

The Baltimore Wood Project

Turning wastes to assets in the sustainable city

— *The* —
**BALTIMORE
WOOD
PROJECT**



RETHINKING WOOD IN THE CITY



BALTIMORE CITY

HAS OLD WOOD WE CAN USE

Supply chains

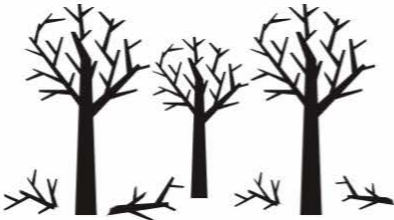
- Generators
 - Who creates wood residue?
- Processors
 - Who collected and cuts/dries wood residues?
- Producers
 - Who adds value and sells as products?



FROM WASTE TO WEALTH

Wood is salvaged from building deconstruction and urban tree care operations, and taken out of the city's waste stream.

1



2





Collected wood is diverted from space-limited landfills and other waste facilities.



A local facility is dedicated to sorting and processing salvaged wood for its best use.



The wood is repurposed and resold locally, creating a closed loop system. Reclaimed and upcycled wood products are available for sustainable building, furniture, energy, and other uses.



4,000
VACANT HOMES

Over the next 10 years, 4,000 condemned Baltimore rowhouses are slated for demolition.



FOUR PROJECT COMPONENTS



COUNT



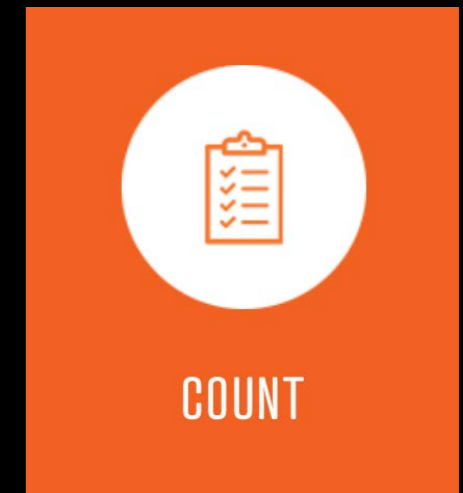
SALVAGE



SORT



USE



- Stocks
 - How much material is out there?
- Drains
 - How much is consumed annually?
- Supply
 - What is the annual supply capacity?
- Urban FIA
- Public tree inventory
- Demolition/deconstruction schedule



COUNT

United States Department of Agriculture
Forest Service

Research & Development

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Contact Information

US Forest Service Research & Development
1400 Independence Ave., SW
Washington, D.C. 20250-0003
800-832-1355

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Urban Forest Inventory and Analysis (FIA)

The **Forest Service's Forest Inventory and Analysis (FIA) program** has provided the Nation's forest census since 1930. A system of forest measurement field plots across the United States serves as the program's foundation. Annual forest data collection, analysis, and reporting provide critical information needed to assess the status, trends, and sustainability of the Nation's forests. FIA represents the vast majority of trees nationally, but the program's definition of forest land leaves out most urban areas: FIA defines forest land as forested areas that are undeveloped or "not developed for nonforest land users", are at least an acre in size and 1200' in width, and contain a "live plus missing" canopy cover of at least 10 percent. In recognition of the importance of including all forests in the nation's forest census, the Forest Service is establishing a systematic approach for collecting the status and trends of urban trees and forests.

The **Urban FIA program** fuses the infrastructure of the traditional with the urban inventory expertise provided by [i-Tree](#). New Urban FIA will be used to produce estimates of the quantity, health, composition, and structure of trees and forests. The Urban FIA program will complement existing programs to provide a cohesive picture of urban forest conditions in the U.S.

The program includes urban versions of two important FIA programs: the [Woodland Owners Survey](#), which is the official census of U.S. forest land, and the [Product Outputs](#) survey.

[Urban FIA Frequently Asked Questions \(pdf\)](#) »

[Urban FIA webinar recording and presentation materials](#)

What is i-Tree?

