
Returns to Brownfields Investments

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Preface

Brownfields are becoming recognized as potential assets for local economic development by more and more practitioners struggling with balanced growth issues and a shortage of land for development in cities. The attitude toward brownfields has shifted markedly from just removing contamination to identifying economic development opportunities for prime space in high traffic locations. Strategically, efforts have focused on finding ways to make development of brownfields more cost-competitive with greenfields.

This report builds on two previous studies of brownfield redevelopment in Illinois conducted by the Illinois Institute for Rural Affairs in partnership with the Illinois Environmental Protection Agency (IEPA), the Illinois Municipal League, and the Western Illinois Regional Council to identify obstacles, redevelopment goals, and successful projects. The current project focuses on outcomes of brownfield redevelopment by public and private agencies, with detailed case studies of how communities undertook the redevelopment process. Information on returns to investment at this level of analysis can add significantly to an understanding of the brownfield redevelopment process.

Many persons contributed to the completion of this project. The IEPA, through the Western Illinois Regional Council, provided funding for the data collection, analyses, and case studies. Ms. Heather NiFong was project manager. The authors thank the U.S. Economic Development Administration for supporting a portion of the senior author's time on this project. Many local elected officials and city administrators collected detailed information on projects, and having this accurate and detailed information was crucial to the success of the project. Lori Sutton and Karen Poncin, IIRA, assisted with the data tabulation and report preparation. As usual, the authors accept full responsibility for any errors in analysis or interpretation.



Executive Summary

Brownfields represent more than a potential contamination problem in cities; they also represent potential assets in the development process. As communities struggle to find available land for development or wrestle with balanced growth issues, they are using innovative ways to redevelop brownfield properties. Many of these sites are in strategic downtown locations and have not been redeveloped in the past due to a fear of potential liability or because of relatively high remediation costs.

In recent years, with the growing need for developable land in high traffic areas as part of city redevelopment plans, brownfields have received a second look. In addition, state agencies and the federal government have paid more attention to the economic development potential of these sites. The result has been that brownfields have been converted from eyesores and wastelands to highly useful and profitable properties.

This report focuses on the investment outcomes private and public agencies have experienced in various brownfield redevelopment projects in Illinois cities. The returns to investment are measured in several ways using generally accepted practices. Case studies involving local public officials and city administrators provide additional insights into the local decisionmaking process, including arrangements used to attract private investment. The uniqueness of brownfield projects makes generalizations from these interviews difficult, but commonalities in terms of approaches and strategies were found among the cities studied. The findings will be useful in planning future projects.

Documenting returns from brownfield redevelopment is complicated by the unique nature of many projects and a lack of detailed information. Documentation is often made more difficult by personnel turnover in cities and businesses, plus the fact that several years can elapse from the start to completion of a project. In some instances, data had to be estimated.

Goals of Brownfield Redevelopment

Brownfield redevelopment efforts are started for many reasons. Based on a 2000 statewide survey of Illinois municipalities (Walzer, Duncan, and Sutton 2001), the most important consideration is that local public officials want to remove unsightly buildings, followed by a desire to increase city tax revenues (Table 1). They also reported a desire to increase the financial return on unused or underused property and add businesses in untapped markets. Other reported reasons include providing greenspace and environmental stewardship.

Local officials pointed out that brownfield redevelopment is often part of the comprehensive city development plan. Also important, however, is interest by private developers, and it is clear that many city redevelopment projects start because of perceived potential investment possibilities.

While these findings do not suggest that health and safety hazards are unimportant, they make clear that aesthetic and economic considerations are more important in designing a development approach. The case studies illustrated the importance of brownfield properties in revitalizing various areas within a community. In some instances, brownfield redevelopment was a major stimulus for reshaping how the downtown were utilized or for reviving abandoned industrial locations. Other redevelopment efforts have created new residential or recreational developments.

Obstacles Faced in Brownfields

While some Illinois cities have made major strides in redevelopment projects, they also reported substantial obstacles in earlier surveys. Highest on the list of constraints was insufficient funding, followed closely by the fact that the city did not have control over the property and, therefore, could encounter resistance from landowners (Table 2). Case studies confirm this as an obstacle, but other cities formed a close alliance with property owners and became effective supportive players in the redevelopment effort.

