Toward Tree Equity

How Cities are using tree canopy to advance equitable climate action

May 23, 2024

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

Our Roots Run Deep

We Need Tree Equity in Cities

Neighborhoods with the lowest poverty rates have **double the tree cover per person** and are **6 degrees cooler** than neighborhoods with the highest.

Neighborhoods with the fewest residents of color have **four times more tree cover per person** and are **13 degrees cooler** than neighborhoods with the most.

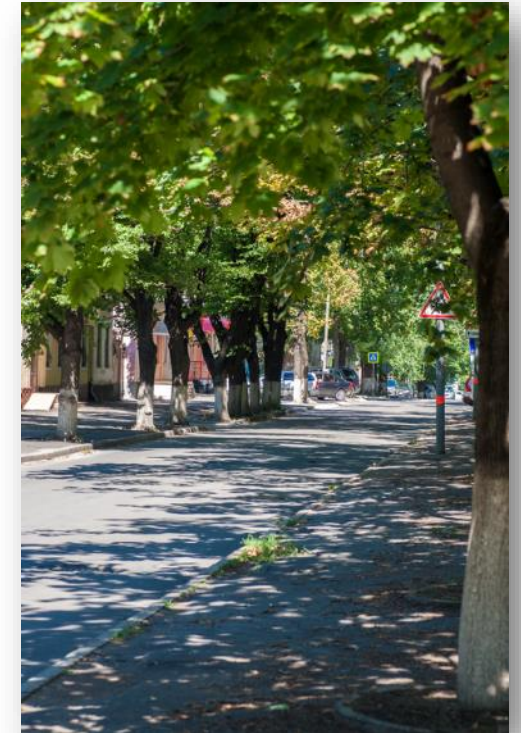*American Forests, Tree Equity Score, 2024.*

Heat Risk: Lower temperatures by up to 10 deg 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

Carbon Negative and Cost-Effective Cooling

BY-THE-NUMBERS

Trees and forests in U.S. urban areas annually save **$4.7 billion** in electricity and **$3.1 billion** in heating costs.

7.2% The average reduction in national residential energy use due to trees is 7.2 percent.

Forest Service Research and Development
Highlights from the World Leader in Forestry Research

Sequestration: Trees in U.S. cities & towns capture nearly 130 Million Mt/CO2e/Year.

Energy Savings: Trees in U.S. cities & towns save 38.8 Million MWh & 246 MMBtus of energy use for heating and cooling.

