

“An Integrated Assessment of Sustainability and Revitalization Outcomes of Greening Vacant Land”

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Megan Heckert is a visiting assistant professor in the environmental studies program of the tri-college consortium of Swarthmore, Bryn Mawr, and Haverford Colleges, where she introduces students to the wonders of geographic information systems (GIS). An urban geographer, she focuses on the use of GIS and spatial analysis to explore urban social issues. She is interested in urban sustainability and neighborhood revitalization, with a particular focus on how sustainability initiatives contribute to urban revitalization efforts. Her research has been published in such journals as *Environment and Planning A* and *Transactions in GIS*. In addition to her academic work, Heckert has served as a U.S. Peace Corps volunteer, worked for a national environmental nonprofit helping K–12 teachers to facilitate community-based service learning projects, and worked as business development manager and GIS analyst for Azavea, a geospatial software development company. She holds a bachelor of science in aquatic biology from Brown University and a master of arts in geography and doctorate in urban studies from Temple University.

Summary and Findings: The purpose of this study is to evaluate the impact of using greening—in which vegetation is planted and maintained—as an interim management strategy for vacant land in blighted urban communities. Three studies explored economic, environmental, and social justice impacts of a Philadelphia program that has, for more than a decade, turned vacant lots into temporary greenspaces. Ultimately, the Philadelphia Land Care (PLC) program is shown to increase surrounding property values, improve environmental conditions, and increase equity in access to greenspace in Philadelphia. These benefits are not uniform, however, and differ for neighborhoods across the city. Property values increased most in distressed neighborhoods and those where a greening was more concentrated and treated a larger percent of all vacant lots. Environmental benefits were strongest in areas with the most greened lots and those where lots had remained greened longest. Greenspace access increased in underserved areas, both in terms of access to any greenspace within one-half-mile walking distance of home and in terms of increasing total amount of nearby greenspace in areas with low access. Though the studies indicate benefits along all three dimensions of sustainability, they also highlight the potential for tensions and trade-offs between types of benefits, especially in the long term.

Implications for Policy and Practice: Greening vacant land can contribute to both urban sustainability and neighborhood revitalization. The economic benefits of greening vacant land are strongest when the greening is done in a more concentrated fashion and in distressed, but not the most distressed, neighborhoods. There are environmental benefits of planting trees with greening projects, but they are relatively small during the early years of the program. For significant environmental gains, the lots will need to remain undeveloped for long periods of time. Equity benefits of greening will depend on existing distributions of greenspaces, but vacant land may provide a means for increasing greenspace in underserved areas while longer-term greenspace planning and funding efforts are advanced. Though greening offers economic, environmental, and equity benefits, not all will be felt in every neighborhood, so targeted implementation may be necessary to ensure that desired outcomes are realized. There may also be both short- and long-term trade-offs between different types of benefits that should be carefully considered when planning greening programs on vacant land. Greening should be seen as a viable approach to management of vacant land, especially if the land is expected to remain vacant for a considerable length of time.