In some cases, local public officials have made brownfields a serious part of the local development effort. Cities such as Elgin, East Peoria, and Palatine, among others, achieved considerable success by incorporating brownfields into their local development plans. It is important that the expected returns be substantial and justify the effort. An obstacle specific to small rural communities is a lack of demand for industrial and commercial property, especially since the economies in many of these communities have been relatively stagnant. This issue is worse when small municipalities have little, if any, expertise in dealing with brownfield issues. Fortunately, state agencies, such as IEPA, have filled some of this knowledge gap.

Factors Associated with Redevelopment Successes

Survey findings and interviews with local elected officials identified several factors common to successful redevelopment (see pp. 7-10). Highest on the list is a strong commitment by municipal officials. This commitment is shown in many ways as city administrators work with local private investors and state agencies on redevelopment projects. Cities play a variety of roles from actually starting projects to serving in a supportive capacity. In some instances, the city government played only a facilitating and coordinating role without investing any serious dollars. In other instances, they bought property, cleared it, and then resold it to private developers for a token amount.

The more important brownfields are in city plans to manage growth and development, the more often city officials reported successful projects according to a second survey of local officials conducted in 2003 (Table 4). Likewise, cities in which balanced growth concepts in development plans are more important also reported more successful brownfield redevelopment projects.

Cities with a higher demand for commercial properties also more often reported successful projects. At the same time, demand for industrial property is not significantly correlated with the likelihood of reporting successful redevelopment.

An understanding of grant requirements is also important and those cities reporting a lack of understanding of grant requirements had fewer successes. This finding suggests a continued need for publicity and information sharing on brownfield redevelopment through outlets such as conferences and educational programs.

The paperwork involved in applying for funds also is a deterrent, and cities reporting this concern less often reported project successes. Smaller cities are more vulnerable because they have fewer staff members and, thus, a reduced capacity to apply for grants.

Community interest seems correlated with the likelihood of reporting successes as well, but, overall, pressure by community groups is not a major stimulus for brownfield redevelopment efforts.

Nevertheless, a significant negative correlation exists between perceived lack of community interest and success with projects.

Impact Measures

Measuring overall brownfield involvement is difficult even when information is available on employment, payrolls, or private investment. The redevelopment effects extend well beyond the immediate brownfield site and, for this reason, are hard to capture. In addition, there usually is no central place either in cities or in a state agency that routinely collects data on employment or investment increases. Therefore, the data that do exist are often inconsistent or not directly comparable among cities.

The current project examined detailed information on outcomes provided by municipal officials. Based on a review of the initial data, the city administrators were either visited or contacted by phone to verify the data provided or to obtain additional clarification. Even then, there were times when job creation, investment, or other characteristics had to be estimated. It also was difficult to completely and accurately document the investment by the city government and/or the state. In some instances, several agencies were involved, and a business may have qualified and received tax benefits without the knowledge of the respondents. Relevant federal agencies such as the Economic Development Administration and Housing and Urban Development were contacted to determine whether grants were used for brownfield projects in the city sample. Likewise, IEPA and the Illinois Department of Commerce and Economic Opportunity were contacted for state investments in the sample projects.

Detailed information is available for 37 projects in 25 Illinois municipalities, and information regarding these projects is included in the analyses. The median number of jobs created or retained in these projects was 66; however, this is an underestimate because many projects are not complete and/or additional employment is expected in the future. An effort was made to identify and include those projects (1) for which as much complete information was available as possible and (2) those projects that are as close to completion as possible. Thus, the sample is not completely random and the analyses are not intended as an evaluation of the brownfield redevelopment program. Rather, this project is an attempt to document the results accomplished, thus far, by municipalities actively involved in the voluntary site remediation program and those that have pursued local development efforts. The results illustrate what can be done when cities and the state partner with private investors.