American Forests created Tree Equity Score to help address damaging environmental inequities by prioritizing people-centered investment.
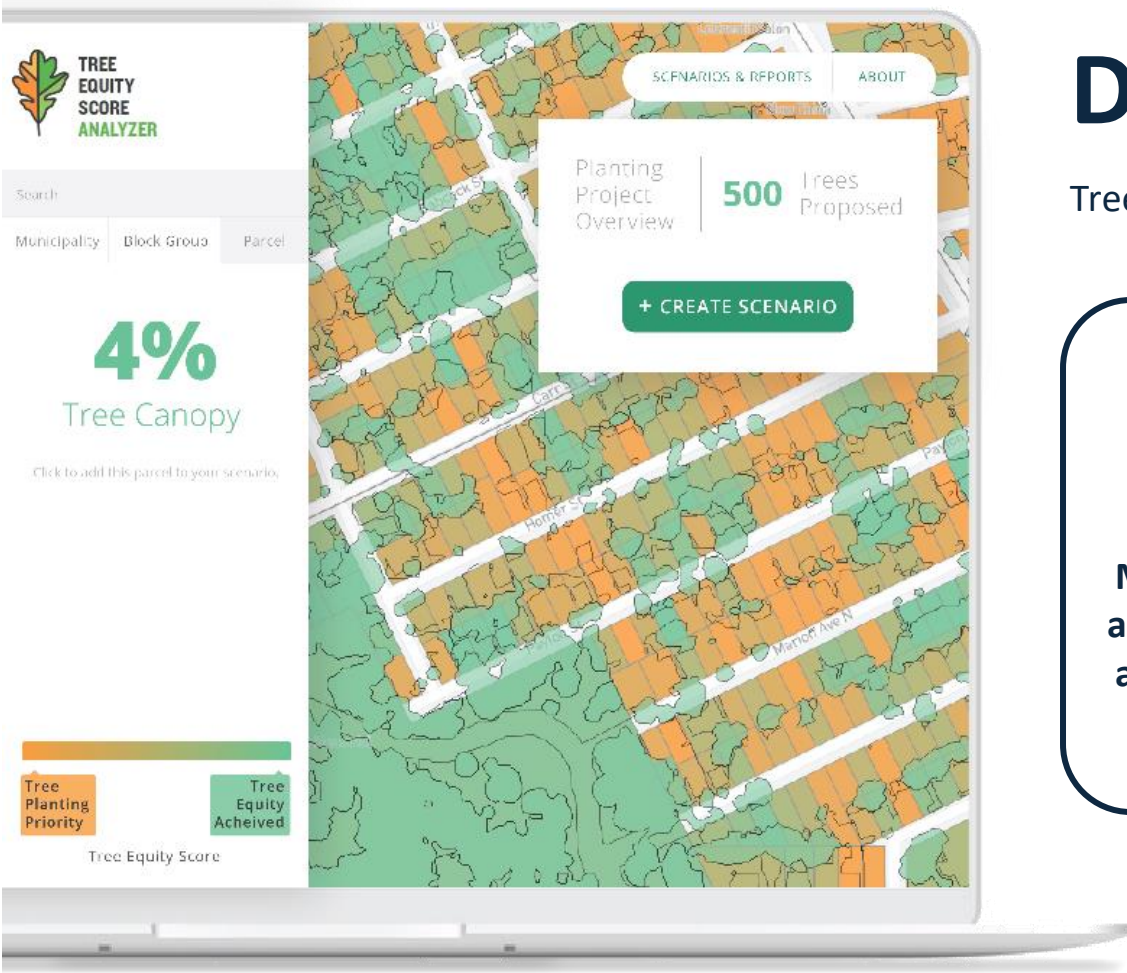
The score sets a national standard to assess how well cities are delivering tree canopy to all residents and to help make the case for investment in areas with the greatest need.

190,000 urban neighborhoods
12,000+ cities and town
80% of the population

Democratizing Data

Tree Equity Score is your toolkit to address inequitable access to urban trees

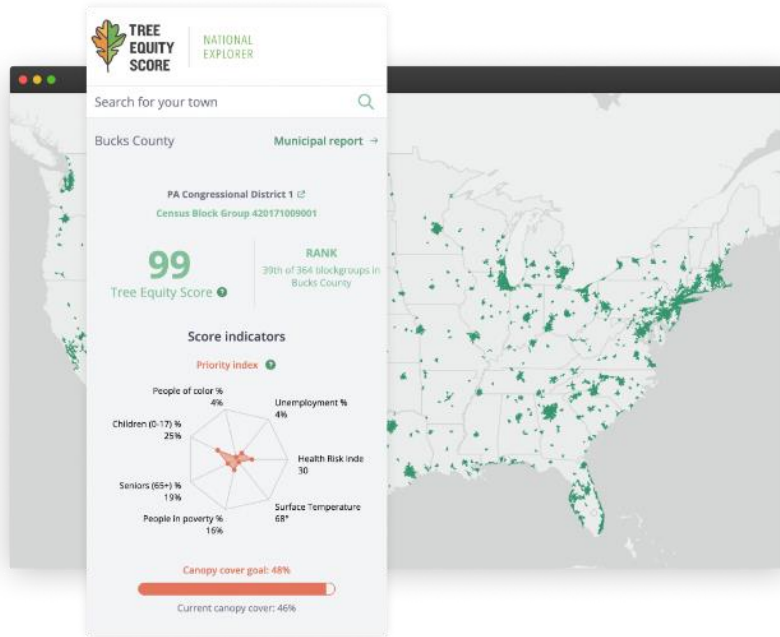| Make state-of-the-art Tree Equity data and tools available to all | → | Target meaningful investment in areas with the greatest need | → | Build a community-led movement for lasting change |

