2000

Building on Brownfields: A Catalyst for Neighborhood Revitalization

Gabriel A. Espinosa

Follow this and additional works at: https://digitalcommons.law.villanova.edu/elj

Part of the Environmental Law Commons

Recommended Citation
Available at: https://digitalcommons.law.villanova.edu/elj/vol11/iss1/1

This Article is brought to you for free and open access by the Journals at Villanova University Charles Widger School of Law Digital Repository. It has been accepted for inclusion in Villanova Environmental Law Journal by an authorized editor of Villanova University Charles Widger School of Law Digital Repository.
BUILDING ON BROWNFIELDS: A CATALYST FOR NEIGHBORHOOD REVITALIZATION

GABRIEL A. ESPINOSA†

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>II. ORIGIN OF BROWNFIELDS</td>
<td>5</td>
</tr>
<tr>
<td>A. RCRA - Resource Conservation and Recovery Act</td>
<td>5</td>
</tr>
<tr>
<td>B. CERCLA - Comprehensive Environmental Response Compensation and Liability Act</td>
<td>6</td>
</tr>
<tr>
<td>C. The Brownfields Problem</td>
<td>8</td>
</tr>
<tr>
<td>III. DESTIGMATIZING BROWNFIELDS DEVELOPMENT</td>
<td>10</td>
</tr>
<tr>
<td>A. State and Local Brownfields Initiatives</td>
<td>11</td>
</tr>
<tr>
<td>B. Brownfields Pilot Programs</td>
<td>13</td>
</tr>
<tr>
<td>C. Brownfields Development Controversy</td>
<td>15</td>
</tr>
<tr>
<td>IV. ENVIRONMENTAL JUSTICE</td>
<td>15</td>
</tr>
<tr>
<td>A. NEJAC - National Environmental Justice Advisory Council</td>
<td>16</td>
</tr>
<tr>
<td>B. NEJAC Public Dialogues</td>
<td>18</td>
</tr>
<tr>
<td>V. PROFILE OF A SUCCESSFUL BROWNFIELDS DEVELOPMENT</td>
<td>20</td>
</tr>
<tr>
<td>A. Two Tales of One City</td>
<td>20</td>
</tr>
<tr>
<td>B. Urban Renewal: Promise and Skepticism</td>
<td>23</td>
</tr>
<tr>
<td>C. Environmental Cleanup</td>
<td>25</td>
</tr>
<tr>
<td>VI. POTENTIAL FOR NEIGHBORHOOD REVITALIZATION</td>
<td>26</td>
</tr>
<tr>
<td>A. Small Business Initiative</td>
<td>27</td>
</tr>
</tbody>
</table>

† Gabriel A. Espinosa practices in California, and works for CB Richard Ellis, Inc. Mr. Espinosa is a 1999 graduate of Southwestern University School of Law, in Los Angeles, CA. Mr. Espinosa would like to acknowledge his wife, Laura, for her encouragement and inspiration, and Professors James Kusher and Eileen Guana for the enthusiasm they bring to the study of Land Use & Planning and Environmental Law.
I. Introduction

"[T]here are literally hundreds of thousands of old, neglected industrial sites now popularly called 'brownfields,' that can be redeveloped . . . . Protecting our environment in the urban area can go hand-in-hand with redevelopment. It can create jobs and at the same time make more people want to live in the cities of America again."¹

A popular anecdote, discussed in dispute resolution circles, depicts two parties arguing over a single orange. Both parties want the entire orange and are unwilling to negotiate a compromise or settle for anything less than the entire orange. In reality, however, neither party needs the entire orange to achieve its objective. One party wants only the rind of the orange while the other party wants only the interior portion of the fruit. It is this misunderstanding of positions that, if allowed to proceed, will produce a windfall for one party and a total loss for the other. Alternatively, if both parties discuss their objectives, they may come to an understanding and achieve a mutually beneficial outcome, thus satisfying both parties' goals and objectives and resulting in a win-win situation.

Brownfields development and the recycling of America's urban wastelands create such a dichotomy of interests. Brownfields development has the unusual distinction of uniting varied forces in the pursuit of the same goal: redevelopment of abandoned or underutilized commercial real estate. This article does not purport to include all possible parties to a given brownfields redevelopment transaction; rather, the focus is on discussing two major forces that consistently cross paths in the quest to revitalize inner city brownfields.

On one side of the debate is the party who stands to gain economically from the development. This group includes, but is not limited to, private investors, state and local governments, property

---

owners, and corporate tenants. This group is driven by pecuniary gain; brownfields development represents the potential for this group to reap large financial rewards from what usually is a high-risk venture. Financial gain is broadly defined to include increased property values, stabilization of local tax revenue bases, decreased unemployment, and increased developer interest in similarly situated properties. Local governments court developers primarily through tax incentives, relaxed zoning standards, and other economic "plums" that make brownfields development a viable alternative to less burdened properties.

On the other side of the debate is a variety of local community interests that collectively operate under the umbrella of the Environmental Justice movement. This melting pot of interested parties consists of, but is not limited to, community-based organizations, youth groups, faith groups, labor groups, civil rights groups, public health groups, and philanthropic groups. This side hopes to benefit from brownfields redevelopment through the creation of jobs.

2. See generally Environmental Protection Agency, NEJAC Rep. 500-R-96-002, Environmental Justice, Urban Revitalization, and Brownfields: The Search for Authentic Signs of Hope (Dec. 1996), available at http://es.epa.gov/oeca/oej/nejac (visited Feb. 16, 2000) [hereinafter AUTHENTIC SIGNS OF HOPE] (noting importance of private and public sectors working with state and local governments to facilitate successful brownfields redevelopment). The National Environmental Justice Advisory Council (NEJAC) has advocated that local governments do not possess the "capacity or resources" to implement effectively any brownfields redevelopment plan. See id. Thus, local governments must utilize "radically different" approaches in order to create a successful brownfields redevelopment project. See id. Thus, the involvement of the affected community, including citizens and businesses, is essential. Only they can provide the resources necessary to aid local governments in crafting solutions to the brownfields problem. See id. (enumerating various members and motivations of NEJAC).

3. See generally Karen-Lee Ryan, Toxic Turnabouts, PLAN. (Dec. 1, 1998), available in 1998 WL 13739271 (citing examples of brownfields redevelopment projects that have resulted in financial gain for their respective areas).

4. See Ronald D. Utt, What to do About the Cities, Heritage Found. Rep., Sept. 1, 1998, at 1; see also Ryan, supra note 3 (citing economic incentives provided to cities in return for brownfields redevelopment); AUTHENTIC SIGNS OF HOPE, supra note 2 (noting that goal of brownfields redevelopment is "[m]obilizing the community's assets fully for economic development and information sharing purposes").

5. See AUTHENTIC SIGNS OF HOPE, supra note 2 (noting existence of ever-increasing number of community groups interested in community planning and development). Community members want to play a larger role in "mapping" their communities; people now want a larger say in deciding how their respective communities will be planned in order to create and sustain a healthy and stable environment. See id. According to the NEJAC Report, "[a] principal tenet of community-based planning is the thesis that a community which has a strong sense of itself is capable of being more self-defined, self-directed, and self-controlled, and thus more capable of shaping its own future." Id. For a further discussion of the Environmental Justice movement, see infra notes 55-74 and accompanying text.
revitalization of the local economy, remediation of contaminated lands, and the reuse of existing commercial inventory. The Environmental Justice movement defines success in terms of lowered health risks, reduced environmental burdens, and increased economic opportunities. It is not enough that a particular project simply is built, it must also satisfy the greater health, safety, and environmental goals of those who will be most affected by its construction.

This article poses some questions. Can brownfields development provide both economic revitalization and environmental justice? Or, are the two sides so hopelessly divided that the efforts of one side will only serve to undermine the efforts of the other? Through the analysis of successful brownfields developments, governmental initiatives, and environmental understanding, this article will illustrate how an integrated approach to brownfields development can achieve the combined goals of all parties through the use of increased stakeholder involvement, compromise, concessions, and a redefining of what makes a successful project. A close observation reveals the similarity of the goals on both sides of the brownfields debate—economic revitalization of urban areas that benefits the community as a whole.

Part II of this article discusses the historical and statutory background of brownfields. Part III discusses measures taken by the federal government and its administrative agencies to create a more positive image of brownfields redevelopment and to encourage remediation of brownfields. Part IV discusses the Environmental Justice movement, and the impact this movement has had on

6. See id. (stating that economic development must directly benefit members of community).

7. See id. (noting that "efforts must be made to ensure workplace health and safety for those jobs developed within the community, particularly those associated with environmental cleanup activities[,] and . . . jobs must produce livable wages which fit into a career development ladder that is based upon realistic assessment of present and emerging job markets"). An increase in economic development must parallel an increase in the community's efforts to achieve higher standards of health and safety. See id. Increased cooperation throughout the community is essential for this group to achieve its goals. See id.; see also TODD S. DAVIS & KEVIN D. MARCOLIS, BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 11 (1997) (emphasizing that remediation of brownfields must preserve and enhance community's health, safety, and environment).

8. For a discussion of the historical and statutory background of brownfields, see infra notes 14-31 and accompanying text.

9. For a discussion of measures taken by the federal government to create a more positive image of brownfields redevelopment and remediation, see infra notes 32-54 and accompanying text.
redeveloping brownfields. Part V discusses the benefits that can emerge from a successful brownfields development by examining a brownfields redevelopment in Lawndale, Illinois. Part VI takes the Lawndale case study a step further and discusses how a successful brownfields redevelopment can result in community revitalization. Finally, Part VII concludes that early unification and cooperation among all parties is crucial in the developmental process in order to determine how best to "split the orange" to achieve the common goal of neighborhood revitalization.

