

From Vacant Lots to Vegetable Plots:

Converting Brownfields to Urban Wealth



Brownfields are abandoned or underused spaces whose redevelopment may be complicated by real or perceived environmental contamination. In the U.S., there are approximately 450,000 (~5 million acres) Brownfield sites. Food insecurity is a major problem in urban areas across the U.S. More than 23.5 million people now live in low-income areas more than 1 mile from a grocery store and fresh, nutritious and affordable food. The “greening” of Brownfields spans a wide range of redevelopment strategies, including their conversion through **Urban Agriculture**—the practice of cultivating, processing and distributing food in or around a village, town or city. Integrated with regional and local food systems, urban agriculture can provide multiple social, financial, educational, environmental, and health benefits to these underserved, food-insecure communities.

Brownfields

- Pervasive in urban areas (large-scale sites and concentrations of smaller, scattered sites)
- Former industrial & commercial sites, service stations, warehouses and abandoned air strips & railroads
- Many types of pollution (chemicals, heavy metals, etc.) that contaminate soils, water and air
- Private & nonprofit Brownfield developers rely on state & federal programs for cleanup rules, financial incentives; work with community, regulators and redevelopers

Food Access and Food Insecurity

- U.S. food ecosystem has changed over recent decades: Larger portion sizes, more processed foods, decreased nutritional content and frequent exposure to all foods contribute to increased diet-related health problems
- People living in underserved areas tend to have diets high in fat and salt
- Low education levels are associated with unhealthy food purchasing patterns

What are the benefits of converting Brownfields to urban agriculture?

Financial

- Increases property value when Brownfields and vacant properties are redeveloped
- Costs the city less to maintain the property
- Increases economic activity (more local jobs and businesses; e.g., farm stands)

Social

- Provides residents with a greater sense of self-reliance, community, safety and well-being
- Decreases crime rate and rate of recidivism (lapsing back into crime)
- Teaches work/life skills to community members
- Builds intergenerational relationships and contributes to neighborhood stabilization

Health/Environmental

- Increases access and exposure to nutritious, fresh food
- Instills better health habits (e.g. physical activity, health screenings) in community members, especially children
- Improves air quality

Urban Garden Site Selection Criteria

- < 3,000 square feet
- Relation to local flood plains
- Optimal sun exposure
- Source of irrigation water
- Accessible by foot for community members
- Conduct an Environmental Site Assessment (ESA) for environmental contamination



Challenges and Opportunities

- What criteria do you develop and apply for selecting suitable sites for urban agriculture?
- What designs, treatments and controls do you put in place to prevent contamination?
- What strategies can we develop to streamline existing Brownfield policies and regulations to encourage greater greening of vacant properties and Brownfields?
- How can we create better coordination between local government, private sector and community-based organization redevelopment efforts?
- How does urban agriculture transform high-risk communities?
- How to best collect more data to show the benefits of Brownfield greening?
- Do the benefits of Brownfield redevelopment offset tax losses?
- How do you measure the success and contribution of green space and food producing land?
- How do you quantify the affect on public health?

Other Resources

- EPA Brownfields and Land Revitalization – www.epa.gov/brownfields
- EPA Urban Agriculture and Improving Local, Sustainable Food Systems – www.epa.gov/brownfields/urbanag/index.html
- USDA-ERS Access to Affordable and Nutritious Food – <http://tinyurl.com/qz6e2bl>
- USDA Food Compass – www.usda.gov/maps/maps/kyfcompassmap.htm
- Sustainable Community Development: Lessons from the Groundwork Trust Model – www.groundworkusa.org
- Community Guide to Brownfields Redevelopment – www.planning.org/research/brownfields/

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