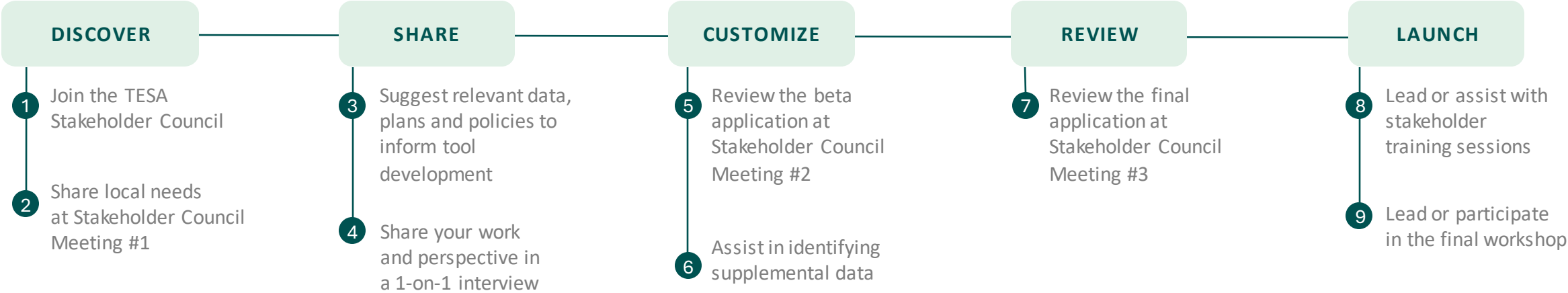**Our flagship National Explorer makes Tree Equity Score available to all.**

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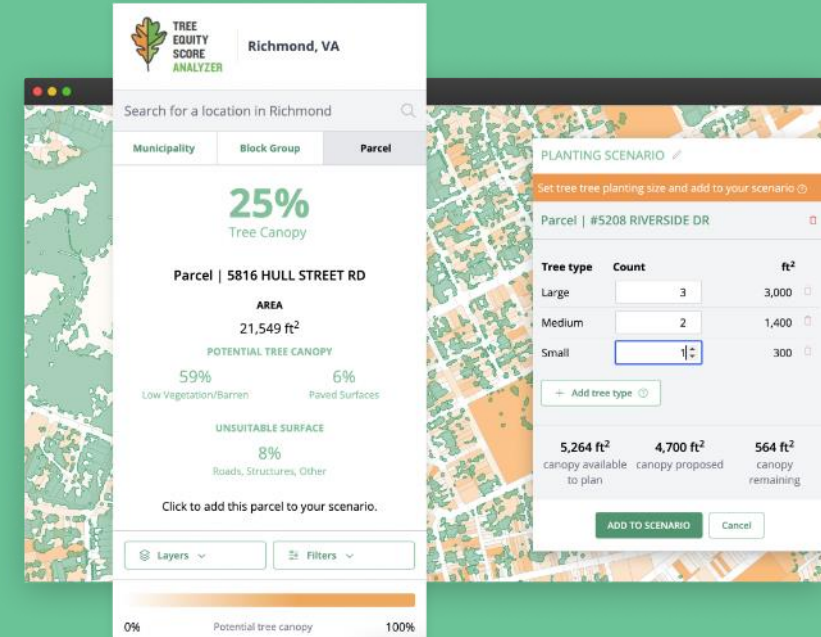
Local Analyzers serve a single city or region to help users *shift* Tree Equity Scores.

- 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.

Every TESA is co-created with a local Stakeholder Council

DISCOVER	SHARE	CUSTOMIZE	REVIEW	LAUNCH
1 Join the TESA Stakeholder Council	**3** Suggest relevant data, plans and policies to inform tool development	**5** Review the beta application at Stakeholder Council Meeting #2	**7** Review the final application at Stakeholder Council Meeting #3	**8** Lead or assist with stakeholder training sessions
2 Share local needs at Stakeholder Council Meeting #1	**4** Share your work and perspective in a 1-on-1 interview	**6** Assist in identifying supplemental data		**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

What we do to advance Tree Equity

Creating the best
Tools & Techniques

We've identified what communities need, invested in policy, planning, financing & planning tools, and have invited partners to help with the areas that we don't work in, to provide a holistic program model.

Building Careers & Opps

We've created education opportunities, employer best practices, pre-employment training opportunities and supported job retention in the forestry and tree care industries.

Funding a Movement

We've unlocked billions in public funding via federal policy efforts and local private and corporate dollars
.
Our $40M Catalyst Fund will drive public and private $ to new communities.