II. ORIGIN OF BROWNFIELDS

A. RCRA - Resource Conservation and Recovery Act

Following World War II, years of industrial growth produced a diversity of chemical compounds and hazardous byproducts that permeated industrial zones throughout the nation. These products, if left unchecked, threatened to leach into residential areas and other vital aspects of the human environment. In response to this threat, Congress, in 1976, passed the Resource Conservation and Recovery Act (RCRA), which allows the Environmental Protection Agency (EPA) to monitor hazardous waste production from "cradle to grave," and to impose strict operation standards for generators, owners, operators and transporters of hazardous wastes. RCRA was enacted in response to a House committee report that

10. For a discussion of the Environmental Justice movement and its impact on redeveloping brownfields, see infra notes 55-74 and accompanying text.
11. For a discussion of the benefits that can emerge from successful brownfields redevelopment, see infra notes 75-101 and accompanying text.
12. For a discussion of how a successful brownfields redevelopment can result in community revitalization, see infra notes 102-14 and accompanying text.
13. For a discussion of the conclusion that early unification and cooperation among parties can achieve the goal of neighborhood revitalization, see infra notes 115-17 and accompanying text.
14. See Utt, supra note 4, at 1.
16. See Tara Burns Koch, Comment, Betting on Brownfields — Does Florida's Brownfields Redevelopment Act Transform Liability Into Opportunity?, 28 STETSON L. REV. 171, 177 (1998) (discussing requirements of RCRA and impact of RCRA on brownfields development). RCRA regulates hazardous waste production from its creation to its disposal. See id. In terms of brownfields, RCRA impacted contaminated property redevelopment "(1) by attaching costly regulation requirements to underground storage tanks . . . and (2) by authorizing the 'government or citizens to require cleanup at sites that may present an imminent and substantial endangerment to health or the environment.'" Id. (quoting 42 U.S.C. §§ 6971(a)(1), 6973). Such statutory requirements have resulted in landowners or operators being held primarily responsible for the cost of a cleanup stemming from contamination of real property by hazardous substances. See Joel B. Eisen, "Brownfields of
detailed the amount of waste materials created annually in the United States. While RCRA addressed the production of hazardous waste, it left a gaping loophole regarding existing hazardous contamination. The Love Canal crisis in the late 1970s symbolizes the prime example of the type of situation that RCRA failed to address.

B. CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

The tribulations of the Love Canal incident brought the consequences of decades of wanton mismanagement of hazardous materials and the need to ascribe liability for remediation and reparation of contaminated real property to the forefront of the American conscience. As a result, during the waning days of the Carter Administration, the Comprehensive Environmental Response, Com-


17. H.R. REP. No. 94-1491, pt. 1, at 2 (1976). The house report estimated that three to four billion tons of solid waste were created every year and tended to grow at an estimated rate of eight percent annually. See id. The report further projected that landfill capacity in half of the United States’ largest cities would be expended by 1980. See id. at 9. This would force cities to dispose of their waste in far away sites, resulting in higher transportation costs. See id. This was becoming increasingly difficult, however, due to local opposition from these cities to receiving hazardous waste from other locations. See id.

18. In 1953, the Hooker Chemical and Plastics Corporation (Hooker) transferred its title to a 16-acre site to the Niagara Falls Board of Education for the sum of one dollar. See Julia A. Solo, Comment, Urban Decay and the Role of Superfund: Legal Barriers to Redevelopment and Prospects for Change, 43 BUFF. L. REV. 285, 290-91 n.23 (1995) (discussing Love Canal crisis); see also Andrea Lee Rimer, Environmental Liability and the Brownfields Phenomenon: An Analysis of Federal Options for Redevelopment, 10 TUL. ENVTL. L.J. 63, 66 n.3 (1996) (stating that “[b]etween 1942 and 1953, the Hooker Chemical Company filled an abandoned hydroelectric channel in Love Canal, New York with over 21,000 tons of chemical waste”). Hooker acknowledged that chemical byproducts from its production process were buried on the site and then covered with a layer of clay. See id. When Hooker transferred the property to the Niagara Falls Board of Education, Hooker mandated that the deed contain a 17-line restriction indicating that it would not be held responsible for any injuries that might result due to the buried byproducts. See Solo, supra, at 290 n.23. This restriction in the deed also served to warn future owners of the possible damages, thereby indemnifying Hooker for any claims. See id.; see also Rimer, supra, at 66 n.3.

A school and 100 homes were built on the site, and this area became known as the Love Canal. See id. Following unseasonably heavy rains in 1978, a chemical soup of more than 80 different substances, including many known carcinogens, began to seep into residential basements. See id. The ensuing cleanup efforts resulted in the relocation of 1,000 families and demolition of all structures along the canal. See id.
pensation, and Liability Act (CERCLA)\textsuperscript{19} was born. Commonly known as "Superfund," CERCLA establishes a fund that EPA utilizes to pay for the emergency abatement or cleanup of sites that present an imminent or substantial endangerment to public health or the environment.\textsuperscript{20} The fund is replenished via a broad liability scheme which imposes strict liability upon an inclusive cast of potentially responsible parties (PRPs).\textsuperscript{21} PRPs are subject to joint and several liability for all the costs of removal or remediation of contamination, damages for injury to natural resources, and costs of health assessments.\textsuperscript{22}

As an added incentive to prevent releases of hazardous substances and encourage voluntary abatement of past releases, courts initially interpreted the strict liability provision of CERCLA as imposing liability "without regard to causation."\textsuperscript{23} While the main purpose of CERCLA appears to be its cleanup program, the real thrust of the Act is to make future releases of hazardous substances "less likely through liability, enlisting business and commercial instincts for the bottom line in place of traditional regulation. It was


\textsuperscript{20} See CERCLA § 111, 42 U.S.C. § 9611 (imposing provisions and limitations on president's use of fund).

\textsuperscript{21} See CERCLA § 107(a), 42 U.S.C. § 9607(a) (establishing liability for costs incurred by government or others and for damages for injury to natural resources). This cast of potentially liable characters includes: (1) current owners and operators of facilities where the release of hazardous materials is imminent or substantial, (2) owners and operators of facilities at the time of hazardous waste disposal, (3) persons who arranged for the transportation or disposal of hazardous materials, and (4) persons who accepted hazardous substances for transport or disposal. See id. These individuals are liable unless they can prove that the damage was caused by (1) an act of God, (2) an act of war, or (3) a third party's act or omission. In the case of a third party, he cannot be an employee or agent of the defendant. See CERCLA § 107(b), 42 U.S.C. § 9607(b); see also United States v. Shell Oil Co., 841 F. Supp. 962, 970 (C.D. Cal. 1993) (stating that "although the statute includes these defenses, courts interpret them very narrowly, limiting their successful use by litigants").

\textsuperscript{22} See CERCLA § 107(c), 42 U.S.C. § 9607(c) (creating provisions for assessment of punitive and treble damages).

\textsuperscript{23} See New York v. Shore Realty Corp., 759 F.2d 1032, 1044 (2d Cir. 1985) (holding that § 9607(a) imposes strict liability without requiring showing of causation). In Shore Realty Corp., the State of New York brought suit against Shore Realty Corporation (Shore) to force Shore to clean up a hazardous waste site. See id. at 1037. Even though Shore was not responsible for the hazardous waste being on its property, it knew that that the waste site was located on its premises and that the cleanup would be expensive. See id. The Second Circuit held Shore liable, emphasizing that § 9607(a)(1) of CERCLA contained no requirement as to a finding of causation. See id. at 1044. The court drew its support from Congress itself, citing that "Congress specifically rejected including a causation requirement in section 9607(a)." Id.
a conscious intention of the statute’s authors to draw lenders and insurers into a new army of quasi-regulators along with corporate risk managers and boards of directors.”

Even though CERCLA’s goals include both remedying past acts and deterring future acts, the broad imposition of responsibility upon a wide variety of parties and pocketbooks has the unintended “chilling effect” of impeding the redevelopment of current and former industrial properties, turning them into what is commonly known today as brownfields.

C. The Brownfields Problem

Brownfields are defined by EPA as “abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.” This definition of brownfields reflects the understanding that the real property in question may or may not be contaminated and that the factual or perceived contamination may not be the sole criteria for the property’s lack of use. Among the litany of potential reasons for lack of use, however, PRP liability reigns supreme among the contenders.

24. Philip T. Cummings, NEPA to CERCLA: Completing the Circle, 7 ENVTL. F. 10, 11 (Nov./Dec. 1990). At CERCLA’s core is its liability provisions. See id. CERCLA combines both strict liability and “joint and several liability.” See id. This allows the government the luxury of not having to prove negligence in a CERCLA case, as well as allowing it to collect containment and cleanup costs from any of the guilty parties. See id.; see also CERCLA § 107, 42 U.S.C. § 9607 (enumerating CERCLA’s joint and several liability provisions).

25. OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, ENVIRONMENTAL PROTECTION AGENCY, BROWNFIELDS NATIONAL PARTNERSHIP ACTION AGENDA (May 1997) (defining “brownfields” and enumerating how various federal agencies will work together to create and implement brownfields redevelopment plans). See Ryan, supra note 3 (noting that General Accounting Office estimates that 400,000 to 500,000 brownfield sites exist across United States). EPA created the Brownfields Action Agenda in early 1995 following Congress’s failure to pass the 1994 Superfund Reform Act. See Paul Stanton Kibel, The Urban Nexus: Open Space, Brownfields, and Justice, 25 B.C. ENVTL. AFF. L. REV. 589, 609 (1998). This, combined with the rise of the Environmental Justice movement and President Clinton’s issuance of his 1994 Executive Order on Environmental Justice, pushed the issue of brownfields redevelopment to the forefront of the American political scene. See id.; see also DAVIS & MARGOLIS, supra note 7, at 41 (discussing Clinton Administration’s brownfields policies). For a further discussion of the Clinton Administration’s efforts to promote brownfields redevelopment, see infra notes 44-54 and accompanying text.

26. See Kibel, supra note 25, at 598-605 (citing liability under CERCLA as primary reason for brownfields to remain unused and thus contributing to economic decline in many neighborhoods); see also Eisen, supra note 16, at 897 (emphasizing that both fear of liability and uncertain cleanup costs prevent many developers from utilizing brownfields). Developers also fear the uncertainty of whether they will be subject to state regulation instead of federal regulation because a state is principally responsible for: (1) sites that do not rise to the level of necessitating
ing to sell unwanted facilities may be faced with large testing costs and potential cleanup bills that may render a "hold" decision to be the most economically sound. Owners of businesses that are no longer viable may directly deed the property to a municipality, the lender, or may simply "walk away" and let the State foreclose on unpaid tax liens. Thus, the brownfield remains an unused, boarded-up eyesore with potential health and safety problems, which persist undiscovered for fear of PRP liability.

The brownfields problem intensifies when it is noted that many brownfields are concentrated in inner city, lower income, and predominantly minority areas of many U.S. cities. No current accurate count exists, but the Congressional Office of Technology Assessment estimates that there might be "tens of thousands to 450,000 brownfields sites nationwide." These idle brownfields directly contribute to dwindling sales tax revenues, property tax reve-

federal action and (2) sites that a state may choose to regulate in the absence of federal regulation. See id. at 900. Thus, the fear of liability exists on many levels, potentially preventing brownfields from being redeveloped at all. See id.

27. See Kibel, supra note 25, at 601 (noting that many regarded brownfields as "untouchables" due to large costs associated with their remediation).

28. See id. (emphasizing effect of liability on reluctance to redevelop brownfields); see also Ryan, supra note 3 (noting examples of typical brownfields, including "a closed gas station or dry cleaner, a vacant warehouse, an abandoned rail yard, a former coal plant, or a shuttered steel mill"); Eisen, supra note 16, at 914 (outlining that high urban crime and obsolete infrastructures of existing buildings also cause developers to shy away from brownfields).

29. See Eisen, supra note 16, at 891. Many municipal representatives and scholars have remarked that a great number of brownfields are located in the so-called "Rust Belt" cities of the northeastern and midwest United States. See id. The concentration of brownfields in these cities further enhances the potential for these areas to decline because brownfields "discourage urban investment and contribute to a pervasive sense of poverty and hopelessness." Id. at 895; see also Kibel, supra note 25, at 601 (observing that "[a]bandoned brownfields tended to drag surrounding properties and communities down with them, thereby reinforcing the cycle").

Developers tend to gravitate towards "greenfields" in order to avoid brownfields, thus encouraging suburban sprawl and the destruction of areas that were previously untouched. See id. at 602. A greenfield has been defined as "property that has not been previously used for commercial or industrial activities and is thus presumed free of contamination." Davis & Margolis, supra note 7, at 5. While greenfield development may reap economic benefits, some of the unfortunate consequences of developing these greenfields include the destruction of economic and environmental resources and an increase in pollution. See Kibel, supra note 25, at 596, 602. Thus, the development of a greenfield, as opposed to the redevelopment of a brownfield, will have a potentially detrimental impact years after the greenfield developments have outlived their usefulness. See Eisen, supra note 16, at 896.

30. Office of Technology Assessment, Environmental Protection Agency, State of the States on Brownfields: Programs for Cleanup and Reuse of Contaminated Sites 3 (1995); see also Ryan, supra note 3 (citing existence of 400,000 to 500,000 brownfields sites across United States).
nues, lost jobs, and lost wages. Consequently, it is not difficult to quantify how the revitalization of many inner cities depends on the success of transforming unproductive brownfields into income-generating assets that are competitive alternatives to greenfields development, i.e. undeveloped, pristine land tracts.\textsuperscript{31}

III. DESTIGMATIZING BROWNFIELDS DEVELOPMENT

The pure economy of the brownfields situation motivated federal and state agencies, as well as Congress and the judiciary, to remove obstacles to brownfields development in an effort to destigmatize these urban assets and promote urban revitalization. Of primary concern for developers, lenders, and insurers was the broad liability that the Eleventh Circuit read into CERCLA in the 1990 case of \textit{United States v. Fleet Factors Corp.}.\textsuperscript{32} The Eleventh Circuit in \textit{Fleet Factors} interpreted CERCLA's language as imposing full liability on covered parties regardless of fault and the presence of other responsible parties.\textsuperscript{33} Specifically, the court imputed liability to a party who participated in the "financial management of a facility to a degree indicating a capacity to influence the corporation's treatment of hazardous wastes."\textsuperscript{34}

Thus, without assurances of immunity for any action taken in foreclosing, lending, or insuring brownfields, financial entities that control the destiny of brownfields development have little incentive

31. \textit{See Davis \& Margolis, supra} note 7, at 5, 12 (discussing attributes of brownfields and competition to redevelop them rather than using greenfields). Turning to greenfields rather than brownfields results in a phenomenon known as urban sprawl, "the practice of building on previously undeveloped land outside the city limits." \textit{Id.} at 12. Urban sprawl can result in a city's infrastructure going unused while comparable infrastructures are replicated elsewhere. \textit{See id.; see also Eisen, supra} note 16, at 896 (enumerating negative results of utilizing greenfields over brownfields, including population problems, increased pollution, and necessity of increasing infrastructures to serve new greenfield developments). For a further discussion of greenfields, see \textit{supra} note 29.

In contrast, employing brownfields over greenfields will prevent many of the negatives mentioned above from occurring. Many existing brownfields sites have good water and sewer systems already in place, and provide better accessibility to those already living in the city. \textit{See id.} at 897. Most importantly, the redevelopment of brownfields can serve to rejuvenate a city's economy by concentrating more activity within the city's boundaries than in its suburbs. \textit{See id.}

32. 901 F.2d 1550 (11th Cir. 1990) (holding that Congress's intent in creating CERCLA was to hold secured creditors liable if they participated in management of facility).

33. \textit{See generally id.}

34. \textit{Id.} at 1557. A party need not be involved in the day-to-day operations of a facility and need not participate in its waste management decisions to be held liable. \textit{See id.} Thus, a party will be held liable "if its involvement with the management of the facility is sufficiently broad to support the inference that it could affect hazardous waste disposal decisions if it so chose." \textit{Id.} at 1558.
to open their arms or bank vaults to prospective developers, no matter how good the location or prospect of future income.\textsuperscript{35} Congress noted this concern in passing the Asset Conservation, Lender Liability and Deposit Insurance Protection Act.\textsuperscript{36} This Act allows lenders and the like, who do not become enmeshed in the day-to-day management or decision-making process at a contaminated site, to be free from liability if contamination damage is later found at the site.\textsuperscript{37}

A. State and Local Brownfields Initiatives

For entities that remain involved in the day-to-day operations of a contaminated site, the liability door is still wide open. EPA reserves the right under CERCLA to enter into settlement agreements that quantify the amount of liability for a given site prior to any EPA abatement action.\textsuperscript{38} EPA retains, however, the option of reopening the case at any time and reimposing unlimited liability on all PRPs involved.\textsuperscript{39} Consequently, for many investors, EPA settlement agreements do nothing to thaw the chill of brownfields investment.

In response, many states, eager to encourage brownfields investment, initiated voluntary cleanup programs (VCPs).\textsuperscript{40} State

\textsuperscript{35} See id. at 1557. The Eleventh Circuit in \textit{Fleet Factors} acknowledged this potential effect. See id. at 1558. The court, however, found these concerns unfounded. See id. The \textit{Fleet Factors} court asserted that its ruling should encourage creditors to investigate thoroughly the waste treatment policies of the potential borrower and include these risks in the loan agreement. See id. The Eleventh Circuit concluded that "[c]reditors, therefore, will incur no greater risk than they bargained for and debtors, aware that inadequate hazardous waste treatment will have a significant adverse impact on their loan terms, will have powerful incentives to improve their handling of hazardous wastes." \textit{Id.}


\textsuperscript{37} See id. Fiduciaries shall not be held personally liable for conducting fiduciary-type activities and for decision-making. See id.

\textsuperscript{38} See CERCLA § 122(b)(1), 42 U.S.C. § 9622(b)(1).

\textsuperscript{39} See id. § 122(F)(6), 42 U.S.C. § 9622(f)(6). The settlement agreement can be reopened and liability imposed for conditions unknown at the time of settlement, or if new information indicates that the action taken was not sufficient to protect public health and the environment. See id.