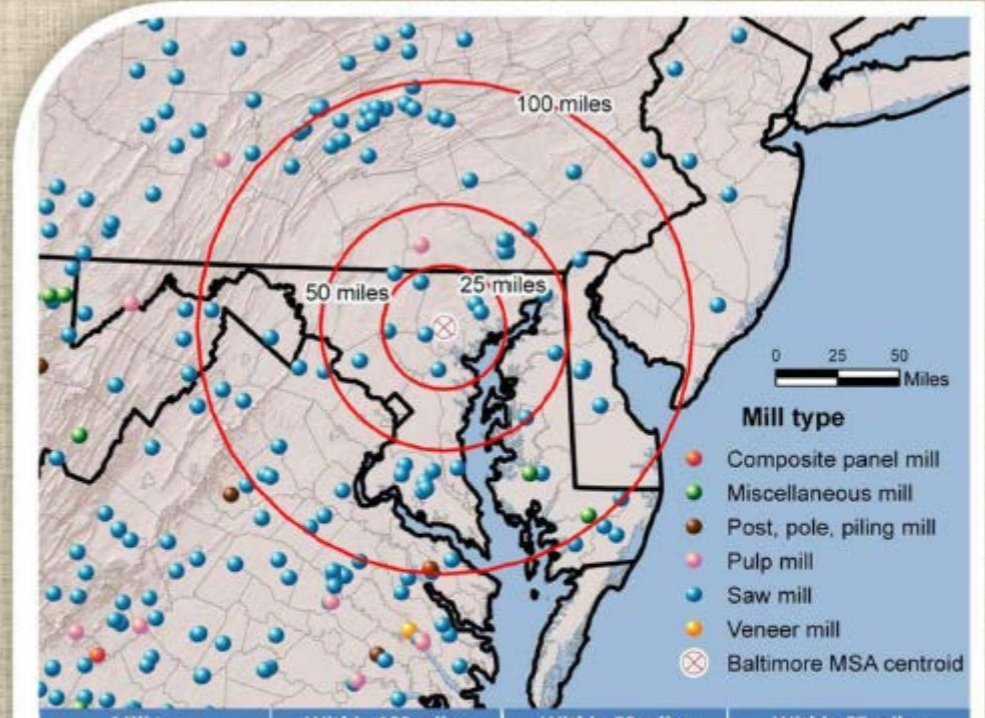
i-Tree is a state-of-the-art, peer-reviewed software tool developed by the Forest Service that provides urban forestry assessment tools. The i-Tree Tools help communities strengthen their urban forest management and quantify the structure of community trees and the services that trees provide.

[Learn more about i-Tree](#) »

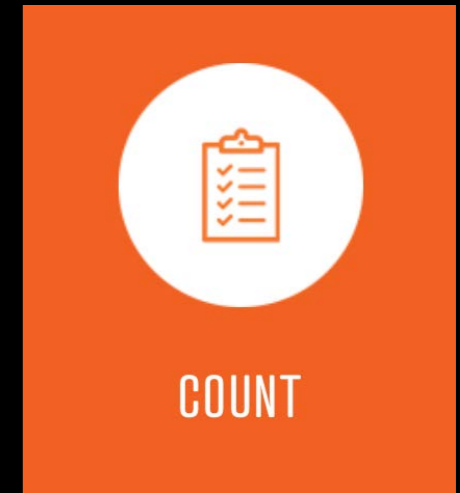
[Learn more about the Forest Inventory & Analysis Program](#) »

Resource Management & Use

- ▶ Resource Management & Use Home
- ▶ Agroforestry
- ▶ Forest Products
- ▶ Forest Restoration Research
- ▶ Landscape Science
- ▶ Management & Operations Research
- ▼ **Urban Research**
 - Research Areas



1/6 Acre vs. Traditional FIA



Urban FIA Plot foot print:

-1/6 Acre Subplot, 48' Radius:

tree sample

-Four 6.8' radius Microplots:

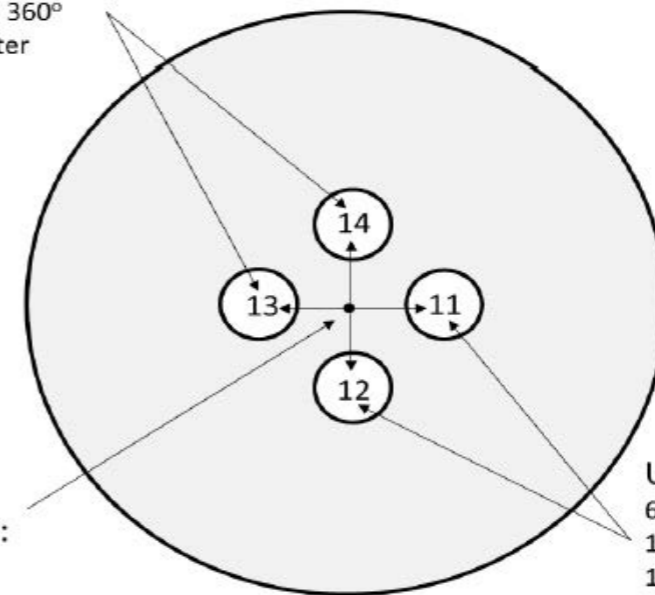
sapling sub-sample

Urban Microplots:

6.8 ft. radius
 13 - 12.0 ft. @ 270°
 14 - 12.0 ft. @ 360°
 From plot center

Urban Plot

Plot Center:
 48.0 ft. radius



Urban Microplots:
 6.8 ft. radius
 11 - 12.0 ft. @ 90°
 12 - 12.0 ft. @ 180°
 From plot center



SALVAGE





SALVAGE



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Email: shaun.preston@baltimorecity.gov