Critical Success Factor: Climate & Health-Smart Forestry

USDA | Forest Service | U.S. DEPARTMENT OF AGRICULTURE

Northern Research Station | General Technical Report NRS-203 | July 2021

CLIMATE ADAPTATION ACTIONS FOR URBAN FORESTS AND HUMAN HEALTH

Table 5.—Tree species list developed to aid Rhode Island community forestry practitioners in selecting trees to reduce climate change vulnerability, reduce carbon dioxide in the atmosphere, and provide benefits to human health. It is meant to be a complement to other tree selection resources. Other factors may also need to be considered, such as aesthetics, local site conditions, wildlife value, or nursery availability. Some species may have climate and health benefits but may not be suitable for planting for other reasons, such as having invasive potential or susceptibility to pests or pathogens.

Scientific name	Common name	Climate vulnerability	Carbon benefit	Health benefit	Health disservices	Notes
Abies balsamea	Balsam fir	moderate-high	moderate	moderate-high	moderate	
Acer campestre	Hedge maple	low	low	low	moderate	can be invasive
Acer ginnala	Amur maple	moderate-high	low-moderate	moderate-high	moderate	can be invasive
Acer griseum	Paperbark maple	moderate	low	low-moderate	moderate-high	
Acer negundo	Boxelder	moderate-high	moderate	moderate	moderate	can be invasive
Acer rubrum	Red maple	moderate	high	high	moderate-high	
Acer saccharinum	Silver maple	moderate	moderate	moderate-high	moderate-high	
Acer saccharum	Sugar maple	low-moderate	moderate-high	high	moderate-high	
Acer tartaricum	Tatarian maple	moderate-high	n/a	n/a	moderate	
Acer truncatum	Shantung maple	low-moderate	low	low	moderate-high	
Acer x freemanii	Freeman maple	low-moderate	n/a	n/a	moderate	
Aesculus hippocastanum	Horse chestnut	low-moderate	moderate-high	high	low	can be invasive

Critical Success Factor: Career Pathways for Those in Need

URBAN FORESTRY CAREER PATHWAY

American Forests™

Business Owner
$100,000/yr
$48.07/hr

Urban Forester
$68,265/yr
$32.82/hr

Certified Arborist
+$10,000/yr
+$5/hr

Arborists and urban foresters are responsible for planting and maintaining urban trees, shrubs and woody plants. After gaining some work experience in urban forestry, an International Society of Arboriculture Certified Arborist credential can increase your base pay.

Foreman/Crew Leader
$54,804/yr
$26/hr

Tree Climber
$40,510/yr
$19.47/hr

Groundworker
$32,094/yr
$15.43/hr

By Removing Key Barriers to Career Opportunities

Arboriculture
Pre-Employment
Curriculum
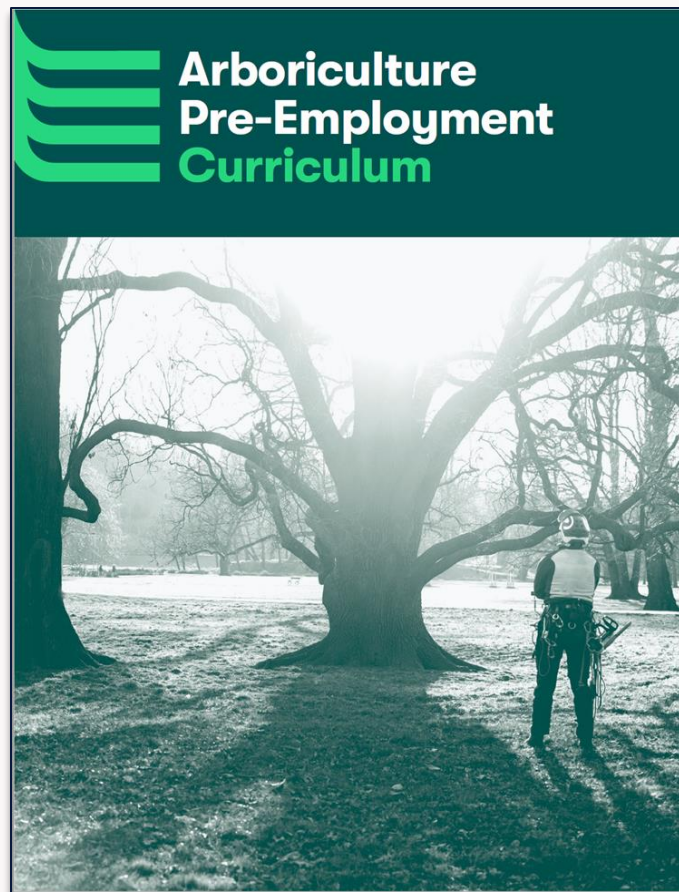
Our Tree Equity Program Model

