



NPCR

NEW PARTNERS FOR
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The Brownfield Opportunity Areas Program:

Smart Investments Laying the Groundwork for Economic Development

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The New York State Brownfields Law, passed in 2003 following years of planning and advocacy, created the landmark Brownfield Opportunity Areas (BOA) program. The BOA program's area-wide approach was conceived as a tool to fight sprawl and achieve economic development and environmental justice by addressing entire neighborhoods and the clusters of brownfields within those neighborhoods, including the conditions fueling abandonment and decay. At its heart, the area-wide approach is about creating value. It recognizes that a "one-parcel-at-a-time" strategy will not result in the revitalization of distressed areas, and will frequently invite dirty or stigmatizing uses such as garbage transfer stations, sewage treatment plants, and fossil fuel power plants.

Instead, the BOA area-wide approach can position a community to become part of the emerging green economy. It can reverse the cycle of disinvestment and decay by creating a plan for an entire community, including housing, shops, small manufacturing, green jobs, public amenities, and infrastructure improvements such as street lights, trees, parks, sidewalks and roadways. These are the things that together define functional communities and livable neighborhoods; that encourage current residents to remain while also attracting new residents.

In April 2011, DOS awarded \$6.5 million in new BOA grants, bringing the total to \$34 million. This investment in BOA communities is projected to create 30,000 to 50,000 jobs across NYS, generate an annual wage-related tax flow of \$165 million and leverage an estimated \$440 million in additional investments.

Another key aspect of the area-wide BOA approach is its impact on sprawl and unplanned development. Increasingly, municipal and state governments cannot afford the new transportation, sewage, water, and other infrastructure required for the continued development of greenfields – both farmland and open space. Scarce public resources must be focused to revitalize already existing, but aging infrastructure in urban areas and downtowns.

There are currently 110 communities across New York participating in the BOA program, with more expected soon. The municipal governments and community based organizations that are leading BOA initiatives are giving hope to residents of some of New York's most distressed neighborhoods. It has provided them a voice in determining the post-cleanup future of their communities, and the area-wide approach to community revitalization is becoming a national model for community revitalization.

The BOA Area-wide Approach: Smart Investments Laying the Groundwork for Economic Development

Brownfield remediation and redevelopment is a powerful driver for economic growth and stability. Brownfield investments are creating commercial anchors and vital new urban and downtown places, adding jobs, increasing property values and strengthening local tax bases. The BOA program, administered by the New York State Department of State (DOS), is laying the groundwork for this boost in economic growth by providing the necessary guidance, expertise and funding to transform 53,000 acres of property affected by over 4,900 brownfields.

To date, 149 BOA grants have been awarded, totaling \$34 million, to 110 communities. Because the BOA program is relatively new and revitalization efforts take time, an analysis of the program benefits is necessarily preliminary and will need refinement as the program matures. Nonetheless, a review of the national data suggests that the benefits of BOA are wide-ranging and significant. Successful revitalization of the 110 communities in the BOA program is projected to create 30,000 to 50,000 jobs across urban, suburban and rural areas.^{1 2} These jobs are projected to generate an annual wage-related tax flow of up to \$165 million.³ In addition, the \$34 million in BOA grants are projected to leverage an estimated \$440 million in additional investments.⁴ These projected benefits are likely to be conservative. The estimates do not fully account for the synergistic economic or “linchpin” effect that can be created by the momentum of several redevelopment projects occurring in one area with the collective support of the community.⁵

Revitalizing New York State

Communities burdened by multiple brownfield sites are often trapped in a downward spiral of disinvestment and decay and require a far more comprehensive approach to revitalization than the traditional site-by-site approach. The BOA program provides communities with funding and the tools to assess the economic and environmental conditions associated with brownfield impacted areas, to identify and prioritize community supported redevelopment opportunities, to garner the collective support of local, state and federal agencies and to advance and implement priority projects. By looking at areas as a whole, the most productive, innovative, and appropriately scaled end uses will be planned, all while mitigating historic, current, and future environmental injustices.

Site revitalization efforts create economic benefits and these same benefits accrue to and catalyze additional paybacks to communities that are implementing area-wide brownfield redevelopment initiatives. The area-wide approach also creates highly favorable conditions for “the linchpin” effect in which brownfield revitalization is the catalyst that leads to the transformation of whole neighborhoods and districts.⁶ It is the transforming of proximate abandoned or underused properties that creates a chain-reaction of positive events, and when several properties within a defined area are redeveloped, the chain reaction is that much more powerful. While the linchpin effect of the BOA area-wide program has not been quantified, conservative conclusions about the impacts of brownfield development via area-wide planning can be drawn based on existing studies of the benefits of individual site redevelopment. Summarized below are several important economic development indicators that verify the significant value of the public dollars invested in the area-wide BOA program.