Ratios of total investment to state investment, private to state, and private to public are presented to document outcomes or returns from the redevelopment efforts. Likewise, total investment per job created or retained, private investment per job, and the state investment per job are included. Each indicator sheds light on a different perspective of the redevelopment effort. For each \$1.00 invested by a private business, the median total project investment was \$1.23 (Table 6). Median total investment per \$1.00 of city investment was \$5.96 whereas the median total investment resulting from \$1.00 invested by state government was \$16.00.

The projects in this sample show a median private investment of 4.17 times the investment of cities. Likewise, the private investment is 7.71 times the state investment, and the median private investment is 8.33 times the federal investment. The ratio of private investment to public investment

is 2.41. This figure compares favorably with an earlier study of 107 brownfield projects conducted by the Council on Urban Economic Development (CUED) (Gilliland 1999).¹

The returns to investment were also examined by the amount of investment per job created or retained. In this project, both jobs created and retained jobs were included; full-time equivalent was calculated for part-time positions. Medians were calculated by type of investment; therefore, the total investment per job is not the sum of private and public investment per job. The median total investment per job in this sample is \$69,486. The median investments are private sector, \$35,478; local government, \$2,989; and state government, \$598, respectively. The most common state investment was Phase I and/or Phase II assessment. Federal investment was only reported by seven projects with a median of \$2,168. The cost of technical assistance provided by state agencies is not known, so the reported median figure for the state government may be low. Differences in size, purpose of the projects, and investment patterns make generalizations difficult. Nevertheless, the gross analyses suggest a substantial return from public investments in the sample projects.

Several factors materially affect the sample results. Especially important is the role played by the municipal government. As noted above, if the municipal government facilitated the remediation process by helping an owner obtain a No Further Remediation letter but did not purchase the property or provide tax incentives, then the local government investment is minimal. On the other extreme, when a city government purchased the property and resold it for a token amount, the city investment is substantial. These differences in strategies affected the costs or investments dramatically and reflect differences in management approaches. Successful redevelopment projects were obtained using both approaches.

The job creation and investment aspects of brownfield projects also have multiplicative effects in the city. These figures have not been included in the analyses, so the returns to investment clearly understate the total impact on the city. If a common impact multiplier of 1.5 or more is applied, the impact is substantially higher.

Common Factors in Redevelopment Successes

Changing local attitudes about brownfields from mainly a contamination removal issue to an economic development consideration was vital to the success of these projects. Municipalities in the current project had several common elements.

Public-Private Partnerships. Virtually every successful redevelopment project involves a successful public-private partnership. This is important because the main focus of most efforts in this sample is on returning the properties to a productive business activity rather than a public purpose, although there are successful projects in both cases.

Existence of a Local Champion. Successful brownfield projects, as with most other efforts, require enthusiastic local leadership. Municipalities in this study vary in this regard, with businesses sometimes leading the way and with local public officials as the stimulus in other cases.

¹ In the 1999 CUED study, two different methods were used to calculate leverage: (1) *publicly supported debt* identified as *public sector investment*, and (2) *publicly supported debt* identified as *private investment*. For this study, *publicly supported debt* was identified as *private investment* due to the fact that the debt represents a private sector obligation that will be repaid by the private sector; likewise comparable data from the CUED study will be used.

Innovative Financing Approaches. Most projects benefited from innovative financing approaches. Many municipalities used Tax Increment Financing (TIF) approaches and Enterprise Zones (EZ) to provide incentives, but they also use them to raise funds for development practices. TIFs are well-suited to brownfield redevelopment because municipalities can make an upfront investment, with the borrowed funds repaid as the property value later increases.

Incorporated into City Development Plan. A common feature of successful redevelopment projects is that the brownfield initiatives are incorporated into the overall city development and/or comprehensive plan. In these instances, economic development personnel and the considerable resources of the municipality are devoted to the brownfield redevelopment plan.

Collaboration with Government Agencies. The communities in this study with the greatest successes collaborated with other government agencies, especially the IEPA. Access to specialized knowledge and the technical assistance in IEPA was instrumental in guiding local officials through the redevelopment process. Additional information and exposure to innovative practices are needed, especially in small communities.

