Redeveloping Brownfields: How States and Localities Use CDBG Funds

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Foreword

America's cities are in their best shape in years. In most cases, fiscal conditions have improved, crime is down, and the center city is becoming more vital. Yet, urban revitalization remains a work in progress, and the restoration of urban brownfields to productive use will be critical in completing the job.

The Clinton Administration has made it a priority to help communities clean up and redevelop brownfields, and the Department of Housing and Urban Development has taken a number of important steps in response to this need. Our new Brownfields Economic Development Initiative (BEDI) specifically addresses this priority as part of a locality's economic redevelopment strategy. We are a full partner in the Administration's "Showcase Communities" initiative, provide technical assistance to State and local governments, and have streamlined our community development regulations to make them more friendly to brownfields redevelopment.

In addition, the Department has launched an active research program to better understand how brownfields impede revitalization of our Nation's distressed communities. This will help us develop ways to overcome and eliminate these impediments. Our research examines a range of concerns: how the intertwined issues of environmental risk and neighborhood economic distress affect redevelopment; how the Community Development Block Grant (CDBG) program supports local brownfields revitalization efforts; the feasibility of using environmental insurance; and innovative financing approaches for brownfields cleanup and redevelopment.

This report, *Redeveloping Brownfields: How States and Localities Use CDBG Funds* provides important insights into how State and local governments use the CDBG program to tackle brownfields redevelopment challenges in their communities. The report illustrates the extent to which CDBG is a sound and adaptable resource for addressing the complexity of local brownfields redevelopment. It also offers suggestions, based primarily on comments from program users, on how the Department can be more responsive to local needs.

I am pleased to make *Redeveloping Brownfields: How States and Localities Use CDBG Funds* available to you as part of the Department's continuing effort to empower communities and help them solve their pressing urban problems.

Andrew Cuomo Secretary of Housing and Urban Development

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Finally, we thank each of the 80 community development agency staff members who took the time to discuss with us their CDBG programs, their brownfields redevelopment activities, and their perceptions about how HUD's programs, policies, and communications could be modified to facilitate brownfields redevelopment. In Boston, Dallas, Philadelphia, Allegheny County, and the State of Michigan, where we conducted more indepth case studies, we thank the HUD grantees for taking extra time for our many questions over several iterations. In these five areas we also thank the other people—in HUD field offices, environmental agencies, private development companies, and nonprofit organizations—who helped us develop a fuller picture of the brownfields experiences in these areas.

Executive Summary

Study background and methods

The Clinton Administration's Brownfields Action Agenda assigned HUD the lead responsibility for several activities, one of which was to facilitate the use of its Community Development Block Grant (CDBG) program funds for brownfields redevelopment. This research study is intended to help HUD meet that responsibility.

Although not designed specifically for brownfields redevelopment, CDBG funds can be used for a full range of community development activities that may be relevant to brownfields, as long as the project satisfies one of the three national objectives:

- 1. benefit low- and moderate-income (LMI) persons
- 2. prevent or eliminate slums or blight
- 3. meet an urgent need.

Without creating an explicit category of funding for brownfields, HUD announced in 1994 that CDBG funds can be used for brownfields projects. Specific eligible activities affecting brownfields include:

- plans for redevelopment or revitalization of brownfields sites, including listing
- site acquisition
- environmental site assessment
- clearance
- demolition and removal of buildings
- rehabilitation of buildings
- removal or remediation of contamination from sites and/or buildings
- construction of real estate improvements.

HUD monitors expenditures of CDBG funds but is not required to and has not yet collected information on brownfields-related outlays. HUD has anecdotal information indicating that some communities are spending very little of CDBG funds on brownfields while others are spending large amounts. To facilitate the use of CDBG resources for brownfields, HUD needs a better understanding of:

- How CDBG resources are used for brownfields.
- The barriers to the use of CDBG funds for brownfields.
- Local government capability to use HUD grants to deal with local brownfields problems.
- The interest of local communities in using their resources for brownfields cleanup and redevelopment.

HUD's Office of Policy Development and Research contracted with Research Triangle Institute (RTI) to conduct a short-turnaround task to inform these policy interests. RTI professional staff contacted directors of 80 community development agencies nationwide who are the administrators of HUD grant and loan funds for their jurisdictions. These included a geographic and size mix of each of the following:

- 43 entitlement cities
- 19 urban entitlement counties
- 18 States, which administer funds to small nonentitlement cities in their States.

After initial contacts, RTI selected 5 of the 80 grantees who were determined to be active in brownfields work for more indepth study as case studies:

- City of Boston
- City of Dallas
- City of Philadelphia
- Allegheny County, Pennsylvania
- State of Michigan

The nature of the contacts with the grantees was not as a structured survey but as a discussion covering the key topics of interest to HUD. Similarly, most of the results are reported according to key themes that emerged, not in tabular or quantitative form. The numbers of grantees contacted are generally too small for percentages to be statistically valid, though some counts are given to provide the reader with a sense of the frequency of mention of various ideas or opinions.

Highlights of the key findings from each of the main topics discussed with grantees are reported here, followed by RTI's recommendations to HUD.

Levels of awareness and involvement in brownfields redevelopment

- The awareness of the term *brownfields* was generally very high among the HUD grantees we contacted; only 5 of the 80 had no idea what it was.
- According to HUD grantees, *brownfields* used to mean large, highly contaminated, urban sites that might or might not be redevelopable. They are still perceived this way by many

of those who are relatively new to dealing with them. The working definition seems to be broadening over time to include rural properties, small sites, suspected contamination, low levels of contamination, and any prior adverse use.

- Another common perception among the grantees contacted is that *brownfields projects* involve only the cleanup or the assessment and cleanup components of a redevelopment project. The more experienced grantees tend to see the brownfields project as the entire process from planning to readiness for reuse.
- Brownfields redevelopment is a priority *incidental* to the economic development, infrastructure, and housing priorities that HUD grantees have. Only 1 of the 80 grantees we contacted had brownfields *per se* as a community development priority.
- Economic development is the top priority in many cities active in brownfields redevelopment. Infrastructure is a high priority among most counties active in brownfields redevelopment.
- Brownfields always compete with other community development priorities for public funding. Many jurisdictions have numerous existing claims on their CDBG allocations and do not find it feasible to earmark funds for brownfields, especially expensive remediation activities.
- Nearly 40 percent of the grantees we contacted said they or the local environmental agency kept an inventory of brownfields sites. These range in sophistication from a GIS tracking system to a simple list. The grantees who are keeping inventories use them for planning purposes and to prioritize investment opportunities. Those not keeping inventories saw them as too costly or just a way to stigmatize certain properties.
- More than half of grantees (43 of 80) we contacted have worked on projects that can be considered brownfields. The majority of entitlement cities and about half of the counties have done or are doing brownfields redevelopment. Only 3 of the 18 States contacted had yet done any brownfields work in their nonentitlement areas.
- By far, the most frequently mentioned deterrent to brownfields redevelopment was cost. More than half of our respondents (47) mentioned cost issues. A related concern was the lack of available funding to address these expensive components. The second most commonly cited deterrent was concern on the part of lenders and/or future property owners about potential liability (21 mentions). A related barrier, concern about the marketability of the property after redevelopment, was mentioned by 14 grantees. Only four respondents mentioned regulatory or red tape issues as a significant barrier to brownfields redevelopment.
- The understanding of brownfields among community development agencies tends to be stronger in areas where they are working closely with their environmental agencies and

the private sector, such as on an EPA pilot grant project, State initiative, or local brownfields forum.

Funding used for brownfields redevelopment

- The primary reason many jurisdictions are not yet spending public funds on brownfields redevelopment is that it is a lower priority than other local needs.
- The reported levels of total public investment to date in brownfields redevelopment ranged from \$100,000 for a single project to more than \$150 million for many years of such work. Sources of public funding other than HUD included city bonds, local funds, and State funds. Some have used EPA brownfields pilot grants of up to \$200,000, which can used for planning and assessment activities.
- About three-quarters of the entitlement cities and half the entitlement counties we contacted are spending or have spent public money on some aspect of brownfields redevelopment.
- The majority of these have spent CDBG or Section 108 funds for brownfields redevelopment at some point. Several entitlement cities have tapped other sources of funding—State program funds and private investment—for brownfields redevelopment and have not used CDBG funds.
- The most common use of HUD money for brownfields is for remediation, followed by site assessment and redevelopment. The types of remediation for which CDBG funds are commonly used are soil treatment, asbestos removal, groundwater treatment, and lead abatement.
- A few grantees have used CDBG funds for planning, site acquisition, or demolition, or for technical assistance to communities.
- CDBG expenditures on brownfields-related activities have ranged from \$150,000 for a project component to more than \$5 million for an entire redevelopment project. Estimates for the remediation components ranged from \$100,000 to \$350,000, with several in the \$200,000 to \$250,000 range.
- The majority of HUD grantees using CDBG for brownfields find that the national objectives work well. Nearly all of the grantees we contacted that are using CDBG funds for brownfields projects are using either the benefit to LMI persons or removal of slums or blight as the qualifying national objective; these are equally common. Only a few cities have used urgent needs to qualify a project for CDBG.
- There are several prevalent misunderstandings of CDBG regulations and national objectives criteria among grantees. For example, many grantees mistakenly believe that 1) there is a 2- or 3-year time limit on meeting the job creation requirements of

the LMI benefit, and 2) the LMI benefit criteria, particularly for job creation, apply primarily to residential areas, although HUD regulations do not state this.

- Among those who use them for brownfields redevelopment, CDBG funds are valued as a
 resource for brownfields projects because they are flexible, readily available once
 allocated, a grant, and a way to fill in financing gaps and leverage other investment in
 distressed areas.
- Among grantees who are *not* using CDBG funds or are less satisfied with them for brownfields uses, it is often due to conflicting local priorities for use of CDBG funds. The other key barrier is the perceived hassle in both demonstrating project eligibility and in meeting ongoing reporting requirements, such as for job creation.
- The Section 108 loan guarantee program, though much less well known outside large cities, seems to be gaining popularity among grantees, many of whom said they are just learning about it.
- Those who see the value of Section 108 say it is the only source of funding that is large and flexible enough for expensive brownfields projects and allows capital to be applied quickly when it is needed, but does not tie up current money in the meantime. These loans allow a community to undertake large-scale, often multimillion dollar, economic development projects that its CDBG allocation is too small to cover.
- Section 108 detractors see it as too large a risk because it uses the CDBG funds as
 collateral. Experienced grantees thus note that only projects believed to show a strong
 return on investment when the property is redeveloped should be proposed for Section
 108 funding.

Environmental and economic development issues in brownfields redevelopment

- Grantees state that the prime motivating factor behind any brownfields project is the
 intended reuse of the site. The more experienced grantees do not initiate brownfields
 redevelopment projects until a new usage of the land is determined and financing is in
 place.
- More than half of the contacted grantees that are active in brownfields redevelopment reported *no* direct experience with environmental permitting. Responsibility for obtaining environmental permits is often done by other State or local government agencies or taken on by the developer.
- Local and State grantees with experience in environmental permitting generally did not consider it to be a major challenge in the brownfields redevelopment process, although several noted permitting was time-consuming and tedious.

- Several respondents with experience in permitting but without permitting problems
 mentioned involvement in cooperative arrangements with permitting agencies either
 through a third-party entity that facilitated permitting or with simply good
 cooperation and assistance directly from the environmental agencies. Those who felt
 permitting was tedious and time-consuming did *not* mention good working
 relationships with environmental agencies.
- Many CDBG grantees contacted simply were not directly involved with environmental matters at the brownfields sites within their jurisdiction. As a result, their direct experience with environmental regulations is limited.
- The grantees who had experience with regulations indicated that soil remediation, asbestos removal, cleanup standards, and the Federal Superfund, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), requirements were the most challenging regulations to understand and with which to comply.
- Liability concerns were a commonly mentioned deterrent by grantees who are *not* active in brownfields redevelopment; however, the majority of grantee agencies with brownfields redevelopment experience did not face significant liability issues.
- Grantees' comments, in the context of their State's policies, suggest that flexible cleanup standards and formal liability release for parties not responsible for existing contamination facilitate successful brownfields redevelopment efforts.
- Several agencies expressing concerns about liability were in States that now offer significant liability release to developers of brownfield properties, suggesting a lack of information among grantees about State initiatives.
- A few grantees indicated that strict liability provisions for sites on the Federal Superfund list of severely contaminated sites (the National Priorities List) have inhibited brownfields redevelopment at those sites.
- Many grantees indicated that brownfields are not competitive with greenfields, citing cleanup costs/time and low property values as reasons. They stated that brownfields sites can compete with greenfields where urban property is valuable, existing infrastructure provides a benefit, or no greenfield sites are available. Further, they asserted that financial incentives, such as public financing of cleanups, can improve brownfields' economic viability relative to greenfields.
- Other economic development issues that grantees consider in deciding whether or not to initiate a brownfields redevelopment project include: whether the costs of site preparation and remediation will be outweighed by the benefits expected from the property's reuse once clean; whether the time it will take to assess and remediate the site will be feasible given the timetable of the industry or other party driving the property's reuse; and the marketability of the property due to either a polluted stigma or concern about the crime

and other social problems common in the low-income areas where brownfields are often located.

Needs for technical assistance on brownfields issues

- HUD grantees' capabilities on brownfields issues range from absolutely zero to an understanding so sophisticated they have developed guidance materials for other places to follow. Grantees in the large entitlement cities generally have a very good understanding of and capacity to deal with brownfields.
- Many HUD grantees have misunderstandings about CDBG regulations, especially related to economic development, even apart from their application to brownfields projects.
- According to HUD grantees, private developers and lenders are often uninformed about brownfields and skeptical about getting involved with them.
- The jurisdictions with the greatest apparent capacity are those where the community development agency is working closely with Federal, State and local environmental agencies, other agencies, lenders, developers, community organizations, and nonprofit agencies. Experienced grantees say that the potentially cumbersome issues involved in a brownfields redevelopment project—including environmental regulations, liability, HUD regulations, lender requirements, and other legal concerns—make them too complex for any single person or agency to understand fully.
- The majority of the grantees in cities, counties, and States active in brownfields redevelopment have successfully sought technical assistance on brownfields. Typically, they have gotten this assistance from the State environmental protection agencies or the U.S. Environmental Protection Agency. Other sources of technical assistance include consultants, local task forces, and, in several cases, HUD.
- Relatively few grantees are aware of the HUD brownfields hotline and those who had called it were generally not impressed with the service received.
- The majority of the grantees active in brownfields work are aware of the Clinton Administration's brownfields cleanup tax incentive, yet they generally do not believe the incentives go far enough in reducing costs to make redevelopment economically feasible.
- Grantees generally viewed HUD field staff as a resource for interpreting CDBG guidelines but less capable on policy and problemsolving for brownfields projects. Several expressed concerns about the caliber of staff remaining after recent staff reductions.

HUD seminars on brownfields have been very well received by grantees, who typically
felt more informed and more optimistic about using HUD funds for brownfields after
attending seminars.

Overall implications

The numbers of community development agencies RTI contacted in each entitlement and size category for this study were small. Many findings by subgroup are therefore not generalizable to HUD grantees nationally. The following findings from the entire sample of 80 grantees are robust in the minds of the RTI staff who conducted this research and are likely to be somewhat more generalizable.

Community development agencies nationwide are often short on the money and capacity to do the broad variety of housing, economic development, and infrastructure activities needed in their areas. Brownfields redevelopment is seen as incidental to, or a component of, these other activities but can be more challenging in terms of both its additional cost and complexity. Based on our contacts with HUD grantees during this study, if they are to make brownfields redevelopment a more integral part of what they do, their hierarchy of needs from HUD is:

- 1. more money
- 2. clearer guidelines on how HUD funds can be applied
- 3. more reliable and targeted technical assistance.
- 1) More money. CDBG funds are shrinking, in real terms, and the local demands for them are growing all the time. The assessment, remediation, and interagency coordination aspects of brownfields projects pose an additional expenditure burden that make it difficult for them to compete with other local demands. Brownfields projects typically do not get funded unless they happen to be part of a high priority economic development or housing project that the community wants to take on anyway. In many areas with a supply of greenfield sites, for instance, brownfields redevelopment is not yet a priority. When projects involving a brownfield site become a priority, typically HUD grantees will use CDBG funds to pay for remediation and other funding for other project components, or use CDBG funds for the entire project if it is a small project.

Especially because of competing demands for CDBG funds, local officials interested in brownfields redevelopment are learning about and tapping other sources of funding. Several large cities and urban counties have used HUD's Section 108 loans as a supplement to CDBG funds that allows them to initiate more expensive, longer turnaround investments where private sector investment is expected. Since their precious CDBG allocation is held as collateral for the Section 108 loan, such projects are undertaken only if there is strong local confidence in the return on investment from the new intended use of the property. In addition, urban areas such as Dallas and Cleveland that have healthy real estate markets and good communications among public and private players have shown impressive leveraging of private funds for brownfields redevelopment. Some States, including Illinois, Michigan, and Pennsylvania, have developed financial incentive programs to encourage brownfields redevelopment in their States. Similarly, there is likely to be great interest in the \$25 million in Economic Development Initiative (EDI)

funds that HUD plans to grant competitively to communities for the economic redevelopment of brownfields.

HUD grantees recognize that because HUD is downsizing, requesting more money from HUD may not be realistic. In addition, they generally do not want HUD's growing brownfields focus to displace or earmark their existing funding; they want to retain local discretion about how block grants should be spent.

2) Clearer guidelines on how HUD funds can be applied. The majority of the HUD grantees doing work in brownfields redevelopment have used CDBG funds for at least part of a project, often the remediation component. They find that CDBG funds can work well for brownfields because of their flexible application to various types of projects and as a good way to leverage investment for other project components. However, there are several grantees that are not aware of how CDBG funds can be used for brownfields projects. They stated that many HUD field staff are equally inexperienced in these matters.

Grantees short on time and money view all Federal paperwork as an unwelcome, but necessary, burden attached to the funding; however, the complexity of the CDBG program regulations and reporting requirements may be a barrier to a brownfields project because staff do not have the time to learn and apply them. Many community development agency staff are generalists who are spread very thinly across a variety of activities, only one of which is to administer HUD block grant funds. In fact, many of them have misunderstandings about CDBG regulations and the Section 108 program, especially as they apply to economic development, even apart from their potential application to brownfields redevelopment. The majority of grantees are thus not a good source of suggestions for specific changes in the CDBG regulations but would appreciate clearer statements of current policy.

However, there are a minority of community development staff experienced and knowledgeable in applying CDBG and Section 108 funds to brownfields redevelopment. They would be good resource people to involve in a HUD working group to propose specific changes. Moreover, HUD grantees are an active network of people who interact regularly with each other and learn from each other's experiences; those among them who have successfully applied CDBG and other HUD funds to brownfields redevelopment projects are a good source of insights and sometimes even written guidance materials that others can adapt to their jurisdictions. A simple role for HUD could be to facilitate this interaction.

3) Reliable and more targeted technical assistance. As with any complex issue, the understanding levels among HUD grantees about brownfields range from zero to very sophisticated. Generally those who have brownfield sites are more active in learning about development options for them, exploring available financing for redevelopment, and requesting technical assistance or partnering with other agencies and private actors to understand the relevant environmental and liability issues. A few of the most active cities and States have developed guidance materials on brownfields redevelopment, including information on financing and environmental and liability issues. These materials have been helpful to the grantees, as well as to the lenders and developers in their areas.

Grantees' understanding of HUD policy as it applies to brownfields is also widely variable. They would like well-informed sources of help on how to plan and implement economically viable brownfields projects and how to apply HUD and other funding to them. They generally have not found HUD field staff, especially since recent staff cuts, to be available or knowledgeable enough to be very helpful in brownfields problemsolving, and the HUD brownfields hotline was not well known or helpful to many of them. However, those who have attended HUD seminars on brownfields have found them very worthwhile and felt more optimistic about brownfields opportunities afterwards. These are clear models for repetition nationwide. In addition, detailing HUD staff experts on brownfields problemsolving to help communities with specific projects would provide more focused and indepth assistance than grantees can get from calling a field staff representative or a hotline.

Recommendations

HUD's sources of funding are generally very well received among grantees. Many of the barriers to brownfields redevelopment and to the expenditure of HUD funds on such projects are local issues, including competing local priorities, market factors, and State or local policies. Our recommendations are therefore focused on improved communications and other actions that HUD may want to take to address the three general areas of grantee need described above.

Convey to grantees that brownfields redevelopment is not just an environmental issue but integral to community development. Many less experienced grantees still regard brownfields as an environmental problem, not a community development opportunity.

Maintain and highlight the availability and flexibility of CDBG funds for brownfields. Make it clear that the CDBG program as it exists now can be used for brownfields and how it can be used. Modify entitlement regulations to make brownfields remediation more explicitly eligible as a use of CDBG. Make sure HUD staff in area offices are aware of this information and disseminate this information clearly and concisely to all CDBG grantees.

Do not encourage brownfields at the expense of other community development.Brownfields are incidental to community development priorities. Do not displace existing CDBG funds to give brownfields a higher priority. Do not create incentives for grantees to remediate brownfield sites unless a reuse is feasible, planned in advance, and will meet a national objective.

Tap into local community developers to design any regulatory changes. Convene a working group of local CDBG administrators who are experienced and actively involved in brownfields redevelopment for a detailed discussion of regulatory changes that would facilitate applying CDBG funds for brownfields redevelopment.

Communicate clearly national objective criteria and how they apply to economic development of brownfields. Debunk misconceptions and misunderstandings such as the common belief that there is a 2- or 3-year time limit to demonstrate LMI benefit, and that there is no presumption, under any circumstances, that jobs created or retained are for the benefit of LMI individuals. [See Section 105(c)(4) of the 1992 Housing and Community Development Act, and

24 CFR 570.208 (a)(4)(iv) and (v) of Entitlement regulations] These misconceptions, as well as others, apply not just to brownfields but to economic development more generally. Without even changing policy, by communicating more clearly what the CDBG program allows, HUD can be very helpful to many grantees. One county grantee mentioned he thought that the objectives were more restrictive until he attended a HUD workshop on brownfields in Fall 1997, and now sees the objectives as reasonably open.

Communicate clearly project eligibility in the economic development category of CDBG. HUD last revised the LMI presumptions for job creation in 1995. If a census tract meets the required income and population standards, then any jobs created and/or retained by a CDBG-assisted activity in that tract are presumed to be held by LMI persons. These changes to the regulations are not well-known or understood by HUD grantees.

Consider revising the LMI area test to include industrial areas in distressed neighborhoods. This would eliminate the job tracking burden that deters some grantees from HUD-funded brownfields redevelopment.

Publicize successful uses of Section 108 loan funds. Experienced grantees could participate in forums about how they were able to accept the risks of using their CDBG funds as collateral on the loans, a major concern of those skeptical about the Section 108 program. Experienced grantees only finance brownfields projects with Section 108 loans where they see a minimal risk of a failure to obtain a good return on the investment. Typically they already have developer interest in the property and a profitable reuse planned.

Educate local community development agencies on liability issues, including insurance, to reduce risk. There appear to be quite a few misinformed grantees whose fear of the unknown (i.e., liability) is a deterrent to brownfields redevelopment. The actual experience of grantees that have completed brownfields redevelopment with liability issues is not as problematic as perceived by those who do not yet understand how to make it workable. Local partnerships among public and private sectors have been very effective in providing joint education about liability.

Publicize successful examples of brownfields incentives. Financial incentives in the form of tax credits or grants can be used to neutralize some of the disincentives to revitalizing brownfield sites. Financial incentives have been successful tools used by States including Michigan, Illinois, and Pennsylvania.

Assist Small Cities grantees in understanding brownfields issues. There is very little awareness of brownfields issues in nonmetropolitan areas because of the prevalence of greenfields. A notable exception and potential model is Michigan, which uses CDBG technical assistance funds to perform outreach to nonentitlement areas.

Educate grantees and help them educate other community stakeholders involved in brownfields redevelopment projects. Hold seminars and/or develop guidance materials on financing, liability, remediation, and marketing.

Continue to hold regional seminars and workshops on brownfields. These have been universally well-received and are effective in giving people a more optimistic and educated perspective about redevelopment opportunities. Target seminars to where the interest is greatest and tailor the focus to relevant issues for each region.

Focus on targeted, tailored technical assistance to grantees. Local community development agencies need targeted assistance with brownfields problemsolving in their areas. Grantees would appreciate a one-stop point of contact that can be trusted to be thorough and reliable. An Internet bulletin board refereed by HUD brownfields specialists may be an effective vehicle for this.

Detail experienced HUD staff to community development offices that want more help with brownfields. Having a small cadre of well-trained HUD staff to help with focused problemsolving on the community development aspects of brownfields might be more cost-effective than trying to train a large number of HUD field staff to be more hands-on in these complex issues.

Improve and then publicize HUD's brownfields hotline. The hotline is not well known among grantees and received mixed reviews about how helpful it was among those who had called it. It should be staffed by people who are more knowledgeable about brownfields problemsolving or who can refer questions to appropriate specialists.

Work more closely and visibly with EPA inside and outside Washington, D.C. If the Federal agencies work together in forums that State and local community developers attend, they can set a good example for the local level community development and environmental collaboration that experienced grantees say is necessary to facilitate brownfields redevelopment.

Publicize success stories as models for a team approach to brownfields. Concerns and uncertainties about high costs, liability, and environmental contamination are the key barriers to brownfields redevelopment. The places where these barriers have been overcome, including Cuyahoga County and the City of Dallas, have created effective vehicles for information sharing among all the public and private stakeholders who need to work together on brownfields. There is much less fear of the unknown in such places.

Partner more visibly with States. HUD's communications and outreach should work in tandem with State initiatives to help its grantees, especially at the State level, understand and work within their own policy context. Communities where the State and Federal officials are working together with the local developers on brownfields projects are convinced this is a key to their success.

Encourage the use of CDBG funds for technical assistance on brownfields.

Publicize the example of nonprofit organizations like the Consumers Renaissance Development Corporation, which has received two grants from the State of Michigan's technical assistance set-aside from its CDBG allocation to assist municipalities with brownfields work.

Finally, several grantees noted that they learned something from RTI's discussions with them, such as that HUD has an active interest in brownfields, is an available resource, and cares what grantees think about how to make its funding sources work better for this purpose. Followup efforts such as those outlined above will be a good demonstration of HUD's commitment to brownfields policy that is responsive to local community development needs.

1. Study Background, Objectives, and Methodology

This section provides background information about brownfields and the interest that the U.S. Department of Housing and Urban Development (HUD) has in how brownfields relate to community development. The purpose of this research study was to explore the degree and nature of the use of HUD's Community Development Block Grant (CDBG) program funds among HUD grantees for projects that can be considered brownfields. The method used by the Research Triangle Institute (RTI) was a qualitative approach involving 80 community development agencies nationwide.

1.1 Background on Brownfields

According to the U.S. Environmental Protection Agency (EPA), brownfields are "abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by actual or perceived environmental contamination." Site contamination can result from a large variety of industrial chemicals and wastes and can include contaminated soil, groundwater, surface water, buildings, or other media. Generally speaking, brownfields sites are considered to be less contaminated or pose lower risk to public health, welfare, or the environment than those sites listed on the EPA's Superfund National Priorities List (NPL).

Although many descriptions of brownfields focus on vacant or unused sites, brownfields may also be currently in use (e.g., older manufacturing facilities) or underutilized. They range in size from very small sites to very large sites of hundreds of acres but more typically are less than 10 acres. The vast majority of brownfields are thought to be urban, and their total number is estimated to be 500,000. The cost of cleanup can range from as little as \$10,000 for small, simple sites to millions of dollars for large, complex sites. However, the typical cost of cleaning up a brownfield, based on a study of State cleanup programs in the early 1990s, is thought to be \$400,000.

The term *brownfields* first emerged in the Federal policy arena in the early 1990s to describe abandoned or underutilized properties where development is complicated by environmental contamination. The redevelopment and reuse of such properties has been occurring for several decades, as long as there has been sufficient private-sector interest. However, acquiring, cleaning, and redeveloping older, often abandoned industrial sites can be very expensive and time-consuming. During the last few years, the belief has grown that private developers and financiers generally are not able or willing to invest sufficient resources to realize the full economic potential of reusing sites. Uncertainties about liability and cleanup costs increase the perceived risks of brownfields projects over and above the risks that lenders and developers face in any urban real estate redevelopment effort.

In recent years, observers have claimed that the current regulatory system, particularly the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), has placed urban brownfields at a competitive disadvantage with uncontaminated, generally vacant land located on the urban fringe popularly known as *greenfields*. According to this view, Federal and State environmental regulation has created significant disincentives to the cleanup and redevelopment of brownfields. This disincentive results from (1) a prolonged and costly regulatory system (i.e., high transaction costs); (2) costly cleanup; and

In May 1997, Vice President Al Gore announced that he was bringing together the resources of more than 15 Federal agencies as part of the Clinton Administration's new "Brownfields National Partnership." The Brownfields Partnership, which includes a \$300 million Federal investment in brownfields cleanup and redevelopment, is hoped to leverage from \$5 billion to \$28 billion in private investment, support up to 196,000 jobs, and protect up to 34,000 acres of undeveloped greenfield areas outside of cities.

(3) the uncertain and seemingly open-ended liability for anyone, such as lending institutions, associated with a brownfield site.

Brownfields became a Federal policy issue in part because of the concern that Federal regulations were severely restricting the reuse, redevelopment, and transfer of properties that suffered from some level of soil or groundwater contamination. In his 1997 State of the Union Address, President Bill Clinton announced a Brownfields National Partnership Action Agenda. From this agenda the administration established action items for various Federal agencies, especially the EPA. EPA, in close coordination with White House staff, has taken the leadership role in addressing the regulatory system governing urban brownfields in order to improve the predictability, cost-effectiveness, timeliness, fairness, and financial feasibility of the brownfields cleanup process while ensuring that public health and safety are protected.