Our Partners

Local

State

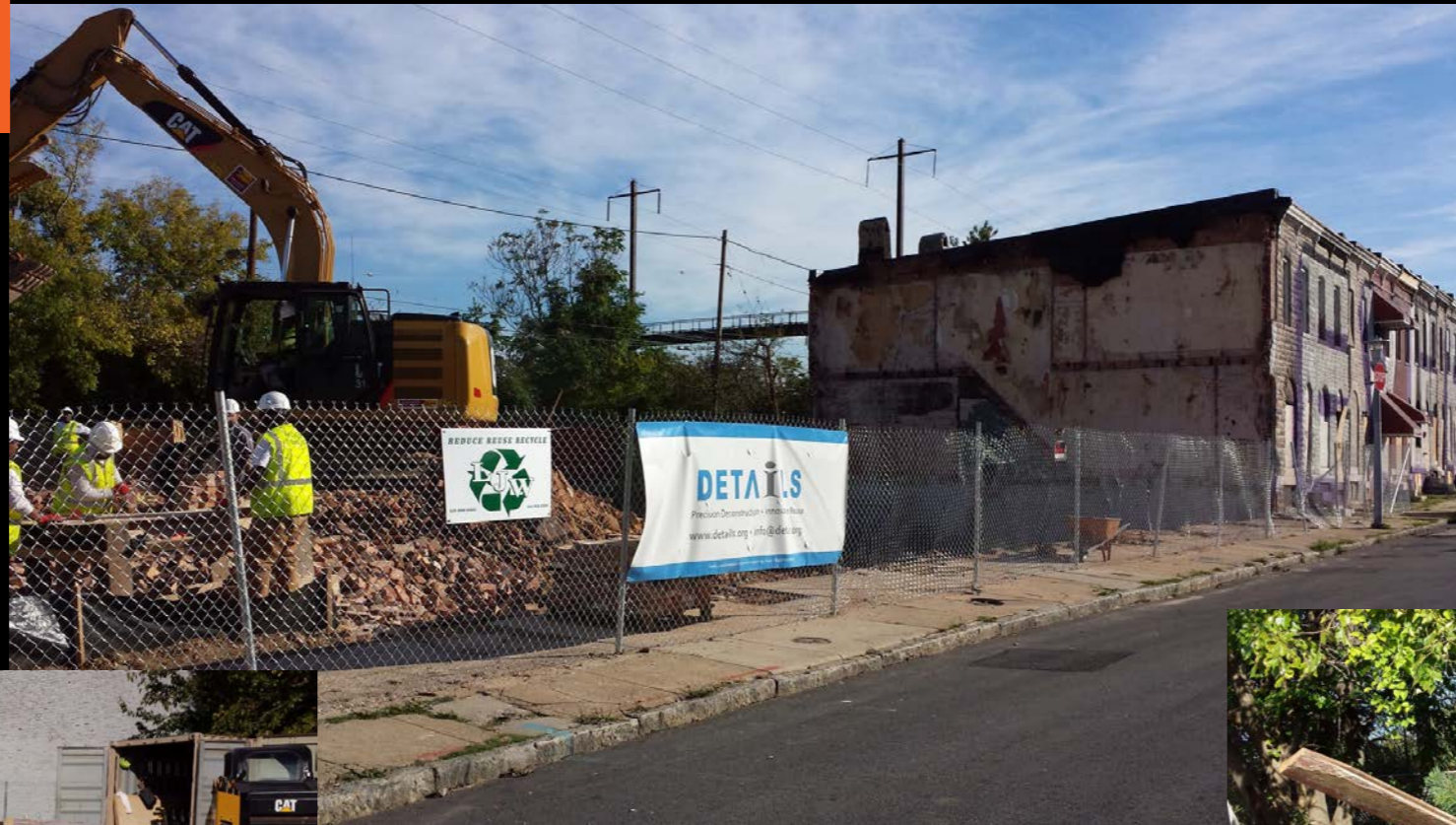
Federal

Non-profit

The Camp Small Zero Waste Initiative



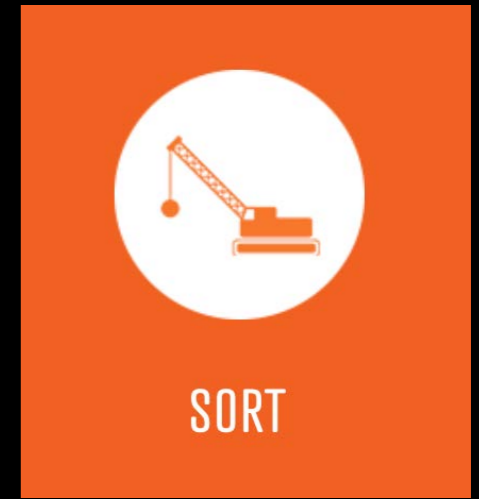
SALVAGE





SORT





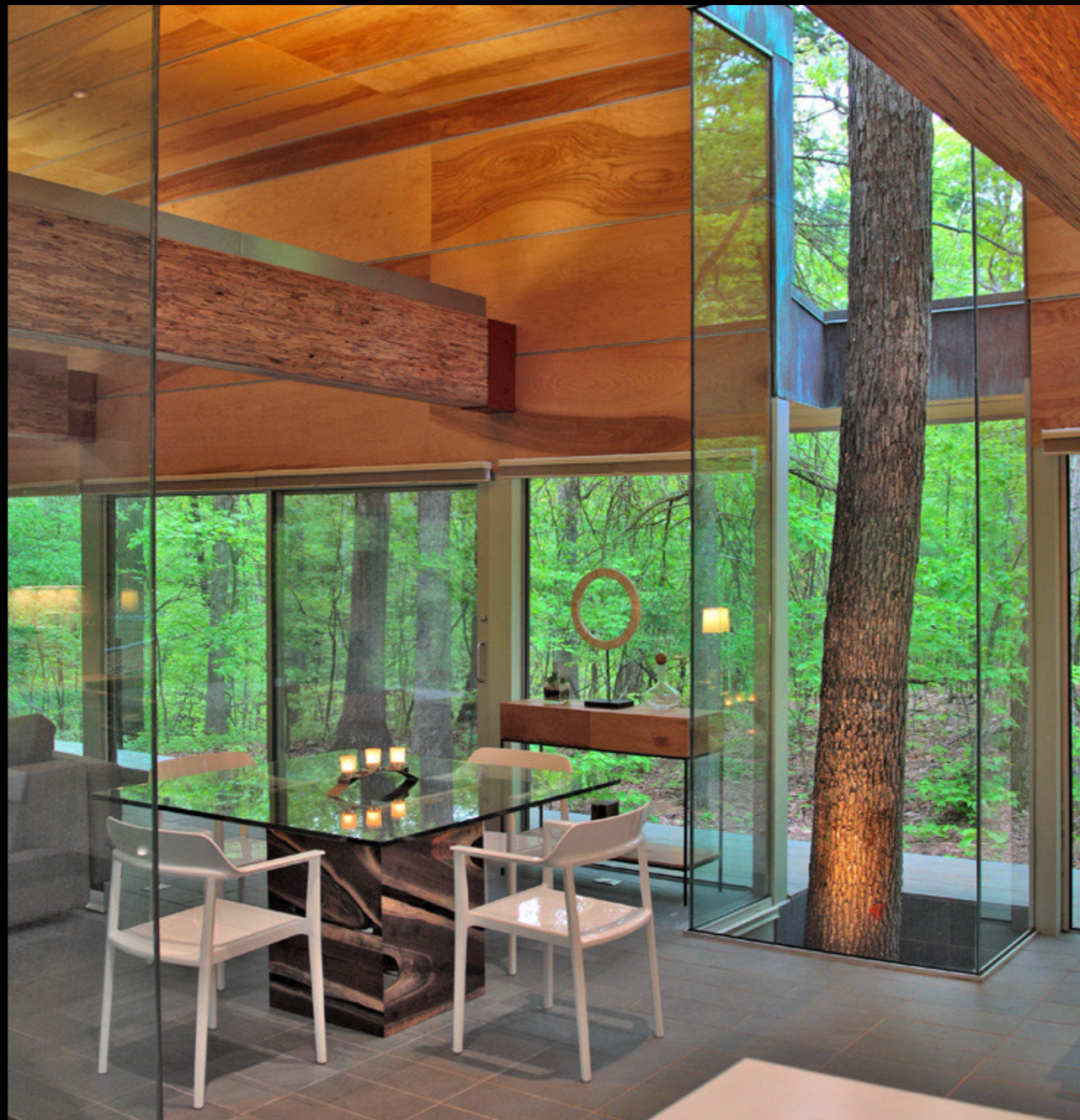
URBAN LOGGING



USE

OECustom

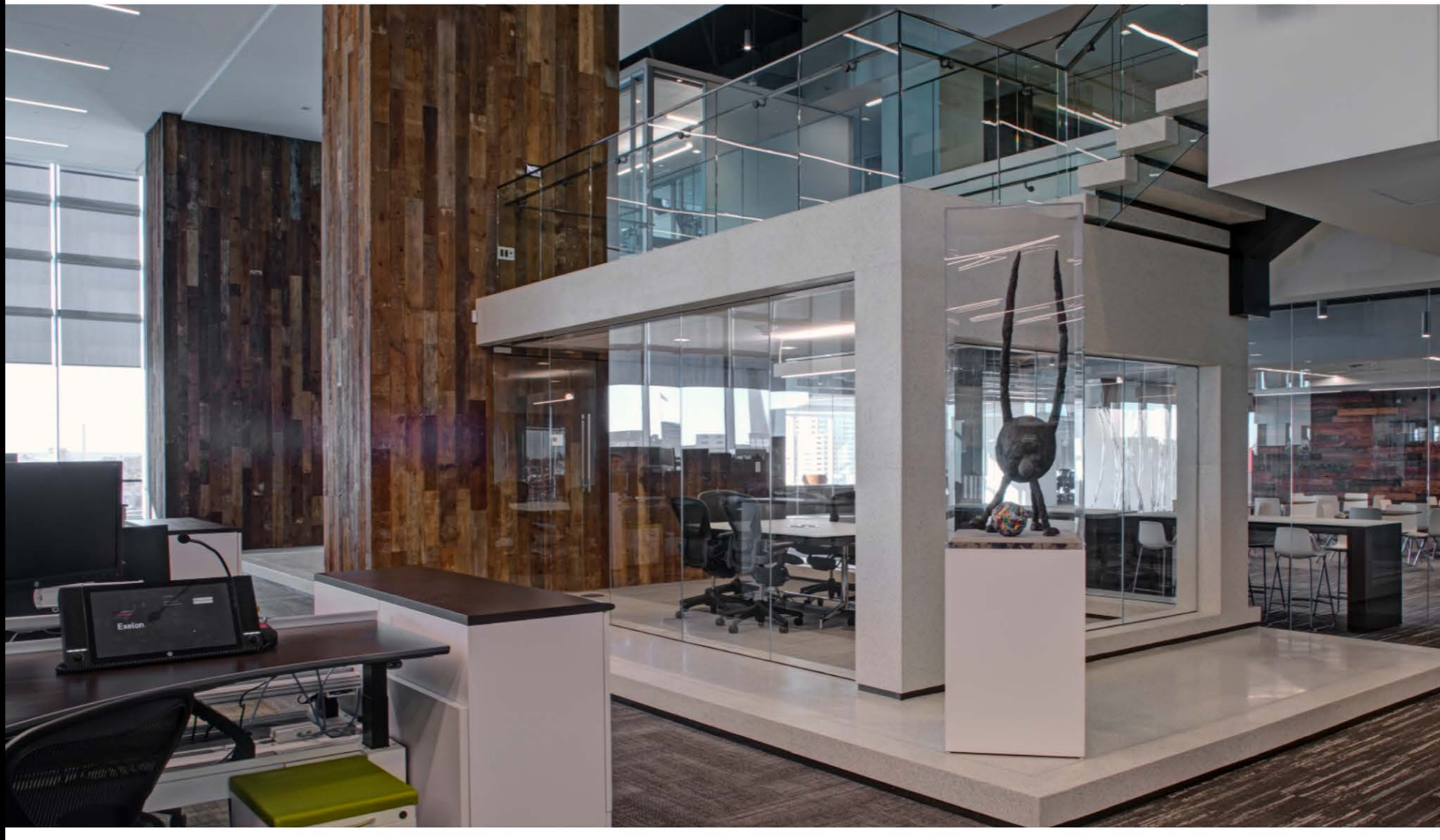
Fresh Cut



USE

Treincarnation

Fresh Cut - Residential



USE

Brick + Board

Deconstruction - Exelon (commercial)



Brick + Board

Deconstruction - Residential



USE

New opportunities for greening, jobs, markets

THE BALTIMORE SUN

FRIDAY JAN. 8, 2016

BREAKING SPORTS MARYLAND FREDDIE GRAY TRENDING OPINION OBITS ADVERTISING