Case Studies

To learn more about specific redevelopment practices and successes, mini case studies were conducted in 11 municipalities. The projects vary but conveniently fit into three broad types: (1) industrial, (2) tourist-based, and (3) downtown development. Each case study is described briefly along with special approaches or features.

Alton. Two large industrial brownfield sites are in the ongoing process of being successfully redeveloped. The conversion of a former glass container factory site to office and commercial use resulted from a successful public-private partnership. The largest project in Alton involved the Laclede Steel mill, the closure of which had a major impact on the city. Private investors, some former Laclede Steel employees, bought the properties and remediated and redeveloped it to produce specialized steel with minimal public involvement. The company is hiring workers and has started production.

Sterling. The City of Sterling initiated the remediation and redevelopment of the 750-acre former Northwest Steel & Wire site. Several companies have purchased the property and have started operations. Obtaining knowledgeable legal counsel was key to working through a complicated bankruptcy situation. The properties were aggressively marketed to former customers of Northwest Steel and Wire.

Mendota. The City of Mendota made marketing a former steel wheel plant a high priority and was able to attract a foam products manufacturer, with minimal investment by the city. The marketing plan succeeded, and as part of the incentives package, the private investor hires Mendota residents.

Harrisburg. Government grants and in-kind services have been used in remediating and redeveloping a former railroad right-of-way and train service yard. Harrisburg has succeeded in attracting several commercial and light manufacturing businesses. The development will be diversified and will include retail, service, and manufacturing operations.

East Peoria. The City of East Peoria has been an integral part of the successful remediation and redevelopment of brownfield properties located along the riverfront. Projects include a large mixed commercial/upscale residential complex on a former junkyard property and a shopping center on a

former coal-fired power generating plant site. The city has recently formed a partnership with Caterpillar, Inc. to redevelop a former industrial site into a state-of-the-art technology park.

Elgin. Following construction of the riverboat casino complex on a former brownfield site, the City of Elgin continues to move forward with other brownfield redevelopment projects. Casino revenues enabled the city to purchase and redevelop additional sites, including properties for condominiums and a major park along the riverfront. The redevelopment has been an integral component in the downtown renovation.

Rock Island. Brownfield redevelopment is a major component of Rock Island's downtown and riverfront revitalization plan, and the city has used innovative financing tools to assist and encourage redevelopment. Completed projects thus far include an insurance headquarters, a mental health facility, and a car wash/oil change center, with many additional projects in progress. The redeveloped brownfield properties have formed an anchor for further redevelopment.

LaGrange. The Village of LaGrange used TIF funds to purchase 11 properties in the downtown area and proceeded to attract retail and other businesses to serve a major housing complex. The redevelopment efforts built on traffic from the commuter rail service in the downtown area. The LaGrange Triangle Redevelopment Project is central to the village's downtown revitalization plan.

Palatine. A detailed comprehensive master plan for the city placed priority on redevelopment of blighted properties, including several brownfields. The result has been a diversity of service and retail establishments that will serve a major residential complex in the downtown area.

Franklin Park. Recognizing the growing demand for additional restaurants in the village, Franklin Park actively marketed a former industrial brownfield site to a restaurant chain. In addition, the village incorporated brownfield redevelopment into its downtown revitalization plan, which will lay the groundwork for further expansion.

Calumet City. Brownfield redevelopment projects in Calumet City have not only created jobs but have improved the aesthetics of the community which was once plagued by undesirable properties and crime. By purchasing a decaying section of the downtown area years earlier, the city has now attracted several fast-food businesses to serve downtown residents and also has brought in several specialty businesses. It also has plans for a mixed-use residential and retail complex in the downtown area.

While each of these projects differs, they all were developed with specific needs of the municipality in mind and, for this reason, have made a major impact. Most are still in the process of further development, but in each case, the potential of the project for job creation, public investment, and improvement in quality of life is evident.

Brownfields Investments and Outcomes

Many local public officials now see beyond the stigma of brownfields as potential liabilities and recognize them as potential assets in comprehensive local development strategies. Likewise, state government agencies have shown a renewed interest in working with local officials on brownfield redevelopment. For instance, a recent National Governors Association (2002) report stated,

There is a compelling economic case for state spending on brownfields. A dollar of state spending produces about 10 times to 100 times more dollars in economic benefits. Expanding the mission of brownfields justifies greater state spending.