The primary interest of HUD related to brownfields is to eliminate barriers to the revitalization of distressed communities. As part of its role in promoting urban economic development, HUD's stated policy is to build partnerships with local officials, businesses, and neighborhood sectors to remove the impediments to urban redevelopment posed by environmental contamination and regulatory requirements. HUD wants to ensure that its programs and resources support State and local governments' economic development efforts and help leverage private-sector investment in America's urban communities.

In a March 1995 message, "Achieving Environmental Justice: A Departmental Strategy," former HUD Secretary Henry Cisneros characterized the community development context for brownfields as follows:

Brownfields pose serious problems for cities and their residents because they can further degrade the environment and represent precious lost opportunities to bring back jobs and a tax base to the inner city. Their adaptation to new uses could restore not only the buildings and their physical environment but also the jobs and vitality of the communities surrounding them. Since many of these sites are in central cities, revitalization would particularly benefit low-income and minority residents who may have suffered the economic and health consequences of living near blighted buildings and contaminated

lands. Reuse would also take advantage of existing infrastructure and reduce urban sprawl.

HUD has already taken some steps to understand and encourage brownfields redevelopment. In December 1994, HUD, with the active support and cooperation of EPA, held a symposium on the barriers to the redevelopment and reuse of urban brownfields. The symposium brought together practitioners and policymakers representing a variety of perspectives: developers, environmentalists, community activists, mayors, and State and local officials. In addition, HUD and EPA recently cosponsored research by the Urban Institute to examine how the intertwined issues of environmental risk and neighborhood economic distress affect the redevelopment process. HUD cohosted a brownfields financing roundtable in April 1998.

HUD has made \$25 million available in 1998 for brownfields redevelopment under the title of the Brownfields Economic Development Initiative (BEDI). HUD has proposed doubling the amount to \$50 million in its fiscal year 1999 budget request. According to HUD Secretary Andrew Cuomo, "Each brownfields dollar is highly leveraged. The \$50 million being proposed for 1999 will leverage \$200 million in loans and loan guarantees and the cleanup effort will generate 28,000 construction and related jobs precisely where employment opportunities are most needed."

The Clinton Administration's Brownfields Action Agenda assigned HUD the lead responsibility for several activities, one of which was to facilitate the use of its CDBG program funds for brownfields redevelopment. This research study is intended to help HUD meet that responsibility.

1.2 The Use of HUD's CDBG Program for Brownfields

HUD's CDBG program was created in 1974 and, along with its precursors, the Urban Renewal and Model Cities programs, has provided funds to State and local governments nationwide for a wide variety of community development projects. CDBG allocations are made on the basis of a formula that takes into account population, poverty, housing overcrowding, age of housing, and growth lag.

Seventy percent of CDBG program funding is allocated to metropolitan cities and urban counties under the entitlement program. Entitlement cities and counties carry out their own programs. The remaining 30 percent of CDBG funds is allocated for use by smaller, nonentitlement communities through the Small Cities CDBG program, administered by State CDBG agencies. All but two States² design a distribution system and are responsible for ensuring compliance with the program's requirements but pass all funds through to smaller, nonentitlement localities that carry out eligible activities.

From Testimony of Secretary Andrew Cuomo before the Senate Appropriations Subcommittee on VA, HUD, and Independent Agencies, March 12, 1998.

HUD administers the Small Cities program in the States of New York and Hawaii.

The CDBG program offers tremendous local flexibility and discretion, as long as the grant funds are used for projects that meet the specific criteria for one of the following three national objectives:

- 1. benefit low- and moderate-income (LMI) persons
- 2. prevent or eliminate slums or blight
- 3. meet an urgent need.

Although not designed specifically for brownfields redevelopment, CDBG funds can be used for a full range of community development activities that may be relevant to brownfields, as long as the project satisfies one of the three national objectives. CDBG funds can be used for various aspects of brownfields projects. Specific eligible activities affecting brownfields include:

- plans for redevelopment or revitalization of brownfields sites, including listing
- site acquisition
- environmental site assessment
- clearance
- demolition and removal of buildings
- rehabilitation of buildings
- removal or remediation of contamination from sites and/or buildings
- construction of real estate improvements.

A community may also use up to 20 percent of its annual CDBG allocation for planning and general administrative costs. Brownfields-related activities such as planning and assessment, regardless of whether a subsequent redevelopment project may meet one of the three national objectives, may be supported under this provision.

The CDBG Section 108 Loan Guarantee Program is also available to support brownfields reuse activities, including land acquisition and cleanup following the land acquisition. The purpose of the Section 108 program is to enable localities to initiate economic development projects that are too large for a single-year CDBG grant to cover and for which project-generated revenues are expected. The loan guarantee-assisted activities must be eligible for CDBG assistance and comply with one or more of the CDBG program national objectives. A grantee's annual CDBG allocation may serve as formal collateral for the Section 108 loan, though grantees are expected to repay loans in part using income generated from the development project.

HUD monitors expenditures of CDBG funds but does not collect systematic information on brownfields-related outlays. To date, HUD has only anecdotal information about grantee usage of CDBG funds on brownfields. To facilitate the use of CDBG resources for brownfields, HUD needs a better understanding of:

- How CDBG resources are used for brownfields.
- The barriers to the use of CDBG funds for brownfields.

- Local government capability to use HUD grants to deal with local brownfields problems.
- The interest of local communities in using their resources for brownfields cleanup and redevelopment.

1.3 Study Objectives and Methods

HUD's Office of Policy Development and Research (PD&R) contracted with RTI to conduct a short-turnaround task to inform these policy interests. The primary objectives of the task order were:

- To obtain detailed information on CDBG recipients' use or nonuse of these funds for brownfields work.
- To determine if there are barriers to the use of CDBG monies for brownfields.
- To suggest revisions in HUD policy, regulations, or administration to encourage the use of CDBG funds for brownfields remediation and reuse.
- A variety of grantee agencies nationwide that administer CDBG programs were contacted to determine the following types of information of interest to HUD:
- Agency plans and budget allocations for brownfields activities.
- Economic development plans for brownfields development.
- Local opinions about the suitability of HUD programs for brownfields.
- Local capacity to address brownfields issues.
- Views about the capability of HUD staff in dealing with brownfields.
- The regulatory context (including environmental regulation) and its effects on brownfields redevelopment.
- Suggestions for steps that HUD can take to eliminate or reduce barriers that CDBG recipients face in addressing brownfields problems.

RTI professional staff contacted directors of 80 community development agencies nationwide who are the administrators of HUD grant and loan funds for their jurisdictions. These included a geographic and size mix of each of the following:

- 43 entitlement cities
- 19 urban entitlement counties
- 18 States, which administer funds to small nonentitlement cities in their States.

Additional information about the selection of grantees, the development of protocols for the contacts with grantees, the data collection itself, the confidentiality assurances made, and the data analysis is provided below.

Selection of Grantees to Contact. The intention for this study was to select a group of grantees that were diverse along several dimensions:

- the type of grantee (entitlement city, entitlement county, or State)
- the size of the jurisdiction
- presumed level of activity in brownfields redevelopment.

HUD staff suggested dividing the 80 sites to contact across 9 categories of type and size, as follows:

Metropolitan cities	<u>Urban counties</u>	<u>States</u>
1,000,000 or more	500,000 or more	larger 25 States
500,000 to 999,999	499,999 or less	smaller 25 States
250,000 to 499,999		
50,000 to 249,999		
49,999 or less		

RTI thus selected 9 grantees in each of the above categories, except only 8 in the cities over 1 million because there are only 8 cities that large in the U.S.³ A list of the grantees included in the study is included in **Appendix A**.

Within each cell, we decided to try to include a roughly equal mix of grantees believed to be active in brownfields redevelopment and grantees who might or might not be active; more specifically, to select five of the nine in each cell from a list of grantees where there was a clear indicator that they were active. The list we used to make this preliminary designation was a list of places that had applied for EPA pilot project funding. It was assumed that areas interested enough to apply for EPA funding had at least identified a local need for brownfields redevelopment and thus for our preliminary site selection purposes were "presumed active." Since we did not have any basis to assume that those who did *not* apply for EPA pilot funding were *not* interested in brownfields redevelopment, we initially classified the remainder of CDBG grantees as "may or may not be active."

This division proved to be only a very rough proxy for their levels of brownfields activity. Several grantees were actually either more or less active than this initial guess would suggest, but the end result was similar. Whereas 47 of the 80 sites contacted were presumed to be active in brownfields work, 43 turned out to be active, with or without the use of HUD funds. The table in Appendix A shows which community development agencies were initially

In addition, a parish in Louisiana listed as an entitlement city was later (after the contact was completed) reclassified more accurately as a county, so in the affected categories we ended up with 10 counties and 8 cities instead of 9 of each.

presumed active and (by shading) which we ultimately determined to be active to some degree in brownfields redevelopment. For States, this classification refers to how active they are in their nonentitlement areas, not to State policies more generally.

To achieve a geographic mix of sites, within each cell we sorted our frame of grantees by their regional location. Then we determined the appropriate random sampling interval to end up with the desired number (four or five) and selected grantees at random. The presorting by region was a way to implicitly stratify the sample by geographic location. After randomly generating a list of grantees in each cell, a few replacements were made in cases where:

- multiple sites within a cell were in the same State, or
- grantees were not responsive to our initial contacts.

Later, after nearly all of the initial contacts with the 80 grantees were made, in consultation with HUD staff RTI selected five grantees determined to be active in brownfields work for more indepth study as case studies:

- City of Boston
- City of Dallas
- City of Philadelphia
- Allegheny County, Pennsylvania
- State of Michigan

Case study profiles for each of these are included in **Appendix C**.

Protocol Development. Experienced qualitative research staff at RTI prepared a draft protocol for the discussions with grantees, based on the issues outlined by HUD in the statement of work. It was prepared as a topic guide for discussions, not as a structured survey. The protocol was revised after several pretest calls were made, at least one to each type of grantee, and to reflect comments from HUD staff. The protocols used for the contacts with the 80 city, county, and State grantees, as well as the issues guide for the case studies, are included in **Appendix B**.

Data Collection. Six RTI professional staff divided up responsibility for calling the 80 grantees. They were jointly trained and oriented by the RTI project director, with input from HUD staff, and each of them read background materials on the CDBG program and brownfields provided by HUD. HUD Community Planning and Development (CPD) staff provided contact information for the directors of the selected agencies. HUD prepared a cover letter to the selected community development agency directors to encourage them to participate in the study, and RTI mailed each selected grantee a list of the general questions to be covered in the discussion. Then RTI staff called each grantee to set up a telephone appointment for discussing the issues. In many cases it was a week or more between the first contact and when appointments could be set; sometimes the director delegated the responsibility to another staff person. Several grantees who were nonresponsive to several messages left by RTI staff were replaced with others in the same type and size category.

The callers covered all of the major issues with each respondent, but in many cases the order of questions varied by discussion to minimize the disruption of the natural flow of the conversation. The average discussion took 45 to 60 minutes to complete. In a few places where there was no brownfields activity the discussions were only 20 to 30 minutes. In some cases more than one grantee staff person participated in the call or an additional person was contacted to answer a subset of the questions.

The nature of the contacts with the grantees was not as a structured survey but as a discussion covering several key topics of interest to HUD. Similarly, most of the results are reported according to key themes that emerged, not in tabular or quantitative form. The numbers of grantees contacted are generally too small for percentages to be statistically valid, though some counts are given to provide the reader with a sense of the frequency of mention of various ideas or opinions.

In the five case study sites, in addition to community development agency staff, RTI contacted the HUD field staff representative, the environmental agency, and other officials who the initial grantee contact suggested were actively involved in brownfields redevelopment in that area.

Confidentiality. Grantees were encouraged to share their views openly and were promised that the information they provided would be reported only in summary fashion without identifying specific individuals or jurisdictions. The only instances in this report where place names are noted are where their local policies are public information available from other sources, or by permission from the five sites selected for more indepth case studies.

Data Analysis. As soon as possible after discussions with grantees were completed, callers wrote up their notes from the call in an open-ended template format with fields corresponding to the key issues from the protocol. When all 80 contacts were complete these templates were concatenated into a qualitative database file using a text-based software called AskSam. This software allows the reporting of data across grantees within field, sorting by various characteristics, and reporting data from multiple fields simultaneously (analogous to a crosstabulation). The data for each major issue area were read and key themes were coded and tabulated by qualitative analysts in preparation for writing the draft report. The callers also met periodically as a group with senior research staff to discuss key findings and impressions. Case study profiles were also prepared and the key findings from them integrated into the analysis for the national assessment.

RTI's key conclusions from this qualitative study come from two main sources: our analysis of the data captured from the discussions with 80 grantees and other contacts in the 5 case study sites, and the observations and insights of the several RTI professional staff who were involved in the direct contacts with community development agencies nationwide. In addition, we conducted a limited review of recent publications on brownfields issues and of States' relevant policies.

It is important to note that these are the perspectives of the respondents, who are community development directors and staff persons. Since our sample of grantees is diverse but not statistically representative, these findings are not strictly generalizable to all CDBG grantees.

Especially within subgroups by size and type of grantee, the findings may not be generalizable because the numbers of grantees contacted are small. For themes that emerged across a large proportion of the 80 grantees contacted, however, we can exert more confidence that they are indicative of national trends among HUD grantees. Some of these more robust findings are reported in the Executive Summary of this report.

In the remainder of this report, the findings from the nationwide contacts with HUD grantees are reported, along four major topic areas:

- Levels of awareness and involvement in brownfields redevelopment (Chapter 2).
- Funding used for brownfields redevelopment (Chapter 3).
- Environmental and economic development issues in brownfields redevelopment (Chapter 4).
- Needs for technical assistance on brownfields issues (Chapter 5).

Within each topic, the authors report key findings, data from the national assessment, highlights from the case studies (often as sidebars), and recommendations (where applicable).

2. Levels of Awareness and Involvement in Brownfields Redevelopment

There is broad variability nationwide among HUD grantees in the understanding of and priority placed on brownfields redevelopment, although awareness is increasing. As HUD grantees learn about Federal funding sources (including CDBG funds), they are getting more involved in brownfields redevelopment, provided that their community development priorities involve project sites that have an actual or perceived contamination.

2.1 Grantees' Community Development Priorities

Key Findings:

- Brownfields redevelopment is a priority *incidental* to the economic development, infrastructure, and housing priorities that HUD grantees have. Only 1 of the 80 grantees we contacted had brownfields per se as a community development priority.
- Economic development is the top priority in many cities active in brownfields redevelopment.
- Infrastructure is a high priority among counties active in brownfields redevelopment.
- Brownfields always compete with other community development priorities for public funding.
 Many jurisdictions have numerous existing claims on their CDBG allocations and do not find it feasible to earmark funds for brownfields, especially expensive remediation activities.

As might be expected, the top three community development priorities across all the HUD grantees contacted were housing, infrastructure, and economic development. Each type of grantee has a somewhat different emphasis among these, however. For the entitlement cities contacted, the top priority (by far) was housing, with infrastructure mentioned slightly more often than economic development. In the urban counties, the order was infrastructure first (by far), then housing and economic development. In the States, it was economic development first, then infrastructure and housing. A host of other priorities were mentioned after these top three, the most common two being public services and public facilities development. Only 1 grantee of the 80 we contacted mentioned brownfields redevelopment as an explicit community development priority (see sidebar on next page).

The grantees that have an emphasis on economic development also seem to be more inclined to pursue brownfields projects. For example, 15 of the 30 cities we determined to be active in brownfields redevelopment (hereafter *active*) mentioned economic development as a priority, versus only 2 of the 13 cities inactive in brownfields redevelopment (hereafter *inactive*). In inactive cities, affordable housing and infrastructure development were mentioned as priorities more often than in active cities, suggesting that these activities often compete with brownfields for priority attention. Economic development was also a top priority in several of the States that are paying the most attention to brownfields issues.

The most commonly mentioned community development priority in the counties we contacted where they have done some brownfields work was infrastructure development, which they say is an important part of making the sites viable for reuse.

Some of the aspects of communities that grantees indicated were important determinants of their local community development priorities, and thus whether or not they have an interest in brownfields, included:

- how long a city has been developed
- urban growth patterns
- growth rate of the economy
- housing supply and demand
- the level and type of industrial activity
- the amount of land available for development
- the concentration of brownfields
- geography within the United States
- the poverty level and other socioeconomic factors.

In Philadelphia and Allegheny County, because of the long industrial history of these areas, urban site redevelopment nearly always involves an environmental assessment and, if necessary, remediation. Consequently, these grantees are necessarily active in brownfields redevelopment. Similarly, in Boston, where there is also a high concentration of brownfields sites, the respondents indicated that they select sites for redevelopment based on their economic potential, not based on whether they are brownfields.

Allegheny County officials say the county has one of highest concentrations of brownfields sites in the country. The county commissioners have selected brownfields as a community development priority simply because the need for their redevelopment is so visually evident. As a result of steel mills' closing, there are a number of deteriorating buildings in clear view as well as many sites that are less prominent. The main locus for the county's brownfields work is the Monongahela Valley, a section of the county hit hardest from the mill closings.

The county and its 130 municipalities are identifying sites and planning for different activities such as infrastructure development and building rehabilitation. The county has developed many of the largest, most visible sites and will now work on some of the smaller sites.

2.2 Perceptions of What Brownfields Are

Key Findings:

- The awareness of the term *brownfields* was generally very high among the HUD grantees we contacted; only 5 of the 80 had no idea what it was.
- According to HUD grantees, *brownfields* used to mean large, highly contaminated, urban sites that might or might not be redevelopable. They are still perceived this way by many of those who are relatively new to dealing with them.
- The working definition seems to be broadening over time to include rural properties, small sites, suspected contamination, low levels of contamination, and any prior adverse use.
- The understanding of brownfields among community development agencies tends to be stronger in areas where they are working closely with their environmental agencies and the private sector, such as on an EPA pilot grant project, State initiative, or local brownfields forum.
- Another common perception among the grantees contacted is that brownfields projects involve
 only the cleanup or the assessment and cleanup components of a redevelopment project. The more
 experienced grantees tend to see the brownfields project as the entire process from planning to
 readiness for reuse.

The awareness of the term *brownfields* was generally very good among the grantees we contacted:

- More than 25 percent of our contacts' unprompted definitions of brownfields generally corresponded to the offered definition.⁴
- Another 25 percent gave a similar definition but mentioned only actual and not suspected contamination.
- Only 5 of 80 had no idea what a brownfield was, and these were all inactive places.
- More than 10 percent (9 grantees) had a concept of brownfields that indicated a more serious environmental problem than is typically considered a brownfield, such as toxic waste, hazardous materials, landfill, or beyond cleanup. The majority of the grantees with these perceptions were inactive as well.

Some grantees discussed other finer points of the brownfields definition. For example, a couple of grantees mentioned that their definition is broader than EPA's because it would include

[&]quot;Abandoned or underdeveloped industrial or commercial properties that may have contamination, including soil and groundwater pollution as well as contaminated buildings (e.g., with asbestos or lead paint)." This definition was agreed upon with HUD as the one RTI staff would use in discussions with grantees; it was believed to be consistent with EPA's definition (see Section 1.1), but stated in specific terms that would be relevant to community development agency staff.

pollution from petroleum products, which EPA's does not. Other criteria that various grantees mentioned as important characteristics of a brownfield included:

- the site is economically feasible for redevelopment
- the site contains existing structures
- the site is located in an urban area
- the site involves public money.

Brownfields are very well understood by some city, county, and State administrators, especially those in heavily industrialized areas. In many areas of the "rust belt" States from Illinois to Massachusetts, redeveloping urban properties that require some environmental assessment and/or remediation has been going on for many years, long before the term *brownfields* was in use. In areas such as Chicago, Cleveland,

Boston is a compact city with a long history of industrial activity. Even sites that have only been used as residences still often have underground storage tanks or other environmental contamination issues. All contacts agree that little vacant, undeveloped, previously unused land exists in Boston.

Detroit, Pittsburgh, Philadelphia, and Boston, redeveloping brownfields is a priority because most, if not all, potential sites for urban economic development projects are brownfields. In these areas, redeveloping brownfields is often an essential step in achieving the top priorities of economic development and housing for LMI households.

In addition to these places with a natural historical need for brownfields work, grantees in the Gulf States such as Florida and Louisiana, where environmental problems have long been a factor in development, tend to be aware of brownfields issues. Several younger, cleaner metropolitan areas such as Dallas, Memphis, and Minneapolis are also becoming active in brownfields redevelopment, in part due to EPA pilot grant opportunities that enhanced their awareness and understanding of brownfields.

On the other hand, in some of the less densely populated States in the South and West and the smaller States in the East, the awareness and perceived relevance of brownfields is quite low. Much of the cynicism we encountered about brownfields as a "Washington buzzword" came from these areas. Grantees in areas that have large tracts of available land and few highly industrialized areas are reasonably unaffected by the need to redevelop a potentially contaminated property, so they have not taken the time to understand the related issues. They express concern that the high priority placed on brownfields redevelopment, especially in the Northeast, may displace their local priorities for community development, such as building sufficient housing to accommodate rapid growth.

Although the majority of the respondents said that their perceptions of brownfields have not changed in the last few years, several grantees did mention such changes. A few people simply noted that the term is now used (some say as a buzzword), whereas it never existed before. Generally, the working definition of brownfields has gradually expanded over time in HUD grantees' minds, as follows:

• Once applied only to large sites; now they can also be small.

- Once included only urban sites; now they can also be rural.
- Once included only industrial sites; now they can be any prior adverse use.
- Once applied only to large environmental problems, such as Love Canal, which is a Superfund site; now a brownfield can include even minor contamination of soil, buildings, or groundwater, including lead and asbestos.
- Once included actual contamination; now can mean a belief that contamination exists.

Another theme in the comments about how perceptions have changed is that brownfields are now seen as feasible for redevelopment and reuse, not as "dead" places that nobody wants to occupy. One comment was that economic development and environmental protection used to be at odds as local priorities, but now these objectives weave together and their supporters have a common interest in redeveloping brownfields.

Officials in Dallas believe that the city's booming economy has created a high demand for real estate in and around the city. This demand almost guarantees investors, and the city has become very active in brownfields redevelopment both to retain existing businesses and to attract new ones.

Another common perception among the grantees contacted is that *brownfields projects* involve only the cleanup or the assessment and cleanup components of a redevelopment project. Generally, this is because these are the aspects of brownfields redevelopment projects that make them different from other urban renewal projects. The more experienced grantees tend to see the brownfields project as the entire process from planning through remediation and construction or rehabilitation for the new use.

Recommendations

Convey to grantees that brownfields redevelopment is not just an environmental issue but integral to community development. Although staff in more mature areas such as Allegheny County recognize that economic development and environmental protection can be compatible purposes, many less experienced grantees still regard brownfields as an environmental problem, not a community development opportunity.

2.3 Prevalence of Brownfields Sites

Key Findings:

- The majority of entitlement city and county grantees said they had brownfield sites in their jurisdictions. The State grantees were less aware of brownfields sites in their nonentitlement areas.
- In the larger jurisdictions, there are hundreds of brownfields sites; in the smaller ones, few enough to count and track easily. Quite a few grantees could not say how many sites they have.
- Nearly 40 percent of the grantees we contacted said they or the local environmental agency kept an inventory of brownfield sites. These range in sophistication from a Geographic Information System (GIS) tracking system to a simple list. Grantees who keep inventories use them for planning purposes and/or to prioritize and market investment opportunities. Those who are not keeping inventories saw them as too costly or just a way to stigmatize certain properties.

When asked whether they have any brownfield sites in their jurisdictions that fit the definition given (see Section 2.2), the majority of the city grantees (37 of 43) and county grantees (17 of 19) said yes. Many of the State grantees did not know about brownfields sites in their nonentitlement areas but generally thought the numbers of sites would be small. The numbers of brownfields sites among those who said they have any ranged from one or two to hundreds or even thousands.

More than one-third (31) of the grantees we contacted said that they or some other organization (usually the environmental agency) were keeping at least an informal inventory of brownfields sites. An additional six (three cities, three counties) indicated that they plan to start an inventory. Reasons why a brownfields inventory is important to some grantees include: it helps establish priorities and timelines for public spending, it helps the city be proactive about planning development rather than just reactive to specific requests, it is used to help determine which sites are eligible for State money, and it is used to keep track of and market investment opportunities for new business development.

About one-fourth (20) of grantees contacted were not maintaining and had no plans to establish an inventory. Their reasons included the following: it is too costly, its cost is better spent on projects, and it would be too much of a stigmatizer or "bad list." A few grantees did not know if there was an inventory in their jurisdiction or not.

The larger cities and the States tend to have their environmental agencies keep an inventory, whereas some of the smaller cities and counties do it themselves in the community development department. The sophistication of

The Dallas Brownfields Program is working with EPA to develop the Brownfields Redevelopment Inventory Management System (BRIMS) tracking system. This system will provide tracking of brownfields successes to gather data on the number of jobs brought into communities, and monitor any increase in tax bases and/or any regulatory modifications achieved.

inventories they mentioned ranged from GIS and tracking systems, with detailed information on each site, to a simple list of sites.

A few grantees mentioned using CDBG funds for activities related to listing or inventorying brownfields sites, which HUD considers an eligible planning activity.

2.4 Range of Brownfields-Related Activity

Key Findings:

Brownfields sites and projects among HUD grantees range from very small to extremely large, are located in urban as well as suburban and rural areas, involve a full range of actual and suspected environmental contaminants, and have a broad range of planned or actual industrial, commercial, and residential reuses.

Community development agencies are working on a broad range of activities that they described as brownfields projects. Two of the smallest site examples were a former gas station and a single former school building with asbestos tiles. The largest examples of sites were a 300-acre industrial site that used to be a petroleum refinery and a 3-million-square-foot former automotive plant. The location of the sites ranged from industrialized sections of old cities to waterfronts to tobacco farms. A commonly offered suburban example of a brownfield site was a former dry cleaner. Many of the sites described had been abandoned for decades.

The types of contamination at sites also covered a broad range and included lead or asbestos in buildings, pigeon guano on buildings, medical waste from a former hospital, petroleum products in soil and groundwater, and heavy metals in soil. Several projects were planned for areas with suspected but not yet documented contamination, such as a former meat packing plant site.

Some of the actual or intended reuses of brownfield sites mentioned included: industrial parks, shopping centers, an education and research park, a broadcast facility, and residential developments. Thus the jobs planned or created from projects included light manufacturing, retail and services, and high-tech positions.

A few specific before and after examples of projects include:

- A former hotel with asbestos problems converted to a senior center.
- A former gas station converted to a medical clinic.
- Former downtown industrial buildings demolished and replaced with a new mixed-use retail and services center.
- A former department store converted to an affordable housing development.

2.5 Barriers to Brownfields Redevelopment

Key Findings:

- By far, the most frequently mentioned deterrent to brownfields redevelopment was cost. More than half of our respondents (47) mentioned cost issues. A related concern was the lack of available funding to address the expensive components of brownfields redevelopment.
- The second most commonly cited deterrent was concern on the part of lenders and/or future property owners about potential liability (21 mentions). A related barrier, concern about the marketability of the property after redevelopment was mentioned by 14 grantees.
- Only four respondents mentioned regulatory or red tape issues as a significant barrier to brownfields redevelopment.

By far, the most frequently mentioned deterrent to brownfields redevelopment was cost. More than half of our respondents (47) mentioned cost issues. Many of them were deterred by the additional cost (beyond that of a typical redevelopment project) of assessment and remediation. A few of these contacts specifically mentioned that the potential benefits after redevelopment were not great enough to offset the anticipated costs.

A related concern was the lack of available funding to address these expensive components. The reasons for lack of sufficient funding include:

- Strong competing local demands for CDBG and other HUD funds.⁵
- Few State or local funds designated for redevelopment purposes.
- Reluctance of private investors to put funds at risk on projects for which they may incur liability for any residual contamination.

One respondent mentioned that the savings and loan crisis and subsequent conservatism have reduced the willingness of lenders to invest in speculative real estate projects generally, but especially projects with the myriad uncertainties of brownfields redevelopment.

The second most commonly cited deterrent was concern on the part of lenders and/or future property owners about potential liability (21 mentions). A related barrier—concern about the marketability of the property after redevelopment, due in part to public perception or stigma about the environmental contamination or the nature of the surrounding area—was mentioned by 14 grantees. This lack of marketability is especially serious in places where there are available greenfields sites, typically in nicer neighborhoods (12 mentions).

Additional information on why grantees are not using HUD funds on brownfields redevelopment is reported in Section 3.6.

Uncertainty about the types of environmental hazards that will be found was cited by 10 grantees. The long-time horizon for a brownfields redevelopment—to get clearance, funding, and community support—was mentioned by seven grantees, including two of the most experienced active cities, as an important deterrent. Only four respondents mentioned regulatory or red tape issues as a significant barrier to brownfields redevelopment.

The perceptions of the problems related to brownfields redevelopment among those who are already doing brownfields work are very similar to those of the grantees who are watching from the sidelines. Generally, however, the inactive grantees were less specific about the problem, citing merely high cost or liability, whereas the experienced grantees gave more detailed insights. In addition, the fears about liability often seem worse than actual experience, suggesting more education is needed about liability issues.

There were also few differences among the types of grantee. One exception is that the availability of greenfields was mentioned as a significant deterrent by several State grantees (whose nonentitlement communities are often in rural areas) and in a few urban counties, but in only a couple of cities. The viability of brownfields versus greenfields is addressed more fully in Chapter 4.