Gov. Hogan announces \$700M plan to target urban decay in Baltimore



Governor Larry Hogan, along with Mayor Stephanie Rawlings-Blake, announced a partnership to demolish thousands of vacant buildings in Baltimore. Project C.O.R.E. is providing \$94 million to help transform these neighborhoods. (Kevin Richardson)

By **Luke Broadwater and Yvonne Wenger** · Contact Reporters
The Baltimore Sun

From this article



House Democrats to push legislation to help Baltimore
Dec. 22, 2015

Buildings - 123 houses
Bricks - 500,000
Wood - 158,000 be ft
Trained - 60
Presently on staff - 40

New contract
3 years
200 houses per year



Baltimore City Existing Green Network

Legend

- Growing Green Initiative Projects
- Bike Lanes
- Water
- Green Network
 - Tree Canopy
 - Parks
 - Golf Courses
 - Cemeteries



2015

Stephanie Rawlings-Blake
Mayor
Thomas J. Slesar
Director of Planning



Baltimore City Existing Green Network

Legend

- Bike Lanes
- Water
- Vacant Lot
- Vacant Building
- Green Network
 - Tree Canopy
 - Parks
 - Golf Courses
 - Cemeteries



2015

Stephanie Rawlings-Blake
Mayor
Thomas J. Slesar
Director of Planning

Baltimore's Opportunity to Create a Green Network



COUNT



SALVAGE



SORT



USE



**Baltimore Office
of Sustainability**
People · Planet · Prosperity



HUMANIM



**WE'RE JUST GETTING STARTED!
MORE TO COME IN 2016.**