Brownfields have been studied extensively at the local, state and national levels (Gilliland 1999; NADO 2001; NRTEE 2003; Walzer, Duncan, and Sutton 2001) in an effort to identify obstacles, potential for development results, and related issues. Case studies and best practices can provide insights to local officials and practitioners struggling with similar issues.

While health and safety risks have been a major issue with brownfields, surveys of local public officials reveal that improving aesthetics in the community is also a major reason for dealing with brownfields (Meyer 1998). Improving the physical appearance in the city can be a goal in and of itself but also contributes positively to attracting businesses in other parts of the city. Thus, brownfields can address several local concerns, including revitalizing downtowns, removing health and safety hazards, stimulating employment growth, and providing balanced growth opportunities in urban areas.

The brownfield redevelopment literature shows the importance of public-private partnerships that include the local, state, and federal governments with a special role played by private land owners or businesses (NADO 2001). Often, landowners initiate redevelopment actions, but, in some instances, a city or another local government agency starts the process. At the very least, successful brownfield redevelopment requires some cooperation from landowners or business owners (Alberini et al. 2002). City administrators have used legal approaches to secure brownfield properties with health and safety hazards, but this can be an expensive or drawn-out process.

Equally important to successful brownfield redevelopment efforts, however, is the availability of funds and technical assistance from public agencies, especially the state. In the past, local public officials and business leaders have struggled to find innovative solutions to brownfield issues; however, in recent years, relatively aggressive efforts by state agencies, such as the IEPA have led to considerable successes in rehabilitating and redeveloping brownfield properties (Lange and McNeil 2004a; NGA 2000).

High demand for industrial and/or commercial property in the city is important because municipalities are often reluctant to undertake brownfield redevelopment without an expected use for the property. The demand for these properties has not always been high in recent years, especially in rural areas, partly because of lower economic activity during the recession and long-term economic shifts from manufacturing to service employment (Walzer et al. 2004). Former commercial and industrial buildings require extra redevelopment costs, making them less competitive compared with greenfield sites that may be better located for new economic uses.

There has been increased pressure for accountability and justification of public expenditures in recent years. The recession in the 2000s made accountability even more important as local and state

public officials had to make difficult choices regarding funding. Program documentation forced public managers to collect information on results and impacts on communities to support public decisions.

In an ongoing effort to document the outcomes of local and state investments, the IEPA Office of Brownfields Assistance, asked the Illinois Institute for Rural Affairs to gather information on results and outcomes from brownfield redevelopment projects resulting from the voluntary clean-up program. In this study, special attention is paid to the direct returns from local or state investment as measured by jobs created, private investment, and resulting increases in tax revenues. Information on job creation or other brownfield redevelopment impacts typically show only the direct effects rather than the overall impact on the city, recognizing that private investment in another part of the city may have been influenced by a previous brownfield redevelopment (Meyer 1998).

The current project follows IIRA's several years of work reviewing municipal experiences with redeveloping and reusing brownfields. The previous research can help identify completed, or nearly completed, projects. However, many worthwhile projects that have recently been started or are in the building phase and have not yet created jobs. In some of these cases, accurate projections are possible.

Previous Illinois studies document that brownfield selection, assessment, rehabilitation, and redevelopment is a multi-year process involving many public and private groups. More often than not, the redevelopment process spans several years, with the progress affected by business decisions, which, in turn, depend on market conditions and other factors, many of which are beyond the control of local public officials.

Overview of Report

This report has three main sections. First, the literature on links between brownfield redevelopment and economic development is briefly reviewed followed by a discussion of state programs available for brownfield assessment/redevelopment and technical assistance. These programs have been shown to be important components of effective redevelopment. Obstacles faced in redevelopment are described to better describe the conditions under which local redevelopment projects were started.

Second, an analysis of the returns or outcomes from local and state government investments in brownfields is presented using two basic approaches (1) the business investment per dollar of local and state governments, and (2) the investment per job created or retained. These findings are then compared with similar figures in national studies.