2.6 Degree of Brownfields Involvement by Grantee Type and Size

Key Findings:

- More than half of grantees (43 of 80) we contacted have worked on projects that can be considered brownfields.
- The majority of entitlement cities and about half of the counties have done or are doing brownfields redevelopment. Only 3 of the 18 States contacted had ever done brownfields work in their nonentitlement areas, even though most States and their entitlement areas are active in brownfields.
- Larger cities, counties, and States deal with larger-scale, more expensive projects and have multisite redevelopment programs but also have larger bureaucracies and more problems to deal with in coordination.
- Smaller areas have fewer sites but also fewer resources to deal with them. A single brownfields redevelopment project can have a much bigger impact in a small area than in a large city.

One of the first assessments RTI made for this analysis was the degree to which each grantee is involved in brownfields redevelopment. Counting any brownfields assessment or redevelopment activity, *whether or not HUD funds were involved*, we determined that:

- Using our working definition, 30 of the 43 entitlement cities have worked on a redevelopment project that could be considered a brownfield.
- Some activity relevant to brownfields had taken place in 10 of the 19 entitlement counties.
- Of the 18 State grantees, 3 had ever had any brownfields activity in nonentitlement areas of their State.

These characterizations of *active* versus *inactive* are not identical for the types of grantees because of their different roles. The entitlement cities are directly involved in redevelopment projects so staff there are generally aware of whether projects they have done could be considered brownfields, even if they do not commonly apply the term. Many urban counties also were directly involved in projects or worked closely with their municipalities to fund them. Both types of local government grantees tend to be well aware of, if not leading, any brownfields redevelopment activity in their jurisdictions.

Conversely, the role of HUD's State-level grantees is to administer funds to the nonentitlement cities and towns in the least urbanized areas of their States. The majority of them are not active in brownfields redevelopment, even when the entitlement areas in their States are very active. HUD grantees in State community development agencies do not typically lead brownfields policy and implementation for their State; governors' offices and State environmental agencies often lead these activities. In fact, we found that some State grantees did not mention any State-level brownfields initiatives when asked about these, yet other public

sources document significant brownfields policy activity in those States.⁶ Again, this suggests that communication among community development and environmental agencies is often lacking.

County respondents were asked if there are special issues that urban counties face in redeveloping brownfields that differ from those facing cities. State respondents were asked a similar question regarding special issues that differ from those facing cities or counties. While some county respondents did not think there are special issues that differ from those facing cities, a number pointed out that counties and cities have different politics due to multiple jurisdictions in counties and different intensity of land development. Specific themes included:

- Counties have more agencies and bureaucracy than cities; counties must have cooperation with municipalities.
- Land is not as intensively developed as cities; less developed areas in counties have fewer brownfields sites but one brownfield can contaminate a very large area.
- Competition among different areas within a county, often both urban and rural, limits the amount of money available for one brownfield site.

State grantees identified significant differences with counties and cities. For example:

- Cities and counties are closer to and more directly involved in brownfields projects but the liability and development problems are similar.
- State grantees are only a funding source and do not control the type of projects proposed.

The activity levels of entitlement cities vary somewhat by size category. The numbers of cities contacted that are at all active in brownfields were as follows:

- Eight of 8 cities over 1 million
- Seven of 9 cities 500,000–999,999
- Six of 8 cities 250,000–499,999
- Four of 9 cities 50,000–249,999
- Six of 9 cities 49.999 or less

All of the cities with populations more than 1 million and the majority of the next largest cities contacted have been active to some degree in brownfields redevelopment. These large cities are generally leveraging funds from numerous sources to finance large redevelopment projects. The smallest cities (population less than 50,000) are also active, yet they more typically rely on a single grant to fund most of a small project. The least active group of those we contacted was the cities with populations of 50,000 to 249,999.

For example, a recent report by Charles Bartsch of the Northeast-Midwest Institute indicated that the legislatures of nearly all 50 States took steps in 1997 to create laws aiding the redevelopment of brownfields sites.

About half of the urban counties contacted in both size categories were active in some aspect of brownfields redevelopment. Although none of the States were yet very active in using funding for brownfields activities in their nonentitlement areas, the more populous States appear to have slightly more activity than the smaller ones.

Not surprisingly, the grantees in highly industrialized areas—including the States and municipalities of Illinois, Michigan, Pennsylvania, and West Virginia, as well as local governments in Ohio, Massachusetts, and New Jersey—have tended to be more active in brownfields considerations than the grantees in newer or less industrialized parts of the Nation such as the western States.

Respondents in each city agency were asked if their insights and experiences with brownfields issues differ from those of larger or smaller cities. Some themes include:

- Larger cities have more experience with most issues in brownfields redevelopment and can deal with large-scale projects and Section 108 loans.
- Liability is greater in larger cities and there are more complex legal problems.
- Larger cities get more entitlement money as well as attract more resources from investors.
- Large cities support larger bureaucracies that complicate brownfields redevelopment.
- Small cities have fewer sites, so it is easier to see the scope of the problem and deal with the responsible property owners.
- Small cities have fewer resources, which intensifies the brownfields problem.

Similarly, grantees in counties and States were asked in what ways their insights and experiences with brownfields differ from those of other size counties or States. Several active counties noted the impact of size:

Small jurisdictions have fewer personnel on staff, which makes it harder to take the time to train staff in areas as complex as brownfields. As one county respondent stated, "It's a lot to ask of someone running a housing program to know the ins and outs of countless regulations."

- A very large county means potentially more brownfield sites.
- Large counties deal with a larger cross-section of issues than small counties do.
- Large counties have more demand for limited funding sources and may have more difficulty coming up with enough money for brownfields projects.
- Large counties face a wider range of environmental problems.

3. Funding for Brownfields Redevelopment

Although more than half of the HUD grantees we contacted are working on or have worked on redevelopment projects that involve brownfields sites, their ways of thinking about and accounting for projects is not typically done according to whether it is a brownfield. **Their ability to estimate total public funding and HUD funding for brownfields redevelopment was often lacking.** Those who are using CDBG and Section 108 funds for brownfields redevelopment generally find them quite suitable for this purpose, though many grantees express frustration with HUD's reporting requirements. The majority of grantees seemed not to have an accurate, detailed understanding of current regulations nor specific suggestions for how HUD might alter them.⁷

3.1 Public Investment in Brownfields Projects

Key Findings:

- The reported levels of total public investment to date in brownfields redevelopment ranged from \$100,000 for a single project to more than \$150 million for many years of such work.
- Only 18 of the 43 grantees who indicated they had done work that could be considered brownfields redevelopment could easily estimate their total public investment to date for these projects; their accounting is not done this way and/or our respondents did not have an historical perspective.
- Sources of public funding other than HUD included small EPA grants, city bonds, local funds, and State funds.
- The primary reason many jurisdictions are not yet spending public funds on brownfields redevelopment is that it is a lower priority than other local needs.

The levels of total public investment in brownfields, among those reporting any activity who could estimate its cost, ranged from \$100,000 to \$150 million. These represent a one-time involvement in a project to several decades of redevelopment projects that involved environmental assessment or remediation. The sources of funding that grantees applied included

In Allegheny County, Pennsylvania, the total public investment (including HUD money) on brownfields redevelopment is \$30 million to \$40 million to date. The county is projected to spend \$40 million to \$50 million more as the redevelopment of smaller sites continues.

HUD sources (discussed in Section 3.3), as well as EPA grants, general obligation and other city bonds, local general funds, and State funds. EPA grants mentioned included both pilot grants and

It is worth noting that RTI's discussions with grantees who were active in brownfields development averaged about an hour in length. Some grantees may have more detailed suggestions than could be offered briefly and with minimal burden.

other small grants for inventorying or assessing sites. Individual jurisdictions also mentioned receiving funds from a local public transit authority or the Economic Development Administration. **Table 1** summarizes the responses of the 18 grantees we contacted who could estimate their total public investment to date in brownfields-related activities. Some of the larger jurisdictions, where there is an ongoing need, have had higher overall investment; otherwise there are no apparent patterns of variation by population size.

Table 1: Examples of Total Public Investments for Brownfields

Type of grantee (population)	Estimated total public investment in brownfields redevelopment projects	Source of funds (if specified)
Cities (1 million+)	\$100,000 \$200,000 \$8.4 million \$56 million \$150–\$200 million	EDA, city bonds city bonds, Section 108
Cities (500,000–999,999)	\$400,000 \$8 million (last 3 years); \$30 million total \$24 million	Section 108
Cities (250,000–499,999)	\$250,000 \$1.6 million \$40 million +	State bonds, general funds
Cities (50,000–249,999)	\$7 million	
Cities (<50,000)	\$8 million	
Counties (>500,000)	\$1 million per year \$16 million \$30–40 million	local tax base HUD and State funds
Counties (<500,000)	\$600,000	total project

Many grantees could not even guess what this amount was or would have had to research it because brownfields are not a discrete category in their accounting or their own tenure was too limited to know. As our discussions generally took an hour to complete, asking respondents to research this request was not an additional burden RTI imposed. A financial survey form with specific line items and clear definitions would be a better way to elicit this information. This study was not funded or designed as a survey.

The major reasons that many jurisdictions (37 of 80) are *not* spending public money on brownfields include:

- Brownfields are a relatively low local priority, in some cases due to other, more pressing needs for funding (15 mentions).
- The area has no (or few) brownfields sites (six mentions).

- Too new a concept/still figuring out what they are (four mentions).
- Low market demand for urban property, especially relative to greenfields (three mentions).

These responses were generally similar by type of jurisdiction, except that the State grantees also offered the reason that none of their nonentitlement communities had requested funds for brownfields.

3.2 Classification of Grantees by Activity Level and Source of Funds

Key Findings:

- About three-quarters of the entitlement cities and half the entitlement counties we contacted are spending or have spent public money on some aspect of brownfields redevelopment.
- The majority of those spending public money have spent CDBG or Section 108 funds for brownfields redevelopment at some point. Several entitlement cities have tapped other sources of funding—small EPA grants, State program funds, and private investment—for brownfields redevelopment and not used CDBG funds. Only 3 of 18 States had ever spent any CDBG funds on brownfields projects in their small (nonentitlement) cities.
- Large cities and counties tend to use CDBG funds to leverage other sources of funds and to fill in financing gaps. The smallest cities have sometimes been able to use CDBG allocations to fund entire but small redevelopment projects.

After determining whether grantees had ever used HUD funds for brownfields work, we classified them into three categories of brownfields activity and funding:

- active in brownfields using HUD funds
- active in brownfields but not using HUD funds
- inactive.

Because of the roles they play in administering HUD programs, entitlement grantees (both cities and counties) can be in any one of these categories. If State grantees are active in brownfields in nonentitlement areas they are also using HUD funds, so the second category above does not apply. It should be noted, however, that minimal activity of a State-level community development office in nonentitlement areas does *not* mean that the State is inactive in brownfields policy. Many States including Pennsylvania and New Jersey are very active in brownfields work but not yet granting CDBG funds for this purpose to their nonentitlement areas. **Table 2** summarizes the three activity levels by jurisdiction.

Table 2: Brownfields Activity Levels by Grantee Type

Grantee agency status	Entitlement cities (n=43)	Entitlement counties (n=19)	States (n=18)	Total (n=80)
HUD active: Have used CDBG/108 funds to remediate and redevelop brownfields	22	7	3	32
Active: Remediating and redeveloping brownfields but have <i>not</i> used CDBG/108	9	2	NA	11
Inactive: Not spending public funds for remediation or redevelopment of brownfields	12	10	15	37

Among the grantees who have been active in projects that could be considered brownfields, about 75 percent (32 of 43) have used a portion of their CDBG allocation in recent years for some aspect of such a project:

- Of the 31 cities contacted, 22 that have redeveloped a brownfield site(s) have spent CDBG funds on some aspect of at least one project.
- Of the 9 counties contacted, 7 that have worked on brownfields redevelopment have spent CDBG funds on some aspect of at least one project.
- The 3 States we contacted that have funded brownfields activity in nonentitlement areas have used CDBG funds to do so.

As for other HUD funding, several mentioned using HOME funds for lead abatement. Only five grantees mentioned using Section 108 loan funds⁸ for brownfields work, and two mentioned using Economic Development Initiative funds, which are awarded competitively from HUD and used in conjunction with Section 108 loan funds.

Tables 3, 4, and 5 summarize the activity levels for each grantee type—cities, counties, and States—by size categories. One interesting finding from the entitlement cities (see **Table 3**) is that all 9 of the smaller cities (less than 250,000) we contacted where there is some brownfields activity have used CDBG as a funding source for it.

Additional information on the Section 108 loan program is provided in Sections 1.2 and 3.7 of this report.

Table 3: Brownfields Activity Levels Among Entitlement Cities by Size

	Population					
Grantee agency status	1,000,000 or greater (n=8)	500,000- 999,999 (n=9)	250,000– 499,999 (n=8)	50,000– 249,999 (n=9)	49,999 or less (n=9)	Total (n=43)
HUD active: Have used CDBG/108 funds for some aspect of brownfields projects	7	5	1	3	6	22
Active: Redeveloping brownfields but have <i>not</i> used CDBG/108	1	2	5	1	0	9
Inactive: Not spending public funds for any aspect of brownfields	0	2	2	5	3	12

Table 4: Brownfields Activity Levels Among Entitlement Counties by Size

	Population		
Grantee agency status	500,000 or greater (n=8)	499,999 or less (n=11)	Total (n=19)
HUD active: Have used CDBG/108 funds for some aspect of brownfields projects	4	3	7
Active: Redeveloping brownfields but have not used CDBG/108	1	1	2
Inactive: Not spending public funds for any aspect of brownfields	4	6	10

Table 5: State Grantees' Brownfields Activity Levels in Nonentitlement Areas by Size of State

Grantee agency status	Largest 25 States (n=9)	Smallest 25 States (n=9)	Total (n=18)
HUD active: Have used CDBG/108 funds for some aspect of brownfields projects	2	1	3
Inactive: Not spending CDBG funds for any aspect of brownfields	7	8	15

Several of the larger cities (250,000 to 999,999) have been active in brownfields redevelopment yet have not used their block grant funds or Section 108 loans for this purpose.

The majority of the counties are using CDBG funds on brownfields if they are active in brownfields, whether the county is large (more than 500,000 in population) or smaller. Similarly, the large majority of State grantees in both large and smaller States have not yet funded brownfields activity in their nonentitlement areas.

The majority of the urban counties we contacted (14 of 19) spend some of their CDBG funds directly, for example, on infrastructure projects, and allocate some via grants to municipalities within their county. Two county grantees only spend funds directly and three administer all their funds to municipalities.

Among those grantees active in work they consider to be related to brownfields redevelopment, generally they have been doing such work only in the last 10 years. Of the respondents who could estimate how long they had been active in brownfields work, a few said for 20 or more years, several said 7 to 10 years, and several said only in the past 2 to 3 years.

3.3 Levels of CDBG Spending for Brownfields

Key Findings:

- CDBG expenditures on brownfields-related activities have ranged from \$200,000 to more than \$5 million for an entire redevelopment project.
- Estimates for the remediation components ranged from \$100,000 to \$350,000, with several in the \$200,000 to \$250,000 range.
- CDBG expenditures on brownfields ranged from about 2 percent to more than 20 percent of the total block grant in entitlement cities that could report their cost breakdowns for brownfields redevelopment. Total brownfields expenditures by counties ranged from less than 1 percent to about 6 percent of their annual allocation. The States had funded very few small cities projects, which amounted to less than 1 percent of their total block grant.

CDBG expenditures on brownfields-related activities have ranged from \$150,000 to more than \$5 million for an entire redevelopment project. CDBG expenditures among the grantees we contacted for planning and site assessments for a single brownfields redevelopment project ranged from \$20,000 to \$200,000. Estimates for remediation paid from block grant funds ranged from \$100,000 to \$350,000, with several in the \$200,000 to \$250,000 range. A high-end outlier was a lead paint abatement for 600 to 1,000 housing units that cost \$5 million (and also used HOME funds). CDBG allocations for both remediation and construction combined ranged from \$550,000 to \$3.2 million. **Table 6** lists specific estimates of CDBG spending for brownfields project components cited by grantees in various types and sizes of jurisdictions.

Table 6: Examples of Specific CDBG Allocations for Brownfields

Type of grantee (population)	Estimated CDBG funds spent on brownfields projects*	Activities funded by CDBG	Grantee's total CDBG allocation (1997)
City (500,000–999,999)	\$350,000 \$5.4 million \$3.2 million	Remediation Total project Remediation & construction	\$26 million
City (500,000–999,999)	\$1.5 million	Site acquisition and redevelopment	\$15.5 million
City (500,000–999,999)	\$200,000	Remediation	\$11 million
City (250,000–499,999)	\$100,000	Lead remediation	\$6 million
City (50,000–249,999)	\$600,000	Planning, acquisition, clearance, assessment	\$5.2 million
City (<50,000)	\$200,000	Planning	\$2.5 million
City (<50,000)	\$42,000 \$1.25 million	Acquisition/assessment Remediation & construction	\$508,000
County (>500,000)	\$60,000 \$250,000 \$300,000	Property disposition remediation construction	\$13 million
County (>500,000)	\$700,000-800,000	Total annual brownfields allocation	\$23 million
County (>500,000)	\$50,000	Planning and assessment	\$6.6 million
County (>500,000)	\$250,000 \$500,000	Remediation Total project	\$3.6 million
County (<500,000)	\$200,000	Total project	\$6.4 million
County (<500,000)	\$20,000	Assessment	\$1.6 million
State (large)	\$810,000 \$250,000 and \$360,000	Remediation & construction Technical assistance grants	\$45 million
State (small)	\$240,000	Asbestos removal	\$21 million

^{*} Each dollar figure within a cell represents estimated CDBG expenditures on a single recent project, except where noted.

CDBG expenditures for brownfields are a very small proportion of the overall block grant in most jurisdictions. **Table 6** shows the 1997 allocation as a reference point, although many project costs are for previous years. The States have funded very few small cities brownfields projects, which have amounted to less than 1 percent of their total block grant. Total brownfields expenditures by counties have ranged from less than 1 percent to about 6 percent of their annual CDBG allocation. One urban county with a \$23 million block grant allocates about 3 percent of it annually to brownfields projects. **CDBG expenditures on brownfields ranged from about 2 percent to more than 20 percent of the total block grant in entitlement cities that could report their cost breakdowns for brownfields redevelopment.** The high-end outlier is a city with a population of less than 50,000, which once spent its entire block grant for the year on a project that could be considered a brownfield redevelopment.

Only a handful of grantees, all in large cities, mentioned using Section 108 loans for brownfields, with several more saying they are looking into their feasibility. Boston, Chicago, Philadelphia, and Seattle are the cities that we determined from our contacts are using Section 108 loans. Loan amounts they cited included \$24 million, \$40 million, \$41 million, and \$50 million. The \$24 million project was for acquisition and renovation of a downtown building for use as a new upscale department store in Seattle; the

The city of Chicago has received approval for two projects that together require \$50 million in Section 108 funds to redevelop four brownfield sites seen as a priority for attracting new businesses. Two of the sites had illegal dumping in the past. Chicago will use revenue from an Illinois Tax Increment Financing program to repay part of the Section 108 loans.

remediation (of asbestos) was paid for from local funds. The \$40 million was used to redevelop Boston's World Trade Center Hotel. The \$41 million loan will be used by the City of Philadelphia for construction and equipment on a \$242 million waterfront development project expected to create more than 1,000 jobs at a new industry; the other key source of financing for this project is the State's capital budget. The \$50 million is for a large four-site industrial project in Chicago.

When asked how their allocations for brownfields redevelopment have been changing recently or are likely to change in the near future, 13 of contacted grantees said their brownfields allocations are increasing over time, 12 said they are stable or unlikely to change much, and 2 said they are decreasing. The reasons given for decreases were that projects were complete and new ones are not envisioned. One common reason for why brownfields budgets are increasing is that as grantees gain experience and can show successes, they can allocate more funding the next year.

In fact, several grantees could not answer the question as asked, two saying that future allocations depended entirely on whether current projects were successful in creating a cost-effective reuse for the property. Eight grantees said they did not know because the community development priorities may change each year; in some years there is an important redevelopment project that involves a brownfield site, in others there is not.

To many community development officials, redeveloping a brownfield site is just another community development project, and they do not keep separate records on brownfields expenditures. As noted in Section 3.1, in a qualitative study such as this, no financial forms were provided to grantees to complete, though a more structured survey would be an effective way to get accurate and comparable expenditure data.

One respondent said that about half of Boston's HUD funds go to economic development, and that most redevelopment projects in Boston have a brownfields component. Boston's CDBG allocation for FY98 is \$24,737,000, and the city has requested a total of approximately \$82.25 million in Section 108 loan guarantees since 1981. As of February 1998, approximately \$57 million of the requested Section 108 funds have been used. Boston also uses HOME funds, as well as funding from the ESG, and Housing Opportunities for People With AIDS (HOPWA) programs.

Boston officials expect that funding on projects with brownfield components will be roughly constant, but that adjustments will have to be made for falling funding levels. The city's CDBG funding has been decreased each of the last few years—last year's cut was 4.5 percent. These cuts have hurt redevelopment. Several sites have redevelopment plans, but the financing is not in place to begin the projects.

3.4 Uses of CDBG Funds in Brownfields Projects

Key Findings:

- The most common use of HUD money for brownfields is for remediation, followed by site assessment and redevelopment.
- The types of remediation CDBG funds are most commonly used for are soil treatment, asbestos removal, groundwater treatment, and lead abatement.
- A few grantees have used CDBG funds for planning, site acquisition, or demolition aspects, or technical assistance to communities.

By far, the most commonly mentioned use of HUD funds on brownfields projects has been for remediation (24 mentions). Interestingly, a misperception in at least two places was that CDBG funds could *not* be used for remediation.

Other cited uses for CDBG funds include site assessment (14 mentions), redevelopment (14), planning (9), site acquisition (6), demolition (5), and site/infrastructure development (4).

In general, the larger cities and counties tend to spend their CDBG funds on redevelopment, the smaller cities on assessment and remediation. Among entitlement cities, the smallest cities (population less than 50,000) often rely on a single CDBG funding allocation to complete several of these activities on a small brownfields project. The small cities are also more likely than other jurisdictions to spend CDBG funds on demolition.

Judging by the grantees we contacted, when CDBG funds are used for remediation, the 4 most common uses are for soil decontamination (22 mentions), asbestos removal (20), lead abatement (16), and groundwater decontamination (16). Some grantees, especially in the small entitlement cities and nonentitlement areas, have used CDBG funds for stormwater or wastewater matters.

Although smaller entitlement cities have used CDBG resources to fund entire projects, the majority of communities with successful brownfields programs seldom rely only on HUD funding for their projects. This is especially true for business redevelopment. These projects generally rely on financing from several sources, including private investment. If private interest was not evident, grantees suggested, many projects would not have been initiated.

Boston uses much of its CDBG allocation for various aspects of brownfields redevelopment, including remediation and new construction. For example, Boston officials used CDBG funds to clean up sites so they would be eligible for funding under HUD's Section 202 for elderly housing. They also used CDBG funds to remediate other sites, after which the project was financed by either a nonprofit entity or a bank. Boston officials say the projects would not have gone forward without the HUD funds, which made the other investment possible.

CDBG funds allocated by the State of Michigan to its nonentitlement areas for brownfields have been used for site planning and assessment, site clearance, and installation of water and sewer systems.

A public/private not-for-profit corporation was established in Michigan to assist the State in preparing brownfield sites for redevelopment, many in its nonentitlement areas. The Consumers Renaissance Development Corporation (CRDC) received two technical assistance grants from State's CDBG funds. CRDC developed an educational notebook and conducted a number of trainings and now is providing followup work to meet the needs of particular communities.

3.5 National Objective Criteria Used

Key Findings:

- The majority of HUD grantees using CDBG funds for brownfields find that the national objectives work well.
- Nearly all of the grantees we contacted that are using CDBG funds for brownfields projects are using the benefit for LMI persons or the removal of slums or blight as the qualifying national objective; these are equally common. Only a few cities have used urgent needs to qualify a brownfields project for CDBG monies.
- Larger cities and counties appear more likely to use the slums/blight objective for brownfields
 redevelopment, while the nonentitlement cities and small or entitlement cities typically use the LMI
 benefit objective.
- HUD regulations as they apply to brownfields are not well understood. For example, several grantees believe there is a 2- or 3-year time limit to demonstrate job creation for LMI benefit, though HUD regulations impose no such time limitation.

Across all the HUD grantees we contacted, the national objectives for helping LMI persons and removing slums or blight were used equally often to qualify brownfields projects. Only three grantees, all cities, had ever used the urgent needs objective, which requires demonstrating a public health threat from the site.

There are some interesting differences by the type of jurisdiction. For example, only one State we contacted had ever used the slums/blight objective to qualify a nonentitlement area for CDBG, while 5 of the 7 cities with populations more than 1 million that spend HUD money on brownfields had used it. The smallest entitlement cities usually used the LMI benefit objective. One reason may be that at least 70 percent of CDBG funds must be used for LMI benefit, so any expensive project, including a brownfields one, would have to be qualified under that objective. In addition, because of this, some grantee staff tend to understand only the requirements of LMI benefit and qualify all their projects under the needs tests for LMI benefit.

The national objective of the LMI benefit can be satisfied by either of two types of benefit: *area benefit* activities, which meet the needs of LMI persons in areas where at least 51 percent of the residents are LMI persons; and *direct benefit* activities (which can include housing activities, job creation or retention activities, and activities for limited clientele such as homeless or disabled persons), which benefit specific individuals or households, at least 51 percent of whom must be classified as LMI.

In addition, at least 70 percent of grantee expenditures from their CDBG allocations, over at least a 3-year period, must benefit LMI persons.

Among those grantees using the LMI objective to qualify brownfields projects for CDBG funding, 20 said they did not explicitly use job creation to demonstrate LMI benefit, though many of these projects did end up creating jobs. Sixteen grantees said they had used job creation motives to qualify the project; estimates of jobs created by projects ranged from 30 to 50 for

smaller redevelopments to 25,000 in a densely populated but poor former industrial area. Another project involving the conversion of former industrial facilities to downtown office space is expected to create 15,000 jobs.

Example of comments from grantees about the *LMI benefit* objective, some of which may reflect misunderstandings of HUD policy, were as follows:

- Works well for redevelopment, less so for cleanup, since it is difficult to demonstrate how the cleanup itself (before jobs or housing are created) provides a benefit to people.
- Project planned for the suburbs near a major bus stop did not qualify because it is not in an LMI area, even though it would create many LMI jobs for people who could easily travel there. 9
- LMI benefit criteria require use of funding for primarily residential areas, which limits their applicability to brownfields. 10

Moreover, it is important to note that quite a few grantees, including two State grantees, believe there is a 2- or 3-year limit for demonstrating LMI job creation, even though HUD officials say that this is a misinterpretation of CDBG regulations. An example of a typical comment included:

• Time limit for job creation (24 months) may be too short for some projects, especially if there is a CDBG-funded cleanup component before the redevelopment can begin.

The specific section of the regulations to which at least the State grantees are referring is from the April 1997 edition of regulations on criteria for national objectives, 24CFR570.483 (vi)(F)(2):

In any case where the cost per job to be created or retained...is \$10,000 or more...this aggregation [of jobs created or retained] must include businesses which, as a result of the public facility/improvement, locate or expand in the service area of the public facility/improvement between the date the State awards the CDBG funds to the recipient and the date 1 year after the physical completion of the public facility/improvement [italics added].

This perception of a time limit on job creation was held broadly enough to suggest specific outreach by HUD to reconcile the perceived versus actual requirements. The comment

This comment appears to reflect a misunderstanding of the regulations. According to HUD CPD staff, if a project will create jobs principally for LMI persons, it can be claimed under the LMI objective regardless of the area in which the project is located.

According to HUD staff, this comment may also reflect a misunderstanding of the regulations, but several grantees made a similar interpretation.

about LMI benefit in primarily residential areas was also mentioned by several grantees; this is another area for HUD to clarify the regulations.

Specific comments from grantees about the *slums/blight* objective included the following:

- Works well for commercial projects.
- Can work for assessment and cleanup activities.
- It is daunting to qualify an area for the slums/blight objective, in part because of having to demonstrate a threat to public health and safety, and if we declare an area to be blighted it attaches a stigma to it.
- Slums/blight work well for brownfields, but we have come up against our limit (30 percent of total CDBG funding; 20 percent for slums/blight) for projects that do not create LMI benefit.
- The HUD definition of slums and blight limits the use of funds to projects involving structures and seems to exclude those that require cleanup of soils *around* the structure.
- To qualify on an areawide basis, the area needs to have a lot of dilapidated buildings (not just in spots), which are not common around abandoned industrial sites.

 The national objective of Elir

Some community development agencies have used a combination of objectives for a brownfields project; for example, one grantee mentioned using the slums/blight objective to qualify the area for the remediation part of the project in 1 year, then later used LMI job creation for the redevelopment aspect to be financed through a Section 108 loan.

One grantee suggested making economic development a national objective as a way to make brownfields and other related projects simpler to qualify. Another suggested redefining eligibility for economic development, tying it to increased tax base, which, according to this informant, is as beneficial to a distressed community as job creation or additional housing for LMI residents. A few grantees suggested making brownfields a national objective, but others strongly resisted this, especially if there is no additional money.

The national objective of Elimination or Prevention of Slums or Blight can be satisfied using one of three bases:

- an area basis, for which grantees must designate a specific area where there is a substantial number of deteriorated or deteriorating buildings or public improvements;
- a spot basis, for which activities such as acquisition, clearance, and building rehabilitation must be designed to eliminate specific conditions of blight that are detrimental to public health and safety; or
- completion of a federally designated urban renewal project.

In 1994, HUD considered a rule change that economic disinvestment due to environmental contamination could qualify areas as blighted, but no actual rule change has yet been made.