Urban Wood

Tree Care

Tree Planting

Tree Nurseries

Tree Protection

Action Plan

Tree Equity Commitment

Data-Driven Priorities

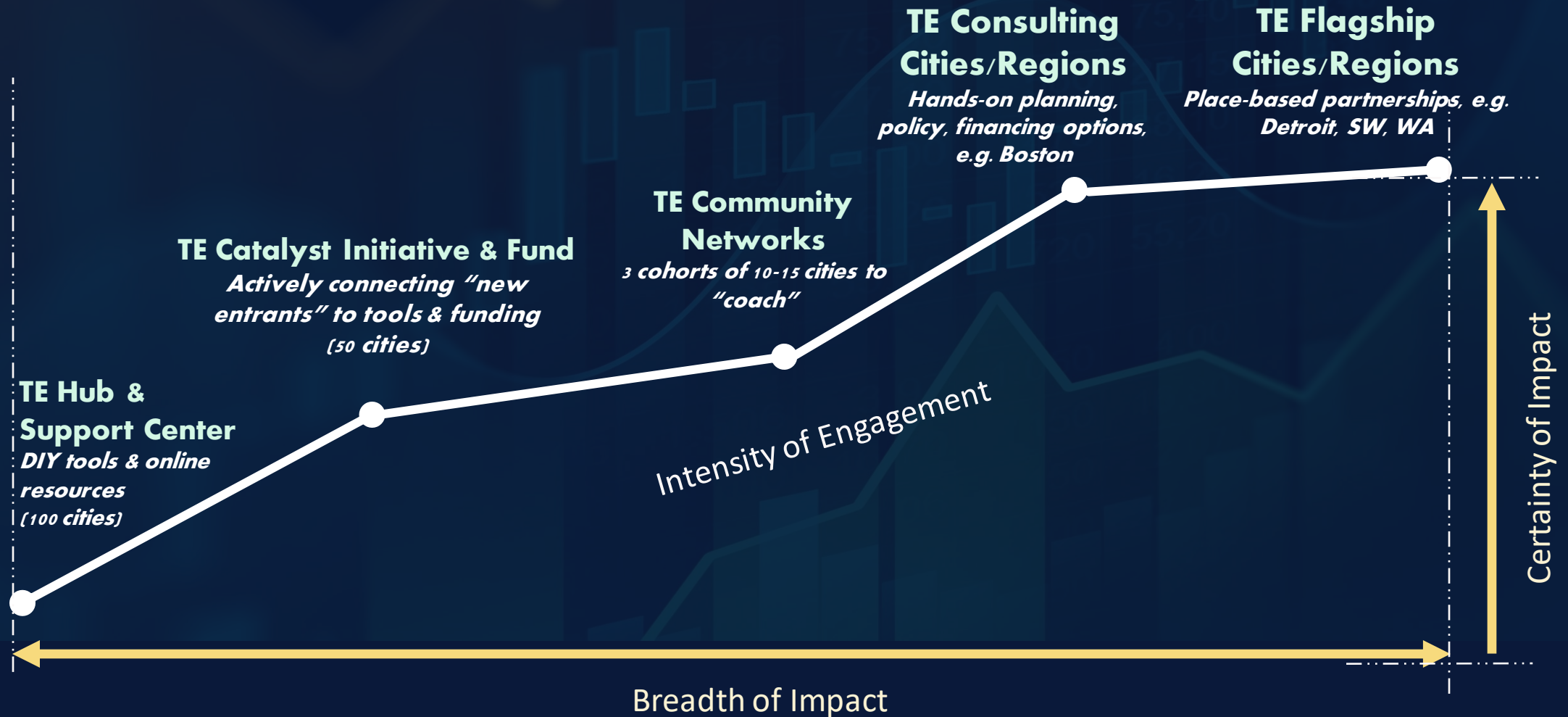Community Engagement

Inclusive Partnership

How we deliver resources to communities: Tree Equity "Support System"