Finally, in-depth analyses of a sample of municipalities that have participated in the brownfield redevelopment program are presented. These discussions are based on personal interviews with local public officials, business leaders, and others involved in the brownfield remediation and redevelopment programs. The overall reaction to the brownfield program in Illinois is very positive, with local officials having accomplished substantial job creation and investment increases. Several key ingredients or factors in successes are reported based on interviews with local officials.

Although many municipalities have made, or are making, major efforts to collect information on outcomes from brownfield redevelopment, past IIRA studies of Illinois municipalities made clear that better documentation of results or outcomes would help justify investments. Measures could include more data on business investment, job creation, increased tax revenues, and other contributions to the local economy.

Reasons and Obstacles for Redeveloping Brownfields

Previous analyses of brownfields in Illinois municipalities reported several main reasons why local public officials try to redevelop environmentally contaminated and abandoned properties (Walzer, Duncan, and Sutton 2001). The data show that economic development issues are not necessarily most important but, nevertheless, are an important motivating factor (Table 1).

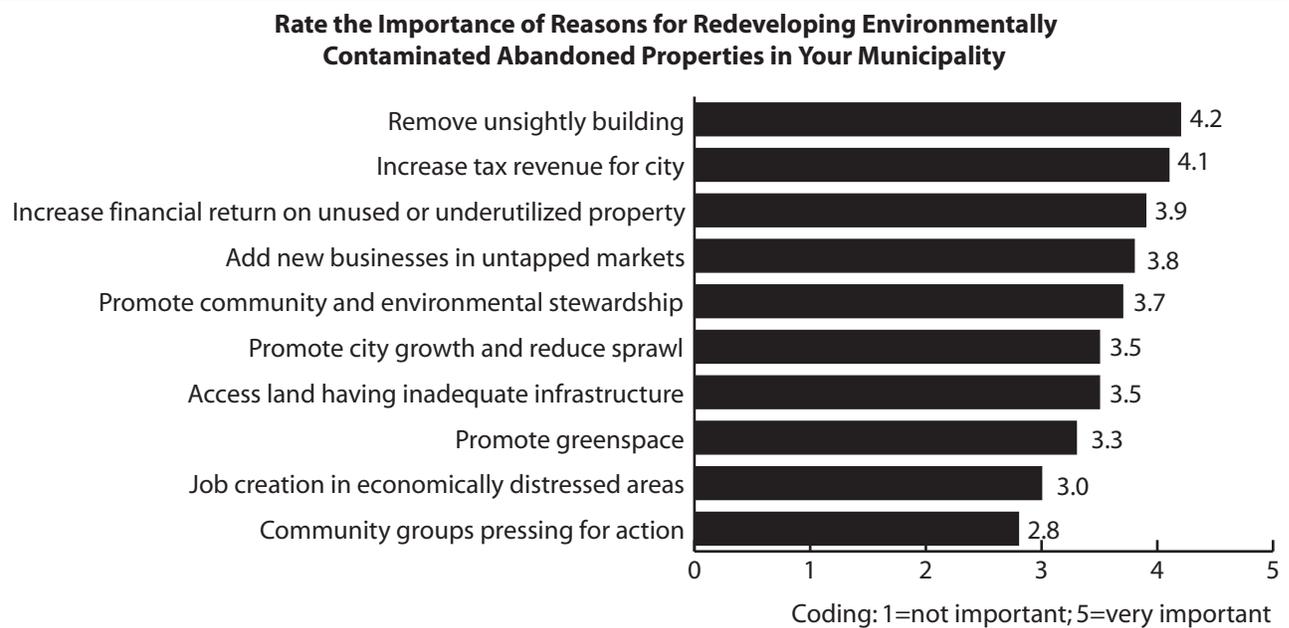
Working with the IEPA Office of Brownfields Assistance, the IIRA surveyed 1,087 Illinois mayors in 2000, with 387 providing information about reasons for clean-up and or redevelopment. Respondents provided information on a five-point Likert scale (1=not important; 5=very important).

