive, safe, resilient and sustainable.

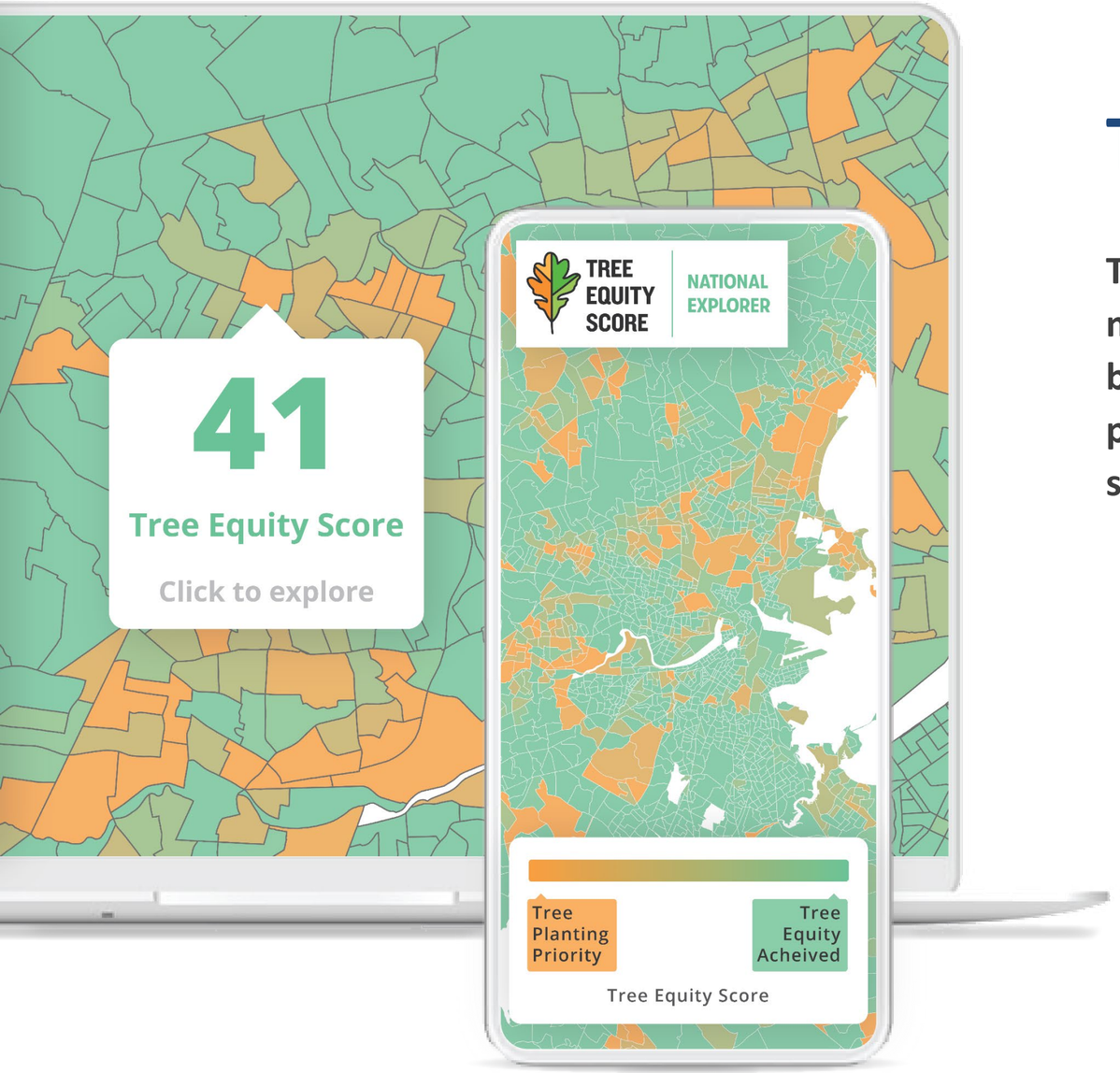
The score sets a national standard to assess how well cities are delivering tree canopy to all residents and to help make the case for investment in areas with the greatest need.