Jobs: Revitalization efforts create pre-development jobs associated with redevelopment and community revitalization planning; site investigation, remediation and construction jobs and post-development commercial and industrial jobs associated with the new land use.

- **Pre-development Job Creation:** The DOS investment of \$34 million in the BOA program is projected to create and/or maintain 1,100 pre-development jobs.⁷ These include jobs for local community based organizations, urban designers and planners, environmental scientists, economic consultants, and other personnel involved in BOA planning and site investigation.⁸ Such additional jobs may include architects, landscape architects, transportation and infrastructure engineers, marketing and real estate consultants and archaeologists.

- **Post-development Job Creation:** It is projected that each BOA study area has the potential to create between 275 and 455 jobs.⁹ To date, there are currently 110 BOA study areas, using job creation statistics, this translates to between 30,000 and 50,000 jobs in BOAs across New York State.¹⁰ These numbers are conservative because they do not take into account the “linchpin” or synergistic effects that redevelopment of strategic sites will have on the larger BOA study area.

Preservation of Open Space/Greenfields: The BOA program is preserving valuable open space by preventing new development on an estimated 12,375 acres of greenfields.¹¹ Preservation of greenfields provides a host of benefits including improvements to air quality and maintenance of open space, both of which contribute to a community’s overall health and quality of life.

Public Investment Leverages New Investment: The BOA program is laying the groundwork for leveraging between \$4 million and \$10 million in private and public investment in each study area.¹² With 110 BOA study areas, this could conservatively lead to an estimated \$440 million in investments across the state.

Property Values: Studies show that brownfield redevelopment leads to a 5 percent to 15 percent increase in property values within $\frac{3}{4}$ mile of the site.¹³ An increase in BOA study area property values is an important economic benefit that increases homeownership values and also increases tax revenues. However, it is also important to note that redevelopment can have the unintended consequence of raising rents and causing displacement, which is a critical issue in low- and moderate-income neighborhoods, and underscores the need for authentic community engagement in the area-wide approach.

Generation of Local Tax Revenue: As property values increase, both on the redeveloped properties and the adjacent properties, so will local tax revenues. With the conservative assumption that local tax revenues only increase on the five strategic sites in a BOA study area, local tax revenues within a typical BOA study area are estimated to increase by about \$3 million annually.¹⁴

Savings in Transportation Related Externalities: It is projected that each BOA study area will save about \$675,000 in transportation-related indirect costs or up to \$74 million in savings across New York’s 110 BOA communities.¹⁵ Redevelopment on denser urban brownfields where public transit options are available means less vehicle usage and fewer vehicle miles traveled relative to new development on greenfields. Therefore the indirect costs -- externalities -- related to transportation, such as parking, accidents, and pollution related health costs, are lower on brownfields redevelopment projects than on greenfields development.

Savings in Infrastructure Investment: Brownfields typically have some infrastructure, such as sewers and water lines, in place, whereas greenfields have none. As a result, redevelopment of brownfields yields substantial savings in infrastructure investment. Recent efforts to quantify the difference suggest that the ability to reuse infrastructure on brownfield sites may save 10 to 35 percent on the infrastructure costs associated with development.¹⁶

Environmental and Social Benefits: It is also important to recognize the social and environmental benefits of the brownfields area-wide approach and how these benefits can indirectly translate into economic benefits. For example, building a park on the waterfront provides waterfront access and additional green/open space, which can improve a community’s health and quality of life and reduce medical expenses. These benefits are difficult to quantify, but they are an important factor that should not

be over-looked in assessing the total value of area-wide redevelopment activities and determining the value of public investment.

Environmental Benefits	Social Benefits
<ul style="list-style-type: none"> • Contamination removed/site remediated • Protection of adjacent natural resources • Green/more sustainable redevelopment • Incorporation of new parks and other amenities • Improve/protect public health • Improvement to air quality • Improvements in storm water management/quality 	<ul style="list-style-type: none"> • Improvement to neighboring properties and businesses • Improve/increase waterfront access • Overall quality of life improvement • Preserve and increase green space • Additional/improved public space and facilities • Downtown improvement • New market rate housing • Affordable and special use housing • Reuse of existing infrastructure • Blight mitigation • Sprawl reduction

About NPCR

New Partners for Community Revitalization, Inc. (NPCR) is a 501c3 nonprofit organization formed to advance the revitalization of New York’s communities with a particular focus on brownfield sites in and proximate to low- and moderate-income neighborhoods and communities of color. The creation of NPCR as an independent nonprofit organization emerged out of a stakeholder process that began in 2001. Amid the multi-year policy debate that surrounded the passage of brownfields legislation in NYS it was recognized that low- and moderate-income (LMI) areas could be left behind without an organization devoted to developing programs and policies specific to LMI communities.