Highest in importance as a motivating factor was “Remove unsightly buildings” (4.2). Somewhat surprising was that health and safety considerations did not rate higher, but clearly local officials were motivated partly by property appearance and the possible negative impact that these sites had on the neighborhood.

Increasing tax revenues for the city was nearly as important (4.1) and often involves converting the property into a business to generate employment and, sometimes, sales taxes for the city. This approach has an economic development impact since it provides a higher revenue stream to support future city services. A city can start by helping a property owner obtain a No Further Remediation (NFR) letter and then assist local investors in the demolition of buildings and/or the construction of facilities through a series of tax incentives, low cost loans, or other approaches.

Even though increasing the number of jobs may not always be cited as of highest importance for redevelopment projects, property improvements positively affect the economic viability of the surrounding areas.

Table 1. Clean-up and Redevelopment



Source: Questionnaire on Vacant and Abandoned Property, Summer 2000, n = 387.

Also cited as highly important is “Increase financial return on unused or underutilized property” (3.9) and “Add businesses in untapped markets” (3.8). The essence of these responses is that local public officials responding to the questionnaire see brownfield properties as a redevelopment option or economic development tool for the city. While “Promote city growth and reduce sprawl” (3.5) and “Promote community and environmental stewardship” (3.7) did not rate as high as other reasons, they, nevertheless, were important.

Mayors responding to the mail questionnaire reported relatively few complaints by residents about the properties and, if so, the concerns were mainly about dilapidated properties as eyesores that made investment in the neighborhood more difficult. This is reflected by the relatively low rating assigned to “Community groups pressing for action” (2.8). Apparently, brownfield remediation is not highly visible as a public concern. Consequently, much, if not most, of the redevelopment motivation comes from local public officials or potential developers rather than the public.

Understanding the obstacles to initiating a brownfield rehabilitation and remediation projects as a backdrop to analyzing investment outcomes is important. Case studies of Illinois cities and elsewhere have disclosed major frustrations, including acquiring the property, working with private investors, and removing contaminants.

Local public officials in the 2000 questionnaire conducted by IIRA identified the top 10 obstacles using a Likert Scale (1=not important; 5=very important) (Walzer, Duncan, and Sutton 2001). “Insufficient funds” were the highest reported obstacle (4.0) and may well explain a reticence by local officials to engage in brownfield redevelopment, especially in cities without a high demand for commercial and industrial property (Table 2). Spending funds for site remediation when the costs (prior to an assessment) are uncertain can be difficult unless a private investor has already expressed interest in the property for development and has requested help from the city in obtaining an NFR letter.

Interviews with local public officials often revealed special difficulties in obtaining funds to demolish existing properties. Matching funds are available for Phase I and Phase II assessments, but, until recently, the substantial costs of demolition or clean-up had to be paid from local funds—private or public. At the same time, a brownfield property is not really marketable unless it is development-ready. Fortunately, many cities have access to programs such as TIF to support and encourage private investment.

A second major obstacle reported is that a city usually has no direct control over a property (3.8). Thus, owners not interested in remediating their property or in seeking extensive city financial involvement for a property without an immediate health and/or safety hazard can definitely slow the redevelopment process. In fact, resistance from property owners was cited as the third most important obstacle (3.5). Legal means of obtaining a site can be lengthy and costly. Cities in the sample used these approaches to secure sites for development, but local officials are wary of taking ownership of a site, and thereby removing liability from the actual polluter, because of the potential costs associated with removing contamination and preparing the site.

The liability issue was raised in survey responses (3.5) as well as in interviews with city administrators and business investors. Typically, a business investor asks for an NFR letter prior to purchasing a brownfield property. Sometimes city governments assist with obtaining this letter to help a developer

Table 2. Obstacles to Cleaning Up and Redeveloping Abandoned Commercial and Residential Property

Question	Percent	Number
Do any of the following obstacles to cleaning up and redeveloping abandoned commercial and industrial properties exist in your city?		
Yes	51.6	131
No	37.0	94
Don't know	11.4	29



Source: Questionnaire on Vacant and Abandoned Property, Summer 2000, n = 387.

prepare the site or property owners undertake the clean-up process alone. This can explain the difference in costs between a brownfield site and a greenfield site.

