

PENNIUR WORKING PAPER

Reducing Crime by Changing Places:

Assessing the Benefits of Abating Vacant and Abandoned Land in Urban Spaces

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Today's cities can curb the incidence of crime by abating blighted vacant land. The benefits are clear, and a useful strategy is to give priority to programs that are straightforward to implement, are scalable to large populations, and are not expensive to sustain. While addressing blighted vacant land has been advocated as a crime-prevention policy for decades, there are now examples of successful programs that cities can inexpensively replicate to reduce crime and encourage residents to remain in their neighborhoods for decades to come.

Philadelphia is one such example. Vacant and abandoned urban spaces are an outcome of the 1960s and 1970s shift from an industrial to a service-based economy, the movement of people to the suburbs, rising crime, urban riots, and "block-busting," all of which led to the spiral of urban decay. Cities such as Boston, New York, San Francisco, and Seattle have been able to successfully rebound from the deindustrialization of the U.S. economy by attracting technology and finance industries. But Philadelphia, like Baltimore, Cleveland, and St. Louis, has a legacy of blight and abandonment that had come to full scale by the 1990s.

In the later years of that decade, residents of the Kensington neighborhood in Philadelphia grew tired of the eyesore of vacant lots, the drug trafficking and associated violence, and other unwanted aspects of these places around their homes. They teamed up with the Pennsylvania Horticultural Society and created a revitalization effort called "land and care," now referred to as the Philadelphia LandCare (PLC) program. When asked about violence and unwanted activity in their neighborhoods, these residents and others across the city are on record as consistently saying, "If I could change things I would. There wouldn't be so many vacant lots [and] abandoned houses."

PLC is simple and was designed to be applied across the neighborhood. Trash and debris are removed from a vacant lot. The land is then graded, and grass and a few trees are planted. A low wooden post-and-rail fence is installed with openings to permit residents access to the newly greened spaces. The fence prevents illegal dumping of garbage and construction debris; it is also a visual sign that someone is maintaining the property. The result is a small "pocket park." The rehabilitation of such lots takes less than a week to clean and green. The lots are maintained through twice-monthly cleaning, weeding, and mowing during the growing season (April through October). The cost to clean and green a typical lot is roughly \$1,000-\$1,300, along with \$150 per year to stabilize the lot through biweekly cleaning and mowing.

Since its inception in 1996, the Kensington neighborhood's PLC program has expanded through partnerships with local contractors and city agencies to the entire city, transforming more than 12,000 vacant lots and over 18 million square feet of land. Funds to support PLC are made possible by local community groups, the city, and private philanthropy. Philadelphia's Department of License and Inspection (L&I) provides the legal mechanism for the PLC cleaning and greening abatement. Once a property is deemed to be in violation of city ordinances about vacancy, L&I contacts the owner of record. If the owner does not respond, L&I affords PLC the right to enter the property and green the vacant lot.

PLC cleaning and greening offers a unique opportunity to document what happens when abandoned and overgrown lots are rehabilitated. In our first study, we examined the effect of PLC remediation on crime between 1999 and 2008. In these years, PLC cleaned and greened roughly 8% of Philadelphia's vacant lots (nearly 7.8 million square feet). We compared changes in crime around cleaned and green PLC lots with those of nearby vacant lots that remained blighted and were otherwise similar (e.g., lots with similar square footage, age of abandonment, and in neighborhoods with similar economic conditions). We found that crime had dropped by a statistically significant amount after the PLC cleaning and greening. In particular, assaults and assaults with guns dropped by a statistically significant amount (decreases of about 4% and 9% respectively) around vacant lots after they had been remediated. We did our best to address selection effects in this study, or the concern that PLC may have selected vacant lots to remediate that were somehow different from lots that remained blighted.

To provide stronger evidence that the PLC program was truly effective at reducing crime, we conducted a citywide, controlled experiment of the cleaning and greening program. With research funding provided by the National Institutes of Health and the Centers for Disease Control, we randomly assigned more than 500 blighted vacant lots to either receive PLC cleaning, greening, and maintenance or to remain in the usual state of blight. We found a significant reduction in crime around PLC-treated lots relative to lots that remained blighted. In particular, we found significant reductions in shootings (8%), assaults with guns (4.5%), and nuisance crimes (7%) such as public drinking and illegal dumping. The effects were even larger for neighborhoods below the poverty line, with the PLC treatment leading to a 29% reduction in gun assaults and a 28% reduction in nuisance crimes. This evidence was consistent with our earlier study but is more convincing because the experiment ensured that treated lots were identical to the lots that remained blighted, controlling for anything we could measure that existed beforehand (e.g., crime and unemployment nearby).