NPCR Program Overview

NPCR is carrying out a multi-pronged initiative which was developed through on-the-ground work with community based groups, nonprofit and for profit developers, environmental justice organizations, community lenders, and nationwide research on innovative programs. NPCR’s activities occur in two general areas: the provision of technical and financial assistance to brownfield redevelopment projects and to Brownfield Opportunity Areas Program grantees; and efforts to create and improve NYC, NYS and federal programs and policies that comprise the infrastructure for the brownfield redevelopment arena. In addition, NPCR is widely recognized as being instrumental in the conceptualization and creation of NY’s area-wide Brownfields Opportunity Areas (BOA) program, intended to revitalize low-income neighborhoods burdened by multiple brownfield sites. Since 2003, when the NYS Brownfields Law was passed, NPCR has worked to secure resources for communities participating in the BOA program, including \$34 million awarded by NYS to 110 communities; and to strengthen State and City policies to provide preference and priority for the implementation of BOA revitalization strategies. For more information about NPCR financing, technical assistance, training and policy work, please see our web site at www.npcr.net.

END NOTES

This report was drawn from NPCR's January 2011 Report, Smart Growth Outlook 2011: Challenges and Opportunities in Brownfields Area-wide Planning & Implementation, which was authored by Jody Kass, Laura Truettner, John Fleming and Jeff Jones and is available on NPCR's website at www.npcr.net. It has been revised to reflect the April 2011 BOA funding awards.

¹It may be conservatively assumed that five brownfield sites per BOA study area will become strategic sites that may be eligible for direct local, state or federal funds. With that assumption, and the Northeast-Midwest Institute (NEMW) statistic that, on average, each brownfield site has the potential to create 91 jobs, the five sites within each BOA Study area have the potential to create 455 jobs. Given that as of May 2011, there are 110 BOA study areas in NYS, this translates to 50,050 jobs. (NEMW, 2008. The Environmental and Economic Impacts of Brownfields Redevelopment available at: <http://www.nemw.org/index.php/policy-areas/brownfields/environmental-and-economic-impacts-of-brownfields-redevelopment>).

² Again, it may be conservatively assumed that five brownfield sites per BOA study area will be strategic sites that may be eligible for direct local, state or federal funds, and assuming that each of the five brownfields in each study area is close to the national average of 5 acres, 25 acres could be developed per BOA study area. With that assumption, and the statistic developed by Howland (2007), that on a national basis, 10 to 11 jobs are created per developed acre, up to 275 jobs would be projected for each BOA Study area. There are currently 110 BOA Study areas in NYS, and at 225 jobs per study area, this translates to 30,250 jobs (Howland, Marie, 2007. Employment Effects of Brownfields Redevelopment, What Do We Know from the Literature? Journal of Planning Literature, 2007, vol. 22, p. 91 available at <http://jpl.sagepub.com/cgi/reprint/22/2/91>)

³ Howland's research shows that economic benefits estimated using a dynamic simulation model predict that on a national basis, 10 to 11 jobs are created per developed acre with an annual tax flow of \$5,470 per job. In this case, assuming that each of the five brownfields in each BOA study area is close to the national average of 5 acres, 25 acres would be developed per BOA study area creating 275 jobs and an annual tax flow of \$1.5 million per BOA study area for a total of \$165 million from 110 BOA study areas. (Howland, Marie, 2007. Employment Effects of Brownfields Redevelopment, What Do We Know from the Literature? Journal of Planning Literature, 2007, vol. 22, p. 91 available at <http://jpl.sagepub.com/cgi/reprint/22/2/91>)

⁴ NEMW estimates that every \$1 of public brownfields funds leverages between \$8 and \$20 of total investments. Therefore, if each BOA study area were conservatively to receive \$100,000 in public funds for each of five sites, the total investment of \$500,000 in public funds could leverage between \$4,000,000 and \$10,000,000 for each study area. Using the low end of this range, \$440 million in total investments would be leveraged across 110 BOA study areas. (NEMW, 2008. The Environmental and Economic Impacts of Brownfields Redevelopment available at: <http://www.nemw.org/index.php/policy-areas/brownfields/environmental-and-economic-impacts-of-brownfields-redevelopment>).

⁵ NEMW, 2008. The Environmental and Economic Impacts of Brownfields Redevelopment available at: <http://www.nemw.org/index.php/policy-areas/brownfields/environmental-and-economic-impacts-of-brownfields-redevelopment>.