\textsuperscript{40} See Sarah W. Rubenstein, Comment, \textit{CERCLA's Contribution to the Federal Brownfields Problem: A Proposal for Federal Reform}, 4 U. CHI. L. SCH. ROUNDTABLE 149, 164 (1997) (remarking that VCP was created to allow PRPs "to elect to remEDIATE contaminated property in exchange for finalized liability at that site"). Even though VCPs differ from state to state, some common elements do exist. See Eisen, supra note 16, at 920. For example, compliance with a VCP is voluntary, and each program is guided by a streamlined cleanup process where "developers continue
VCPs reward owners and investors with clear and ascertainable cleanup standards and quantifiable limits on liability. The most common VCP liability assurances are "No Further Action" letters (NFA), "Covenants Not to Sue" (CNTS), and "Certificates of Completion" (COC). Typical VCP financial incentives range from small grants for preliminary testing to Revolving Loan Funds (RLF) for larger scale remediation and state tax exemptions. While these programs are creative and innovative methods for states to spur brownfields investment, VCPs are not, in and of themselves, sufficient to stimulate wholesale neighborhood revitalization on a scale that is necessary to cure some of the larger tracts of idle land.

41. See Rubenstein, supra note 40, at 164 (noting that "finalized liability" encourages developers not only to acquire brownfields but also to remediate their own brownfields).  
42. See Eisen, supra note 16, at 952-57 (describing various VCP liability assurances states can issue). The purpose of the NFA is to inform a developer that the state will not require any further cleanup of the contaminated site, nor pursue any type of enforcement action against the developer. See id. at 952. The developer will receive such an assurance if the contamination level is too low for regulatory concerns, if there is no contamination at all, or if the contamination level exceeds acceptable standards and the developer has completed the approved cleanup. See id.; see also R. Michael Sweeney, Brownfields Restoration and Voluntary Cleanup Legislation, 2 ENVTL. L. 101, 118 (1995) (stating that developers who satisfy cleanup requirements qualify for NFA). The NFA, although, does not guarantee that the state will not force the developer to clean up the site if unknown contamination presents itself in the future. See Eisen, supra note 16, at 954.  

In contrast to the NFA, CNTS offer express protection against the possibility of future enforced cleanups at the site. See id. at 955; see also Sweeney, supra, at 118 (finding that state will grant CNTS "in consideration for the proper and timely completion of the state voluntary cleanup program"). A state may first require that the developer obtain a NFA or COC prior to issuing the CNTS. See Eisen, supra note 16, at 955-56.  

Finally, the COC is "a state approval of successful completion of cleanup activities." Id. at 956. The developer must receive confirmation of the cleanup’s completion and agree to cooperate with the state, maintaining and monitoring the site, and completing any future cleanups. See id. Moreover, the COC creates broad liability protections for the developer. See id.

43. See Rubenstein, supra note 40, at 171. Financial incentives enhance the brownfields programs and encourage redevelopment. See id. Not all states, however, offer these financial incentives. See Eisen, supra note 16, at 977. Those states that do provide these financial incentives are usually provided to public entities and sometimes even to developers of brownfields themselves. See id. (naming Michigan, Minnesota, Ohio, New Jersey, and Pennsylvania as states which utilize financial incentives).
B. Brownfields Pilot Programs

In 1993, the Clinton Administration brought a proactive attitude towards environmentalism that had been missing during the previous twelve years of Republican rule, based on the Reagan Administration’s reluctance to enforce the provisions of CERCLA due to CERCLA’s perceived shortcomings.\(^4\) In November 1993, the first Brownfields Pilot Program was launched in Cuyahoga County, Ohio.\(^5\) The potential success of the pilot program was inspired by a Clinton-sponsored bill which attempted to reform CERCLA’s shortcomings. The bill was defeated, however, in the final days of the 103rd Congress.\(^6\) Thereafter, in 1995, EPA announced its Brownfields Action Agenda that outlined four key areas of action for returning brownfields to productive use: (1) pilot grant programs, (2) partnership programs for brownfields stakeholders, (3) fostering local workforce development, and (4) job training initiatives.\(^7\)

The essential first step to federal assistance came in the form of aligning the myriad of federal agencies that impact brownfields. Agency oversight needed to be streamlined in order to make the cleanup process efficient and to motivate investor interest. The primary vehicle for achieving this goal became the “Memorandum of Understanding” (MOU). The general purpose of the MOU used by EPA in connection with its Brownfields Action Agenda is to “estab-

\(^{44}\) See generally TRAVIS P. WAGNER, THE COMPLETE GUIDE TO HAZARDOUS WASTE REGULATIONS 295 (3d ed. 1997); see also DAVIS & MARGOLIS, supra note 7, at 41 (remarking that “[t]he Clinton Administration’s Brownfields Initiative is designed to empower states, localities, and other agents of economic redevelopment to work together in a timely manner to prevent, assess, safely remediate, and sustainably reuse brownfields”).

\(^{45}\) See DAVIS & MARGOLIS, supra note 7, at 45 (discussing monies used to remediate existing brownfields in Cuyahoga County, Ohio).

\(^{46}\) See Kibel, supra note 25, at 603. Congress did not pass the Superfund Reform Act, thus shifting the drive for CERCLA reform to the agency level. See id. EPA created the Brownfields Action Agenda in response to the Superfund Reform Act’s defeat in Congress. See Mark Reisch, Superfund and the Brownfields Issue (visited Mar. 23, 2000) <http://www.cnie.org/nle/waste-10.html>.

\(^{47}\) See Reisch, supra note 46 (discussing four main methods EPA would use to increase interest in redeveloping brownfields). EPA Administrator Carol Browner described EPA’s Brownfields Action Agenda as “a work in progress” where the Agenda would continuously be redefined and updated in order to stay consistent with the increasing number of brownfields being redeveloped. See id.; see also Eisen, supra note 16, at 979 (stating that purposes of Brownfields Action Agenda were to stimulate brownfields redevelopment and to clarify issues regarding CERCLA liability); Rubenstein, supra note 40, at 175 (stating that EPA hoped that Brownfields Action Agenda would also result in job training and establishment of inner city empowerment zones stemming from brownfields redevelopment). For a further discussion of EPA’s Pilot Programs, see infra notes 49-53 and accompanying text.
lish policies and procedures for a general working agreement between [various federal agencies] in support of the EPA's Brownfields Economic Redevelopment Initiative (BERI).”

With agency alignment in place, the federal brownfields initiative was able to move forward with the heart of its financial assistance program: the Brownfields Pilot Program. The Brownfields Pilot Program went into effect in 1995, with fifty pilot projects receiving up to $200,000 each in federal funding to support two-year demonstrations of redevelopment solutions. The goal of the Pilot Programs is to “develop a national policy regarding Brownfields redevelopment [and] serve as guidance to states and localities struggling with this issue.” The Pilot Programs serve to “test redevelopment models by removing regulatory barriers without sacrificing environmental protection; encourage community groups, investors, lenders, developers and other [stakeholders] to work together to clean up contaminated sites and return them to productive use . . . and establish guidelines for cities cleaning up and returning contaminated, abandoned property back to productive

48. Memorandum of Understanding between Office of Solid Waste and Emergency Response, EPA, and Econ. Dev. Admin., Apr. 28, 1995 (emphasizing that federal government and individual state governments must work together in order to achieve success in redeveloping brownfields). MOUs allow agencies to attack procedural issues early and establish proactive guidelines towards a common goal. See, e.g., id. Typical goals of an MOU include creating site assessment criteria, establishing cleanup standards, addressing community revitalization issues, and spurring economic redevelopment efforts. See Memorandum of Understanding between EPA and Dept’ of Hous. and Urban Dev., Sept. 20, 1996 (reducing to writing EPA’s and HUD’s agreement to use their combined energies to redevelop brownfields).

49. See Sweeney, supra note 42, at 118 (discussing fine details of pilot programs); see also Ryan, supra note 3 (observing that Brownfields Pilot Programs serve to assist communities in overcoming obstacles associated with transforming brownfields into areas of productive use). The pilot projects also seek to “facilitate community-based and coordinated input” while brownfields are in the process of remediation. See Margolis & Davis, supra note 7, at 45.

50. See Announcement of Competition for Final Five Brownfields Economic Redevelopment Initiative Pilots, 59 Fed. Reg. 60,012 (1994) (noting necessity of pilot programs in state and local governments and their respective communities which will have to address brownfields eventually); see also Ryan, supra note 3 (commenting that “[o]ne goal of EPA’s pilot programs is to illustrate that a small amount of federal money directed at brownfields can leverage major private investment in redevelopment efforts”). The following criteria were used by EPA in deciding which cities would host the pilot programs: “(1) the applicant’s problem statement and needs assessment, (2) evidence of community-based planning and involvement, (3) the applicant’s implementation plan, and (4) the long-term benefits and sustainability of the project.” Davis & Margolis, supra note 7, at 45. As of 1997, the $200,000 had been leveraged to about $3.2 million to support the remediation of brownfields. See Ryan, supra note 3 (recounting numerous pilot program success stories).

51. Sweeney, supra note 42, at 118.
use.” By the end of 1998, EPA had funded a total of 228 brownfields pilots and planned to initiate another 100 new pilots in 1999.

In addition to the Pilot Programs, other assorted federal and local funding programs are in place. These programs seek to rejuvenate underused properties in order to revitalize communities. A combination of grants and tax incentives function to leverage public and private investment into projects that are otherwise very difficult to finance conventionally.

C. Brownfields Development Controversy

Thus, with liability and financing issues addressed, only one aspect of the urban revitalization puzzle remains at the core of the brownfields development controversy: will private investors, driven purely by market-oriented goals, provide developments that benefit host communities with jobs, tax revenues, and sustainability? Or will these heavily subsidized brownfields programs merely be a new incarnation of the site’s previous uses, offering little direct economic benefit and substantial health and safety hazards? The Environmental Justice movement was born in response to these questions.