A survey of residents living in the areas that were part of the experiment showed that those living near greened and cleaned lots reported significantly fewer concerns about their personal safety and an increase in the use of outside space for relaxing and socializing, compared with residents living near lots that remained blighted. Collaborators of ours, who inspected hundreds of PLC-remediated lots, noted the presence of tables and chairs, gardens, barbeques, and swings. The PLC program provides clear evidence that remediating vacant lots reduces crime and improves what NYU sociologist Eric Klinenberg calls the "social infrastructure": basic needs inherent in all city neighborhoods.

If remediating vacant lots simply displaced crime to nearby places, there would be no citywide benefit. When we examined areas at farther distances from the vacant lots that had been cleaned and greened, we did not see evidence of rising crime. This was not surprising, as a review of studies of place-based interventions finds that they are about as likely to find a diffusion of crime *reductions* to nearby places, as they are to find displacement. The opportunity to engage in crime facilitated by vacant lots may not easily be transferred to nearby places after lots have been cleaned and greened.

Beyond the reduction of crime and fear, the PLC program provides economic opportunities. PLC relies on a network of 18 community organizations that hire local landscape contractors to perform the work; these contractors hire individuals from the same communities to clean, green, and maintain the properties. As it has grown from a pilot project in the Kensington neighborhood to a citywide effort, the program has brought jobs and future career opportunities in landscape management to individuals in some of Philadelphia's most economically disadvantaged communities. This has helped PLC expand to every area in need in Philadelphia, and it allows the resources devoted to vacant-lot abatement and maintenance to be spent in the affected communities.

To remediate the remaining 30,000 vacant lots in Philadelphia would cost \$34–\$45 million and about \$5 million to maintain. The money spent doing the work would stay in the community, employing individuals with a decent wage and a semiskilled occupation that can spur economic self-sufficiency and entrepreneurship. The economic benefits of reduced crime are also clear. The results from our research imply that one can invest about \$15,000 in the PLC program to avert a shooting. Our overall calculations suggest that \$1 invested in the PLC program returns \$26 in net benefits to taxpayers from reductions in gun violence, and as much as \$333 in general costs to society, such as pain and suffering costs associated with a gun assault.

Programs similar to PLC are underway in Youngstown, Ohio, and Detroit and Flint, Michigan, and are now being launched in New Orleans and Chicago. In Youngstown, a city that has experienced a 30% population loss between 1990 and 2010 and has a notable number of abandoned spaces, local residents and community groups apply to the Youngstown Neighborhood Development Corporation (YNDC) to remediate vacant lots. The applicants determine the type of remediation—typically, community gardens, but also urban farms or orchards, native plantings, athletic fields, and green spaces. Applicants who receive the funds are responsible for the



upkeep. Results from an evaluation of nearly 250 vacant lots in Youngstown that were remediated compared with nearly a thousand vacant lots (in similar neighborhoods that remained blighted) found that the program reduced violent and property crime offenses in the nearby areas.

In Flint, the local land bank, Genesee County Land Bank Authority (Clean & Green, or C & G), which has ownership over some 15,000 vacant properties, has funding to support neighborhood groups that submit a proposal to remediate and maintain vacant lots. Like Philadelphia's PLC, the C & G program in Flint requires neighborhood groups that receive funding to clean and mow the lot once every three weeks and perform additional maintenance if they desire. A study compared streets in the year before and after the C & G program was implemented with streets that had un-remediated vacant parcels of land. It found significant reductions in violent crimes after the program had been implemented: roughly a 39% reduction in assaults.

The results from the studies of vacant-lot remediation programs in Philadelphia, Youngstown, and Flint show that these programs can be designed to be scalable to entire cities and replicable across different settings. City governments like Baltimore and Chicago have also begun partnerships with community groups and local residents to clean and green blighted and abandoned lots.

Today, a growing body of high-quality studies demonstrates that abating vacant land in an urban neighborhood can dramatically reduce crime. The changes do not require large-scale structural investments from taxpayers. Rather, they require local partnerships between landscape workers, contractors, and municipal organizations to simply and quickly clean up blighted blocks—opportunities that local residents often welcome, if not outright request. Given that crime and related problems are highly concentrated in the same places, this means that strategic planning can have large-scale population benefits. Imagine a likely scenario where a hundred blocks in a city are responsible for 20% of all serious crime. Addressing blight on these blocks alone could translate into a 5% to 10% reduction in crime for the entire city. As a means of reducing crime and the fear that it creates in urban neighborhoods, changing places is often easier than changing people.