TE Flagship Cities/Regions
Place-based partnerships, e.g. Detroit, SW, WA

TE Consulting Cities/Regions
Hands-on planning, policy, financing options, e.g. Boston

TE Community Networks
3 cohorts of 10-15 cities to "coach"

TE Catalyst Initiative & Fund
Actively connecting "new entrants" to tools & funding (50 cities)

TE Hub & Support Center
DIY tools & online resources (100 cities)

Intensity of Engagement

Certainty of Impact

Breadth of Impact
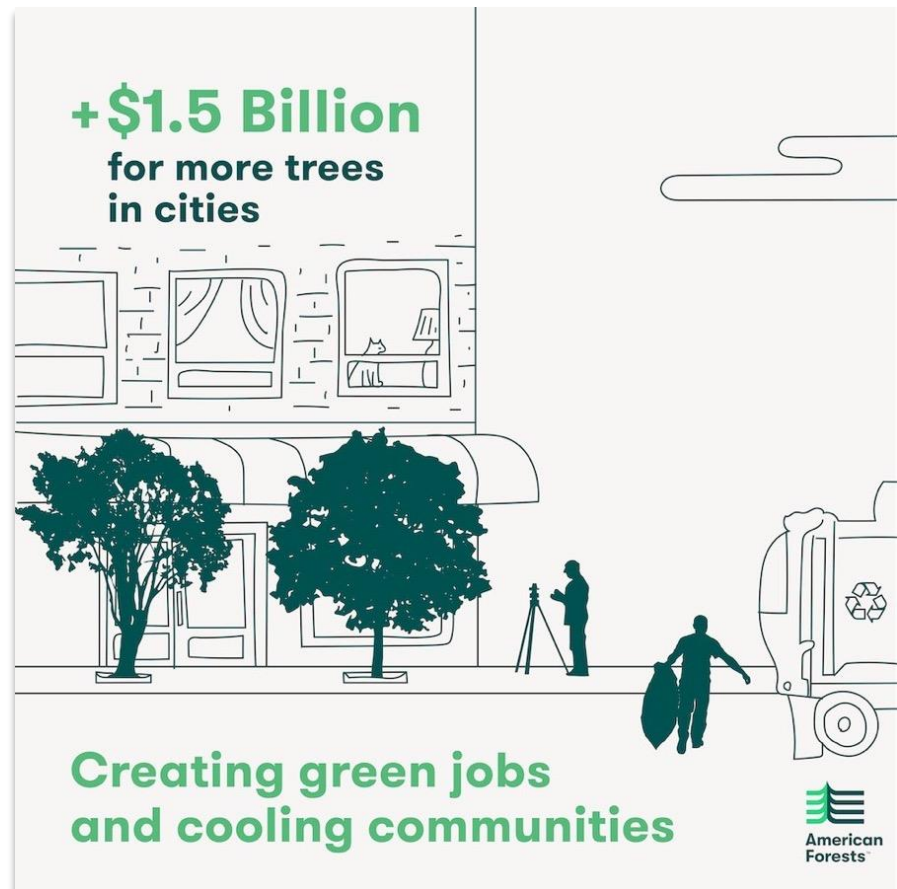
Place Based Partnerships

Phoenix Cool Corridors
1st of 100 Cool Corridors

Detroit Tree Equity Partnership
75,000 Trees & 300 Jobs

Critical Success Factor: Ask for Funding at Scale of Need

Tree Equity Policy Framework

Unlock and Sustain Federal **Funding** Streams

Empower Whole of Government Approach to Build Program Efficiencies & Maximize Impact

Enhance Technical Assistance Delivery to the Field Utilizing Best in Class Data Driven Decision Making Tools & Accessible Resources

UNITED STATES GOVERNMENT
INTERAGENCY
MEMORANDUM OF UNDERSTANDING
ON PROMOTING EQUITABLE ACCESS TO NATURE
IN NATURE-DEPRIVED COMMUNITIES

Thank You!

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