Several grantees made comments suggesting they did not understand that Phase 1 and 2 investigations can be paid for using the planning and administrative category (up to 20 percent of a recipient's CDBG allocation), whether or not one of the three national objectives can be met. In cases where an assessment will cost more than the jurisdiction can allocate from administrative funds, a few grantees noted that other sources such as State funds or EPA pilot grants are especially important for funding assessments.

Recommendations

Clarify how national objective criteria can apply to brownfields redevelopment. For example, explicitly debunk the myth that there is a 2- or 3-year time limit to demonstrate LMI benefit. This common misconception among grantees applies not just to brownfields but to economic development more generally. Without even changing HUD policy, simply communicating more clearly what it allows will simplify life for many grantees. One county grantee mentioned he thought that the objectives were more restrictive until he attended a HUD workshop on brownfields in fall 1997, and now sees the objectives as reasonably open.

Communicate more effectively simplified ways of demonstrating job creation requirements in economic development projects. Currently benefit to LMI persons is the main emphasis of the regulations. Some grantees are unaware that a simplified way may exist to meet job creation requirements for brownfield redevelopment projects. Some informants suggested using as a model the Empowerment Zones and Enterprise Communities (EZ/EC) program, under which once an area is demonstrated as distressed, no further burden of proof that benefits will accrue to LMI persons is necessary. Perhaps not widely known, this was accomplished in changes to the CDBG regulations in 1995 by providing for the presumption that job creation and retention benefit LMI individuals for areas meeting certain requirements [Section 105(c)(4) of the Housing and Community Development Act and 24 CFR 570.208(a)(iv) and (v) of the Entitlement regulations]. If a census tract meets the standards cited in the regulations, then any jobs created and/or retained by a CDBG-assisted activity in that tract are presumed to be held by LMI persons. Our interviews suggest that these changes to the regulations are not well known or understood by HUD grantees.

Consider revising the LMI area test to include industrial areas in distressed neighborhoods. This would eliminate the job tracking burden that deters many grantees from economic development projects including brownfields redevelopment efforts.

3.6 Suitability of CDBG Funds for Brownfields Redevelopment

Key Findings:

- Several grantees indicated that the current regulations do not make it clear that brownfields redevelopment is an eligible use of CDBG funding.
- Among those who use them for brownfields redevelopment, CDBG funds are valued as a
 resource for brownfields projects because these funds are flexible, readily available once
 allocated, a grant, and a way to fill in financing gaps and leverage other investment in
 distressed areas. These grantees find that the national objectives generally work well for
 brownfields.

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• Among grantees who are *not* using CDBG or are less satisfied with them for brownfields uses, it is sometimes due to conflicting local priorities for CDBG and sometimes because of perceived hassles in both demonstrating project eligibility and in meeting ongoing reporting requirements, such as for job creation.

Several grantees indicated that HUD's current regulations do not make it clear that brownfields redevelopment is an eligible use of CDBG funds, and some asked that regulations be revised to acknowledge explicitly that CDBG funds can be used for brownfields remediation.

Among those who use them for brownfields redevelopment, CDBG funds are valued as a resource for brownfields projects because they are flexible, readily available once allocated, a grant, and a way to fill in financing gaps and leverage other investment in distressed areas. These grantees find that the national objectives generally work well for brownfields. CDBG funds are generally considered insufficient for large projects, especially as competing local priorities vie for an allocation that is dwindling (on an inflation-adjusted basis), although they have been used to fund entire small projects.

Among grantees who are *not* using CDBG or are less satisfied with them for brownfields uses, it is sometimes because these funds are too limited to be worth the administrative hassle in both demonstrating eligibility and ongoing reporting requirements, such as for job creation. Several grantees expressed frustration with trying to fit potentially viable brownfields projects into the LMI benefit or slums/blight objectives. Some brownfields are in areas that have few, if any, residences making it difficult to demonstrate LMI area benefit.

Some grantees believe that CDBG funds are inappropriate or too cumbersome to apply. However, some grantees do not use CDBG funds for other reasons. In places that have healthy real estate markets, for example, private and other funding sources are available for brownfields redevelopment, whereas major affordable housing needs can *only* be addressed through CDBG funding. In places where States or large local governments have program funds to address brownfields issues, the need to use scarce CDBG allocations on brownfields is not as acute.

Several grantees commented that there simply is not enough CDBG funding to go around for existing priority needs, so its applicability to

Dallas has an extensive brownfields redevelopment program and a large CDBG program but does not use CDBG funds for brownfields redevelopment. The primary reason is that the private sector has put a lot of money into redeveloping brownfields. In the last 2 years, the City of Dallas was able to leverage more than \$109 million in private investments for brownfields, while using only \$150,000 of CDBG funds for brownfields. The city has not found any problem with CDBG regulations that prevents it from using these monies for brownfields, but Dallas has allocated its CDBG funds primarily for LMI housing.

brownfields is irrelevant unless funding levels are increased. For example, several community development agencies in urban areas of the south and west indicated that their rapid growth has caused a severe shortage of adequate housing. In these newer areas, building and rehabilitating housing is a more pressing economic development need than is redeveloping brownfields. Therefore grantees apply a large share of their block grant funds to housing.

Finally, many grantees say they do not yet have sufficient knowledge or experience with trying to apply CDBG funding to brownfields projects to comment on its suitability.

In general, CDBG funds were viewed as an important and needed source of funding for brownfields redevelopment. Especially in the small cities we contacted, CDBG funds are the only funding currently being applied to such projects. Grantees mentioned the following *advantages of using CDBG* funds:

- Fills financing gaps, leverages private investment where otherwise development may not be viable (nine mentions).
- Flexible, can be tailored to local priorities (eight mentions).
- Helps with job creation, other community benefits in brownfields areas (six mentions).
- Is a key (sometimes the only) source of funding (five mentions).
- Is a grant, doesn't have to be paid back (four mentions).
- Once allocated, money is available and can be accessed quickly (two mentions).

Although the majority of grantees using CDBG funds are positive about their flexibility, other grantees are not using CDBG at all or are less satisfied about how well it works for brownfields projects. There were few specific objections to the CDBG program as it is structured. Many of the comments relate to insufficient funding levels and competing local priorities. Specific themes on the *disadvantages of using CDBG* as a brownfields funding source include:

One key purpose of CDBG funds is to help leverage private investment. One good example of this was in a small town in Michigan. A private investor was interested in a property where groundwater contamination had made the property unusable as a source of water. CDBG funds were used to extend water lines to the facility, which was then redeveloped by the private investor. The grantee involved in this project pointed out the importance of the HUD funds used on this project, because without them the project might not have been realized. It is estimated that 80 jobs were created by the new facility on this site.

- Brownfields are another large demand among many competing local priorities (14 mentions).
- There isn't enough CDBG money to fund large projects, and allocations are dwindling (nine mentions).
- Paperwork burden (nine mentions).
- Regulations are too restrictive (eight mentions).
- Davis-Bacon Act requirements raise cost and administrative burden (seven mentions).
- Time it takes may be too long for developers (three mentions).
- Too much hassle for a small amount of money (two mentions).
- Time limit of 24 months [an apparent misconception] may not be long enough to complete project and show required benefits (two mentions).

The concern about competing local priorities was especially salient among entitlement cities. Otherwise, there are few notable differences by the type of jurisdiction.

Recommendations

This study suggests that regulatory change is not as important for most grantees as clarification of existing regulations and outreach on how the block grant can be used for brownfields. Some respondents emphasized that HUD should maintain the flexibility of CDBG funds because few other HUD programs can be used for brownfields redevelopment.

The suggestions from grantees about what HUD should alter in the CDBG regulations were so sparse, varied, and conflicting, it would be difficult to recommend specific changes that are well-supported by even a handful of grantees. The majority of the respondents, despite our prompting for specifics, were only able to offer general suggestions, such as "increase funding levels," "broaden the national objectives," "streamline reporting requirements," or "encourage creativity at the local level." In addition, there is not a common understanding or usage among grantees of words that have very particular meanings to HUD staff, such as objectives, categories, criteria, and eligible activities, nor a good understanding of which changes would be statutory changes (e.g., creating a new objective) and which would be regulatory changes (e.g., including brownfields in slums/blight). Given their misunderstandings about what current regulations may and may not permit, many grantees are unable to suggest specific changes that sound valid to HUD staff who have expertise in applying the regulations. Using their input, RTI thus offers these general recommendations:

Maintain and highlight the availability and flexibility of CDBG funds for brownfields. Make it clear that the CDBG program as it exists now can be used for brownfields and how it can be used. Modify entitlement regulations to make brownfields remediation more explicitly eligible as a use of CDBG funds. Make sure HUD staff in area offices are aware of this information and disseminate this information clearly and concisely to all CDBG grantees. Publicize good examples of various uses of CDBG monies, including their use for technical assistance.

Do not encourage brownfields at the expense of other community development. For instance, creating a separate national objective for brownfields might be misleading, since both active and inactive grantees understood that brownfields are incidental to community development priorities. Do not displace existing CDBG funds to give brownfields a higher priority. Do not create incentives for grantees to remediate brownfield sites unless a profitable reuse is feasible, planned in advance, and will meet a national needs test.

Tap into local community development agency directors to design any regulatory changes. Convene a working group of local CDBG administrators who are experienced and actively involved in brownfields redevelopment for a detailed discussion of regulatory changes that would facilitate applying CDBG funds for brownfields redevelopment. Several large city program administrators expressed a strong interest in working directly with HUD staff on brownfields program implementation and changes. The typical grantee we contacted, however, is not familiar enough with either brownfields issues or the details of existing CDBG regulations to offer specific suggestions for regulatory changes. HUD should, however, be attentive to potential bias in the perspectives of large city grantees from rust belt areas and test their suggested changes with other grantees before implementation.

3.7 Suitability of Section 108 Loans for Brownfields Redevelopment

Key Findings:

- The Section 108 loan guarantee program, though much less well known, seems to be gaining popularity among grantees, many of whom said they are just learning about it.
- Those who see the value of Section 108 say it is the only source of funding that is large and flexible enough for expensive, long-term projects such as brownfields and allows capital to be applied quickly when it is needed, but does not tie up current money in the meantime.
- Section 108 detractors see it as too large a risk because it uses the CDBG funds as collateral.
- Experienced grantees thus note that only projects believed to show a strong return on investment when the property is redeveloped should be proposed for Section 108 funding.

Only a few grantees in large cities had yet used the Section 108 program for brownfields redevelopment. A few of the advantages they mentioned about Section 108 include:

- It gives grantees control over the property without ownership; it's "patient money" that allows them not to tie up current funds in projects that take longer to show a return.
- It's the only source of funding large enough and flexible enough to do large-scale brownfields redevelopment.
- It takes the pressure off communities to compete with other local priorities for CDBG funds.

Under Section 108, local governments issue debentures to cover project costs, then usually pay them off using a combination of income generated from the project and their annual CDBG allocations. The grantee's future CDBG allocations, as well as other sources, are official collateral for the loan. This requires grantees to use Section 108 only for projects that show good promise of a return and/or that can use other financing sources to repay the loan.

- It allows grantees to apply a large body of capital quickly.
- It could be especially helpful if the interest rate differential is great enough.

Some of the themes of negative comments about the Section 108 loan program include:

- It's too risky to put up our CDBG money as collateral.
- We don't believe in borrowing against our future.
- We experienced long paperwork delays from HUD, especially since HUD's staff cuts.
- The application process is cumbersome.
- Section 108 loans pass on a high interest rate loan to developers, which does not help us keep down the costs of brownfields redevelopment.

One large city's grantee mentioned she had no direct experience of her own, but she has heard from those who have tried to use Section 108 that the application forms are overly complicated, time-consuming, and generally overwhelming. This is one of several comments suggesting that HUD grantees often interact with each other to share experiences. The positive experiences should be better disseminated.

As far as other HUD programs are concerned, a few grantees located in Empowerment Zone or Enterprise Community (EZ/EC) cities mentioned that the EZ/EC program can be used for brownfields redevelopment as well as to expedite eligibility for other Federal programs. One grantee noted that the availability of HOME funds for housing creation and rehabilitation has allowed the locality to spend less of its CDBG funds on these priorities.

Boston has made extensive use of the Section 108 loan guarantees; since 1981 the city has borrowed more than \$82 million of the \$100 million borrowing limit available to the city. A city's borrowing limit is five times its annual CDBG allocation.

Boston respondents stated that recent changes in the Section 108 program that attach Economic Development Initiative (EDI) funds to the loans will help in the funding of future projects. EDI funds are awarded on a competitive basis to selected applicants who respond to the periodic Notice of Funding Availability from HUD. Before having the EDI funds, HUD provided borrowing authority but no funds to reduce the interest rate. Boston has funded four projects using Section 8/EDI funds, two of which are now complete. The Clinton Administration has proposed the creation of the Community Enterprise Fund (CEF) to be funded initially at \$400 million. The CEF would consolidate the existing EDI initiatives into one unified program for supporting local economic development efforts.

Recommendations

Publicize successful uses of Section 108 funds. Especially because the Section 108 program has received rave reviews by the few grantees who are using it, its applicability to brownfields should be well publicized. Such grantees could participate in forums, for example, and discuss how they were able to accept the risks of using their CDBG funds as collateral on the loans, a major concern of those skeptical about the Section 108 program. Experienced grantees only fund brownfields projects with Section 108 loans where they see a minimal risk of a failure to obtain a good return on the investment. They already have developer interest in the property and a profitable reuse planned.

4. Environmental and Economic Development Issues in Brownfields Redevelopment

It is the environmental issues associated with contamination that define brownfields and set them apart from other redevelopment efforts. Obtaining environmental permits, complying with environmental regulations, and dealing with liability for assessing and remediating contamination are therefore a necessary part of brownfields redevelopment.

As community development professionals, many HUD grantees are simply new to dealing with environmental remediation and the ways in which it can slow down a redevelopment project for several months, even when processes go smoothly.

However, the majority of the HUD grantees RTI contacted did not have direct experience with permitting, environmental regulations, or liability issues. More than half of the contacted grantees that are at all active in brownfields redevelopment reported *no* applicable experience with permitting. Many city, county, and State respondents had only limited experience with environmental regulations. And, although liability for contamination was cited as the second most significant barrier to brownfields redevelopment, almost all of the grantees either did not have direct experience with liability issues or had not encountered significant liability issues during their brownfields work.

The interview responses suggest that many CDBG grantees contacted simply were not directly involved with environmental matters at the brownfields sites within their jurisdiction. Responsibility for obtaining permits is often delegated to State or local government bodies or taken on by the developer. As a result, direct experience is limited with environmental regulations. Similarly, a few agencies we contacted had direct experience with environmental liability problems at brownfields sites, but generally problems with liability were not reported.

The environmental sections below focus primarily on the responses of the grantees who did report experience with permitting and other regulatory issues at brownfields sites. Important factors mentioned that minimize environmental problems at brownfields sites include close working relationships with State and Federal environmental agencies, flexible cleanup standards, and formal legal mechanisms for releasing owners and redevelopers from liability for past contamination.

One of the economic development issues related to brownfields redevelopment of concern to grantees was the viability of brownfields versus greenfields. Other issues mentioned by respondents include how the cost and time required for cleanup can negatively impact the economic viability of redevelopment and how the "polluted" stigma or a distressed urban setting (i.e., poverty, crime) can diminish the basic marketability of the property after remediation.

4.1 The Environmental Permitting Process

Key findings:

- More than half of the contacted grantees that are at all active in brownfields redevelopment reported *no* applicable experience with permitting. Responsibility for obtaining environmental permits is often done by other State or local government agencies or taken on by the developer.
- Local and State grantees with experience in environmental permitting generally did not consider it to be a major challenge in the brownfields redevelopment process, although several noted permitting was time-consuming and tedious.
- Several respondents with experience in permitting but without permitting problems identified
 cooperative arrangements with permitting agencies either through a third-party entity that facilitated
 permitting or with simply good cooperation and assistance directly from the environmental
 agencies.
- Those who felt permitting was tedious and time-consuming did *not* mention good working relationships with environmental agencies.

The majority of the grantees did not have direct experience with environmental permitting. Those with permitting experience did not report significant difficulties in obtaining permits. The three city grantees that reported significant troubles with environmental permitting were in the two largest size categories and reported dealing with complex brownfields problems. One grantee in a large city expressed frustration in dealing with six agencies that must participate in permitting a project. Several grantees commented that permitting was slow and tedious.

Several city grantees (including almost all of those who reported few problems with permitting) described close working relationships with environmental departments that eased the permitting process. These were often prompted by interagency working groups, legislation, or staff sharing. Specific examples of such arrangements include:

- Omnibus organizations, formed with representatives from key State agencies, to facilitate communication on complex redevelopment issues such as brownfields.
- Forums of representatives from EPA, the State environmental agency, city staff, investors, and business owners who meet regularly to discuss brownfields issues.
- Voluntary cleanup legislation for contaminated sites that provides certainty for developers and therefore eases the permit process. One city grantee indicated that his State (Michigan) does not require permitting unless the owner of the property is liable for the contamination.
- Having an EPA staff person on loan for a year or two to expedite paperwork and interactions with the regulatory agency through knowledge of the system.

A few county grantees also reported successful coordination and collaboration between local, State, and Federal government agencies involved in the redevelopment effort.

- One county reported that a strong partnership between stakeholders was critical to the success of its brownfields program. Local, State, and Federal government agencies; community groups; and investors, bankers, and developers all work well together toward the same goal. One result of this cooperation and collaboration is that permitting problems are not an issue.
- In another county, the local Brownfields Task Force is the main resource for all issues regarding brownfields and they are especially helpful with regard to public awareness of environmental and other issues.

Several of the cities and counties where collaboration among various parties was mentioned as an important way to ease the brownfields development process are recipients of EPA pilot grants. Eight of the grantees we contacted mentioned they had received EPA pilot grants, and a few of these indicated the grant made them more aware of and optimistic about brownfields reuse.

The purpose of EPA pilot projects is to test redevelopment models, direct special efforts toward removing regulatory barriers without sacrificing protectiveness, and facilitate coordinated site assessment, environmental cleanup, and redevelopment efforts. These funds help bring together community groups, investors, lenders, developers, and other affected parties.

One western State that has not used CDBG funding for brownfields projects does use CDBG funds for environmental assessments at sites called *colonias*. Colonias are residential settlements along the Mexican border that are near industrial areas and lack water and sewer, which has resulted in some soil and groundwater contamination. Similar to several of the brownfields cases, strong cooperation between State and Federal environmental and public health agencies there has minimized permitting problems.

4.2 Environmental Regulations

Key findings:

- Many CDBG grantees contacted simply were not directly involved with environmental matters at
 the brownfields sites within their jurisdiction. As a result, direct experience is limited with
 environmental regulations.
- The grantees who had experience with regulations indicated that soil remediation, asbestos removal, cleanup standards, and Superfund requirements were the most challenging regulations with which to understand and comply.
- Grantees experienced with regulations indicated that cooperation of community development staff
 with environmental regulatory agencies, either through formal work groups or regular working
 arrangements, greatly eased their compliance with environmental regulations.

Generally, experience with environmental regulations was low among the community development agency staff we contacted. They usually work through State or local environmental agencies rather than with the regulations directly.

Among those grantees knowledgeable about environmental regulations, the cities were the most specific about environmental regulations they found challenging to understand and comply with. The smaller cities tended to find regulations more challenging, perhaps reflecting a lower capability to address environmental issues with a smaller staff. The most troublesome regulations mentioned by city grantees included:

- soil remediation (5 mentions)
- asbestos removal (5)¹¹
- cleanup standards (4)
- CERCLA (Superfund) regulations (4)
- historic preservation (3)11.¹¹

Also mentioned were lead paint, groundwater contamination, air emissions, noise, and liability.

Soil contamination challenges mentioned were the liability issues associated with the removed soil, and that sites contaminated with oil and gasoline are harder to fund than some other sites (some States exclude such sites from brownfields initiatives). Cited impacts of Superfund regulations included that CERCLA standards were strict and challenging and that NPL designation can hinder brownfields redevelopment efforts. In one case, NPL site boundaries were so broadly drawn that they encompassed several sites with minor contamination that otherwise may have been eligible for the State's voluntary cleanup program.

Although asbestos is not a CERCLA-regulated contaminant and historic preservation is not an environmental issue, the regulatory requirements for each are commonly encountered at brownfields sites and were mentioned by grantees.

Two of the respondents reporting no problems with environmental permitting or regulatory compliance noted that their agency was part of a partnership of local, Federal, and State environmental and community development agencies, along with developers, owners, lenders, and other stakeholders. As with permitting issues, cooperation and collaboration through these partnerships greatly eased the overall process of complying with environmental regulations. Benefits mentioned include greater certainty in regulatory requirements and cleanup goals and virtual elimination of concerns about liability.

Officials in Dallas credit the Dallas Brownfields Forum with helping all parties to negotiate regulatory hurdles smoothly. Forum participants include representatives from insurance, banking, business, real estate, and neighborhood groups, as well as representatives from chambers of commerce, HUD, EPA, Federal Deposit Insurance Corporation (FDIC), and the Texas Natural Resources Conservation Commission (TNRCC). This forum has created open lines of communication between all involved parties and helped expedite projects.

Two general comments suggest that in some States the regulatory burden needs to be lightened for brownfields sites to promote redevelopment. One city grantee stated that legislators need to understand that cleanup standards should be flexible and based on a site's future use. The respondent commented that cleaning up soils to standards appropriate for a nursery school does not make sense when it will be a paved parking lot for a factory. Another city grantee noted that if two technical remediation options exist, current regulations require selection of the most costly option. Neither of these cities is in a State offering flexible cleanup standards.

Among the county agencies we contacted, three found all regulations equally challenging, with one county describing environmental regulations as tedious. One county found no regulations challenging, citing its strong partnership with State and Federal environmental agencies. Two counties described soil and groundwater regulations as the most difficult. Two counties indicated difficulty in knowing site-specific regulatory requirements because of the many issues involved.

One State grantee reported that liability regulations were the most troublesome. Another indicated that groundwater regulations were the toughest because of the uncertainty and continuing costs associated with pump-and-treat cleanup remedies. A third State grantee had

only occasional dealings with environmental regulations but viewed them as a "necessary evil." In general, the State grantees reporting regulatory difficulties also reported working with their State environmental agencies on environmental issues associated with brownfields redevelopment. Thus, lack of coordination does not seem to be the source of these States' difficulties.

Allegheny County noted the importance of doing environmental assessments early in the redevelopment process. Michigan officials recommended doing a site inventory, setting priorities, and deciding the uses for brownfields sites early in the redevelopment process as well.

4.3 Liability Issues

Key findings:

- Liability concerns were a commonly mentioned deterrent by grantees who are *not* active in brownfields redevelopment.
- The majority of grantee agencies that had brownfields redevelopment experience did not face significant liability issues.
- Grantees' comments, in the context of their State's policies, suggest that flexible cleanup standards
 and formal liability release for nonresponsible parties facilitate successful brownfields
 redevelopment efforts.
- Several agencies expressing concerns about liability were in States that do now offer significant liability release to developers of brownfield properties, suggesting a lack of information among grantees about State initiatives.
- Some grantees indicate that strict CERCLA liability provisions for Federal Superfund (i.e., NPL) sites have inhibited brownfields redevelopment at those sites.

Fear of liability—particularly liability under CERCLA—for contamination was cited as the second most significant barrier to brownfields redevelopment (next to cost; see Section 2.5). However, almost all of the grantees either did not have direct experience with liability issues or had not encountered significant liability issues during their brownfields work. Although some respondents had carefully avoided assuming liability, several reported that State liability waivers removed liability concerns for developers and funding agencies.

According to respondents, formal legal mechanisms for liability, such as States' covenants not to sue, are effective in many instances. Several of those interviewed noted that liability release for developers, granted by the State or the city, was available and responsible for the lack of liability concerns. However, a few respondents noted that State waivers do not protect cities from Federal liability if sites have a Federal tie (such as a Federal lien or a listing on the NPL). These respondents expressed concern about potential EPA intervention: the belief that the developer or city would be held liable when EPA is involved, even with State waivers, was strong. In addition to an actual listing on NPL, several respondents mentioned emergency removal situations where a Federal lien was placed on a property not on the NPL. While no city had actually been held liable, the concern apparently acted as a deterrent to redevelopment even after particular sites had been cleaned up. Cities and developers were concerned that EPA would intervene and cite the new developer as a responsible party.

Other agencies interviewed actively avoided liability concerns by not participating in projects where liability issues were present. In these cases, it was apparent that unless liability is removed, local governments in cooperation with private entities generally do not take on brownfields projects. Finally, several agencies expressing concerns about liability were in States

Philadelphia noted that the city is ultimately liable for environmental hazards on sites it owns and the State will not protect the city. Therefore, the city has developed tougher environmental standards than the State.

that do in fact offer significant liability release to developers of brownfield properties, suggesting lack of information among grantees about State initiatives.

Among the 43 city grantees interviewed, 12 reported no experience with liability and 20 could not recall facing liability issues with respect to environmental contamination at brownfields sites. Although some of these simply avoided properties with any liability issues, seven respondents noted partnerships with States to relieve liability either at a local level (i.e., city covenant not to sue) or at a State level (liability relief legislation, including covenants not to sue). Among the 10 cities reporting concerns with liability, specific comments included the following:

- Liability issues were raised in dealing with contaminated soil removed from brownfields sites. In several cases, potential liability issues have caused projects to be abandoned because the city does not want to assume any liability for sites.
- In one city involving city property, developers' attorneys wanted excessive and even unreasonable proof and protection, which the city simply could not grant. The respondent said, "Attorneys have even asked for unlimited coverage for eternity." (This city is in a State that does offer complete liability release for developers and subsequent property owners.)

Of the 10 cities whose grantees reported facing liability issues, 7 are in States with either no State liability waivers or States where liability releases can be rescinded in certain instances, including newly discovered contamination and changes in State cleanup standards. ¹² The other three States do offer complete release from liability (which cannot be rescinded) for developers who are not responsible for the contamination, suggesting that the grantees interviewed were not fully informed about brownfields initiatives in their States.

Based on information on the 50 States' legislative initiatives for voluntary cleanups extracted from an appendix of *Brownfields Redevelopment: A Guidebook for Local Governments and Communities*, International City/County Management Association, Washington, D.C., May 1997.

Formal mechanisms cited for legal protection against liability included covenants not to sue and no further action letters from State environmental agencies. In these cases, liability

release is generally granted after successful cleanup, and in some cases can be transferred along with the property to subsequent owners. Alternatively, a covenant not to sue is sometimes available after a Phase I and Phase II audit to determine the extent of contamination when the developer takes possession of the property. Two respondents noted that liability release only applies to State liability, as there is no waiver policy available for sites that fall under the Federal authority (for example, NPL, or Superfund, sites). They indicated that this can limit redevelopment efforts at such sites.

EPA Region 6 has signed a Memorandum of Agreement (MOA) with the Texas Natural Resources Conservation Commission (TNRCC) that will clear landowners and lenders of liability under Federal and State laws. Under the agreement, the EPA will refrain from pursuing Federal enforcement action involving contaminated properties that are cleaned up to Texas program specifications. The pact covers both of the two major Federal pollution cleanup statutes, including Superfund.

There is variable opinion among the city grantees RTI contacted as to whether the city takes on liability in cases where property was seized due to nonpayment of taxes. Several city grantees mentioned having seized thousands of parcels for nonpayment of taxes, some of which have asbestos or underground storage tank problems to address. One respondent said that his city does not legally take possession of seized properties, in an effort to minimize liability. These respondents reported that they do not want to conduct environmental assessments of these properties because they then may become liable for cleaning up the site if, for example, a site is actively leaking waste onto another property.

No county or State agencies we contacted had direct experience with liability problems at brownfields sites. Their comments about liability and brownfields are generally similar to those of the cities:

- One county grantee indicated that liability was not a big issue because of the effective regulations and policies under the State's voluntary action plan. These include a State covenant not to sue and flexible cleanup standards based on future use of the site.
- Two other county agencies reported that liability issues were left to the seller and purchaser of the property. One of these counties never takes on liability or enters into agreements that limit purchaser liability, although their State does offer a covenant not to sue for previously occurring contamination.
- Another county grantee abandons any deal when contamination is discovered and only gets re-involved when cleanup is complete, which reflects State law that requires a no further action letter before liability release is granted.
- One State grantee indicated that, generally, environmental agencies and the banks work out liability waivers for brownfields sites (the State offers several written releases of liability to owners or third parties that are not responsible for contamination).

Although Federal liability under the strict joint and several liability provisions for Superfund was not specifically addressed in the discussion questions, several responses suggest that this may have limited the inclusion of NPL sites in brownfields redevelopment efforts in the past. In defining brownfields sites, a few respondents specifically excluded NPL sites, although EPA's brownfields program does not. Other respondents clearly viewed NPL sites as separate from brownfields, or were confused as to whether NPL sites could be redeveloped as brownfields. The Michigan case study contacts indicated that Superfund sites generally were not redeveloped as brownfields because the Superfund process was too slow and cumbersome to meet the tight time schedules required by private developers. However, several respondents (including Michigan) indicated that close collaboration and cooperation with Federal as well as State environmental agencies hold promise toward incorporating Superfund cleanups within brownfields redevelopment efforts in the future.

Recommendation

Educate local community development agencies on liability issues, including insurance to reduce risk. There appear to be quite a few misinformed grantees whose fear of the unknown (i.e., liability) is a deterrent to brownfields redevelopment. The actual experience of grantees who have completed brownfields redevelopment with liability issues is not as problematic as perceived by those who do not yet understand how to make it workable. Local partnerships among public and private sectors have been very effective in providing joint education about liability.