HISTORIC Impact

Catalyzed Investment for Tree Equity

- **$1.5 Billion** (with a B!) for Tree Equity through the Inflation Reduction Act
- Increased awareness from corporate donors and foundations = more money in communities for TREES
- Cities and states taking charge by formally incorporating Tree Equity into local policy
- Power to the people through Democratized Data





The Score

Tree Equity Score highlights inequitable access to trees. It measures how well a neighborhood or municipality provides the benefits of urban tree canopy to low-income communities, populations of color and other populations that are particularly susceptible to extreme heat and other conditions.

190,000 urban neighborhoods in 12,000+ cities and towns

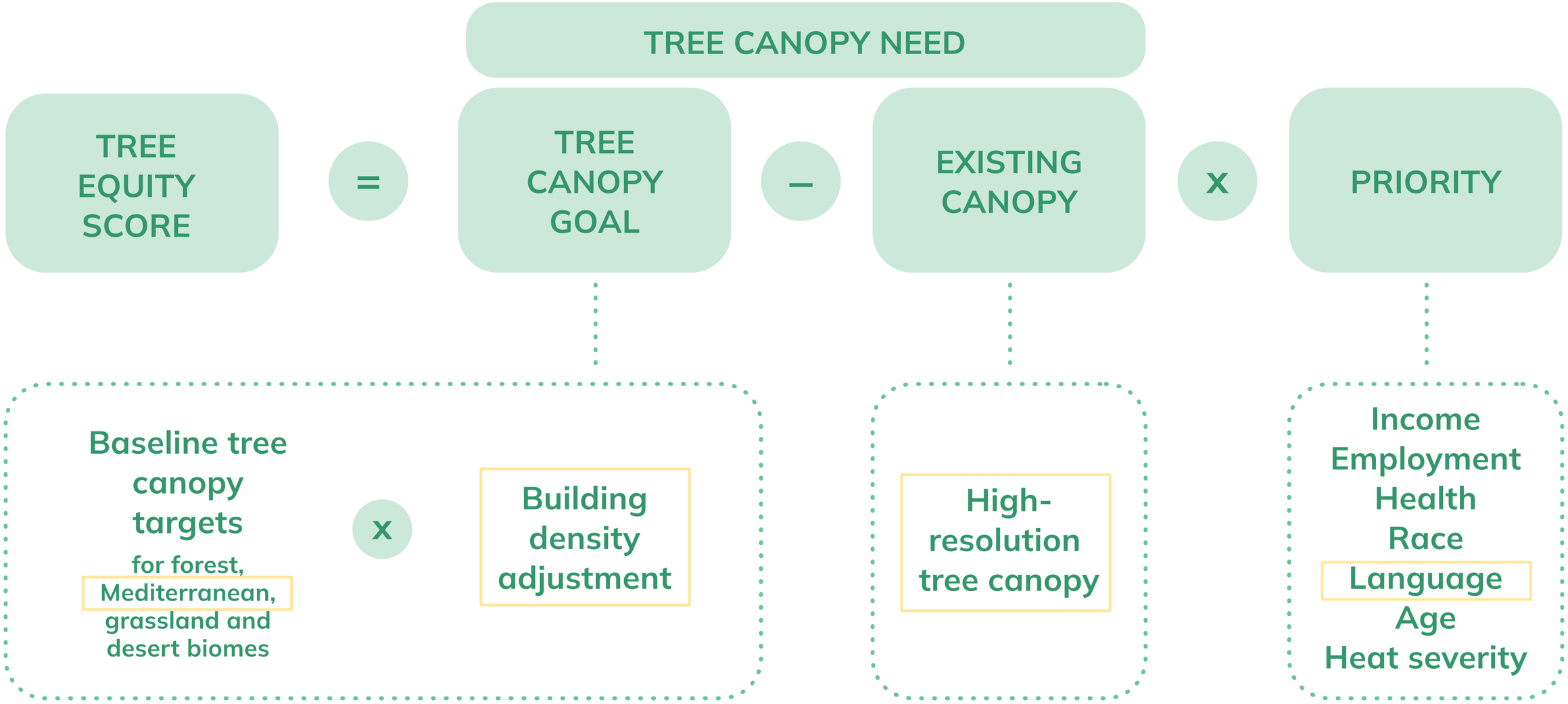
0 — 100

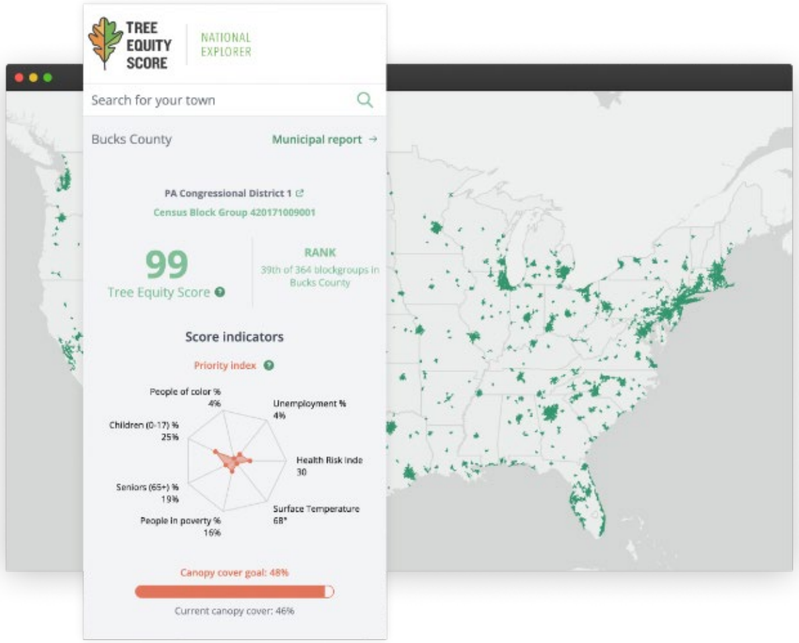
The lower the score, the greater priority for tree planting. A score of 100 means the neighborhood has met tree planting goals.

The Math

TREE EQUITY SCORE = TREE CANOPY NEED (TREE CANOPY GOAL − EXISTING CANOPY) x PRIORITY

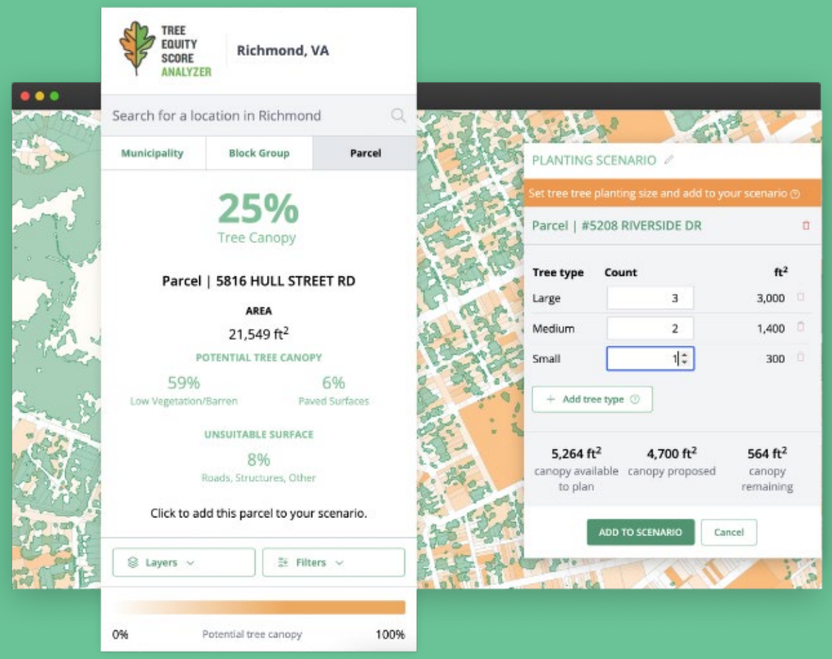
The Math


TREE CANOPY NEED
TREE EQUITY SCORE
=
TREE CANOPY GOAL
–
EXISTING CANOPY
x
PRIORITY
Baseline tree canopy targets
for forest, Mediterranean, grassland and desert biomes
x
Building density adjustment
High-resolution tree canopy
Income
Employment
Health
Race
Language
Age
Heat severity



Our flagship National Explorer makes Tree Equity Score available to all.