IV. ENVIRONMENTAL JUSTICE

The Environmental Justice movement emerged, as other grassroots organizations sprouted up, in response to historical inequities and disproportionate allocations of risk in the siting of hazardous facilities in communities with large percentages of minorities. En-

52. Id. at 118-19. By limiting a prospective buyer’s liability, “EPA will alleviate the concerns of parties participating in Brownfields reuse or redevelopment.” Id. at 119; see also Eisen, supra note 16, at 981 (observing that pilot programs also seek to develop “intergovernmental cooperation networks for brownfield cleanups” and “[identify] sites for cleanups”).

53. See ENVIRONMENTAL PROTECTION AGENCY, REGION IX BROWNFIELDS PARTNERSHIP ACTION AGENDA (Jan. 7, 1999).

54. Other funding programs include, but are not limited to, Community Development Block Grants (CDBG), HUD Section 108 Loan Guarantees, Empowerment Zones and Enterprise Communities (EZ/EC), and Tax Increment Financing (TIF). See generally CHARLES BARTSCH & ELIZABETH COLLATON, NORTHEAST MIDWEST INSTITUTE, COMING CLEAN FOR ECONOMIC DEVELOPMENT: A RESOURCE BOOK ON ENVIRONMENTAL CLEANUP AND ECONOMIC DEVELOPMENT OPPORTUNITIES (1996).

55. See William A. Shutkin & Charles P. Lord, Environmental Law, Environmental Justice, and Democracy, 96 W. VA. L. REV. 1117, 1118 (1994) (claiming that minorities and members of low-income communities “have borne the brunt of environmental harms”); see also AUTHENTIC SIGNS OF HOPE, supra note 2 (explaining that members of environmental justice groups are no longer just minorities
Environmental Justice constituents are generally composed of lower and middle class families who lack the political muscle to oppose effectively the construction of hazardous facilities or "vote with their feet" and move away these facilities once they are in place.56

The Clinton Administration took two actions to help raise the political profile of the Environmental Justice movement. First, on September 30, 1993, President Clinton established the National Environmental Justice Advisory Council (NEJAC) to provide independent advice, consultations, and recommendations to the EPA Administrator on environmental justice matters.57 Second, on February 11, 1994, President Clinton issued Executive Order 12898, also known as "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations."58 This Executive Order states, "To the greatest extent practicable and permitted by law . . . each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."59

A. NEJAC - National Environmental Justice Advisory Council

The stated goal of the NEJAC is to develop a "holistic, bottomup, community-based, multi-issue, cross-cutting, integrative, and low-income individuals, but now include people concerned with day-to-day affairs of their respective communities). The Environmental Justice movement represents a desire to reach traditionally underrepresented communities and teach them about environmental law and policy. See Shutkin & Lord, supra, at 1120. This movement has evolved to encompass a "community driven process" which seeks to use public discourse to create healthy, productive, and vital communities. See AUTHENTIC SIGNS OF HOPE, supra note 2 (maintaining that environmental justice will create "a transformative discourse" which will shape communities in twenty-first century). "Environmental justice will be the seed-bed for the development of a set of new frameworks and tools truly capable of producing physically and psychologically healthy, economically and ecologically sustainable, and culturally and spiritually vital communities." Id.

56. See generally KENNETH T. JACKSON, CRABGRASS FRONTIER: THE SUBURBANIZATION OF THE UNITED STATES (1985); see also Kibel, supra note 25, at 606 (recalling that Environmental Justice movement focuses on recognition that poor communities and minorities suffer from "disproportionately high health and environmental risks").

57. See OFFICE OF ENVTL. JUSTICE, EPA, THE MODEL PLAN FOR PUBLIC PARTICIPATION ii (Nov. 1996). For a further discussion of the NEJAC, see infra notes 60-74 and accompanying text.


59. Id. (detailing federal agencies' responsibilities regarding environmental justice); see also AUTHENTIC SIGNS OF HOPE, supra note 2 (stating that only by uniting various federal agencies can federal government hope to "address the interrelated issues associated with urban revitalization and Brownfields").
and unifying paradigm for achieving healthy and sustainable communities—both urban and rural." The organization seeks to place the Environmental Justice agenda at the forefront of all discussions regarding brownfields development and hazardous facility siting. It is through this ultra-inclusive stance that the NEJAC seeks to organize local groups to remedy the issues that have plagued lower income and minority neighborhoods and to achieve greater environmental goals, such as stemming the tide of urban sprawl. Supporters of the Environmental Justice movement view brownfields redevelopment as an attempt by overzealous politicians and investors to skirt liability issues, loosen cleanup standards, and attract businesses that add little to the sustainability of communities while increasing potential health hazards. Therefore, it is not uncommon for local groups to unite in opposition to proposed brownfields development where these groups have not been consulted or included.

60. AUTHENTIC SIGNS OF HOPE, supra note 2.

61. See id.

62. See DAVIS & MARCOLIS, supra note 7, at 183-92 (stressing that community participation is key to success of brownfields development). One such display of opposition resulted in an EPA decision to suspend air emissions permits for the proposed siting of a $700 million PVC (polyvinyl chloride) manufacturing facility in Convent, Louisiana. See generally Statement by Congressman William Jefferson on the Decision to Postpone Shintech Inc.'s Permit, GOV'T PRESS RELEASES (Sept. 10, 1997). A coalition of citizens' groups alleged that the Louisiana Department of Environmental Quality's issuance of the air permits involved racial discrimination. See id. The group's contention was that the proposed facility would disproportionately burden the surrounding low-income populations with increased levels of pollution, and health and environmental risks. See id.

The petitioners also contended that the cumulative effect of additional pollution, in light of the high pollution burden already borne by adjacent communities, was not considered and that the poor enforcement record of environmental agencies in the area would exacerbate the problem. See Mike Dunne, Shintech Withdraws Plan; West Baton Rouge Location Selected for Smaller Facility, THE ADVOC. (Baton Rouge, La.), Sept. 18, 1998, at 1A. EPA's decision to suspend issuance of the air permits eventually forced the chemical company to abandon its plans in favor of a smaller site in an adjacent town that did not present similar demographic challenges. See id. (noting that Shintech Controller thinks new site will "raise fewer environmental justice questions because the area is whiter and more affluent" than previous proposed site). Environmental Justice advocates hailed this decision as a victory even though the residents of Convent were not unanimous in their opposition to the facility. See id. (commenting that even though facility would harm environment, many people would support facility because of potential jobs it would create for community). The local chapter of the National Association for the Advancement of Colored People (NAACP) and 73% of African-American residents polled supported the facility because of the jobs and other economic benefits it would have brought to the area. See Stephen C. Jones & Anoop G. Shroff, Balancing Growth and the Environment; Environmental Justice Concerns Delay Industrial Expansion, 13 ENV. COMP. & LIT. STRATEGY, Oct. 1997, § 5, at 1.
B. NEJAC Public Dialogues

In an effort to understand the issues affecting the citizens most impacted by brownfields development, the NEJAC and EPA co-sponsored a series of "Public Dialogues" in five major cities (Atlanta, Boston, Detroit, Philadelphia, and Oakland) across the country.\textsuperscript{63} The dialogues were scheduled to (1) provide a forum for local citizens to ask questions of federal administrators, (2) air grievances with past agency practice, and (3) suggest new policies to encourage responsible and inclusive brownfields development.\textsuperscript{64} The result of these dialogues was a report released by the NEJAC entitled "Environmental Justice, Urban Revitalization, and Brownfields: The Search for Authentic Signs of Hope."\textsuperscript{65} The report's goal was to provide both an understanding of local concerns, as well as a framework for public participation at all stages of the brownfields development process.\textsuperscript{66}

The NEJAC report was successful in inspiring and promoting federal agencies to encourage grant applicants to include community input and participation in both the planning and implementation process.\textsuperscript{67} Examples of this are the U.S. Department of Housing and Urban Development (HUD) Enterprise Zone/Eco-
nomic Community (EZ/EC) and Economic Development Initiative/Brownfields Economic Development Initiative (EDI/BEDI) applications, which include categories for community participation as factors for determining grants. While the point values for community factors are not high, they are enough to encourage applicants to give these issues more than a cursory inspection because of the competitiveness of the grant process.

An unstated benefit of the NEJAC report has been to provide a sense of focus and clarity for the Environmental Justice movement as a whole, which too often is criticized for being associated with "NIMBYism" or pure social or racial concerns. The rhetoric of risk and racism misconstrues the challenge of revitalizing neighborhoods and achieving healthy, sustainable, and livable communities. With the motivation for private investment being primarily pecuniary, the risk of loss needs to be quantifiable and within the realm of commercial realism. Therefore, Environmental Justice concerns can reap the highest rewards in those instances where they can assist in clearly defining a problem and working towards


70. See Eisen, supra note 16, at 992. NIMBYism (Not In My BackYard) involves opposition of a small group to a controversial development project which will result in scattered benefits for a larger group of people. See id. In other words, many will benefit at the expense of concentrated costs for the immediate community being affected. See id. (noting that since early 1980s, many states require developers to provide compensation to communities that host waste facilities).

71. See G. Nelson Smith & David B. Graham, To Achieve Environmental Justice, Attack Economic Causes Of Urban Blight, LEGAL TIMES, ENVTL. L. SEC., June 16, 1997, at S46. But see AUTHENTIC SIGNS OF HOPE, supra note 2 (asserting that environmental justice has evolved into more community-based movement as opposed to defining itself only along economic or racial lines).