4.4 Viability of Brownfields Versus Greenfields

Key Findings:

- Many grantees believed that brownfields are not competitive with greenfields, citing cleanup costs/time and low property values as reasons.
- Brownfields sites can compete with greenfields where urban property is valuable, existing infrastructure provides a benefit, or no greenfield sites are available.
- Financial incentives, such as public financing of cleanups, can improve brownfields' economic viability relative to greenfields.

Greenfields was a term familiar to nearly all of the grantees RTI contacted. It is usually used to refer to vacant properties that have not been developed and used, often in suburban rather than central city areas. Grantees were asked about whether they had brownfields that were economically competitive with greenfields. For those grantees who had an insight about the relative viability of brownfields versus greenfields, the majority indicated that brownfields were *not* competitive with greenfields in their area because of higher cost, the trouble of cleanup, and lower property values.

The grantees who reported that brownfields could compete with greenfields attributed their success to three situations:

- 1. existing infrastructure provides an economic benefit.
- 2. suitable greenfields sites are limited.
- 3. the location of the brownfields sites is desirable to a business.

Several grantees indicated that financial incentives, such as using public funds for remediation, also can make brownfields economically viable where factors such as the three above are not sufficient.

Circumstances where brownfields redevelopment with existing infrastructure was a viable alternative to an underdeveloped greenfield site were most common for the category of cities with populations of 500,000 to 1 million. Two-thirds of respondents in this category said that they had identified successful brownfields alternatives to greenfields. In Detroit, proximity to the Big Three automakers makes urban sites desirable locations for distributors that serve the factories. Other city grantees indicated that companies prefer to expand operations in the cities they are in, even if it is cheaper to develop elsewhere, and that economic incentives made brownfields economically viable.

Many of the grantees did not feel brownfields were competitive with greenfields but generally did not offer reasons. Grantees in 3 of the 8 largest cities (populations of 1 million and greater) said that greenfields are still succeeding as development sites; only one offered reasons, indicating that low property values and high costs of remediation make it difficult to raise capital for redeveloping brownfields. A few grantees mentioned cases where a redevelopment had been stalled due to concerns about contamination, including possible delays resulting from cleanup activities.

Grantees in places where brownfields were viable relative to greenfields reported high property values, financial incentives, flexibility in selecting remedial alternatives, and a lack of greenfields sites as explanatory factors. Two of the most successful large cities in making brownfields viable, Dallas and Chicago, have active brownfields development programs in place. Dallas officials indicated that strong demand for central city real estate made the 17 sites in their brownfields program economically viable. Chicago officials indicated that they have sometimes been able, in part through tax incentives, to convince local companies to expand to adjacent properties in the city rather than move their business to an undeveloped suburban site.

Specific comments of State and county agencies on the economic viability of brownfields sites are summarized below.

- One State grantee indicated that brownfields are competitive only when the State pays for cleanup.
- Another State agency points to existing facilities and infrastructure as a competitive advantage for brownfields. A county grantee stated that the existing infrastructure may be a lure in the county's attempts to curb urban sprawl by having a viable alternative to a vacant site outside the city.

- In a county that does not have a lot of greenfields, the respondent said the centralized city infrastructure tends to favor inner-city locations.
- Another county that has many brownfields sites and few greenfields sites indicated that the previously used land is thus more valuable.
- Another county grantee said that although buildable land was running out, brownfields will not be economically viable for 10 to 20 years.
- A State grantee mentioned some brownfields are economically viable, even though the State provides developers with lists of both brownfields and greenfields sites (with no direction or preference on development).
- One county grantee described two examples where brownfields out-competed greenfields for industrial development. One large national company invested \$20 million at a site and created more than 400 jobs. Another spent \$40 million building its headquarters on an old landfill site and preserved 400 jobs that otherwise would have moved out of State.
- Wayne County, Michigan, reported that brownfields sites located near the Big
 Three automakers, especially those with easy access to major highways, have
 proven to be preferable for development by companies supporting the auto
 industry. Using bonds to fund remediation and liability limitations also helped
 develop these sites.

Recommendations

Publicize successful examples of financial incentives for brownfields redevelopment. HUD does not currently have incentives to directly encourage brownfields redevelopment over development of greenfields sites. Generally speaking, there are three ways to encourage brownfields redevelopment: financial incentives, freedom from liability, and flexible cleanup standards. Since freedom from liability and flexible cleanup standards are not within the community development purview, financial incentives in the form of tax credits or grants are the obvious tool that State and local grantees can use to attempt to neutralize some of the disincentives of brownfields sites. Financial incentives have been successful tools used by States including Michigan, Illinois, and Pennsylvania.

Increase Permitted Expenditure Limit for Job Creation to Account for Unusual Costs of Brownfield Remediation. Current CDBG regulations allow for expenditure of \$50,000 of CDBG funds for each job created. This may be reasonable for typical economic development projects, but does not take into account the potentially high costs of cleaning up brownfields sites to make them suitable for economic redevelopment. Current policy does not take into consideration that remediation is a necessary, and frequently costly, undertaking as part of the community's economic development investment. Increasing the expenditure limit to \$100,000 or \$150,000 to account for brownfields cleanup expenditures would correct this oversight and make local economic development initiatives more feasible.

Assist Small Cities grantees in understanding brownfields issues. There is very little awareness of brownfields issues in nonmetropolitan areas because of the prevalence of greenfields sites. Because many State grantees are reactive to the requests of their nonentitlement areas, the majority of them are not yet addressing brownfields with their CDBG funds. A notable exception and potential model is Michigan, which uses CDBG funds to provide technical assistance and outreach to nonentitlement areas.

4.5 Other Economic Development Issues

Key Findings:

- Other economic development issues mentioned by grantees in considering a brownfields redevelopment besides the availability of greenfields include:
- Whether the costs of site preparation and remediation will be outweighed by the benefits expected from the property's reuse once clean;
- Whether the time it will take to assess and remediate the site will be feasible given the timetable of the industry or other party driving the property's reuse; and
- The marketability of the property due to either a polluted stigma or concern about the crime and other social problems common in poverty-stricken areas.
- Grantees say the motivating factor behind any brownfields project is the intended reuse of the site. The more experienced grantees do not initiate brownfields redevelopment projects until a new usage of the land is determined and financing is in place.

The availability of greenfields is a specific consideration, among many others, that public and private developers assess in determining the economic viability of brownfields. Other issues mentioned by grantees include:

- The costs of site preparation and remediation and whether they will be outweighed by the benefits expected from the property's reuse once clean.
- The time it will take to assess and remediate the site, and whether this will be feasible given the timetable of the industry or other party driving the property's reuse.
- The marketability of the property, even assuming successful remediation, if there is no investor already interested in the site's reuse, due to either a polluted stigma associated with the property or concern about the distressed urban setting that may be undesirable because of crime and other social problems common in poverty-stricken areas.

To the extent that these barriers are overcome—as they are in many places—brownfields redevelopment is seen as more feasible.

As one grantee noted, "In economic development, speed is everything." When areas are trying to recruit new industry or help existing industry with expansions, their development sites must compete not just with other sites in their own regions but with those in competing regions nationwide. The additional time required to

Several respondents think of brownfields as just another real estate transaction that requires addressing minor environmental issues. Contacts in two grantee agencies (City of Dallas and Cuyahoga County, Ohio) suggested that conveying this to potential developers and lenders has been very important to their success in brownfields development.

complete assessment and remediation makes potentially contaminated sites less competitive than available clean sites.

Some States have enacted tax credits for brownfields development and have taken steps to reduce bureaucratic delays in getting site approvals for covenants not to sue. For some companies, these steps can make an important difference in their location or development decision.

The marketability of any redeveloped sites in distressed or blighted neighborhoods is challenging enough, say some grantees, because of concerns about the skill levels of the work force, as well as crime; the stigma of potential contamination just adds another element of concern to the prospective developer or buyer of the property. Fortunately, however, in most areas the community groups are very supportive of the redevelopment of brownfields sites because of their potential for both economic and psychological benefits to the residents of the area.

In small communities, a brownfield may be one of the only potential development sites and thus must be redeveloped for the local economy to create investment and jobs. All State and some county grantees evaluate projects from their nonentitlement areas that they consider for CDBG grant funding and determine which appear to have the greatest economic or other community development potential. Some of the signs of a project's economic viability that they look for include:

- job creation potential
- potential to attract or retain businesses
- a motivated buyer and seller
- a project that can proceed quickly
- the involvement of both public- and private-sector players
- a publicly owned site or a private prospect that promises job creation
- a local company as an anchor tenant (they tend to be more loval).

These factors are likely to be similar to those used by entitlement areas¹³ in assessing which projects have the greatest potential to show a return on their investment of local and HUD funds.

This question was not asked of city grantees.

In any event, the majority of grantees State that the prime motivating factor behind any brownfields project is the intended reuse of the site. In some cities where staff have many years of brownfields redevelopment experience, projects are not started until a new usage of the land is determined and financing is in place.

5. Needs for Technical Assistance on Brownfields Issues

Grantee and HUD staff capability on brownfields issues is variable and in need of improvement in many areas, especially on environmental and liability issues and on what the CDBG regulations allow. Awareness of existing resources, including those from HUD, can be improved. The successful examples from experienced grantees can provide some models for technical assistance.

5.1 Grantee Capability on Brownfields Issues

Key Findings:

- Grantees who have a local interest in redeveloping a brownfield site tend to actively seek out technical assistance, and those who do not are more passive about the concept.
- HUD grantees' capabilities range from absolutely zero to an understanding so sophisticated they
 have developed guidance materials for other places to follow. The large entitlement cities generally
 have a very good understanding of and capacity to deal with brownfields.
- Many HUD grantees have misunderstandings about CDBG regulations, especially related to economic development, even apart from their application to brownfields projects.
- Private developers and lenders are often uninformed about brownfields and skeptical about getting involved with them.
- The jurisdictions with the greatest apparent capacity are those where the community development agency is working closely with the environmental agency and other local, State, and Federal agencies; lenders; developers; community organizations; and nonprofit agencies.

Grantees were asked if brownfields redevelopment presents any issues or challenges not faced in other types of urban development projects. They gave a wide range of answers, but many focused on cleanup requirements and costs, liability issues, and the complexity and uncertainty of the process. Examples of comments from grantees active in brownfields include:

- Need to know real costs of cleanup, not just perceptions.
- Financing cleanup costs is a major problem.
- There is real potential for remediation difficulties at sites.
- There are so many unknowns; crucial to get accurate assessment of costs.
- The liability issues are different from other projects.
- The technical issues are unfamiliar to development professionals.
- Have to deal with both State and Federal cleanup standards.

- Need to understand the legal, liability, environmental testing, and cleanup criteria.
- Lender willingness to finance is a problem.
- Takes far longer (up to 10 times longer than other projects) because of red tape, finding investors, completing cleanup, so banks are not as interested.
- The time and cost of remediation are big problems.
- Public perception of brownfields is a problem.
- Additional resources are needed to address how brownfields affect a community.

Some agencies noted that they had the capability to deal with these problems but others indicated that they need additional technical expertise or partnership with other agencies. Several grantees noted that there are too many demands for time and money other than brownfields.

Smaller municipalities often have very small staffs who deal with all community development issues in their jurisdiction. It is difficult for these people to make informed decisions on issues as involved as brownfields, so they don't use their limited time and money on projects with a potential remediation component.

In addition to some fears of the unknown about brownfields, many grantees have incomplete knowledge of current CDBG regulations, even apart from their application to brownfields. One example is the commonly held misconception that LMI benefit must be demonstrated within 2 years of grant initiation.

Although RTI did not contact lenders or developers directly, it is clear from some of our discussions with grantees that these private actors often have skeptical and uninformed views about brownfields that deter redevelopment. Our contacts indicated that many lenders and developers need a better understanding of the basics, including:

- What a voluntary cleanup program is.
- Who sets cleanup standards and what determines them.
- What are the applicable local, State, and Federal guidelines on liability for a given property.

Recommendations

Educate grantees and help them educate others they need to work with locally on brownfields projects. Hold seminars and/or develop guidance materials on financing, liability, remediation, and marketing. For example, the information packet the City of Dallas provides to developers could serve as a model.

5.2 Sources of Technical Assistance

Key Findings:

- The majority of the grantees in cities, counties, and States active in brownfields redevelopment have successfully sought technical assistance on brownfields. Typically, they have gotten this assistance from State environmental protection agencies or from EPA. Other sources of technical assistance include consultants, local task forces, and, in several cases, HUD.
- Three of the active city grantees that have *not* sought technical assistance have populations of more than 1 million and presumably were able to get technical assistance within the city administration.
- None of the grantees in inactive counties or States has sought technical assistance. Only one of the
 inactive cities' grantees sought assistance from the State and from EPA, and that was because it was
 considering brownfields redevelopment.

RTI asked respondents to whom they would or do look for help in four areas related to brownfields: financial issues, liability issues, environmental issues, and community issues.

Financial issues. For financial issues, many of the grantees in smaller cities active in brownfields redevelopment indicated that they would look to State or Federal agencies, while many of the staff of larger active cities said that they would get help from someone on the city staff, such as the city attorney or city economic development department. A couple of grantees each in smaller cities and larger cities said that they would ask HUD for help on financial issues. Grantees in inactive cities named Federal, State, local, private, and nonprofit sources. Several inactive State grantees mentioned national associations such as the Council of State Community Development Agencies as an information source. Two active grantees mentioned local lenders or banks as the source they would look to on financial issues on brownfields.

Although officials in Dallas have utilized many individual sources for assistance, including EPA, HUD, and Texas Natural Resources Conservation Commission (TNRCC), they mentioned that the Dallas Brownfields Forum meetings put them in direct contact with representatives from insurance, banking, business, real estate, and neighborhood groups, as well as representatives from chambers of commerce, HUD, EPA, Federal Deposit Insurance Corporation (FDIC), and the TNRCC. This forum has created open lines of communication between all involved parties. The forum has been especially helpful in assisting with community issues.

Liability issues. A number of the grantees

in active cities, counties, and States said they would ask local lawyers, the city attorney, or the State attorney general for help on liability issues. However, many of the respondents said they would ask State and Federal environmental offices, and several said they would ask the local HUD office. Few of the grantees in inactive cities, counties, and States gave a response.

Environmental issues. A majority of active grantees in cities, counties, and States said that they would seek help from the State and/or Federal environmental protection agency for information on environmental issues. Some of the active city grantees mentioned local

environmental or health departments. The majority of the inactive grantees did not respond or said that the issue was not applicable.

Community issues. In general, local grantees mentioned three sources of assistance on community issues: their local staff or another local agency, community groups or neighborhood associations, and HUD staff. Of the three grantee types, respondents in entitlement cities were most inclined to consult community groups. Two State grantees mentioned the State environment and health departments, and two said they would look to the HUD regional office. Two State grantees said that they would go directly to the community or to public interest groups.

Because States and some urban counties provide CDBG funding to smaller, nonentitlement localities within their jurisdictions, we asked these grantees whether they also provided technical assistance to local agencies on brownfields. Only 3 of the 16 State agencies responding to this question give technical assistance to local governments on brownfields, and 1 said it would if requested. Half of the urban counties that are active in brownfields provide some form of technical assistance to the local agencies they serve. Some give specific assistance such as preparing brownfields redevelopment plans for local bonds issues or technical assistance on site remediation. Several mentioned that they would if asked but the request has not come up.

5.3 Awareness and Use of Existing Resources

Key Findings:

- The grantees who are most active in brownfields redevelopment are the most aware of and likely to use available resources. Some have even developed guidance materials of their own for use by others.
- Relatively few grantees are aware of the HUD brownfields hotline and those who had called it were generally not impressed.
- The majority of the grantees active in brownfields work are aware of the Clinton Administration's tax incentives for brownfields redevelopment, yet they generally do not believe the incentives go far enough in overcoming economic barriers.

In general, many HUD grantees are not aware of the HUD hotline on brownfields. Seven grantees in active cities are aware of it and 21 are not. Only one of the inactive city grantees we contacted was aware of the HUD brownfields hotline. Among the grantees in active counties, three were aware of the hotline and five were not. None of the inactive counties and none of the active or inactive States knew about the hotline. Some respondents who had used the hotline said they were simply referred to EPA.

Respondents were also asked whether they were familiar with the Clinton brownfields tax incentives. Few of the inactive grantees

were familiar with the Clinton tax plan. Several of the active grantees who knew about the tax incentive observed that the tax incentives are not enough to solve the economic problem and that the incentive does not remove the contamination and liability problems.

The Brownfields Hotline, as part of HUD's Community Connections, can be reached at 1–800–998–9999.

Respondents were also asked if there had been any particular State or Federal legislation, rule-making, or guidance documents that helped their agency clarify or streamline environmental regulations at brownfields sites, clarify liability issues, or assist with community outreach. The majority of grantees said no. A few grantees mentioned Federal reports or State legislation. About half of the grantees in active cities identified some helpful document or source material, including five, State laws or source material; four, EPA program documents on brownfields and HUD material on lead-based paint and other programs. Comments from this part of the discussion ranged from strong recommendations, such as to send the Massachusetts guidelines on the State's brownfields initiative (the "21E program") to all agencies interested in brownfields, to a general comment that any State or Federal legislation or documents on brownfields would be helpful.

Resources mentioned by county grantees included the State of Illinois legislation on brownfields liability, State brownfields legislation, State environmental department publications,

and documents from the Rural Communities Assistance Corporation in Sacramento, California. One mentioned the HUD Web site.

5.4 Assistance from HUD

Key Findings:

- Grantees generally viewed HUD field staff as a resource for interpreting CDBG guidelines, but less capable on policy and problemsolving for brownfields projects.
- Several expressed concerns about the caliber of staff remaining after recent staff reductions.
- HUD seminars on brownfields have been very well received by grantees, who typically felt more informed and more optimistic about using HUD funds for brownfields after attending seminars.
- RTI's contacts with grantees for this study encouraged several of them to express appreciation for HUD's interest in their views and experiences.

Based on the discussions with grantees, HUD staff are seen as potential resource persons on brownfields redevelopment issues but are only one source of information among many. The majority of the grantees we contacted were comfortable getting advice about HUD funding guidelines from their field offices. Some did not see HUD staff as knowledgeable enough to help them solve larger problems, although several grantees gave credit to their HUD representatives for exactly that.

Several grantees expressed concerns that the caliber of staff in HUD field offices suffered after staff reductions, that many of the most experienced and helpful people were gone, and that the remaining people were not as knowledgeable. A few said they would never ask HUD's advice on anything, and a few of the larger cities said they know more about brownfields redevelopment than their HUD area office staff do.

Several community development directors mentioned having recently participated in brownfields seminars offered regionally by HUD, and these were considered very helpful. Those who attended these sessions were generally positive about the knowledge and capability of HUD, specifically those staff who conducted the seminars.

A number of grantees mentioned HUD as a source of help on the financial, liability, environmental, or community issues related to brownfields. There were, however, several negative comments about HUD. One official in an active city said HUD "parrots the regulations" when contacted and locals have to depend on themselves. One respondent in an inactive city said that HUD is not an option for help in any of these four areas, and one official from an inactive county said that HUD should not be involved in brownfields at all.

Although grantees said they typically spoke to their regional HUD representative about brownfields issues, one State grantee said they took such questions to a former local representative now working in another State, since their current representative had no information on the topic. Several grantees feared the loss of institutional memory caused by offering early retirement packages to experienced HUD staff, leaving behind representatives who lack the training and experience to deal with issues as complex as brownfields. Their loss has significantly reduced the effectiveness of the system.

As an example, one respondent said that when the State consolidated its environmental regulations, the regional HUD office proved to be incapable of adequately reviewing the regulations, so the State must still work through complex regulations to determine if a site is eligible for HUD funds.

Other specific comments included: HUD was very helpful; HUD helped the city interpret the regulations; but HUD has no perception of the cost, time, and difficulty in dealing with environmental issues.

Grantees in all but one of the active counties have talked to HUD about brownfields, and three of them mentioned HUD conferences or workshops related to brownfields. One active county grantee said a workshop changed her perception that HUD sources were too restrictive to be used on brownfields. However, another active county grantee said that he had expressed his concerns to HUD at a conference about competing community priorities, and "it went in one ear and out the other." One inactive county grantee had talked to HUD about lead paint, but none of them had talked to HUD about brownfields. Respondents from only three of the States contacted have talked with HUD about brownfields, and two of these had made contact at a seminar or training session.

A second question about HUD staff capability on brownfields issues asked whether the respondent would look to HUD for advice, support, or guidance on brownfields. Among grantees in active cities, 22 responded yes, 6 said no, and 2 said maybe. Among the grantees who would look to HUD, the most enthusiastic included those who have been to HUD training classes and others saying HUD has been very helpful. A few said they would go to other sources first and several indicated they would look to HUD if necessary.

One of the grantees who would not look to HUD said that past experience with HUD had not been positive. A large city grantee indicated that the city knows more than HUD about brownfields and the HUD regional office is not responsive. The majority of grantees in both

active and inactive States would look to HUD for advice on brownfields, but one said only about the regulations.

Interestingly, grantees in several of the cities, counties, and States we contacted indicated that they would *now* look to HUD for advice on brownfields because this discussion showed them that HUD is putting a priority on brownfields. In other words, this study highlighted HUD's interest in brownfields for them.

Impressions from RTI's own contacts with HUD field staff also suggest that they represent a range of understanding. Some are very knowledgeable and serve as helpful resource persons for their entitlement areas, and others have no better or even worse understandings of brownfields than the community development agencies do. Many HUD staff who administer CDBG funds do not seem to have a big picture understanding of brownfields redevelopment but only what the regulations will allow. Generally, in terms of carrying out and funding the whole redevelopment project, the community development directors seemed more knowledgeable than the HUD staff.

Recommendations

Concerns among grantees about the recent budget and staffing cuts at HUD, as well as their mixed reviews of the service they receive from HUD staff, suggest the following three recommendations.

Continue to hold regional seminars and workshops on brownfields. Almost every mention of such meetings was positive. These have been very well received and are effective in giving people a more optimistic and educated perspective about redevelopment opportunities. Target seminars to where the interest is greatest and tailor the focus to relevant issues for each region. In the south and west, concurrently train HUD field staff, who were seen as less knowledgeable about brownfields.

Focus on targeted, tailored technical assistance to grantees. Local community development agencies are overburdened already and usually do not need generalized information about brownfields, but assistance with problemsolving in their areas. Not all HUD field staff are or need to be experts on the use of HUD funding for brownfields projects. Grantees would appreciate a one-stop point of contact that can be trusted to be thorough and reliable. HUD's brownfields hotline or an Internet bulletin board refereed by HUD specialists may be effective vehicles for this.

Detail experienced HUD staff to community development offices that want more help with brownfields. Several grantees mentioned the helpfulness of having EPA staff detailed temporarily to their offices. Having a small cadre of well-trained HUD staff to help with focused problemsolving on the community development aspects of brownfields might be more cost-effective than trying to train a large number of HUD field staff to be more hands-on in these complex issues. These experienced HUD staff members could also be a resource for selected calls on the HUD hotline.

Since uncertainty was such a strong theme in the conversations about barriers to brownfields redevelopment, communications, and outreach about what is already known about brownfields and the use of block grant funds to address them are an important way for HUD to help ease the anxiety levels of those who are still at the steep initial portion of the learning curve on brownfields. Several specific suggestions to HUD for improving communications and outreach are offered here.

Improve and then publicize HUD's brownfields hotline. It is not well known among grantees and received mixed reviews about how helpful it was among those who had called it. It should be staffed with people who are more knowledgeable about brownfields problemsolving or who can refer questions to appropriate specialists.

Work more closely and visibly with EPA inside and outside Washington, D.C. The Brownfields Action Agenda charges HUD and EPA with several joint tasks, several of which are already under way but are not necessarily well known outside Washington, D.C. If the Federal agencies work together in forums that State and local community developers attend, they can set a good example for the local-level community development and environmental collaboration experienced grantees say is necessary to facilitate brownfields redevelopment. For example, include EPA staff in HUD-sponsored regional seminars.

Publicize success stories as models for a team approach to brownfields. Concerns and uncertainties about high costs, liability, and environmental contamination are the key barriers to brownfields redevelopment. The places where these barriers have been overcome, including Cuyahoga County and the City of Dallas, have created effective vehicles for information sharing among all the public and private stakeholders who need to work together on brownfields. There is much less fear of the unknown in such places. A best practices brochure or report could be very useful for cities and counties considering brownfields redevelopment.

Partner more visibly with States. Many States are quite active in brownfields redevelopment policy and program legislation. HUD's communications and outreach should work in tandem with State initiatives to help its grantees—especially State community development agencies—work within their own policy context. In addition, partnerships with community development agencies and State and Federal environmental agencies appear to be especially powerful in their ability to add certainty to the regulatory process and minimize concerns about State and Federal liability. Communities where the State and Federal officials are working together with the local developers on brownfields projects are convinced this is a key to their success. The brownfields hotline can be used to disseminate information about successful approaches that States are taking in brownfields redevelopment.

Encourage the use of CDBG funds for technical assistance on brownfields. Publicize the example of nonprofit organizations like the Consumers Renaissance Development Corporation, which has received two grants from the State of Michigan's 1 percent technical assistance set-aside from its CDBG allocation to assist municipalities with brownfields work.

Several grantees noted that they learned something from our discussions with them, such as that HUD has an active interest in brownfields, is an available resource, and cares what

grantees think about how to make its funding sources work better for this purpose. Follow-up efforts such as those outlined above will be a good demonstration of HUD's commitment to brownfields policy that is responsive to local community development needs.

References

- Pepper, Edith M. 1997. Lessons From the Field: Unlocking Economic Potential With an Environmental Key. Washington, D.C.: Northeast-Midwest Institute. 229 pp.
- The Urban Institute. 1996. Summary of the Proceedings of the Symposium on the Relationship Between Environmental Protection and Opportunities for Inner City Economic Development: How to Promote Economic Reuse of Brownfields, a HUD Symposium. December 12, 1994. Washington, D.C. Prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research.
- Kirshenberg, Seth, and William Fischer (International City/County Management Association) and Charlie Bartsch and Elizabeth Collaton (Northeast-Midwest Institute). 1997. *Brownfields Redevelopment: A Guidebook for Local Governments and Communities*. Washington, D.C.: International City/County Management Association.
- The Urban Institute, Center for Public Finance and Housing. 1995. Federal Funds, Local Choices: An Evaluation of the Community Development Block Grant Program, Volume I. Prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research.
- Consumers Renaissance Development Corporation. *Brownfield Redevelopment Guide*. Jackson, Michigan: Consumers Renaissance Development Corporation.

Appendix A: Selection of Grantees

Table A-1. Selection of HUD Grantees for Brownfields Study

(Shading indicates grantee has actually had some activity in brownfields redevelopment, as indicated from RTI contacts.)

CATEGORY	PRESUMED ACTIVE (Applied for EPA Pilot Grant)			MAY OR MAY NOT	BE ACTIVE	
Metropolitan Cities	_					
1 million or more	Region /State	Location	Population			opulation of 1 million lactive in brownfields.
	2–NY	New York City	7,333,235			
	3–PA	Philadelphia	1,524,249			
	5-IL	Chicago	2,731,743			
	6-TX	Houston	1,702,086			
	6-TX	Dallas	1,022,830			
	9–AZ	Phoenix	1,048,949			
	9–CA	Los Angeles	3,448,613			
	9–CA	San Diego	1,151,977			
500,000 to 999,999	Region /State	Location	Population	Region/ State	Location	Population
	3-MD	Baltimore	702,979	4–TN	Nashville– Davidson	527,195
	4–TN	Memphis	614,289	6-TX	San Antonio	998,905
	5-MI	Detroit	992,038	9–CA	San Jose	816,884
	5-OH	Cleveland	502,931			
	2–WA	Seattle	520,947			
	1–MA	Boston	547,725			

CATEGORY		PRESUMED ACTIVE (Applied for EPA Pilot Grant)			MAY OR MAY NOT BE ACTIVE		
Metropolitan Cities							
250,000 to 499,999	Region /State	Location	Population	Region/ State	Location	Population	
	2-NJ	Newark	275,000	6–OK	Oklahoma City	463,201	
	4–FL	Miami	373,024	8–CO	Colorado Springs	316,480	
	5–MN	Minneapolis	354,590	9–AZ	Mesa	313,649	
	6–LA	Baton Rouge	373,763				
	7–KS	Wichita	310,236				
50,000 to 249,999	Region /State	Location	Population	Region/ State	Location	Population	
	10-WA	Tacoma	183,060	4–MS	Gulfport	65,721	
	2-NJ	Camden	82,866	8-MT	Great Falls	58,202	
	4–TN	Chattanooga	152,259	6-TX	Port Arthur	58,795	
	7–IA	Des Moines	193,965	5-MI	Sterling Heights	119,505	
	9–CA	Palo Alto	56,925				
49,999 or less	Region /State	Location	Population	Region/ State	Location	Population	
	1-VT	Burlington	38,306	4–KY	Hopkinsville	32,283	
	2-NJ	Perth Amboy	40,467	4–PR	Fajardo Municipo	37,028	
	5-IL	East St. Louis	37,438	3–VA	Charlottesville	41,034	
	5-MI	Benton Harbor	13,186	6-AR	Conway	33,946	
	5–IN	Elkhart	44,840				

CATEGORY	PRESUMED ACTIVE (Applied for EPA Pilot Grant)			MAY OR MAY NOT BE ACTIVE		
Urban Counties						
500,000 or more	Region /State	Location	Population	Region/ State	Location	Population
	3-MD	Prince George's Co.	750,000	2–NY	Suffolk Co.	640,596
	4–FL	Dade Co.	1,284,524	3–PA	Allegheny Co.	879,723
	4–FL	Broward Co.	538,432	5-IL	Cook Co.	1,738,356
	5-MN	Hennepin Co.	589,111	9–CA	San Diego Co.	603,731
	5-OH	Cuyahoga Co.	549,340			
499,999 or less	Region /State	Location	Population	Region/ State	Location	Population
	2-NJ	Morris Co.	372,525	2-NY	Dutchess Co.	218,755
	2–NY	Westchester Co.	486,498	3-VA	Henrico Co.	229, 552
	4–FL	Escambia Co.	209,694	5–IL	Will Co.	301,057
	5-MI	Wayne Co.	451,859	4–FL	Sarasota Co.	237,992
	9–CA	Alameda Co.	228,970	6–LA	Jefferson Parish ¹⁴	383,698

¹⁴Jefferson Parish was originally classified as a 250,000–499,999 city and later reclassified.