⁶ Ibid and EPA, 2003. For EPA's Brownfields Programs, "Green" Refers to More than the Environment available at: http://www.epa.gov/swerosps/bf/success/Green_Money.pdf

⁷ NYC commissioned an analysis of job creation associated with PlaNYC and of particular interest for this report is the estimate of jobs created in connection with the Local Brownfields Cleanup Program (LBCP) and the Brownfields Incentives Grant (BIG) Program. The report, prepared by The Louis Berger Group, Inc. provides an estimate of the jobs created in connection with implementing the LBCP and conducting investigative and other activities under the LBCP, it does not consider jobs created after redevelopment. The report, entitled "Analysis of Job Creation in PlaNYC Final Report" is available at http://www.nyc.gov/html/om/pdf/2008/pr110_planyc_job_creation_analysis.pdf. Berger estimates that OER's \$15 million leveraged 500 jobs, by a simple ratio, DOS's \$34 million would leverage 1,133 jobs. While the analysis is not directly comparable because some of OER's money is set aside for incentive bonuses, both grants provide funds for the hiring of consultants to conduct work on behalf of the developer/grantee and so were deemed similar for the intent of this report.

⁸ "Louis Berger Group, March 2008, Analysis of Job Creation in PlaNYC Final Report, available at http://www.nyc.gov/html/om/pdf/2008/pr110_planyc_job_creation_analysis.pdf

⁹ See footnotes 1 and 2 above using information from NEMW, 2008. The Environmental and Economic Impacts of Brownfields Redevelopment available at: <http://www.nemw.org/index.php/policy-areas/brownfields/environmental-and-economic-impacts-of-brownfields-redevelopment>) and from Howland, Marie, 2007. Employment Effects of Brownfields Redevelopment, What Do We Know from the Literature? Journal of Planning Literature, 2007, vol. 22, p. 91 available at <http://jpl.sagepub.com/cgi/reprint/22/2/91>.

¹⁰ Data from NEMW and Howland yield a range of 30,250 to 50,050 jobs and the lower of the estimates may be more realistic when urban areas are taken into consideration. In urbanized areas, where densities are higher and properties are smaller, the job creation statistic should be adjusted for size. In NYC, it is conservatively estimated that 10 to 11 jobs are created per half acre of brownfield development (The NYC Mayor's Office of Environmental Remediation has established a Local brownfield Cleanup Program and will begin collecting job creation statistics on each site that enters the program in order to more accurately quantify the economic benefits of redevelopment). NYC currently has 18 BOA study areas and assuming that NYC brownfield sites are, on average, one acre in size, and that there are five brownfield sites within each BOA study area, the sites in all 17 BOA study areas would generate 1,980 jobs in NYC.

¹¹ According to NEMW, 4.5 acres of greenfields are preserved for every acre of brownfields redeveloped. Theoretically, if there are 110 BOA Study Areas in NYS, each with five-five strategic sites that are redeveloped, then the BOA Program has or will preserve 112.5 acres of greenfields per BOA study area or 12,375 acres state-wide.

¹² See Endnote 4

¹³ NEMW, 2008. The Environmental and Economic Impacts of Brownfields Redevelopment available at: <http://www.nemw.org/index.php/policy-areas/brownfields/environmental-and-economic-impacts-of-brownfields-redevelopment>)

¹⁴ Based on a review of brownfield projects in the 2007 USCM survey, NEMW estimated an average local tax generation of \$626,000 per site (NEMW, 2008. The Environmental and Economic Impacts of Brownfields Redevelopment available at: <http://www.nemw.org/index.php/policy-areas/brownfields/environmental-and-economic-impacts-of-brownfields-redevelopment>)

¹⁵ According to NEMW, research by De Sousa in Toronto, Canada, determined that the external costs associated with transportation (ie parking, accident, air pollution and health costs) were about \$27,000/acre lower for brownfields redevelopment in the city than for greenfields development. Assuming there are five five-acre strategic sites within each BOA study area, or a total of 25 acres, that equates to \$675,000 in savings per study area and \$74 million in savings across 110 study areas. NEMW, 2008. The Environmental and Economic Impacts of Brownfields Redevelopment available at: <http://www.nemw.org/index.php/policy-areas/brownfields/environmental-and-economic-impacts-of-brownfields-redevelopment>)

¹⁶ NEMW, 2008. The Environmental and Economic Impacts of Brownfields Redevelopment available at: <http://www.nemw.org/index.php/policy-areas/brownfields/environmental-and-economic-impacts-of-brownfields-redevelopment>)