72. See generally CHRISTOPHER H. FOREMAN, JR., THE PROMISE AND PERIL OF ENVIRONMENTAL JUSTICE (1998); see also Julie Rajzer, The Environmental Justice Information Homepage (visited Mar. 24, 2000) <http://www-personal.umich.edu/~jrajzer/nre/index.html> (confirming belief that environmental justice transcends its original delineation and now encompasses "a guarantee of equal access to relief and meaningful community participation with government and industry decision-makers"); AUTHENTIC SIGNS OF HOPE, supra note 2 (maintaining that community concerns are now major facet of environmental justice).

73. See DAVIS & MARCOLIS, supra note 7, at 87 (stating that many potential private investors shy away from brownfields because of investment risks involved). Some commentators have proposed that "[t]he presence of environmental contamination on a site increases both liability and investment risks. These risks must be lowered to levels that are reasonable and acceptable for increased public and private-sector investments to occur in brownfields." Id. For a further discussion of liability risks associated with brownfields redevelopment, see supra notes 25-31 and accompanying text.
crafting a realistic solution. When effectively done, this process can leverage public dollars to obtain substantial private investment for community gain, as demonstrated in the destigmatization process.\(^7^4\)

V. PROFILE OF A SUCCESSFUL BROWNFIELDS DEVELOPMENT

A. Two Tales of One City

The Lawndale district in Chicago’s westside emerged from the ashes of the Great Chicago fire in 1871 as industry abandoned the charred ruins of the central city.\(^7^5\) Lawndale’s first inhabitants were Dutch, Irish, and German immigrants.\(^7^6\) By 1930, Lawndale was Chicago’s largest Jewish neighborhood with 51,000 people per square mile, forty-nine synagogues, homes for the elderly and orphans, and a well-stocked public library.\(^7^7\) Two industrial giants anchored Lawndale’s economy, International Harvester and Western Electric, both of which employed over 57,000 people combined.\(^7^8\)

\(^7^4\) A successful example of leveraging public funds to encourage private investment occurred in Bridgeport, Connecticut, where more than 250 dilapidated and vacant buildings were impeding the private development process and draining scarce public resources through vandalism response, devaluation, and a declining tax base. See The United States Conference of Mayors (May 19, 1997). The City of Bridgeport organized an anti-blight campaign to eradicate the structures, conduct site assessments, and if necessary, remedy environmental problems. See id. With input from area residents and local business owners, Bridgeport spent approximately $15 million over six years which, in turn, inspired $61 million in private housing and commercial development. See id. Mayor Joseph Ganin proclaimed, “we want the housing stock to be affordable, safe and attractive for anyone willing to lead a productive life . . . where families and businesses can prosper and feel like part of the community.” Id.

\(^7^5\) See R.C. Longworth, Lawndale’s Lots Eerily Empty, Haunted By Economy That Died, CHI. TRIB., Nov. 17, 1985, § News, at 1 (providing that Lawndale received its name in 1870 from real estate firm which originally designed city’s layout). In 1871, many Chicago city-centered industries moved to Lawndale to escape the downtown ruins left in the aftermath of the Chicago Fire. See id. (noting that International Harvester, formerly known as McCormick Reaper Co., was first major business to move to Lawndale).

\(^7^6\) See id. (explaining that Lawndale’s inhabitants arrived there around turn of century along with elevated tracks and industry). Following the emergence of the elevated tracks, Sears Ryerson Steel Co. and Western Electric also relocated to Lawndale. See id. Cottages near the factories housed the workers. See id.

\(^7^7\) See id. (noting that Lawndale had twice as many people per square mile than Chicago). Longworth, in reference to this booming community, stated that “[i]t was tough and crowded . . . but it hummed.” Id.

\(^7^8\) See id. (noting that Sears, Roebuck and Co.’s headquarters was also located in Lawndale, employing more than 10,000 workers). In 1973, however, Sears moved its best paying jobs and most of its operations to Chicago’s “Loop.” See id. Currently, in North Lawndale a catalogue distribution center still employs 3,000 workers, but three-fourths of these workers live outside the immediate Lawndale vicinity. See id.
The end of World War II sparked a national migration of families from crowded inner cities to single family homes in the suburbs. Lawndale's predominantly white population was replaced with lower and middle income black families.\textsuperscript{79} This resulted in an overall change in demographics from a black population of thirteen percent in 1950, to a black population of 91 percent in 1960, a figure which remains relatively unchanged today.\textsuperscript{80} The population of Lawndale hit an all-time high of 125,000 in 1960, but this number has been declining ever since.\textsuperscript{81} Most white families, and a large percentage of middle-class black families, fled to suburbia. To compound matters, after the 1968 riots protesting Reverend Martin Luther King, Jr.'s assassination, Lawndale's economy took a turn for the worse when storekeepers found themselves either burned out or unable to get insurance. These events began a cycle of poverty and welfare dependence that currently has over forty-five percent of Lawndale's residents in a stranglehold.\textsuperscript{82}

In 1906, Sears, Roebuck & Company (Sears), a national retailer, finished construction of its world headquarters in the middle of Lawndale. With three million square feet of buildings on fifty-five acres of land, the facility was the largest in the world.\textsuperscript{83} Sears relocated most of its operations to the 110-story Sears Tower in the "loop" section of downtown Lawndale in 1973, and then moved to a suburban Chicago location in 1992. The void created by Sears' departure in 1973 compounded Lawndale's economic woes, which had already been hit with massive losses of population and housing

---

\textsuperscript{79} See \textit{id.} (recalling that in 1946, North Lawndale was 64\% Jewish, yet in 1950, this number fell to 42\% because many Lawndale residents moved to better neighborhoods).

\textsuperscript{80} See Longworth, \textit{supra} note 75, at 1 (stating that African-American population in Lawndale now accounts for 97\% of Lawndale's total population).

\textsuperscript{81} See \textit{id.} (providing that only 61,500 lived in Lawndale in 1985). Longworth explained: "The loss has been due to not only the exodus of whites; middle-class blacks also moved out to better neighborhoods or suburbs. The neighborhood's change from white to black coincided exactly with the decline in North Lawndale's economy and the loss of jobs there." \textit{Id.} Longworth also added that while some business owners moved out early and took their shops with them, "[t]he real exodus took place after the riots, when store keepers either found themselves burned out or unable to get insurance. The departure of Harvester was a milestone in the loss of industrial jobs." \textit{Id.}

\textsuperscript{82} See Jeanette Almada, \textit{10-Year Development Plan for a Sears Site in Chicago}, N.Y. TIMES, Aug. 28, 1994, § 9, at 5 (acknowledging joint venture in 1994 between Sears and Shaw Co. as example of limited major residential developments underway in Lawndale).

\textsuperscript{83} See J. Linn Allen, \textit{Rejuvenation of Sears' Site May Sell Others on Inner City}, CHI. TRIB., Jan. 23, 1994, § Real Estate, at 1.
stock.84 In 1987, the final time card was punched at Sears' Lawndale facility, which employed at this time only 1,350 full-time workers and 450 part-time employees.85 With Sears gone, and much of Lawndale’s businesses and housing stock shuttered, developers began to flock to Lawndale with high expectations of developing the one project that would turn local fortunes around.86

84. See Longworth, supra note 75, at 1 (stating that while Sears moved most of its operations out of Lawndale, including most of its best-paying jobs, it kept its Lawndale distribution center for its catalogues in 1985). Between 1970 and 1980, the time period in which Sears relocated, Lawndale lost an additional 44% of its remaining commercial jobs and 80% of its manufacturing jobs. See id.

85. David Elsner, No Surprises In Sears Closing Lawndale Plant’s Workers Disheartened About Future, CHI. TRIB., Mar. 3, 1987, § Business, at 6 (noting that until 1974, North Lawndale was home to Sears' headquarters and most employees who were let go in 1987 closing of distribution center lived in North Lawndale). Residents of Lawndale currently have a median income of $12,000 per year, roughly half that of Chicago as a whole. See Longworth, supra note 75, at 1. Unemployment in Lawndale is estimated at 40% to 45%. See id. (noting that while some community leaders claim economy is improving, growing number of welfare cases, continuing loss of jobs, and recent industry closings suggest otherwise). Ruth Rothstein, President of Mt. Sinai Hospital, one of the city’s few remaining big institutions, stated that “without new jobs, the cycle of more people on welfare and deteriorating housing situation will continue . . . .” Id.

86. One development group proposed a shopping center that would require substantial public funds to pay for items, such as a security tower with a second-floor observation deck, 24-hour closed circuit surveillance, perimeter fencing, and a security patrol. See David Ibata, Developer Revives Hope for N. Lawndale Mall, CHI. TRIB., Aug. 6, 1987, § Business, at 1 (estimating that proposed 100,000 square foot project would cost approximately $9.5 million and that no guarantee of success existed even with tax incentives and below-market loans). Matanky Reality Group president, Barry Kreisler, stated that the envisioned high-security shopping center not only was the only type of shopping center that could survive in the neighborhood, but also “require[d] a very high level of public participation. . . . All this heightened security and staffing [would have to come] at a price.” Id. This “prison-style” development was not the type of revitalization that the local community had in mind, and the project therefore never got off the ground. See id.