CATEGORY		PRESUMED ACTIV (Applied for EPA Pilot (MAY OR MAY	NOT BE ACTIVE
States			_			
Larger 25	Region /State	Location	Population	Region/ State	Location	Population
	9–CA	California	31,430,901	3–PA	Pennsylvania	12,052,410
	5-IL	Illinois	11,751,679	2-NJ	New Jersey	7,903,996
	4–NC	North Carolina	7,068,870	6–LA	Louisiana	4,314,974
	5-MI	Michigan	9,496,539	10-WA	Washington	5,343,183
	5-MN	Minnesota	4,567,341			
Smaller 25	Region /State	Location	Population	Region/ State	Location	Population
	8–CO	Colorado	3,655,714	3-WV	West Virginia	1,822,640
	6-NM	New Mexico	1,653,537	6–AR	Arkansas	2,452,660
	1–ME	Maine	1,240,280	8–ND	North Dakota	638,351
	*Only th	*Only three small States are presumed active.		8–UT	Utah	1,907,975
				3-NH	New Hampshire	1,136,859
				7–IA	Iowa	2,829,305

Appendix B: Protocols for Telephone Discussions

- Entitlement Cities
- Entitlement Counties
- States Administering Small Cities CDBG
- Case Study Sites

Interview Guide for Calls to CDBG Agencies: Cities

Size	type category:			
Met	ropolitan cities	<u>Urban counties</u>	<u>States</u>	
1,000	0,000 or more	500,000 or more	larger 25 States	
500,0	000 to 999,999	499,999 or less	smaller 25 States	
250,0	000 to 499,999			
50,00	00 to 249,999			
49,99	99 or less			
Agen	ncy name:			
Addr	ess:			
City:				
State	:			
Cont	act person:			
Phon	e number:			
E-ma	ail:			
HUD	of field office contact n	ame, location, phone n	umber:	
	vity category:	(Fill in after	interview):	
I	Presumed active	Actually	y active	
I	Presumed inactive	Actually	y inactive	
resea local You ago. devel (or se	arch organization in No and State community should have received We would like to talk	orth Carolina. We are we development agencies a Federal Express pack with you for about a harmonic control of the control of t	n Triangle Institute, an independent nonprofit working under contract with HUD on a study of and was one of the sites we selected tage from us with a letter from HUD a few day alf-hour about your local community acces with brownfields. Is this a convenient time	· 'S
	•			
1.	What are the com	munity development	priorities for your city?	
	Use prompts from (See if brownfields i		hey mention, unprompted	
	How are pri	orities set (automatic a	illocation, de novo each year, combination)	
			HUD money and through what HUD program Have they changed since 1995?	S

2. What do brownfields and brownfields redevelopment mean to you?

- What does the term brownfields mean to you?
- Has your perception of brownfields changed in recent years?

For the remainder of this discussion, I'd like to talk about brownfields as any abandoned or underdeveloped industrial or commercial properties that may have contamination, including soil and groundwater pollution as well as contaminated buildings (e.g., with asbestos or lead paint).

- Do you have any brownfields sites (by this definition)?
- Do you have any projects that for CDBG purposes qualify as:
 - urban blight or slums
 - economic development
 - adaptive reuse
 - or involve the removal of lead-based paint or asbestos?
- What do you see as the major deterrents to brownfields redevelopment? *Prompts:*
 - socioeconomic factors (e.g., crime, drugs, poverty)
 - community resistance to cleanup/redevelopment plans
 - liability issues for lenders or development
 - low-market value for redeveloped property
 - regulatory hurdles (environmental)
 - cleanup costs
 - availability of greenfields sites

3. Is your city active in brownfields redevelopment?

For HUD's purposes, we would like to consider a brownfields project to include all activities in redeveloping contaminated sites, not just the environmental cleanup components.

- Is your city currently working on anything that would qualify under this definition as a brownfields redevelopment project?
- Do you/someone keep an inventory of brownfields sites in your area? [using their description] Why or why not?
- Brief project(s) description/location

• What is the total public investment (for planning, acquisition, clearance, etc.) for your brownfields projects?

[If YES, any public money spent for brownfields, SKIP to ***]

[If NO, public money spent for brownfields . . .]

- Why are you *not* spending public dollars on brownfields projects? *Prompts:*
 - low-market demand for urban property
 - complexity and cost of project
 - brownfields are low priority for local government
 - loan availability or lender liability issues
 - developers avoiding perceived liabilities and/or costs
 - lack of expertise in this area of development
 - we do not have any brownfields sites
 - we did not know that government funds were available
 - difficult or uncertain environmental regulatory requirements
 - no money available (e.g. EPA) for site assessment
 - assumption that we cannot afford transaction costs and/or cleanup costs

[SKIP TO Q4]

• In what activities are you investing public monies as part of your brownfields redevelopment? What are the sources of funding? Where is HUD money being spent (if at all)?

Fill in matrix:

Activities

Total Public Funding

CDBG or other HUD Funding (which program)

- planning
- site assessment
- acquisition
- clearance
- remediation/cleanup
- housing rehabilitation
- infrastructure development
- business loans
- job creation
- How are these allocations changing from year to year? What are your HUD funding allocations on brownfields for FY97, FY98, and projected for FY99?

What environmental problems at your brownfields site(s) were CDBG funds
applied to?
soil contamination cleanup
groundwater contamination cleanup

_lead paint removal
_asbestos removal
_stormwater management
_wastewater discharge to sewer
_air emissions (indoor and outdoor)
other (specify)

4. What has been your experience dealing with the environmental issues related to brownfields?

• Have you dealt with environmental or public health agencies (Federal, State, or local) for brownfields redevelopment? What role does each play? How well is this working?

Prompts [list agencies dealt with for each]:

- liability issues
- environmental regulation
- public health issues
- community issues
- community outreach
- How difficult is it to obtain local and/or State environmental permits/approvals to perform brownfields redevelopment? How long has it taken?
- Have you had any circumstances where a brownfields redevelopment site with existing infrastructure was a viable alternative to an undeveloped greenfield site?
- Which types of environmental or other regulations are the most challenging for you and why?

Prompts:

- soil contamination
- groundwater contamination
- floodplains
- historic preservation
- lead paint removal
- asbestos removal
- stormwater
- wastewater discharge to sewer
- air emissions (indoor and outdoor)
- other? (specify)
- Have you faced any liability issues with respect to environmental contamination, e.g., at a redevelopment site where some contamination remains after completion of the project? Describe specific cases and how barriers were overcome.

Prompts:

- waivers
- developer takes on liability

- city assumes liability
- State allowed developer/lender to take title without liability for past contamination
- State "covenant not to sue" once cleanup is complete
- State—full statutory release once cleanup is complete
- State—"no further action" letter or certificate of completion once cleanup complete
- State liability limitations (specify conditions)
- Federal: site is on __, is not on __, has been removed__ from Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) (Superfund's list of sites believed to be contaminated—removal eliminates liability under Superfund)
- Federal: Superfund memoranda of agreement (MOA) with State

5. In your professional opinion, how well do you think HUD funding sources (would or do) work for brownfields redevelopment?

[If using any HUD funding for brownfields, ask:]

• How long have you been using HUD money for brownfields?

[If using CDBG funds for brownfields]

- What national objectives did you use for applying CDBG funds to brownfields redevelopment? Please discuss how and why.
 - Prompts:
 - benefit to low- to moderate-income (LMI) households
 - prevention/elimination of slums or blight
 - urgent needs
- What is your opinion of how the CDBG national objectives work well for brownfields projects? Please discuss.
- Did you use job creation as an important purpose of the project and/or as part of demonstrating LMI benefit? If so, how many jobs do you predict that the brownfields redevelopment will generate?

[Ask the remainder of questions of ALL respondents]

- What advantages do you see (or have you had) in using CDBG or Section 108 funds for brownfields redevelopment?
- What barriers, problems, or hassles do you see (or have you had) in using CDBG, Section 108 or other HUD funds for brownfields redevelopment?
 Prompts:
 - other local priorities for CDBG funds take precedence
 - timing issues
 - hassle

- project reporting requirements
- HUD staff have restrictive interpretation of the CDBG program
- Are there any changes in HUD policy, regulations, communications, or administration you think would make CDBG or Section 108 funds more suitable for brownfields projects?

6. Have you sought any guidance or technical assistance on brownfields? [If yes, what types?]

- Whom would you look to for help on:
 - financial issues related to brownfields
 - liability issues related to brownfields
 - environmental issues related to brownfields
 - community issues related to brownfields

Prompts:

- local health department
- other local agency: _____
- State agency:_____
- community groups
- local lender
- real estate agent
- HUD
- EPA
- other (specify)
- Have you ever talked to anyone at HUD about brownfields issues?
 - Under what program (CDBG/108)?
 - What issues?
 - With whom at HUD?
 - Response (describe):
- Would you look to HUD for advice, support, or guidance on brownfields in the future? Why or why not?
- Are you aware of the HUD brownfields hotline? [1–800–998–9999] [They probably know about Community Connections but may not know it includes brownfields]
- Are you familiar with the Clinton Administration's brownfields tax incentives? What are your views about them? Have you thought about how you can use them to leverage your own activities?
- Have there been any particular State or Federal legislation, rulemaking, or guidance documents that help your agency:
 - clarify environmental regulations and requirements at brownfields sites

- streamline environmental regulations and their enforcement
- reduce or clarify liability associated with environmental issues at brownfields
- assist with community outreach or other community concerns

If yes, can you please cite these and discuss how you use them?

• Does brownfields redevelopment present any issues or challenges that you don't face with other types of urban development projects? Do you feel like your agency has the capability to oversee and monitor funding for brownfields redevelopment projects? What areas of additional expertise or guidance do you feel are needed? Please discuss.

Prompts:

- assessing the environmental need for brownfields revitalization, or to verify perceived environmental threats
- knowing where the contaminated sites are (having a brownfields site list)
- economic aspects (value, development potential)
- liability aspects
- developing and implementing public outreach strategies to inform the community about brownfields revitalization decision making and progress
- community issues associated with brownfields

7.	In what ways (if any) do you think that	your insights and experiences with
	brownfields issues, as a city of	size, differ from those of other size cities?

Interview Guide for Calls to CDBG Agencies: Counties

Size/type cate	gory:				
Metropolitan d	<u>cities</u>	<u>Urban counties</u>	<u>States</u>		
1,000,000 or n	nore	500,000 or more	larger 25 States		
500,000 to 999	9,999	499,999 or less	smaller 25 States		
250,000 to 499	9,999				
50,000 to 249,	999				
49,999 or less					
Agency name:					
Address:					
City:					
State:					
Contact person					
Phone number	:				
E-mail:					
HUD field off	ice contact nar	ne, location, phone n	umber:		
Activity categ		(Fill in after			
Presumed		Actually			
	Presumed inactive Actually inactive				
Introduction:					
			Triangle Institute, an independent nonprofit		
			working under contract with HUD on a study of		
			and was one of the sites we selected.		
			age from us with a letter from HUD a few days		
			alf-hour about your local community		
	-	ur agency's experien	ces with brownfields. Is this a convenient time		
(or set another)?				
Discussion To	pics:				
1. What	are the comm	nunity development	priorities for your county?		
Use nr	omnts from Co	onsolidated Plan			
_			hey mention, unprompted		
•	How are prior	rities set (automatic a	llocation, de novo each year, combination)		
•	Do you spend both?	funds directly or gra	nt them to other jurisdictions in the county or		

 What are your major priorities for HUD money and through what HUD programs (e.g., CDBG, Section 108, EDI)? Have they changed since 1995? If so, how and why?

2. What do brownfields and brownfields redevelopment mean to you?

- What does the term brownfields mean to you?
- Has your perception of brownfields changed in recent years?

For the remainder of this discussion, I'd like to talk about brownfields as any abandoned or underdeveloped industrial or commercial properties that may have contamination, including soil and groundwater pollution as well as contaminated buildings (e.g., with asbestos or lead paint).

- Do you have any brownfields sites (by this definition)?
- Do you have any projects that for CDBG purposes qualify as:
 - urban blight or slums
 - economic development
 - adaptive reuse
 - or involve the removal of lead-based paint or asbestos?
- What do you see as the major deterrents to brownfields redevelopment? *Prompts:*
 - socioeconomic factors (e.g., crime, drugs, poverty)
 - community resistance to cleanup/redevelopment plans
 - liability issues for lenders or development
 - low-market value for redeveloped property
 - regulatory hurdles (environmental)
 - cleanup costs
 - availability of greenfields sites

3. Is your county active in brownfields redevelopment?

For HUD's purposes, we would like to consider a brownfields project to include all activities in redeveloping contaminated sites, not just the environmental cleanup components.

- Is your county (or your grantees) currently working on anything that would qualify under this definition as a brownfields redevelopment project?
- Do you/someone keep an inventory of brownfields sites in your area? [using their description] Why or why not?
- Brief project(s) description/location

• What is the total public investment (for planning, acquisition, clearance, etc.) for your brownfields projects? [Use our brownfield definition.]

[If YES, any public money spent for brownfields, SKIP to ***]

[If NO, public money spent for brownfields . . .]

- Why are you *not* spending public dollars on brownfields projects? *Prompts*:
 - low-market demand for urban property
 - complexity and cost of project
 - brownfields are low priority for local government
 - loan availability or lender liability issues
 - developers avoiding perceived liabilities and/or costs
 - lack of expertise in this area of development
 - we do not have any brownfields sites
 - we did not know that government funds were available
 - difficult or uncertain environmental regulatory requirements
 - no money available (e.g. EPA) for site assessment
 - assumption that we cannot afford transaction costs and/or cleanup costs

[SKIP TO Q4]

• In what activities are you investing public monies as part of your brownfields redevelopment? What are the sources of funding? Where is HUD money being spent (if at all)?

Fill in matrix:

<u>Activities</u>

Total Public Funding

CDBG or other HUD Funding (which program)

- planning
- site assessment
- acquisition
- clearance
- remediation/cleanup
- housing rehabilitation
- infrastructure development
- business loans
- job creation
- How are these allocations changing from year to year? HUD funding allocations on brownfields for FY97, FY98, and projected for FY99?
- [If serve as grantee to other jurisdictions] What criteria do you use to evaluate brownfields projects?

Prompts:

The site's potential to promote economic development The degree of environmental contamination associated with the site The technical and economic feasibility of site remediation

•	What environmental problems at your brownfields site(s) were CDBG funds
	applied to?
	soil contamination cleanup
	groundwater contamination cleanup
	lead paint removal
	asbestos removal
	stormwater management
	wastewater discharge to sewer
	air emissions (indoor and outdoor)
	other (specify)

4. What has been your experience dealing with the environmental issues related to brownfields?

 Have you dealt with environmental or public health agencies (Federal, State, or local) for brownfields redevelopment? What role does each play? How well is this working?

Prompts [list agencies dealt with for each]:

- liability issues
- environmental regulation
- public health issues
- community issues
- community outreach
- How difficult is it to obtain local and/or State environmental permits/approvals to perform brownfields redevelopment? How long has it taken?
- Have you had any circumstances where a brownfields redevelopment site with existing infrastructure was a viable alternative to an undeveloped greenfield site?
- Which types of environmental or other regulations are the most challenging for you and why?

Prompts:

- soil contamination
- groundwater contamination
- floodplains
- historic preservation
- lead paint removal
- asbestos removal
- stormwater
- wastewater discharge to sewer

- air emissions (indoor and outdoor)
- other (specify)
- Have you faced any liability issues with respect to environmental contamination, e.g., at a redevelopment site where some contamination remains after completion of the project? Describe specific cases and how barriers were overcome.
 Prompts:
 - waivers
 - developer takes on liability
 - county assumes liability
 - State allowed developer/lender to take title without liability for past contamination
 - State "covenant not to sue" once cleanup is complete
 - State—full statutory release once cleanup is complete
 - State—"no further action" letter or certificate of completion once cleanup complete
 - State liability limitations (specify conditions)
 - Federal: site is on ___, is not on ___, has been removed__ from CERCLIS (Superfund's list of sites believed to be contaminated removal eliminates liability under Superfund)
 - Federal: Superfund memoranda of agreement (MOA) with State
- 5. In your professional opinion, how well do you think HUD funding sources (would or do) work for brownfields redevelopment?

[If using any HUD funding for brownfields, ask:]

• How long have you been using HUD money for brownfields?

[If using CDBG funds for brownfields]

- What national objectives did you use for applying CDBG funds to brownfields redevelopment? Please discuss how and why.
 - Prompts:
 - benefit to low- to moderate-income (LMI) households
 - prevention/elimination of slums or blight
 - urgent needs
- What is your opinion of how the CDBG national objectives work well for brownfields projects? Please discuss.
- Did you use job creation as an important purpose of the project and/or as part of demonstrating LMI benefit? If so, how many jobs do you predict that the brownfields redevelopment will generate?

[Ask the remainder of questions of ALL respondents]

- What advantages do you see (or have you had) in using CDBG or Section 108 funds for brownfields redevelopment?
- What barriers, problems, or hassles do you see (or have you had) in using CDBG, Section 108, or other HUD funds for brownfields redevelopment?

 Prompts:
 - other local priorities for CDBG funds take precedence
 - timing issues
 - hassle
 - project reporting requirements
 - HUD staff have restrictive interpretation of CDBG
- Are there any changes in HUD policy, regulations, communications, or administration you think would make CDBG or Section 108 funds more suitable for brownfields projects?
- 6. Have you sought any guidance or technical assistance on brownfields? [If yes, what types?]
 - Whom would you look to for help on:
 - financial issues related to brownfields
 - liability issues related to brownfields
 - environmental issues related to brownfields
 - community issues related to brownfields

Prompts:

- local health department
- other local agency: _____
- State agency:_____
- community groups
- local lender
- real estate agent
- HUD
- EPA
- other (specify)
- Have you ever talked to anyone at HUD about brownfields issues?
 - Under what program (CDBG/108)?
 - What issues?
 - With whom at HUD?
 - Response (describe):
- Would you look to HUD for advice, support, or guidance on brownfields in the future? Why or why not?

- Are you aware of the HUD brownfields hotline? [1–800–998–9999]
 [They probably know about Community Connections but may not know it includes brownfields]
- Does your agency provide technical assistance to local agencies on brownfields projects? If so, on what aspects?
- Are you familiar with the Clinton Administration's brownfields tax incentives? What are your views about them? Have you thought about how you can use them to leverage your own activities?
- Have there been any particular State or Federal legislation, rulemaking, or guidance documents that help your agency:
 - clarify environmental regulations and requirements at brownfields sites
 - streamline environmental regulations and their enforcement
 - reduce or clarify liability associated with environmental issues at brownfields
 - assist with community outreach or other community concerns

If yes, can you please cite these and discuss how you use them?

• Does brownfields redevelopment present any issues or challenges that you don't face with other types of urban development projects? Do you feel like your agency has the capability to oversee and monitor funding for brownfields redevelopment projects? What areas of additional expertise or guidance do you feel are needed? Please discuss.

Prompts:

- assessing the environmental need for brownfields revitalization, or to verify perceived environmental threats
- knowing where the contaminated sites are (having a brownfields site list)
- economic aspects (value, development potential)
- liability aspects
- developing and implementing public outreach strategies to inform the community about brownfields revitalization decision making and progress
- community issues associated with brownfields

7. Are there special issues that urban counties face in redeveloping brownfields that differ from those facing cities?

•	In what ways (if any) do you think that your	insights and experiences with
	brownfields issues, as a county of	size, differ from those of other size
	counties?	

Interview Guide for Calls to CDBG Agencies: States

Size/type category: Metropolitan cities 1,000,000 or more 500,000 to 999,999 250,000 to 499,999 50,000 to 249,999 49,999 or less	<u>Urban counties</u> 500,000 or more 499,999 or less	States larger 25 States smaller 25 States
Agency name: Address: City: State: Contact person: Phone number: Email: HUD field office contact nar	ne, location, phone nu	mber:
Activity category: Presumed active Presumed inactive	Actually	active
research organization in Nor local and State community d You should have received a ago. We would like to talk w	th Carolina. We are we evelopment agencies a Federal Express packa with you for about a hal	Triangle Institute, an independent nonprofit orking under contract with HUD on a study of and was one of the sites we selected. ge from us with a letter from HUD a few days of the sites we selected that it is a convenient time with brownfields. Is this a convenient time
Discussion Topics: 1. What are the comm	unity development p	riorities for your State?
		v

Use prompts from Consolidated Plan See if brownfields is one of the priorities they mention, unprompted

- How are priorities set (automatic allocation, de novo each year, combination)
- What are your major priorities for HUD money and through what HUD programs (e.g., CDBG, Section 108, EDI)? Have they changed since 1995? If so, how and why?

2. What do brownfields and brownfields redevelopment mean to you?

- What does the term brownfields mean to you?
- Has your perception of brownfields changed in recent years?

For the remainder of this discussion, I'd like to talk about brownfields as any abandoned or underdeveloped industrial or commercial properties that may have contamination, including soil and groundwater pollution as well as contaminated buildings (e.g., with asbestos or lead paint).

- Do you know approximately how many brownfields sites you have in the State (under this definition)?
- Do you or other State agency keep an inventory of brownfields sites?
- Are there any brownfields in the nonentitlement areas that receive your CDBG funds?
- Do you have any projects that for CDBG purposes qualify as:
 - urban blight or slums
 - economic development
 - adaptive reuse
 - or involve the removal of lead-based paint or asbestos?
- What do you see as the major deterrents to brownfields redevelopment? *Prompts:*
 - socioeconomic factors (e.g., crime, drugs, poverty)
 - community resistance to cleanup/redevelopment plans
 - liability issues for lenders or development
 - low market value for redeveloped property
 - regulatory hurdles (environmental)
 - cleanup costs
 - availability of greenfields sites

3. Is your State active in brownfields redevelopment?

For HUD's purposes, we would like to consider a brownfields project to include all activities in redeveloping contaminated sites, not just the environmental cleanup components.

- Is your State (or your grantees) currently working on anything that would qualify under this definition as a brownfields redevelopment project?
- Brief project(s) description/location

- Does your State have a brownfields initiative? If so, please describe briefly.
- What is the total public investment (for planning, acquisition, clearance, etc.) for your brownfields projects? [Use our brownfield definition.]

[If YES, any public money spent for brownfields, SKIP to ***]

[If NO, public money spent for brownfields . . .]

- Why are you <u>not</u> spending public dollars on brownfields projects? *Prompts:*
 - low-market demand for urban property
 - complexity and cost of project
 - brownfields are low priority for local government
 - loan availability or lender liability issues
 - developers avoiding perceived liabilities and/or costs
 - lack of expertise in this area of development
 - we do not have any brownfields sites
 - we did not know that government funds were available
 - difficult or uncertain environmental regulatory requirements
 - no money available (e.g. EPA) for site assessment
 - assumption that we cannot afford transaction costs and/or cleanup costs

[SKIP TO Q4]

• In what activities are you investing public monies as part of your brownfields redevelopment? What are the sources of funding? Where is HUD money being spent (if at all)?

Fill in matrix:

Activities

Total Public Funding

CDBG or other HUD Funding (which program)

- planning
- site assessment
- acquisition
- clearance
- remediation/cleanup
- housing rehabilitation
- infrastructure development
- business loans
- job creation
- How are these allocations changing from year to year? HUD funding allocations on brownfields for FY97, FY98, and projected for FY99?
- What criteria do you use to evaluate brownfields projects?
 Prompts:

The site's potential to promote economic development The degree of environmental contamination associated with the site The technical and economic feasibility of site remediation

• What priority do you give to brownfields projects relative to other community development projects in your State? Has this changed in recent years? Why?

•	What environmental problems at your brownfields site(s) were CDBG funds
	applied to?
	soil contamination cleanup
	groundwater contamination cleanup
	lead paint removal
	asbestos removal
	stormwater management
	wastewater discharge to sewer
	air emissions (indoor and outdoor)
	other (specify)

4. What has been your experience dealing with the environmental issues related to brownfields?

• Have you dealt with environmental or public health agencies (Federal, State, or local) for brownfields redevelopment? What role does each play? How well is this working?

Prompts [list agencies dealt with for each]:

- liability issues
- environmental regulation
- public health issues
- community issues
- community outreach
- How difficult is it to obtain local and/or State environmental permits/approvals to perform brownfields redevelopment? How long has it taken?
- Have you had any circumstances where a brownfields redevelopment site with existing infrastructure was a viable alternative to an undeveloped greenfield site?
- Which types of environmental or other regulations are the most challenging for you and why?

Prompts:

- soil contamination
- groundwater contamination
- floodplains
- historic preservation
- lead paint removal
- asbestos removal

- stormwater
- wastewater discharge to sewer
- air emissions (indoor and outdoor)
- other (specify)
- Have you faced any liability issues with respect to environmental contamination, e.g., at a redevelopment site where some contamination remains after completion of the project? Describe specific cases and how barriers were overcome.

Prompts:

- waivers
- developer takes on liability
- county assumes liability
- State allowed developer/lender to take title without liability for past contamination
- State "covenant not to sue" once cleanup is complete
- State—full statutory release once cleanup is complete
- State—"no further action" letter or certificate of completion once cleanup complete
- State liability limitations (specify conditions)
- Federal: site is on ___, is not on ___, has been removed__ from CERCLIS (Superfund's list of sites believed to be contaminated—removal eliminates liability under Superfund)
- Federal: Superfund memoranda of agreement (MOA) with State
- 5. In your professional opinion, how well do you think HUD funding sources (would or do) work for brownfields redevelopment?

[If using any HUD funding for brownfields, ask:]

• How long have you or your grantees been using HUD money for brownfields?

[If using CDBG funds for brownfields]

- What national objectives did you/grantees use for applying CDBG funds to brownfields redevelopment? Please discuss how and why.
 - Prompts:
 - benefit to low- to moderate-income (LMI) households
 - prevention/elimination of slums or blight
 - urgent needs
- What is your opinion of how the CDBG national objectives work well for brownfields projects? Please discuss.
- Did you/grantees use job creation as an important purpose of the project and/or as part of demonstrating LMI benefit? If so, how many jobs do you predict that the brownfields redevelopment will generate?

[Ask the remainder of questions of ALL respondents]

- What advantages do you see (or have you had) in using CDBG or Section 108 funds for brownfields redevelopment?
- What barriers, problems, or hassles do you see (or have you had) in using CDBG, Section 108 or other HUD funds for brownfields redevelopment? Prompts:
 - other local priorities for CDBG funds take precedence
 - timing issues
 - hassle
 - project reporting requirements
 - HUD staff have restrictive interpretation of CDBG
- Are there any changes in HUD policy, regulations, communications, or administration you think would make CDBG or Section 108 funds more suitable for brownfields projects?
- 6. Have you sought any guidance or technical assistance on brownfields? [If yes, what types?]
 - Whom would you look to for help on:
 - financial issues related to brownfields
 - liability issues related to brownfields
 - environmental issues related to brownfields
 - community issues related to brownfields

Prompts:

- local health department
 other local agency: ______
 State agency: _____
 community groups
 local lender
- real estate agent
- HUD - EPA
- other (specify)
- Have you ever talked to anyone at HUD about brownfields issues?
 - Under what program (CDBG/108)?
 - What issues?
 - With whom at HUD?
 - Response (describe):
- Would you look to HUD for advice, support, or guidance on brownfields in the future? Why or why not?
- Are you aware of the HUD brownfields hotline? [1–800–998–9999]

[They probably know about Community Connections but may not know includes brownfields]

- Does your agency provide technical assistance to local agencies on brownfields projects? If so, on what aspects?
- Do you coordinate brownfields activities among your grantees?
- Do you coordinate environmental and economic redevelopment efforts with other agencies in your State?
- Are you familiar with the Clinton Administration's brownfields tax incentives?
 What are your views about them? Have you thought about how you can use them to leverage your own activities?
- Have there been any particular State or Federal legislation, rulemaking, or guidance documents that help your agency:
 - clarify environmental regulations and requirements at brownfields sites
 - streamline environmental regulations and their enforcement
 - reduce or clarify liability associated with environmental issues at brownfields
 - assist with community outreach or other community concerns

If yes, can you please cite these and discuss how you use them?

• Does brownfields redevelopment present any issues or challenges that you don't face with other types of urban development projects? Do you feel like your agency has the capability to oversee and monitor funding for brownfields redevelopment projects? What areas of additional expertise or guidance do you feel are needed? Please discuss.

Prompts:

- assessing the environmental need for brownfields revitalization, or to verify perceived environmental threats
- knowing where the contaminated sites are (having a brownfields site list)
- economic aspects (value, development potential)
- liability aspects
- developing and implementing public outreach strategies to inform the community about brownfields revitalization decision making and progress
- community issues associated with brownfields

7.	Are there special issues that States face in redeveloping brownfields that differ from
	those facing cities or counties?

•	In what ways (if any) do you think tha	t your insights and experiences with
	brownfields issues, as a State of	size, differ from those of other size
	States?	

Protocol for case studies on brownfields for HUD

Approach:

The initial caller and a more senior RTI professional will make a joint call to our CD contact and tell them we would like to use their city/county/State as a HUD case study that other places can learn from. (Get their consent to participate.)

