Brownfields and Urban Agriculture

*The Convergence of Land Recycling and Food Policy*

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Mission: basic and applied research on the forces shaping metropolitan growth and development, with a special focus on:

- Resilient and Sustainable Communities
- Urban Regeneration

Signature projects:

- Sustainability Planning Lab
- Vacant Property Research Network
- Strong Cities, Strong Communities Fellowship Program
What Are Brownfields?

2002 Brownfield Revitalization Act: "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance pollutant or contaminant."

In practice, "presence or potential presence" is pervasive – these sites are everywhere in urban areas that have been previously developed, especially in older industrial cities (AKA Legacy Cities).
Continuum of Vacant Properties

- Substandard Housing
- Chronic Vacant Properties
- Greyfields
- Abandoned Buildings
- Brownfields
- Vacant Lots

Full or Partially Occupied  Unoccupied

Increasing levels of Owner Neglect and Market Weakness
The Complex Web of Brownfields Redevelopment

Liabilities & Challenges
- Environmental cleanup—costs and technical issues
- Legal liability extends to prospective purchasers
- Real property problems
- Weak market conditions

Assets & Assistance
- EPA’s legal liability protection, regulatory flexibility and BFs grants and programs
- State environmental cleanup programs
- Local govt. BFs coordination
- Brownfields redevelopment industry
Classic BF Redevelopment Projects—The First Generation

Portage Steel Plant in Portage, Michigan
The Greening of Brownfields—the Next Generation of BFs Projects

- Community led BFs projects
- EPA’s Area Wide Brownfields Pilots
- Bright Fields—DOE and EPA collaboration
- Urban Greening (Groundwork USA Model)

Strategic Lessons in Sustainable Community Building—the Groundwork USA Network (2013)
Urban Greening Characteristics

- Integrating nature with the urban fabric
- Localized initiatives led by CBOs and NGOs
- Preservation of natural resources to enhance quality of life
- Improved economic conditions that leverage greening to promote equitable development
- Public health as policy driver for urban greening—links physical activity & food security
Vacant Land as Stormwater Managers Partnership Project – Philadelphia Green and Philadelphia Water Department

Models for Stormwater Management on Reclaimed Vacant Land in Philadelphia

16,000s.f. Completion Fall 2004

3rd St. & Dauphin St. 22,500s.f. Completion Spring 2005
## Effects of Urban Greening Strategies on Home Values in Philadelphia

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjacent to Derelict Vacant Lot</td>
<td>-20%</td>
</tr>
<tr>
<td>Adjacent to Vacant Lot Transformed into a Clean &amp; Green Lot</td>
<td>+37%</td>
</tr>
<tr>
<td>&lt;= 50 feet of New Tree</td>
<td>+9%</td>
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</tbody>
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Conducted by Professor Susan Wachter - Wharton School - University of Pennsylvania

Funded by The William Penn Foundation (2006)
CORE ELEMENTS OF URBAN GREENING:
Urban Agriculture + Community Gardens

A process of cultivating and distributing food that is integrated into the urban ecological and economic system.

Philadelphia’s Greensgrow Farm

Seattle’s P-Patch
Emergence of the Food Policy Movement
Challenges to Greening Brownfields

1) Rules and regulations make greening brownfields projects more difficult and complex;

2) Markets and real estate finance drive most brownfields redevelopment; thus, private developers often ignore greening projects and smaller brownfields scattered across underserved neighborhoods;

3) Brownfields programs and policies designed for local government and private sector redevelopment and not greening projects led by community-based organizations (CBOs);

4) NGOs and CBOs involved with greening projects need capacity building assistance, better data on benefits of greening, and coordination of federal, state and local government programs and incentives.
Strategies for Facilitating Collaboration & Coordination

**Vacant Property Reclamation**

Suite of strategies:
- Land Banking
- Code Enforcement
- Information Systems
- Demolition
- Brownfield Redevelopment
- Housing and Environmental Courts
- Special Prosecution Units

**Intersection of Collaboration**

Collaborative Processes and Catalysts:
- Grants
- Leadership
- Nonprofit Intermediary
- Mission Alignment

Collaborative Actions:
- Policies & Plans
- Programs
- Projects

**Urban Greening & Sustainable Reuse**

Suite of strategies:
- Green Infrastructure
- Redevelopment Projects
- Community Gardens
- Urban Agriculture/Food
- Urban Forestry
- Vacant Lot Greening
- Parks/Open Space
Bright Ideas to Enhance Greening of Brownfields

- Urban Greening Institute
- CBOs as Brownfields Community Consultants
- Charter a Brownfields Nonprofit Assistance Center
- Making Demolition Dollars Cover Costs for Urban Greening Development and Maintenance.
- Coordinated Funding for Urban Greening.