Shortly thereafter, the Sears site in Lawndale became a front runner in the race for a new National Football League stadium for the Chicago Bears. See Uthman Muhammad, Sears and Bears, Get Together!, CRAIN'S CHI. BUS., Jan. 16, 1989, § Opinion, at 11 (acknowledging that proposed business/stadium complex had potential to overcome social and economic distress prevalent in Lawndale's community). Community opposition to this proposal was strong and swift over what was perceived as the city's attempt to displace residents while providing merely low-paying stadium jobs. See John McCarron, More Proposals for Stadium Site Promoters, Politicians Seek Bears, CHI. TRIB., May 5, 1987, at 3 (noting one city official as saying Bears could move into Lawndale without disrupting or disturbing anything). To express their concerns, local groups chartered buses and held a news conference on the front steps of the Chicago Bears owner's estate. See id. The protesters made it clear that any development in Lawndale was going to require input from community members, who collectively were interested in retaining and enhancing the social character of the neighborhood through the creation of economic benefits. See id. The Chicago Bears subsequently dropped their plans to move to Lawndale.
B. Urban Renewal: Promise and Skepticism

The early 1990s saw a retail boom in Chicago that brought 128 new shopping centers, which contained a total of thirty-two million square feet by 1992.\(^{87}\) Sensing that a retail center was on the horizon for Lawndale, local residents were surprised to discover that Sears had engaged a prominent residential/commercial developer, Charles H. Shaw Co. (Shaw), to construct low to moderate income housing on the former Sears site (Homan Square).\(^{88}\) Shaw saw this as an opportunity to be a model for the nation as to how to deal with the low and moderate-income housing issue.\(^{89}\)

Local optimism, however, was soon met with strong skepticism. Even though the local community would greatly benefit from this new development, many residents voiced concerns that the new development was really meant to displace current residents in exchange for middle and upper income residents from other neighborhoods, a process known as "gentrification."\(^{90}\)

---

87. See Malls Fuel Retail Space Boom: Survey Shows Heated Pace For Development Through '92, CRAIN'S CHI. BUS., May 7, 1990, § Real Estate, at 26 (commenting that, in 1989, 33 shopping centers opened in greater Chicago metropolitan area, and 95 additional centers were scheduled to open in 1990, 1991, and 1992).

88. See Jerry C. Davis & Maudlyne Ihejirika, Housing Project For Sears Site; Affordable Units on Westside Seen, CHI. SUN-TIMES, Mar. 13, 1992, § News, at 5 (explaining that proposed new housing development would feature two and three story homes with approximately 24 single-family homes, townhouses, and 56 rental units). The single-family homes and townhouses were to range from $65,000 to $90,000, and the rental units were expected to fall within the $375 to $525 per month range. See id.

89. See Patrick T. Reardon, Housing Development Planned On Former Sears Site, CHI. TRIB., Mar. 14, 1992, § Business, at 2 (stating that 41 acres will be used for housing and remaining space will continue unused with possibility for industrial development). Sears and Shaw created a non-profit partnership, West Side Affordable Housing Inc., for the development of this project. See id. Shaw stated that they "may have to create some opportunities that don't exist today." Id.

It is important to note that Shaw's actions here were technically in keeping with the original motivations behind the Environmental Justice movement, namely to prevent environmental discrimination against minorities and poor communities. See Kibel, supra note 25, at 606 (describing intent which originally drove environmental justice). Even though no one may have described Shaw's actions in such a way, such a characterization is inescapable. For a further discussion of the Environmental Justice movement, see supra notes 55-74 and accompanying text.

90. See Maudlyne Ihejirika, Housing Plan Divides North Lawndale, CHI. SUN-TIMES, Apr. 18, 1993, at 33. This article quotes Reverend Floyd James, Chairman of the Greater Lawndale Preservation Council, as saying, "I don't mind economic and racial integration, but that doesn't happen in our communities. In our communities, with gentrification, comes elimination." Id. (quoting Shaw as also stating, "It's not a question of driving low-income out. It's a question of brining in working class—or middle class, . . . [i]t's to these groups enlightened self-interest to get themselves about the business of building on the stimulus this project can be").
In order to be responsive to community concerns, where in the past, other developers had not, Shaw met with over a hundred different stakeholder groups whose input was incorporated into the planning process of Homan Square. The result of the community input was a three-component development plan, incorporating housing, commercial, and community service elements.91

Stability of the local economic base is critical for a housing project, such as Homan Square, to survive.92 While stability is usually achieved in conjunction with a large institution, such as a hospital or a university, Homan Square will require a “luring back” of middle class residents to the community. In order to attract the types of industry that provide neighborhood stability, Homan Square and Lawndale need to offer a diverse and educated labor pool. If Homan Square and Lawndale are unable to do this, then new employers will be forced to draw employment from other parts of the

91. See Allen, supra note 83, at 1. Charles Shaw noted that he spent more time with bureaucrats and community people on the project than in any other project in his 33 years of building experience. See id. (revealing that Shaw’s greatest efforts have been aimed at attracting business and government leaders to industrial and office space in Lawndale). This article also emphasized that Shaw’s project will be very influential in determining whether future projects will be supported and financed by local business and government leaders. See id. Moreover, the article asserted:

If his development at the 55-acre former Sears headquarters complex should succeed, it could inspire similar large-scale projects to reclaim innercities all around the country. If it fails, it could be taken in Chicago and elsewhere as further evidence that money going to innercity redevelopment is just dollars down the drain.

Id. The housing component is comprised of approximately 600 multi-income units in four phases, with a majority of subsidized units for low-income renters and purchasers alike. See id. The remaining units are being sold at “market” rates to allow for residents whose income level would disqualify them from receiving housing subsidies. See id.

Shaw’s intensive work with community leaders and neighbors illustrates the necessity of any community’s coming together to decide how a brownfields redevelopment will affect them. See Davis & Margolis, supra note 7, at 183-92 (asserting that interaction between developer of brownfields and community members is essential). This “coming together” of interests also reflects the current mindset behind the Environmental Justice movement. See Rajzer, supra note 72 (noting that Environmental Justice advocates desire equal partnership on every level in making decisions which will affect their community); see also Authentic Signs of Hope, supra note 2 (discussing community involvement in brownfields redevelopment). For a further discussion of the Environmental Justice movement and the need for community involvement in making brownfields redevelopment decisions, see supra notes 55-74 and accompanying text.

92. See Allen, supra note 83, at 1 (noting Shaw’s comment that “most successful revitalization projects on [Homan Square] scale have been done in association with an institution that provides a natural stabilizer and an employment base”). Shaw added that it is essential to have a business center as the foundation of the community and its new residents. See id. “Job creation through business development is crucial to maintaining a market for the housing.” Id.
region, leaving only the most menial positions available for the local citizenry. Therefore, while gentrification is not the primary objective for Homan Square, Shaw has been forthright with community leaders that the long-term success of the development depends largely upon its ability to attract middle-class residents in order to achieve an "economically integrated" project. Shaw hopes to achieve integration through design elements, such as single family residences and multi-family residences interspersed on the same street, as well as the mixture of subsidized and market rate units discussed above.

The commercial component for Homan Square consists of one million square feet of office and industrial uses and will utilize existing structures on the property. The proximity of Homan Square to the local expressway and light-rail stations gives Homan Square an advantage over competitive sites further away from transportation corridors. Shaw hopes to attract major employers who will provide a percentage of jobs to local residents in exchange for subsidized rent and/or HUD Enterprise Zone tax credits.

The community service element of Homan Square includes amenities designed to enhance the quality of life for the residents. It is hoped that these amenities will in turn create sustainability for the development. These amenities include generous green areas, a community park, a local bank branch, a family healthcare center, an 800-officer police station, a day-care center, and job training facilities.

C. Environmental Cleanup

Environmental contamination at Homan Square consisted largely of the removal of asbestos and PCB (polychlorinated biphenyls) from the old, demolished Sears catalog building. Furthermore, under the site of the former Sears Auto Center, underground storage tanks leaked a petroleum mixture known as B-TEX (Benzine, Toluene, Ethyl benzene, and Xylene). Remediation

93. See id. (commenting that for residential developments such as Homan Square to be successful, developers must draw from larger area than just North Lawndale because not enough financially qualified buyers live in Lawndale area).

94. See id. (explaining that Shaw's plan to lure buyers to development includes landscaped open spaces, which will have picnic and play areas).

95. See Almada, supra note 82, at 5.

96. See BARTSCH & COLLATON, supra note 54, at 135-37 (noting that success of Homan Square Project was achieved through implementation of Sears and Shaw's three-component revitalization plan (housing, commercial development, and community services)).
tion at this site consisted of excavation and removal of contaminated soils to landfills.\textsuperscript{97}

Shaw received aid in the cleanup process via a state law which provides for the use of "risk assessments" in connection with potential groundwater contaminants. Risk-based cleanup strategists evaluate the level of contamination in the context of the intended use of the property.\textsuperscript{98} Where the containment of subsurface chemicals is achievable, and the intended use of the property is not for residential purposes, on-site treatment alternatives, such as vapor extraction and soil washing, may be utilized as opposed to the excavation and removal of the entire site.\textsuperscript{99} The availability of these alternatives accomplishes a cost-effective remediation in the smallest amount of time.\textsuperscript{100} The expedited confrontation of the environmental issues at Homan Square prevented the expression of any serious concern or opposition from the community. Moreover, it was beneficial that the development's landowner was responsible, proactive, and possessed the financial resources to achieve the cleanup.\textsuperscript{101}

VI. POTENTIAL FOR NEIGHBORHOOD REVITALIZATION

As of January 1998, completed construction of Phase III of Homan Square resulted in the creation of 347 housing units.\textsuperscript{102} Unit count, however, is not the sole measure of a successful housing development. In a national trade publication, Charles Shaw noted that "we are not just building buildings, we are building a neighbor-

\textsuperscript{97} See id. (noting that expedited manner in which environmental problems and concerns were addressed prevented community protest regarding potential health risks).