We will read or fax them a list of our 12 general questions (see below) and get their suggestions for 4 to 6 other people in their community or State whom we should contact to answer these questions. At a minimum, in each case study site our contacts should include:

- the CD director and/or our initial discussion participant
- the HUD field office representative
- a representative of the local or State environmental agency
- a relevant leader of a community group or CDC

Under each general question, we will also probe on details of issues raised in the initial discussion.

Finally, the case study of each site will investigate what is most interesting, unique, or instructive about its experience in brownfields redevelopment, especially as it may relate to HUD policy or administration.

General topics:

- 1. How did the community select brownfields as a priority? Who was involved in the decision? What was the role of the agency that administers the CDBG program?
- 2. What are the primary objectives of your brownfields activities? How do these differ or fit in with how you are spending CDBG funds anyway?
- 3. What is the status and progress of your brownfields initiative(s)?
- 4. How have you put the money together for these? How does HUD money fit into the picture and why? Verify details on CDBG funds and other resources invested and for what activities, insights on how well this works, and what the issues are in deciding whether to use HUD money.
- 5. Probe further on how they apply and might modify the CDBG national objectives for brownfields projects. Get any specific suggestions about how regulations or categories should be modified.
- 6. How have you formed the necessary partnerships for brownfields projects? What are the roles/responsibilities of key actors?

- 7. How have you involved the community and what have you learned that you could share with other communities?
- 8. How are environmental issues addressed and what have you learned that you could share with others? [use initial discussion as guide to where followup is needed]
- 9. Follow up on other barriers/issues in brownfields redevelopment mentioned in initial discussion, especially anything potentially relevant to HUD policy, and how they were addressed.
- 10. [If a county or State]—What brownfields activity, if any, is there in your nonentitlement smaller cities? How are their issues different from larger cities?
- 11. What advice or ideas do you have for HUD policymakers or administrators in helping communities to address brownfields issues?
- 12. What are the "best practices" that you would recommend to other places in addressing brownfields or related redevelopment issues, especially in using HUD money?

Appendix C: Case Study Profiles

- Boston
- Dallas
- Philadelphia
- Allegheny County, Pennsylvania
- State of Michigan

Case Study 1: City of Boston

Capsule Summary. Boston has recently begun to increase funding for economic development. It is estimated that the city currently spends about half of its Community Development Block Grant (CDBG), Section 108, and Economic Development Initiative (EDI) funds for this purpose. Boston has taken possession of about 3,000 parcels due to nonpayment of taxes, and most sites in Boston have some contamination. While neighborhood redevelopment is the primary objective, brownfields remediation is directly related to this objective. The city sees CDBG funds as very useful for brownfields redevelopment because the guidelines for their use allow much greater local discretion than other HUD programs.

Brownfields Redevelopment in the Context of Community Development Priorities. Boston is a compact city with a long history of industrial activity. Even sites that have been used only as residences still often have underground storage tanks or other environmental contamination issues. All contacts agree that little vacant undeveloped land exists in Boston, so there is not much of an issue of competing greenfields.

The City of Boston has been involved in economic redevelopment since the 1960s. Several factors have influenced this effort, including strong involvement of private developers, the presence of many active community groups, and the support of financial and academic institutions. Another benefit is that both political and economic power are concentrated in Boston as the State capitol, so in some cases decisionmaking can be expedited.

According to a key contact in local government, brownfields issues are viewed as a necessary part of the redevelopment process. A local HUD official agreed, noting that the city was involved in brownfields redevelopment long before the term was coined. Boston redevelops sites based on their economic potential and does not prioritize sites based on brownfields criteria. Both the city and the local HUD official agreed that the use of the term *brownfields* has a negative impact on the public perception of an area.

Use of HUD Funding for Brownfields Projects. CDBG funds are seen by Boston officials as particularly valuable because they are so much more flexible than other Federal sources. For example, HOME funds can be used only for housing, and to use certain EPA brownfields funds, the site cannot be contaminated by oil or by total petroleum hydrocarbons. CDBG funds can be used for an array of activities, as long as they fit under the general umbrella of helping low- to moderate-income (LMI) persons, or removing slums or blight. CDBG funds are used only rarely for property acquisition in Boston (because the city already owns so many properties) but are often used for site assessments, remediation activities, and construction. Boston has used CDBG funds to remediate both city and private properties. The city generally uses the LMI benefit as the national objective for CDBG funds and has cited LMI job creation as the specific priority in some cases.

Boston's CDBG appropriation for FY98 is \$24,737,000, and the city has requested a total of approximately \$82.25 million in Section 108 loan guarantees since 1981. As of February 1998, approximately \$57 million of the requested Section 108 funds have been used. Boston also uses HOME Investment Partnership Program funds, as well as funding from the Emergency

Shelter Grant (ESG) and Housing Opportunities for Persons with AIDS (HOPWA) programs. In the last fiscal year for which data were available, appropriations of these funds were \$6,309,000 in HOME funds, \$992,000 for ESG, and \$1,184,000 for HOPWA.

Boston has also used Section 108 loan guarantees, including \$40 million to redevelop the World Trade Center Hotel. The city contacts stated that recent changes in the Section 108 program that attach EDI funds to the loans will help in the funding of future projects. Before having the EDI funds, HUD provided borrowing authority but no funds to reduce the interest rate. Boston has funded four Section 108/EDI projects, two of which are complete.

Other Sources of Funding. Boston is participating in EPA's Brownfields Pilot Program, which provides up to \$200,000 to support creative 2-year explorations and demonstrations of brownfields solutions. In Boston this grant is funding the Brownfields Economic Redevelopment Initiative. This initiative is focused on the Dudley Street neighborhood, which has a disproportionate number of contaminated sites: with 4 percent of the State's population, this neighborhood has 9 percent of the State's listed contaminated sites. One of the sites in the Dudley Street neighborhood that was identified under the pilot project is also currently under consideration as a development project by Boston.

Boston has a HUD-designated Enhanced Enterprise Community (EEC) that has helped it establish partnerships with local businesses. Seven Boston banks have pledged to set aside \$5 million each for commercial lending in the EEC area—providing \$35 million over 5 years. The Commonwealth of Massachusetts also provides funding in the form of Community Development Action Grants and Urban Initiative Funds.

Organizational Structure for Brownfields Redevelopment. Housing and community development programs in Boston are operated through three agencies, grouped under the direction of the city's Chief Economic Development Officer. A HUD representative said that this person has been very effective in the city's economic redevelopment efforts. The three agencies involved are the Department of Neighborhood Development (DND), which administers the Federal grant funds; the Economic Development and Industrial Corporation, which administers the Public Housing Program; and the Boston Redevelopment Authority, which oversees zoning and activities in urban renewal districts.

Boston's DND is the official grantee for CDBG funds. Its staff prepares the Consolidated Plan, which establishes specific priority projects in both housing and economic development for the CDBG. This office also determines the eligibility of projects for various funding, including CDBG and HOME, and administers the grants. The Public Facilities Department also participates in community outreach, develops funding sources for redevelopment projects, and contracts with outside companies to carry out site assessments. The city's environment department manages the initial brownfields pilot from EPA.

Many groups play a part in brownfields redevelopment projects in Boston. The city environment department coordinates a brownfields task force made up of agencies, community groups, residents, the business community, and other interested individuals. The city has partnerships with the Main Street program of the National Trust for Historic Preservation and

with several business and community organizations. The city seeks input from these organizations to help determine the type of redevelopment that should take place at the site. The permitting and zoning boards also have input in determining redevelopment plans. The city has also worked with the Boston Redevelopment Authority, city and State environmental agencies, and the local Community Development Corporations (CDCs).

Selected Project Descriptions. The Roslindale project redeveloped a former retail establishment as a grocery store in an LMI multi-ethnic neighborhood with substantial Greek and Lebanese populations. A total of \$1.1 million in CDBG funds was spent on the project. This included acquiring the property, \$350,000 for remediation, and construction costs. Thirty jobs were created, and all were available to LMI residents. The project got off to a difficult start, however. The community formed a co-op that had a goal of redeveloping the site as a grocery store to bring people into the community and help other area businesses. It was discovered that abandoned underground tanks on an adjacent city-owned property had leaked contaminants under this site, as well as under another plot that bordered the site. The nonprofit entity that had organized the project did not have the expertise needed to manage the remediation of the site.

At this point, the city acquired the property and the adjacent contaminated plot, and a new developer was found. Local HUD staff provided the city with some guidance to help ensure that the \$250,000 of CDBG funds already spent on the project design would not go to waste on a stalled project. After acquiring this property, the city changed the way it organized projects, underscoring the need for cooperation between the agencies involved and for a thorough site assessment before undertaking a project. The local HUD representative said that because of the experiences with this project, the city is now more formalized in its procedures and much better able to deal with brownfields issues.

The city also used CDBG funds to clean up sites that were used for rental housing and elderly care facilities. At the former Michelangelo School, the community wanted to redevelop the site as an elderly housing facility, but lead and asbestos were discovered. City officials contacted HUD's local Housing/Federal Housing Administration staff, who indicated that for the site to be eligible for Section 202 funding, the contamination would first have to be eliminated. The city used CDBG funds to remediate the site, which was then awarded Section 202 funds. Similar approaches were used at the former Longfellow School, where \$5.4 million in HUD funds was spent to redevelop the school as elderly housing, and at Mei-Wah Village, where \$120,000 in CDBG funds was used to remediate the site. The latter site was developed as a Section 202 rental housing project for LMI persons. HUD provided \$3.4 million in Section 202 assistance.

Another brownfields redevelopment completed in 1996 is a good example of a partnership between the public and private sectors and of using CDBG to leverage private funds. At the Jamaica Plain Center, a new supermarket and a community health center were constructed. The Public Facilities Department provided \$3.3 million in CDBG funds; the Office of Community Services, a division of the Department of Health and Human Services, provided a \$474,000 grant; Local Initiatives Support Coalition (LISC) gave a \$50,000 loan; Fleet Bank provided \$9.2 million in construction financing; and the Carpenter's Union Pension Fund provided \$9.2 million in permanent financing. The developer has committed to provide a

\$500,000 community trust fund. City officials State that a minimum of 100 jobs was created, and 60 of those were available to LMI residents. The medical center provides access for affordable health care, and the supermarket was the first to be constructed in a Boston inner-city neighborhood in more than 20 years.

Lessons Learned. Boston officials undertake redevelopment projects for the purpose of neighborhood economic development. Environmental remediation is often an essential part of the redevelopment but not the purpose. Projects usually begin when financing and a reuse plan are in place for the site, not because the site may be next on a list of brownfields sites that need to be remediated.

Based on its experience over the past several years, Boston's advice to other places dealing with community issues in brownfields redevelopment includes:

- Focus on identifying an economically viable reuse and obtain firm commitments before remediating a site.
- Where possible and appropriate, try to make the reuse for a site similar to the former use; e.g., if it was a business, redevelop it to be a business. This helps minimize the need for zoning changes. If you have to change the use of a site, inform the community early.
- Perform a complete site assessment early on to avoid having surprises. Perform community outreach and act with local community organizations when appropriate.
- Make sure the site is physically secure. There is a need to keep people out of the site, both to limit potential liability as well as to reduce the possibility of crime.

In most cases, Boston officials have taken these recommended actions in doing their own brownfields redevelopment. They did not do a complete site assessment initially in redeveloping the Roslindale site and confronted additional contamination that substantially increased costs and could have jeopardized the project; this was a difficult but important lesson.

Suggestions for HUD. Boston officials suggested that the national HUD office work closely with local agencies, such as their own, that are active and experienced in brownfields redevelopment before launching new programs and regulations. Boston Neighborhood Development officials saw the discussions from this CDBG/brownfields study as a first step in this communication. They also felt it was very important that the CDBG program retain its flexibility, because each brownfields redevelopment project presents its own unique set of challenges. They believe the program's flexibility does not go far enough, however, especially for brownfields projects. For example, HUD could exempt funds used for brownfields remediation from meeting the LMI national objective and lift the \$50,000 per job ceiling on CDBG/Section 108/EDI assistance for such projects, though this may require statutory action. Also, officials there would prefer a freestanding brownfields program to one that must operate within the existing Section 108 regulatory framework.

Several Boston contacts noted that CDBG funding has been declining since 1974, yet the needs have increased. Some of the new eligible activities now include business technical services and assistance for nonprofit organizations. The respondents indicated a consequent need for increases in CDBG allocations.

Case Study 2: City of Dallas

Capsule Summary. Dallas used a \$200,000 pilot grant from EPA to lay the foundations for an effective brownfields program that is based on the work plan completed for the grant. City officials indicate that without the initial funds from EPA, brownfields redevelopment would probably not be a prominent issue in Dallas now. During the last 2 years, Dallas Brownfields Program officials say they have leveraged more than \$109 million in private investments, helped save and create 1,705 jobs, and are redeveloping 16 brownfields sites covering 1,244 acres. Dallas has a large CDBG program but has used few of these funds for brownfields redevelopment projects because of other pressing priorities for its CDBG allocation, especially improving low-income housing. The Dallas Brownfields Forum, which links the City's community development officials with community groups, business owners, regulators, and investors, is considered a vital component of Dallas' brownfields program because it helps everyone understand the economic, legal, and social issues involved in redeveloping a contaminated property.

Brownfields Redevelopment in the Context of Community Development Priorities.

One of the key objectives of the city's Economic Development Department is revitalizing low-income areas, and a majority of the brownfield sites are located in low-income neighborhoods in South Dallas. In many of these distressed neighborhoods the poverty rate reaches 19 percent, and the unemployment rates approach 25 percent. The Dallas Brownfields Program was created in large part to revitalize low-income neighborhoods in Dallas and simultaneously address the environmental concerns.

Dallas has been opportunistic about brownfields redevelopment as a vehicle for its economic development priorities. There has always been a high demand among investors for developable land within the city, which has helped make urban redevelopment projects viable. However, the city's attention to brownfields redevelopment in particular began in about February 1995, when EPA grants first became available. In October 1995, EPA selected Dallas as a regional brownfields pilot. Its selection as an EPA pilot site helped develop local interest and momentum.

By 1997, after completing some visible and successful brownfields redevelopment projects, brownfields redevelopment had come to the forefront as an economic development strategy in Dallas. The Economic Development Department (EDD) in Dallas now considers brownfields redevelopment one of its top economic development priorities. One indication of this commitment is its creation of a brownfields program office with two full-time staff, and the recent inclusion of brownfields as a target industry in the city's Public/Private Partnership Program incentive opportunities.

The overriding purpose of the Dallas Brownfields Program (DBP) is economic development, especially in the central business district and in the four Enterprise Zones. The mission statement of the Dallas Brownfields Program is to "assist in the economic redevelopment of perceived or real environmentally impaired real estate in Dallas." The DBP's scope generally includes:

- Providing neighborhoods and businesses the opportunity to identify and inventory potential brownfields.
- Assessing the sites' environmental conditions.
- Where feasible and warranted, prioritizing the sites to provide gap financing to assist borrowers in cleaning up their sites.

Use of HUD Funding. The City of Dallas, the eighth largest city in the U.S., makes extensive use of HUD funds. The city's Action Plan for FY 1995–96 used \$22.9 million in CDBG funds, including \$8.2 million for housing and \$1.5 million for economic development. However, the only CDBG money that has been used in brownfields redevelopment was redevelopment was \$500,000 for a brownfield redevelopment in FY 1996–97 and \$150,000 for blight removal and site development at one site in FY 1997–98. The reason that only one of the 16 brownfields projects has used HUD funds is that other funds, primarily from the private sector, have been available for brownfields, whereas other local priorities, especially housing for LMI families, depend on CDBG money and do not have alternative sources of funding. The rapid growth of Dallas over the last several years has helped cause severe shortages of affordable housing. City officials note that the CDBG-funded housing efforts work in tandem with the redevelopment of brownfield sites in some LMI areas, such as the southern part of Dallas, to achieve overall neighborhood improvement.

Competing local priorities are Dallas' main reason for not using HUD money for brownfields redevelopment. City officials see few technical problems in using CDBG funds for brownfields and realize they can be applied to various project aspects. Only one specific comment was made about requirements they find to be a barrier to the use of HUD funds. Under the CDBG's Section 108 loan program, if the community draws down an advance from the interim lending facility before the debenture notes are sold in the public offering, interest starts accruing immediately and payments must be made quarterly. The city is generally not willing to cover these interim costs.

Other Sources of Funding. Dallas has been the beneficiary of extensive private funding, as well as some other Federal and city funding, for its brownfields program efforts. Private developers have put large sums into redeveloping brownfields in Dallas, nearly \$45 million in the last 2 years. About \$8.4 million in public investment was used to leverage a total of \$52.9 million in investment. Much of this has been invested in LMI neighborhoods. The city's 1997–98 operating budget allocates \$410,000 to the Dallas Brownfields Program for staffing, operational, and technical assistance expenditures. The city used its \$200,000 EPA pilot grant as a catalyst to form a public/private partnership approach to brownfields redevelopment that includes regular meetings of the brownfields forum, a citizens' advisory group.

At a meeting of the Dallas Brownfields Forum in November 1997, Vice President Al Gore visited Dallas to announce a \$1.5 million brownfields grant from the U.S. Department of Commerce. These grants are awarded on a competitive basis. Dallas will use its grant funds to launch the construction of an eco-business park and International Environmental Training and Technology Center at the site of the McCommas Bluff illegal waste dump, north of the

municipal landfill, which was part of the EPA-designated pilot area. The McCommas Bluff ecobusiness park project will support technology transfer and maximize the creation of new businesses. It will use recyclable materials and will be one of the first such parks in the country. The International Environmental Training and Technology Center will train students in traditional environmental science, waste and wastewater management, recycling, and wetland preservation. The city plans a bond referendum in 1998, which will include \$2.7 million for the McCommas Bluff project, specifically for street improvements.

Organizational Structure for Brownfields Redevelopment. The key organizational entities in Dallas' brownfields efforts are: the Dallas Brownfields Program, within the city's EDD; the Texas Natural Resource Conservation Commission (TNRCC), a State agency; and the Dallas Brownfields Forum, which involves the private sector and neighborhood groups.

Dallas' EDD has four program areas: brownfields (the Dallas Brownfields Program), area redevelopment, business retention and development, and small business. The program areas work together closely on brownfields redevelopment. The city's specific brownfields initiatives include economic development, community outreach, and a planned revolving loan fund for brownfields cleanup.

The Dallas Brownfields Program serves as a one-stop contact for brownfields assessment/redevelopment questions from all sectors. Program officials work closely with the TNRCC's Voluntary Cleanup Program to handle inquiries from Dallas developers. One of the program's key contributions on brownfields redevelopment projects completed to date is that it helped developers attain a certification of completion from TNRCC and a comfort letter from EPA indicating the site had been remediated, assuring that neither State nor Federal agencies would later sue for environmental contamination at a brownfields site.

The Dallas Brownfields Forum is viewed by city officials as an absolutely essential component of its effective brownfields projects. The forum was the idea of two city staffers, who spent several weeks traveling around the city and inviting people to the first meetings. It had its first meeting in November 1995, a month after the EPA pilot grant was awarded. The Forum meets every 6 weeks and serves as an information exchange among residents, regulators, bankers and investors. HUD, FDIC, the Small Business Administration (SBA), the Federal Reserve Bank, the Texas Department of Banking, and the Trust for Public Land are also participants in the Dallas Brownfields Forum. The group has collaborated in several instances for voluntary cleanup, letter-writing campaigns, and informing the public. The Forum is an independent entity, not part of the city or State government. One of the projects described below was a direct result of the developer attending the Brownfields Forum. This developer is seeking to obtain a certificate of completion for his project.

Dallas' EDD has put a priority on the involvement of neighborhood groups in areas contaminated by brownfields. Initially, a \$20,000 grant enabled the office to start an environmental awareness program in four lower income neighborhoods for two to three meetings per neighborhood. A person on loan from EPA gave presentations on environmental problems and solutions. The meetings were so well-attended by residents and business owners that the program was expanded to include six neighborhoods with four to five meetings each. From these

meetings, contacts were established who later became participants in the Dallas Brownfields Forum. Neighborhood leaders, through the Forum, are in direct contact with city officials, lenders, developers, EPA, and State and Federal officials, who can answer all their questions in one meeting.

Selected Project Descriptions. One company owner, a representative of the West Dallas Business Association, attended the first meeting of the forum. A few months later his business was expanding and he needed additional land because the existing site was too small. He began evaluating undeveloped suburban sites as well as urban industrial sites for a new plant location. The brownfields site he opted to use had been vacant for 9 years and had soil and groundwater contaminated with petroleum hydrocarbons. He started cleanup in March 1996, finished the project in 6 months, and spent about \$100,000. Approximately 50 jobs were retained and an additional 30 are planned in an LMI area because of the project; the company owner would have moved his plant to the suburbs otherwise.

One key to completing this development was getting protection from potential liability. The TNRCC provided a certificate of completion and EPA issued a comfort letter. These documents provided the development protection from State or Federal liability suits and enabled the developer to obtain financing from wary lenders.

Another developer credited the Office of Economic Development (OED) with helping him navigate the government red tape. He bought a site and cleared it using his own funds. The OED provided him information on getting the Phase One assessment and is now working with him to get a certificate of completion from the TNRCC. This will be an essential step before he can get a construction loan from a bank.

Not all developers are satisfied or happy with the brownfields redevelopment process in Dallas. Another developer indicated that the TNRCC is very helpful but is too bureaucratic and has caused significant delays. He estimates that delays caused by the TNRCC and his bank's hesitation because of liability concerns have set his redevelopment project back 6 to 8 months and cost him more than \$100,000. The TNRCC is currently rewriting its rules to reflect more current knowledge of contamination issues. This developer is trying to get a certificate of completion and attends most meetings of the Brownfields Forum because it enables him to vent his frustration with some of the government agencies and to get information about brownfields redevelopment in Dallas.

Lessons Learned. Some of the key factors Dallas officials credit for the city's success in brownfields projects are extensive community involvement, educational efforts, communications among all parties, a forum or advisory group, and good public awareness. One specific practice that has been effective is to have certain groups make educational presentations at the Forum meetings, such as banks, developers, and EPA.

City officials say that two of the Dallas Brownfields Program's most measurable accomplishments are:

- (1) Bringing stakeholders together (private citizens, developers, bankers, lawyers, and environmental regulators) via the Dallas Brownfields Forum and the Citizen Advisory Focus Groups for discussions on brownfields problems, concerns, and solutions. These meetings have resulted directly in brownfields redevelopment because they increase developers' understanding of, and comfort level with, environmental regulatory processes.
- (2) Playing a key role in drafting the May 1997 EPA Memorandum of Agreement (MOA) between the EPA and the TNRCC Voluntary Cleanup Program, which helps provide liability assurances that are necessary for developers to be willing to invest in brownfields redevelopment.

The Dallas Brownfields Program has produced a bilingual (English/Spanish) Dallas Brownfields Guidance Manual, which includes the work products generated by the Forum members during the past 2 years. The manual explains the steps that cities and neighborhoods should take for brownfields redevelopment. It has been provided to numerous pilot programs and cities across the country.

Case Study 3: City of Philadelphia

Capsule Summary. Philadelphia is very active in the redevelopment of former industrial property, inasmuch as nearly every site in this 300-year-old city is potentially a brownfield. The city completed numerous redevelopment projects involving an environmental remediation component long before the term brownfields was even coined. The city's redevelopment priority is currently on residential reuses, not industrial ones; in parallel, the city's top focus for its CDBG funding is affordable housing and homeownership, though it has also used CDBG funds for economic development projects. Philadelphia also actively uses Section 108 funds—currently \$180 million for economic development and \$60 million for housing. The city has made requests that will reach its borrowing limit of five times its annual grant.

Brownfields Redevelopment in the Context of CD Priorities. In a city as old as Philadelphia, with a long industrial history that includes numerous munitions factories during World War II, every city property has a potential environmental hazard to be assessed before redevelopment can proceed. Even old residential properties with oil tanks in basements are potential brownfields. Since the Model Cities program in the 1960s, Philadelphia has made it a goal to bring abandoned properties back to life, though environmental requirements have changed substantially. Thus, although the term brownfields has only been in use for a few years, nearly every parcel of available land in Philadelphia can be considered a brownfield site. Economic development officials in Philadelphia are uncomfortable with the stigma associated with brown because it never conjures up an image that businesses find attractive relative to green.

Philadelphia's Consolidated Plan now includes site remediation as a distinct activity that is commonly required in redevelopment projects. The city does not actively seek out brownfields as opposed to other redevelopment projects; however, nor do they reject funding requests that include a remediation component unless the costs are prohibitive. Because of an extensive list of priority projects at any given time, the city limits its subsidy to \$1.5 million on any given project.

Use of HUD Funding for Brownfields Projects. Nearly all of Philadelphia's use of CDBG funds for hard costs, such as for infrastructure, new construction, or rehabilitation could be considered a use of CDBG money for brownfields since nearly all projects require an environmental assessment. The social services programs are the only programs under the block grant that are not used in connection with brownfields sites.

About 94 percent of Philadelphia's entitlement money from the block grant goes toward housing, the remainder to economic development. The majority of CDBG funds in brownfield redevelopment projects in Philadelphia, for either housing or economic development, go toward acquisition and construction, not remediation. City officials usually find that the remediation component of projects is too expensive to justify as a CDBG expenditure. As one official explained, it is difficult to go into a meeting with community groups or elected officials and ask for a lot of money to clean up a single brown piece of land that might turn into something useful, when that same amount of money could be used to create a new housing development or something else with a visible, tangible impact to a neighborhood. The city thus usually tries to

and has succeeded in getting direct State appropriations for the cleanup component of redevelopment projects.

On residential projects, Philadelphia usually uses LMI benefit as the national objective, where the direct beneficiaries receive affordable housing. The city has also used some of its HOME funds for residential redevelopment of brownfield sites.

In economic development, Philadelphia uses both the LMI and slums and blight objectives to qualify projects. Officials find both to be problematic. The area basis requirements for projects to be eligible under LMI benefit are too narrow (e.g., projects must provide a retail benefit or service), and identifying the direct beneficiaries of a project is very labor-intensive. Officials believe that any project that creates tax base or jobs in an area that is clearly a low-income area should qualify on an area benefit basis. Conversely, the slums and blight definition is easy to apply to nearly any property in Philadelphia, but it creates a stigma that helps encourage businesses to move to the suburban and exurban areas.

The city makes extensive, ongoing use of Section 108 loans and is currently requesting about \$100 million per year. For large projects, they request Section 108 funds to spend on a single project. They are also creating their own loan pools, drawing down a lump sum from Section 108, to fund smaller projects in the \$500,000 to \$5,000,000 range. Typically tax increment financing (on the increase in assessed value of properties after improvement) is used to repay the loans.

Philadelphia is an Empowerment Zone (EZ) city and is using brownfields redevelopment to try to spark industries to locate within the zone. EZ funds have been used primarily for construction and site development.

Other Sources of Funding. According to economic development officials, the private sector will pay for brownfields remediation if they see a probable return on investment from the cleanup. The city can often get some private funding for industrial redevelopment but not for housing projects. Housing projects rely heavily if not solely on HUD funding, especially CDBG funds, though the projects that create affordable housing for new homeowners do recoup some money for the city in real estate taxes.

When the city can get State funds for assessment or remediation, its HUD funding can be used for more housing production and economic development. Without these other sources of funds, fewer projects can be tackled with their CDBG allocation.

Pennsylvania's Industrial Site Reuse Program funds grants up to \$1 million for remediation and \$200,000 for assessment. According to officials in both Philadelphia and Allegheny County, however, these funds are often depleted by October from a fiscal year budget that starts in July. The State program is small and has tended to favor the western part of State, according to one city official. Philadelphia has been able to use some of these funds for its Sovereign Oil site project [see below]. The State pays for 75 percent of Phase 1 and Phase 2 assessment costs. It will also pay up to 75 percent of the Phase 3 or abatement costs, as a loan if the site is privately held or as a grant if it is owned by a public or nonprofit agency; however, the

insufficient funding levels of the program rarely permit its use for remediation, which is more expensive than assessment. Philadelphia has used CDBG funds as its 25 percent match for these State funds.

Organizational Structure for Brownfields Redevelopment. Philadelphia has a somewhat decentralized structure for economic development and housing functions. Its Office of Housing and Community Development (OHCD) is the planning and policy agency and the official grantee for categorical funds including CDBG. Its staff prepare the Consolidated Plan, which establishes specific priority projects in both housing and economic development for the CDBG. OHCD also determines the eligibility of housing projects for various funding, including CDBG and HOME, and administers the grants.

The Philadelphia Redevelopment Authority is the financing and implementation agency for housing projects and serves as a frequent contractor to the OHCD. Its staff release requests for proposals for rental assistance and housing projects, for which developers (profit and nonprofit) apply for funding.

The City Commerce Department handles economic development projects, which involve CDBG, Section 108, and EZ/EC funds, and administers programs to support small business. The Philadelphia Industrial Development Corporation puts together site and incentive packages for industries interested in expansion or relocation in Philadelphia.

The City Planning Commission has an environmental review officer who reviews the environmental assessments that are required for all city projects that are funded with Federal dollars. The officer handles site plans, environmental reviews, and clearances for redevelopment projects that involve a potential environmental component. The salary of this staff person is paid with CDBG funds.

Selected Project Descriptions. The Freedom Square strip mall project in the Germantown area of Philadelphia was the first major project that could be considered a brownfields redevelopment. It was completed in the early 1980s, before the term brownfields was in common usage. Germantown is an LMI, blue-collar neighborhood of about 100,000 people (about one-half are black). This was an area that had had years of industrial activity, including a paint manufacturer and an auto repair shop, but then fell into disuse and had seen no infusion of new money for many years. Using the slums and blight national objective to qualify the project for HUD funding, the city used CDBG funds to do a Phase 1 assessment and remediation. Other financing included a bank loan and an Urban Development Action Grant. The property was redeveloped into a neighborhood-based retail plaza with a small shopping center and a midrise senior citizens residential complex.