- Scores for 190,000+ urban block groups in the
- A national standard to support equity-first tree planting and investment.
- Neighborhood-level data; municipal and regional goal-setting.
- Communicate the positive impacts of trees.



Local Analyzers serve a single city or region to help users *shift* Tree Equity Scores.

- Data for all public and private properties.
- For each block group (neighborhood), set Tree Equity Score goals and estimate planting needs.
- Build property-level plans to shift scores. Track progress. Communicate the benefits of new and existing trees.
- Co-created with stakeholders; locally-tailored.

What's Next?

CONTINUOUS Improvement

- Annual data updates
- Regular review of new technology and data advancements
- Feedback from users incorporated into out update roadmap
- Data stories linking our Tree Equity Score data to the experiences people are having in communities

DEEP DIVE TREE EQUITY SCORE ANALYZERS

Live

- Rhode Island
- Richmond, VA
- Boston, MA
- Ruston, LA
- Washington, D.C.

In Beta

- Austin, TX
- Dallas, TX
- Phoenix, AZ
- Detroit, MI
- Indianapolis, IN

In Development

- Houston, TX
- Columbus, OH
- Toronto, Ontario
- Washington State

NEW TREE EQUITY SCORE Tools in the works

- Tree Equity Score UK Explorer
- Tree Equity Support/Action Center
- Tree Equity Score Dashboard

Every Explorer/Analyzer is co-created with a Stakeholder Council

DISCOVER

1. Join the TESA Stakeholder Council
2. Share local needs at Stakeholder Council Meeting #1

SHARE

3. Suggest relevant data, plans and policies to inform tool development
4. Share your work and perspective in a 1-on-1 interview

CUSTOMIZE

5. Review the beta application at Stakeholder Council Meeting #2
6. Assist in identifying supplemental data

REVIEW

7. Review the final application at Stakeholder Council Meeting #3

LAUNCH

8. Lead or assist with stakeholder training sessions
9. Lead or participate in the final workshop

Local Government Officials

Environmental Justice Organizations

Public Health Officials

Environmental Organizations

Housing, climate, transportation, and other urban forestry allies

Tree Care Industry Professionals

Advocates/ Community Leaders

Social Justice Organizations

DEMO

https://treeequityscore.org/

Tree Equity Score in the Field

Lora Martens, City of Phoenix
Lawrence Sobson, Michigan DNR
Mona Cummings, Tree Fresno
David Meshoulam / Josh Reed, Speak for the Trees

Interactive Exercise

https://treeequityscore.org/

1. Use the search bar to identify an address of your choosing.
2. Explore components of the score for your neighborhood.
3. Open a city, county, district or state report from the “Dynamic Reports” menu
4. Explore the data in the report. Use the slider to identify the number of trees needed to achieve a target score.

Q: What insights did you uncover? How might you be able to use this information in your work?

Discussion

- What are the barriers to getting more trees in the ground where you live?
- How might you use Tree Equity Score in your part of the world?
- What's missing? How can it be improved?

Thank you

Chris David & Mushtaaq Ali | American Forests

cdavid@ americanforests.org

mali@ americanforests.org

Food and Agriculture Organization of the United Nations

Arbor Day Foundation

POLITECNICO MILANO 1863

SISEF

ISA International Society of Arboriculture

Smithsonian

Forest Service U.S. Department of Agriculture

GROUNDWORK Rhode Island
CHANGING PLACES CHANGING LIVES

Resident-led Tree Planting in Pawtucket and Central Falls, Rhode Island

Door-to-door **targeted canvassing** + **Free tree giveaway** with TESA screening process + Tree planting and **3-year maintenance plan** + Five funded **community member positions**

Groundwork RI was awarded **$143,000** to plant trees on public and private property in Pawtucket and Central Falls

“We called everyone who had the lowest [tree equity] scores first and gave them priority to getting a tree planted.” -- Groundworks Coordinator

Statewide, **Rhode Island** has leveraged over **$1 million** in additional external funding since TESA Rhode Island's launch in late 2020.

Tree Equity Score is now being used as the standard for evaluating federal dollars.

CEUs

How to make the Most of Tree Equity Score

PP-23-3588

World Forum on Urban Forests