\textsuperscript{98} See Davis & Margolis, supra note 7, at 276 (explaining that future expected use of brownfields property allows environmental experts to assess property risks resulting from existing contaminants). For a further discussion of brownfields cleanup projects, see supra notes 44-54 and accompanying text.

\textsuperscript{99} See id. (commenting that brownfields cleanup levels and requirements must also fulfill any applicable state and regional criteria present).

\textsuperscript{100} See id. (remarking that if risk-based cleanup levels are significantly higher than required state or regional levels, then additional costs to achieve higher level are "contrasted to the probability and cost of failing regulatory approval for the risk-based cleanup levels").

\textsuperscript{101} See Don DeBat, Ray of Hope for North Lawndale; Rehabilitation Planned, CHI. SUN-TIMES, Jan. 21, 1994, § Homelife, at 15. The author stated that "[Sears]... plans to contribute land and spend $30 million for architectural, planning and other professional fees, demolition and environmental cleanup to make way for housing." Id. (stating that Sears planned to demolish its antiquated three million square foot catalogue building which currently remains on property).

The true measure of whether a project of this type can be the centerpiece of a successful neighborhood revitalization is its ability to inspire substantial private and public investment in complementary projects that add to the sustainability of the community as a whole. In this light, Homan Square has been an immense success.

A. Small Business Initiative

The first substantial complementary investment in Homan Square came from Chicago's Economic Development Commission when the Commission decided that Homan Square was the right site for a federally-backed regional Manufacturing Technology Extension Center (MTEC). The federal government earmarked eight million dollars, as part of President Clinton's Defense Reinvestment Conversion Initiative, to place a limited number of MTEC facilities throughout the nation. The City of Chicago and the State of Illinois are expected in turn to provide an additional thirty-three million dollars for operating expenses, with more funds coming from private business sources. The MTEC will be used to give small and midsize businesses training and other assistance in using the latest technology, equipment, and global operating standards. The services provided by MTEC are vital to the long-term survival of Chicago as a manufacturing hub, and to Chicago's overall industrial competitiveness.

B. Local Health Services

Another tenant in the former Sears administration building is a new health and family center, which is a collaborative effort between the Rush College of Nursing, Rush University, and the Rush

103. Dan McLeister, Infill Housing Opportunities Still Growing, 61 Prof. Builder, Sept. 1996, no. 15, at 14; see also Rajzer, supra note 72 (highlighting importance of community involvement in redeveloping brownfields); Authentic Signs of Hope, supra note 2 (stating that brownfields redevelopment affects entire community, thus mandating that community participation is essential because community's health, safety, and stability are at issue).

104. See Allen, supra note 83, at 1 (noting that Shaw was also courting such civic and business leaders as Lester Crown of Material Service Corp., Richard Terry of Peoples Gas, Martin Koldyke of Chicago School Finance Authority, and various officials of Catholic Archdiocese).

105. See id. (commenting that job creation though business development is critical to maintaining market for new housing project).

106. See id. (quoting Shaw as saying, "Nobody is going to come out here independently, so we've got to keep a bunch of things going at the same time").
Primary Care Institute. The development of the Rush Homan Square Health Center is to improve access to cost-effective, high quality primary and preventative health care services for all residents of Chicago's westside. With its four examination rooms, the center is able to accommodate 13,800 office visits annually. No longer will residents have to take the train outside of their communities to obtain basic health care.

C. Residential Rehabilitation

Two residential areas adjacent to Homan Square were the beneficiaries of a 1995 sale of fifty-five million dollar bonds by the Illinois Housing Development Authority. One hundred buildings, containing 1,240 units, in a ten-block area of nearby Douglas Boulevard, are scheduled for rehabilitation with sixteen million dollars of the bond issue. The rehabilitation project enhanced

107. See Rush Primary Care Institute, Rush Homan Square Health Center (visited Nov. 10, 1999) <http://www.rpci.rush.edu/homan/index.htm> (explaining that Rush Homan Square Health Center occupies approximately 2,000 square feet of former Sears building). The Health Center was developed to provide cost-effective, quality primary, and preventative healthcare to the residents of Chicago's westside. See id.

108. See id. (providing that Rush Homan Square Health Center is staffed by family medicine physician, general internist, obstetrician/gynecologist, and three nurse practitioners, thus enabling Health Center to deal with any health situation that is customarily handled by "family doctors"). Services provided to the community by the Health Center include immunizations, pre and postnatal care, and treatment for acute and chronic illnesses, such as tuberculosis, HIV, breast cancer, and prostate cancer. See id. The Health Center has thus proven to be a vital asset to the community. See id.

109. See Rich Hein, Residents Fear Being Priced Out of the Area, CHI. SUN-TIMES, Jan. 16, 1994, § Sunday News, at 21 (remarking that development such as Rush Homan Square Health Center is crucial to Lawndale's revival). Chicago developer Jesse Miller stated, referring to projects such as the Health Center, "We can't move the community forwards with only low income housing, low income residents and low income jobs . . . [w]e need a mixture . . . ." Id.

The Homan Square project as a whole also represents an important facet of brownfields redevelopment: ceasing the development of greenfields and preventing urban sprawl. People will remain in their communities and utilize existing structures rather than creating entirely new ones outside the city limits. For a further discussion of greenfields and urban sprawl, see supra notes 29 and 31 and accompanying text.


111. See id. (commenting that residents of Lawndale had mixed emotions about infusion of money into their neighborhood because many feel what is needed is more affordable housing rather than rehabbing of subsidized rental units).
the living conditions of over 3,800 residents.112 Another three million dollars was allocated towards establishing Chicago's fifth Strategic Neighborhood Action Plan Program (SNAPP) district.113 This program provides funds for the rehabilitation of multi-family housing, landscapes, street improvements, and new building facades along the business district.

D. Private Commercial Development

The commercial development in Lawndale, motivated by Homan Square, spawned an 80,000 square foot shopping center which features a 50,000 square foot supermarket, a commodity that has been absent from Lawndale for over four decades. This retail project cost $38 million to construct and created 200 local jobs. Furthermore, in another area of Lawndale, a local print shop that was considering relocating chose instead to remain in Lawndale to expand its operations. This will provide 200 additional jobs. Lastly, still in the planning stages is a $150 million television studio complex, which will be located on a former illegal dump site in Lawndale. Upon completion, this facility will add 200 more jobs to the bustling local economy.

In total, the fifty million dollars spent on creating and developing Homan Square inspired developers to spend another $200 million on complementary development in the Lawndale area. This complementary development created over 600 new jobs in Lawndale and added low to middle income housing stock. In the words of a local developer who saw many projects fail in the 1980s, "there was nothing else going on in the community at the time that impressed potential store owners, now with the Homan Square project and the other development activities, [investors] are taking a new look at [Lawndale]."114

112. See id. (stating that funds would dramatically improve Lawndale, which at time was filled with empty lots, burned-out buildings and 45% unemployment of its residents).

113. See id. (recalling how Lawndale once used to be home to corporate employers, such as Sears, Coca-Cola and Aldens during 1950s).

114. Flynn McRoberts, $51 Million 'Phoenix' Seen In North Lawndale, CHI. TRIB., Feb. 1, 1995, § News, at 1 (noting optimistic attitude that development and success of Homan Square will bring more projects, such as shopping centers, to Lawndale). McRoberts further stated, "Lawndale developers and residents hope this will provide the engine to rebuild a community long equated with urban plight." Id.
VII. CONCLUSION

A 1997 urban development study indicated that brownfields development deals do not fail because of environmental costs or fears regarding potential liability.\(^\text{115}\) Rather, the primary factor for failure involved non-environmental factors, such as local circumstances, market demand for the product, and extraordinary non-environmental costs.\(^\text{116}\) Homan Square stands as a symbol of what can be achieved when divergent interests come together to discuss their collective wants, desires, risks, and rewards in terms that are both flexible and realistic. Brownfields development has the potential to unite economic and environmental justice interests in the common goal of neighborhood revitalization through the establishment of clear and focused goals with quantifiable environmental cleanup costs.\(^\text{117}\)

In Lawndale, Shaw was responsive to community concerns regarding job creation and fears of gentrification. In turn, Shaw articulated what was necessary to construct a viable development that would sustain itself over time, namely, a project with the capability of attracting middle class residents and national commercial tenants. Compromises were reached on many points to provide for pecuniary gain and community prosperity. Therefore, by including local interests in the planning stages and clearly defining the goals of both sides, the Homan Square project achieved the economic revitalization of a declining community while providing significant benefits to its residents, many of whom are inhabitants of the new project.

\(^\text{115}\) See Christopher Walker et al., The Effects Of Environmental Hazards And Regulation On Urban Redevelopment, exec. sum. (Urban Inst. et al., 1997) (explaining that vital dimensions of project include broad market, legal and regulatory context, specific aspects of state and local policies, and site characteristics). This section of the study also charted factors which influence redevelopment project outcomes and the characteristics of the factors' variations. See id. These factors and variations included relationships such as preservation and development limits in comparison with the scope of architectural preservation and green space creation and maintenance requirements. See id.

\(^\text{116}\) See id. ("The lists of actors, stages in the redevelopment process, and factors influencing redevelopment outcomes . . . imply a lengthy inventory of data items, most of which are quantifiable, in theory.").

\(^\text{117}\) For a further discussion of Environmental Justice and the need to unite opposing interests to achieve common goals when redeveloping brownfields, see supra notes 55-74 and accompanying text.