Currently, the West Poplar project in northern Philadelphia is converting a mixed-use area into a community of 800 homes, most of which will be for LMI families, over the next few years. The area had numerous vacant lots and abandoned 19th century homes with lead and petroleum contamination, as well as industrial sites with potential soil contamination from metals. CDBG funds were not used for cleanup but for several other aspects of this project, including

neighborhood site improvement and housing construction. Older style row homes are being transformed into more separate style homes, which creates more of a suburban amenity.

While most of Philadelphia's use of CDBG funds for brownfields has focused on housing as the reuse, a few economic development projects use CDBG as well. One of the earliest ones in about 1980, located at American and Somerset Streets, used CDBG funds to acquire and clear a site that had been used by a manufacturer of specialty petroleum lubricants. The CDBG money was also used to leverage an Economic Development Administration (EDA) grant used for cleanup, though city officials say it was called demolition back then. One of the subasements of the property was overlooked in cleanup, however; the site was then encapsulated. An industrial building was later constructed on top.

At the Heritage One project in a north central area at Ninth and Gerard Streets, the nonprofit Renaissance Community Development Corporation developed a locally based supermarket on a former retail and auto body shop site. State funds were used for the remediation, and CDBG and EZ/EC funds were used for construction.

At the former Sovereign Oil site in the North American Street Corridor, which is located in the EZ, \$10 million of Section 108 and EZ/EC funds will be used for construction of a commercial food distribution facility. The expected \$1.2 million in remediation costs will be paid for primarily (75 percent) by State funds through the Industrial Site Reuse Program, with a 25 percent match from Philadelphia's CDBG funds. Local funds from the city's capital budget are also being used here.

Section 108 funds have been approved and will be used to create the Philadelphia Naval Base Center to be located on the League Island/Delaware River site where the massive naval shipyard once employed 16,000 (but now only 1,000) persons. The development budget for this project is \$242 million, which includes \$20 million for demolition and remediation, \$13 million for infrastructure development, \$60 million for new construction, and \$84 million for equipment (the remainder is for professional services, financing, and construction contingencies). The major sources of financing for this project are \$182 million from the Commonwealth of Pennsylvania's capital budget and \$41 million in Section 108 loans for construction and equipment. The Section 108 loans will be repaid through a combination of tax increment financing and direct payments. Officials used the slums/blight objective to qualify the project, which is expected to create more than 1,000 direct jobs at the Kvaerner private shipbuilding company, a maker of large container ships.

Lessons Learned. Officials in Philadelphia offered the following insights:

• Brownfields cannot compete with greenfields as long as States continue to build highways that draw businesses out of downtown into the corporate centers and shopping malls of the suburbs. The combination of good transportation and less expensive land makes greenfields a more viable option for any business that does not need to be downtown in Philadelphia. Countervailing incentives that emphasize the unique facades, historic value, or cultural aspects of downtown properties are important to encourage the marketability of brownfields.

- It does not make sense to use Section 108 funds for property remediation. If there is a positive cash flow to be made by cleaning up a property, the private sector will do it. If the project requires a public subsidy, then it should come from another source, such as the State. If a Section 108-funded project does not create a return, the city's CDBG funding would be at risk. Philadelphia uses its Section 108 funds mainly for construction and equipment, which increase the assessed value of properties, and uses tax increment financing to repay the loans.
- The best way both to lower liability risk and make a property marketable is to determine that it is clean enough for the intended use. Everyone interested in redevelopment—municipal officials, developers, bankers, and attorneys—wants to know whether a site is clean as part of their business decisions about urban projects. Economic development and environmental contamination used to be two separate problems dealt with by different parties; now everyone cares about both.
- State liability laws may not protect cities. Large cities like Philadelphia are typically self-insured, whereas some smaller cities may have State insurance. This means the city is ultimately liable—even if a site has been cleaned up to State standards—for environmental hazards that an owner may discover later. The State does not protect the city. City officials feel they have to do their own review based on the urban experience, not just apply State standards, in order to protect the city from community challenges. They recognize that the disparity between State and local standards also makes it difficult for those who are applying for funds.
- Civic action groups are important allies in making a project run smoothly within the neighborhood. If a developer feels that the community does not support the project, he will go elsewhere. There are about 350 civic action groups in Philadelphia, and the CDCs have a lot of power.

Suggestions for HUD. Local officials in Philadelphia have successfully applied the CDBG national objectives and guidelines to several brownfields projects that use either CDBG or Section 108 funds. A few specific suggestions for improvement that they said would help HUD focus better on the "real world" and not the paperwork, were as follows.

They suggested that certain activities that do not affect life or property should be exempted from environmental review, such as rental assistance, planning, report writing, or any other activity that is just money or paper, not bricks and mortar. They believe HUD should just provide a blanket exemption for these activities. Now the grantees are required to submit an official letter to State why each project is exempt from environmental review and it creates a greater paperwork burden locally.

They would also like to see HUD establish a less restrictive definition of LMI area benefit. For example, one official noted: "I know that my job is to provide assistance to disadvantaged persons and I take this very seriously." About 55 percent of Philadelphia's population of 1.5 million are LMI persons. The poverty rate is 22 percent. *Any* project that brings

in property tax revenue, businesses, income, or jobs creates a benefit for LMI persons. They suggest that the entire city be considered an LMI area and any project that creates jobs or tax base should be eligible because it creates a clear benefit to the area.

On a related note, they would like HUD to remove the job creation requirements of LMI that pose unnecessary impediments to economic development projects. Specifically, they would like to revise or eliminate 24CFR570.209 and Appendix A, which are the collateral conditions of 24CFR570.203a and 204.

Case Study 4: Allegheny County, Pennsylvania

Capsule Summary. Allegheny County is the only HUD grantee among the 80 RTI contacted that has explicitly established brownfields as a community development priority in its Consolidated Plan. The county has been very active in brownfields redevelopment since 1988. The county's CDBG funding goes mostly to infrastructure development to prepare properties for the private market. The county has been working collaboratively with both the smaller nonentitlement municipalities and the entitlement city of Pittsburgh as part of the Enterprise Community (EC), in joint economic development activities, and in work with the Pittsburgh Brownfields Center, a technical information resource at Carnegie Mellon University.

Brownfields Redevelopment in the Context of Community Development Priorities.

Allegheny County officials say they have one of highest concentrations of brownfields sites in the nation. The county commissioners have selected brownfields as a community development priority simply because the need for their redevelopment is so evident. The blighted property all along the Monongahela River, which runs through much of the county, is an eyesore. As a result of steel mills' closings, there are a number of deteriorating buildings in clear view as well as many sites that are less prominent. The county believes cleaning up these areas is critical to its citizens' quality of life. Economic development priorities include both job creation and infrastructure development.

The focus of the county's efforts in brownfields redevelopment for the last 3 years has been to prepare properties for market. Officials recognized that making properties attractive to buyers or developers involves both environmental remediation as well as the infrastructure and street improvements needed to convert the property's use from industrial to another use. For example, a mixed-use development of commercial, retail, and residential requires different road and parking configurations from that of a large steel mill. Once the county gets a site ready to be marketed, the private sector has taken over the development aspects of the project. Unlike the City of Pittsburgh, the county does not typically purchase the property itself.

The main locus for the county's brownfields work is the Monongahela Valley (Mon Valley), a section of the county hit hardest from the mill closings. The county and its 130 municipalities are identifying sites and planning for different activities such as infrastructure development environmental remediation and rehabilitation. The county is probably about halfway through the redevelopment of its many brownfields sites; it has developed many of the largest, most visible sites and will now work on some of the smaller sites. The county subcontracted with another agency to identify 10 small sites in the Mon Valley that have good economic development potential. Pittsburgh has been very active in completing brownfields redevelopment projects and Allegheny County is now also an active player in the region.

Use of HUD Funding for Brownfields Projects. CDBG funds are applied to two main priorities in Allegheny County: municipal developments, which includes developing streets and sewer lines, and housing. CDBG, Section 108 loans, and EDI funds have been used for brownfields infrastructure and site preparation in Allegheny County. For the first time last year, the county used CDBG funds to identify sites and do Phase 1 assessments. The county has not yet, but is contemplating using CDBG funds to do site assessments on privately owned sites.

Other sources like CDBG-based minor loans have been applied to brownfields, bringing the total public investment (including HUD money) to \$30 million to \$40 million to date. The county is projected to spend \$40 million to \$50 million more as the redevelopment of sites continues. Job creation prospects are good; county officials project that in 10 to 15 years, about 25,000 new jobs will be created on brownfields sites.

Allegheny County officials see the biggest advantage of the CDBG program to be that it is a grant. They have not experienced many problems with the CBDG national objectives and usually use the LMI benefit objective.

Allegheny County has not used Section 108 funds yet for brownfields, but officials are looking into it because the amount of money needed for some of their larger projects (e.g., \$20 million) is much too high to cover with an annual CDBG allocation. It is attractive because it allows the county to apply a large amount of capital right away but repay it over a long period of time. The loan would be repaid from the sale of the property after it is redeveloped. Currently the County is focusing on applying for EZ/EC status and for a Brownfields Economic Development Initiative (BEDI) grant for the steel mill sites.

The EC covers parts of six municipalities—including Pittsburgh—within Allegheny County. No HUD money has been spent on brownfields sites in the EC areas so far, but is very likely in the near future, as most parts of the Mon Valley are within EC areas. In addition, their EC status helped two EC cities, Pittsburgh and McKeesport, get EDI funds awarded 2 years ago. Allegheny County does market the Federal tax incentives available in EC areas and emphasizes to developers that these can be used for brownfields redevelopment. To date, there have been no takers to redevelop the two former steel mill sites (360 acres) because of their high projected cleanup costs of \$8 to 12 million. (Under the State's prior standards, cleanup costs would have been even higher, about \$20 to 30 million.) Even the Federal brownfields tax incentive to cover brownfields cleanup costs has not yet been sufficient to entice a developer to make the substantial outlay; so far no developers are interested unless the government will do the cleanup.

Other Sources of Funding. The Commonwealth of Pennsylvania has several programs, including infrastructure programs and opportunity grants, that can be used for the redevelopment of brownfields. Pennsylvania's Industrial Site Reuse Program funds grants up to \$1 million for remediation and \$200,000 for assessment. It has provided \$9 million in funding over the last 2 years, though Allegheny County has not yet been able to use it because funds tend to get depleted very quickly in the State's fiscal year.

The State's capital budget can also be tapped for remediation costs but requires a one-to-one match. Allegheny used \$1.5 in grant funds from this program in remediating the Pipe Mill Building, a two-building structure, located in the Mon Valley. The redevelopment of the property involved removing the facade and designing and constructing a road in between the buildings, changing it into a four-building structure.

Allegheny County also has a Tax Increment Financing (TIF) program. After the developer makes an improvement, the county issues revenue bonds for the difference between the property's assessed value before and after the improvement. The owner's increase in taxes

due to the property's increased value is used to pay back the debt. The developer has up to 20 years to pay this back, although 8 years has been the longest payback time to date. Allegheny County was hoping to use this program for the first time for a brownfields project in 1998, but the prospective developer of the proposed site has decided to locate elsewhere. The City of Pittsburgh has used TIF in three cases.

The State's job creation tax credit can also be used indirectly for cleanup of sites that will result in job creation; the remediation expenses can be treated as a tax deduction.

Organizational Structure for Brownfields Redevelopment. Allegheny County's Department of Economic Development administers the CDBG program, prepares the Consolidated Plan, packages the funding for projects, and helps with business development and marketing of sites to prospective developers or businesses. It responds to requests from the many municipalities in the county and helps them identify viable projects. The Industrial Development Authority also helps market the properties and provides information to the county and municipalities. The Steel Valley Authority conducts site identification and review. The county has 130 municipalities, which makes coordination on anything a challenge, but the municipalities have begun to unite around trying to clean up their brownfields to create a more attractive and economically vibrant urban area. Allegheny County also works closely with Pittsburgh and McKeesport, the two entitlement cities in the region.

Pennsylvania's Department of Environmental Protection refers developers to the county economic development department for details about grant funds, and it runs and advertises the State's Voluntary Cleanup Program. County officials find that permits to perform brownfields redevelopment are relatively easy to obtain, especially since a change in 1995 in the remediation requirements of the Pennsylvania Land Act. Having moved toward use-oriented risk-based standards, the law no longer holds developers to the standard of a "pristine state" on certain projects. For instance, sites planned for parking lots are held to a lower standard than those being cleaned for a park or housing.

The Brownfields Center (TBC) is a joint venture involving Carnegie Mellon University, the University of Pittsburgh, and the Federal ECs that serve the Pittsburgh area. County officials see it as a valuable regional resource for their many municipal officials who are just learning about brownfields. TBC serves as a vehicle for sharing the research of these university faculty on brownfields with community groups, developers, planners, and other end users of information. TBC conducts workshops and seminars for the full range of brownfields stakeholders, disseminates a monthly newsletter, and creates PC-based decision support tools including a Web-searchable tool for accessing and understanding regulations from all levels of government. Having TBC as an information and educational resource for the region helps free up the county to focus on putting together funding for projects.

Selected Project Descriptions. One recent project where CDBG resources were used was the Brickshed Building project located at City Center in Duquesne, one of Allegheny County's municipalities. Of Allegheny County's CDBG funds, \$200,000 were used for site rehabilitation, including infrastructure improvements and building an elevator. Slums and blight was the national objective used, and it worked very well for this project. The property was

formerly used for steel manufacturing. The remediation included removing asbestos from the building, and oil and other chemical contaminants from the soil. The Regional Industrial Development Corporation, a private nonprofit firm, owns the Brickshed Building. A graphic design firm is now moving in.

The county is planning to spend CDBG funds for a site redevelopment of a former railyard near the McKees Rock Terrace, a county public housing project. The entire site is about 100 acres and includes existing businesses scattered about the property. Contamination at various levels is believed to exist on the site. Allegheny County is looking to establish joint ownership of the 100 acres with the existing private business owners and the Housing Authority, then convert the redeveloped property into a small industrial park. Any cleanup needed is expected to be funded primarily by CDBG.

Lessons Learned. Allegheny County has learned that the community plays a key role in brownfields redevelopment. Presently, the community groups are generally cooperative and supportive. During the last several years, only one group has been a problem. Initially, the Steel Industry Heritage Corporation, a local group interested in historic preservation of notable steel industry sites, wanted to preserve a mill that was to be demolished for redevelopment. Ultimately, the group did support redevelopment.

Understanding local community priorities is especially relevant for Allegheny County because it has to work with and provide funding to dozens of municipalities that lie outside of the entitlement cities of Pittsburgh and McKeesport. The requests for funds are increasing, while funding availability remains constant. Thus, the municipalities have to compete more and the county has had to become more selective. Most of the projects are considered for their economic development potential. The recent trend for the county has been to fund more smaller projects rather than one or two large ones, in part for political reasons in dealing with so many municipalities; in addition, the county and its partners have seen that even small projects can have quite a noticeable impact on tax base and job creation in a small town.

Two best practices that Allegheny County would recommend to other places in addressing brownfields include conduct thorough environmental assessments early, to provide the interested parties with the relevant information for their development decision; and prepare sites for the private market to take over, rather than trying to retain public ownership.

Suggestions for HUD. Sometimes Allegheny County officials struggle with projects that do not qualify on an area benefit basis but that require substantial time and effort to sort out the income levels of the project's direct beneficiaries. They would like to see the area benefit requirements for specific types of projects be loosened or eliminated, so that any project in an area established to be LMI can qualify. Officials there generally encourage HUD to be more flexible about how money can be used in regard to brownfields redevelopment. HUD has been responsive to this county's need so far.

Case Study 5: State of Michigan

Capsule Summary. Michigan was selected for a case study because it is one of the few States of the 18 RTI contacted that uses some of its Small Cities CDBG funds for activities related to brownfields redevelopment. The State of Michigan has a State-level brownfields initiative that involves the Michigan Jobs Commission, the Michigan Department of Environmental Quality (DEQ), and the Consumers Renaissance Development Corporation (CRDC). CDBG funds have been used for planning and infrastructure development on brownfields sites in nonentitlement areas, and they also help finance the technical assistance and training on brownfields that CRDC provides to municipalities throughout the State.

Brownfields Redevelopment in the Context of CD Priorities. Brownfields redevelopment is seen by the Michigan Jobs Commission—which is the State's economic development organization—as one important type of economic development approach, though it does not give brownfields projects priority over other economic development projects. The impetus for redeveloping a brownfields site in Michigan generally comes from local governments' planning or economic development departments, a third party such as a chamber of commerce or economic development corporation, a property buyer or developer, or a community/grass roots organization. The underlying motivation in most cases is economic development.

According to State officials in both the environmental and economic development agencies, Michigan's State policies have made brownfields redevelopment a more feasible and attractive community development activity. Michigan made broad changes in the State's environmental cleanup regulations in June 1995. The regulations moved from strict liability-based regulations to causation-based regulations that only assign liability to parties responsible in some way for the contamination. Development of sites now focuses on a baseline environmental analysis (BEA) conducted prior to or within 45 days of property acquisition that establishes what type and levels of contamination are present at a site.

State officials say Michigan's brownfields initiative has dramatically stimulated the market for contaminated or potentially contaminated property and has caused its value to increase. From June 1995 to November 1997, about 1,800 transactions have taken place in which buyers did not have to assume liability for the property, whereas in the 4 years prior to the State initiative only 30 to 40 such transactions took place. A 1996 survey of 30 communities, 1 year after the initiative was in place, indicates that about \$220 million had been invested and 2,400 new jobs had been created.

Since the State's environmental regulations have relaxed liability and use-based cleanup requirements, Michigan officials say brownfields have become more competitive relative to greenfields than they used to be. However, the public perception has not yet caught up, and there is largely still a stigma attached to brownfields. Developers still have a general distrust of the legal issues associated with environmental contamination, and also are concerned about time delays from extra meetings and forms required on contaminated sites.

Use of HUD Funding for Brownfields Projects. The State of Michigan receives a little more than \$43 million annually for its Small Cities CDBG allocation. The Michigan Jobs

Commission administers these CDBG funds, 75 percent of which are dedicated to economic development and the other 25 percent to housing. Most localities with a brownfields redevelopment interest use the LMI benefit test when they apply for CDBG funding, and the intended benefit usually takes the form of job creation for LMI persons.

Michigan officials find that CDBG funds can be useful for a variety of activities relevant to a brownfields project, including clearing property and improving/installing the necessary infrastructure (sewer, water) for development. They say CDBG funds especially work well as part of a larger package of funds (including State and Federal sources) that can combine to make a brownfield site competitive with or an even better investment opportunity than greenfield sites, especially if the brownfield site is in a desirable location for a prospective industry.

Michigan officials also appreciate that CDBG funds can be a good way to leverage private investment. As an example, in a situation where a private investor was interested in a property where the groundwater was contaminated and therefore unusable, CDBG funds were used to extend water lines to the facility, which was then redeveloped by the private investor. The State's CDBG administrator involved in this project pointed out the importance of the HUD funds used on this project, because without them the marketability of the site would have been in jeopardy indefinitely [see project description below].

Michigan also makes regular use of its CDBG funds to provide Technical Assistance Grants (TAGs). States are allowed to set aside 1 percent of their CDBG allocation for technical assistance. It is common for TAGs to be given to regional planning commissions to help local units of government to access CDBG funds. TAGs have also been used twice to fund the CRDC, a nonprofit affiliate of the Consumers Electric utility company formed in part by the Michigan Jobs Commission and the Michigan Municipal League. The director of the CRDC is an employee of the utility, which donates 95 percent of his time to running the CRDC. Consumers Electric sees a clear economic interest in helping the State to clean up brownfields sites so they can be used for new or expanded industry projects that bring in new utility revenue.

The CRDC initially received a \$250,000 TAG from CDBG funds to do educational outreach and training. Specifically, the CRDC developed an educational notebook and conducted a number of training workshops. The CRDC later received two additional \$360,000 TAGs from the Jobs Commission for continuing education and technical assistance at specific sites. The community is only eligible for the assistance if the deal closes and positive material impacts to the community can be clearly identified. The CRDC is seen by Michigan officials as an especially important asset to cities of less than 50,000 that have brownfields sites but do not have expertise in dealing with brownfields issues. With the new options available from the State to encourage redevelopment, the CRDC provides assistance in preparing for redevelopment and leveraging Federal and State funds.

Other Sources of Funding. In general, there are many stakeholders involved and therefore usually multiple funding sources for brownfields projects as well. One of the CRDC's primary objectives is getting the community positioned to attract investment (private or public) at brownfields sites. Some of the ways they do this is by attempting to leverage State

investments to get private funds, establishing eligibility for tax incentives, and offering planning and zoning assistance.

The State of Michigan offers a variety of economic enticements, including tax incentives and grants, that can be used to encourage redevelopment at brownfield sites. If a local unit of government establishes itself as a Brownfields Redevelopment Authority (BRA), then developers choosing a site within their jurisdiction are eligible for Michigan corporate income tax, or Single Business Tax (SBT), credits. A credit of 10 percent (up to \$1 million) of the money invested in at the site can be given. Another benefit of becoming a BRA is eligibility for tax increment financing (TIF) authority. This is a similar tool to more conventional TIFs used for land assembly or infrastructure redevelopment and can also be used to fund cleanup work, but BRAs, unlike generic TIF districts, are site-specific. The major incentive for cities is that they can collect tax increments for up to 5 years beyond the project to use proceeds to set up local redevelopment pools. To date, more than 70 BRAs have been created and they are being created at rate of 5 to 7 per month. DEQ expects to do a review of the BRA program in summer 1998.

The Michigan Department of Environmental Quality (DEQ) awards grants to local municipalities of up to \$2 million per site from a \$45 million fund that was established by a 1988 bond issue. The fund includes \$10 million for site assessment and \$35 million for cleanup. To qualify, the developer must be committed to the site and the community must identify the economic benefits that will result from the project. In the past, the DEQ awarded site assessment grants that did not require that a developer be identified; however, that \$12 million fund has been exhausted. In November 1998, a major bond issue called Clean Michigan will be on the ballot, which, if passed, could yield a \$20-million annual assessment and cleanup fund, up to a total of \$350 million.

In addition, the Michigan governor and legislature have designated 11 Renaissance Zones to encourage economic development in specific areas of need. The major incentive in each Renaissance Zone is the suspension of most State taxes for businesses and residents. State and local CDBG funds have been used in these areas, which include Detroit and 10 other communities. Many of the properties in these zones can be considered brownfields. State officials claim that hundreds of millions of dollars in private investment and 4,000 jobs are being created in these zones.

Organizational Structure for Brownfields Redevelopment. The Michigan Jobs Commission is the administrator of the State's CDBG program. The Business Development Bureau (BDB), which is part of the Jobs Commission, is responsible for business retention and expansion within the State. Its managers promote State programs available to businesses and help the businesses get through the red tape. In working with existing industry, the BDB encourages businesses to expand at their existing site or within the same community. In working with new or expanding industry, the BDB encourages businesses to consider sites in industrial areas with existing infrastructure rather than to develop greenfields and farm land.

BDB account managers are familiar with the processes for applying for CDBG funds, so they can act as an intermediary between a potentially interested company and a community that could use CDBG funds to help make the project more attractive. In some cases a city will have

identified a site before a business has shown interest, and in these cases BDB can determine what incentives they can offer and be ready to move quickly if interest is shown in the site. The Jobs Commission has provided training to local governments in the processes and criteria required to acquire public monies, which leads to a greater capacity and fewer inappropriate requests over time.

In addition to providing funding [see above], the Michigan DEQ was involved in developing the changes in Michigan law in 1995 and has been very active in promoting them around the State. DEQ has offered numerous workshops to developers, private industry, and consultants. DEQ's environmental response staff, previously considered an enforcement group, is attempting to make people aware that they are also a resource of information and technical assistance on environmental issues.

The DEQ reviews the BEAs now required before cleaning up a property. Once a BEA is conducted, the buyer has no responsibility for remediation costs; in general, this is the seller's responsibility prior to purchase. Under the due care provision of the law, the buyer has three responsibilities: not to exacerbate the contamination (e.g., increase cleanup costs to the responsible party), to ensure that no member of the public comes in contact with unacceptable levels of contamination, and to ensure that no third party violates either of these above two requirements. DEQ also sometimes negotiates covenants not to sue with developers in cases where the BEA is not conclusive, for instance where the developer is using similar contaminants as those used by prior owners of the site; in these cases the covenant may require some cleanup by the developer and not offer a complete liability release.

According to its other partner agencies, the Michigan DEQ has shifted from a "command and control" attitude to being an active, willing, and cooperative partner in redevelopment efforts. An administrator at the Jobs Commission said that while in the past, permitting had been problematic, under the new structure of the State environmental agency, permitting and regulatory issues have been greatly expedited.

CRDC is a nonprofit organization that was formed by a collection of groups including the Jobs Commission, Municipal League, and Consumers Electric. CRDC, with grant funds from CDBG, is the State's main technical assistance and training provider for counties, cities, and municipalities investigating potential brownfields redevelopment projects. The CRDC performs three basic functions:

- Educational outreach and training. CRDC has created a user-friendly guide and software providing basic information to teach municipalities how to do brownfields projects and has distributed approximately 800 guide/software packets so far. The CRDC also provides training to interested municipalities.
- Community assistance services. CRDC provides assistance to develop local community capacity to handle brownfields redevelopment projects, which may include assistance in obtaining TAGs (from State CDBG funds) and in lining up pro bono professional services from environmental consultants and attorneys. The DEQ contact indicated that

CRDC was especially effective in providing such help to smaller communities with populations less than 50,000 that do not have the sufficient expertise in-house.

• Transaction facilitation. The CRDC works with buyers, sellers, and local, State, and Federal government agencies to facilitate negotiations to proceed with the redevelopment of sites. In this capacity it encourages open communication among all government stakeholders in identifying obstacles to redevelopment, developing team strategies to overcome these obstacles, documenting the roles and responsibilities of each party, and developing strategies to monitor the progress of the redevelopment effort.

Selected Project Descriptions. In addition to the uses of Michigan's TAG monies from its CDBG allocation to fund the CRDC, described above, the following are two examples of brownfields projects that have been completed in Michigan's nonentitlement areas.

On the Quincy Village project, in Branch County on the Indiana border, a former plating manufacturing site was redeveloped into an auto supply facility. The 30-acre site had a 164,000-square-foot building, around which the soils were contaminated with plating overflow. The site had been on the market for years, but prospective buyers were also concerned with groundwater contamination from an offsite source that rendered the facility's well unusable. CRDC assisted the seller and buyer and, with the local government, obtained an \$810,000 CDBG allocation that funded extension of water lines from a nearby village to the facility. To address onsite sources of contamination, the buyer conducted a BEA to establish the condition of the land prior to purchase. Michigan then granted a statewide liability release (there was no potential for Federal liability under RCRA or CERCLA for this site). The project was initiated in June 1996 and completed in April 1997. Eighty new jobs were created through an auto supply facility built on the site.

On another project, CDBG funds were used indirectly, as the CDBG-funded CRDC helped a community access State and private funds. A former dry cleaner facility was acquired by a private investment group and converted into a 65-room hotel and conference center. The CRDC helped the local government obtain a \$1.6 million cleanup grant from the Michigan DEQ that was used to leverage an additional \$5 million from the private investment group. Soil and groundwater on the site were contaminated by solvents; remediation included hot-spot (source) removal followed by a slurry wall, impermeable barrier, and soil vapor extraction (which is still in operation). The project was initiated in April 1996 and the ribbon was cut for the new hotel in November 1997. Thirty new jobs were created.

CRDC reports that in addition to these completed projects, CDBG funds are used for project development and planning of several other projects in nonentitlement areas.

Lessons Learned. The key lesson from the Michigan case study is that CDBG funds can be used effectively for technical assistance, such as to fund organizations—including the CRDC— which are considered an invaluable resource, especially to smaller, nonentitlement jurisdictions in Michigan.

Both the Jobs Commission and CRDC officials suggest that the best way to approach brownfields projects is by waiting until a developer is interested and a specific reuse is planned for the property. In addition, State and CRDC officials offered the following recommendations for other jurisdictions:

- Involve the community as early as possible in the process, before the developer comes in. CRDC's advice to communities is that they should prioritize their brownfields sites based on their redevelopment potential. They should also decide the acceptable uses of the sites so they will be prepared if and when a developer becomes interested in a site, and can avoid delays that could cause a developer to look elsewhere. The State's initiative to have communities designated as BRAs also helps communities plan and prepare for their intended reuse of the sites before having funding, which helps expedite redevelopment projects.
- Keep the public informed throughout the process, and communicate with them regularly regarding their concerns. Credible and careful communication about risks posed by the site and any remediation actions is critical.
- Use or form nonprofits to act as a go-between with government and private industry. The CRDC director feels that his position in a nonprofit organization gives him a great deal of credibility; for example, it allows him to sign confidentiality agreements with private industry so that he can be privy to more of the details of the developers' plans or finances, which government employees are unable to do. In addition, CRDC has created a user-friendly guide and software providing basic information to teach other municipalities how to do brownfields projects.

Suggestions for HUD. Michigan officials say that HUD could make it easier to use CDBG funds for brownfields projects by examining the regulations governing economic development and either relaxing the regulations or making specific provisions for brownfields redevelopment. For example, one of Michigan's barriers to using CDBG funds for brownfields is their belief that the community must show job creation benefits within a year after the completion of the facility, which can be difficult because of the longer time frames to complete a brownfields redevelopment project. They are referring to 24CFR570.483(vi)(F)(2) of the 4-1-97 regulations. [According to HUD staff, this may be a misconception of what the CDBG regulations State, but it has motivated Michigan to help get communities ready in advance by inventorying and prioritizing their sites.]