The importance of understanding obstacles for the current project is that each obstacle increases the length of time necessary to bring a project to completion and, thus, delays investment, employment, and tax increases. Unless an investor has a project, is ready to commit, and the contamination removal process stays on schedule, several years can easily elapse before a business is operating on a brownfield site.

Lengthy delays in the remediation and redevelopment process make documenting employment generation and other outcome measures more difficult as shown in the case studies provided later in this report. By their very nature, the remediation and redevelopment processes often involve substantial time for testing, possibly removing and replacing soils, marketing the properties, and finally starting a business. When a business finally opens, it may start small with the potential for expansion in several more years.

Setting Priorities and Documenting Development. In 2002-2003, Illinois mayors were asked about the importance of various factors in prioritizing specific properties for development or redevelopment (Table 3). The three highest priorities were targeting “Blighted buildings are an eyesore” (4.1)

followed by “Based on comprehensive plan for the city” (3.8) and “Interest expressed by private developers” (3.8).

Table 3. Priorities for Development

Question	Percent	Number
Are certain properties or areas in your municipality prioritized for development or redevelopment?		
Yes	62.0	186
No	33.7	101
Don't know	4.3	13
If yes, how important is each of the following as a factor in setting the priorities? (Coding: 1 = not important; 5 = very important)	Mean	Number
Blighted buildings are an eyesore	4.1	172
Based on comprehensive plan for city	3.8	161
Interest expressed by private developers	3.8	164
Based on feasibility studies of potential use	3.4	152
Proximity to downtown	3.3	163
Specific need for space	3.2	154
Population loss	2.8	159
Proximity to other industrial plants	2.7	155
High unemployment in neighborhood	2.4	151
Poverty	2.4	147

Source: Questionnaire on Vacant and Abandoned Property, Summer 2000, n = 37.

The implications of these findings are that local public officials typically use a systematic process to improve the attractiveness of the city as well as to address the interests of potential developers. The extensive involvement, or reliance, by cities on private developers means that redeveloping the property is influenced by the timing of business decisions. This finding was confirmed during the personal interviews conducted for the project.

After a city works with a private developer or property owner to obtain an NFR letter, unless additional fiscal incentives are requested from the city, the process is largely in the domain of the private sector as building codes and related regulations are followed. When the property is privately owned, the city government may not be able to collect much in the way of information regarding investment or job creation.

When public incentives are used in a redevelopment process, regular contact between city personnel and business investors is more common. In these instances, especially when the city owns the property and writes down the price based on development expectations, job creation expectations may be imposed as a stipulation for qualifying for the incentives. In those cases, the city government may

track investment, job creation, and tax revenue increases. This is especially true when the property is included in a TIF district with reports required by state government.

Interviews with municipal officials in the current study revealed that significant difficulties were frequently encountered in obtaining detailed information about private investment and even direct job creation, let alone the creation of indirect jobs. After the initial work by city officials to make the site development-ready is complete, businesses no longer have a responsibility to share private information about business employment or investment. In fact, if this information were made public, it could conceivably damage the competitive advantage of the business.

Thus, in these cases, information used to evaluate the success of brownfield remediation and redevelopment must come directly from the businesses involved and then must be combined to present information for a municipality. This situation poses special problems in cities where only one business is involved in a brownfield project because detailed information cannot be revealed. In these instances, the most reasonable approach is to estimate the jobs created and the investments based on discussion with city officials and business leaders. These estimates have been included but identified as estimates, in later sections of this report.

Factors Associated with Redevelopment Successes

The diverse goals and types of brownfield projects make determining overall measures of success difficult. Also, success can be identified at two levels. Lange and McNeil (2004a) report a multivariate analysis of perceived success at the project or site level, which can be useful for local officials in future site or project selection. The analysis in the current project, however, is directed at the overall perception of success with local use of the brownfield redevelopment program rather than for any one site.

In the 2002-2003 survey, respondents reported perceived success with the redevelopment efforts on a five-point Likert Scale, so the factors contributing to that success can be correlated using the survey information provided. Specifically, respondents were asked, "How successful have the brownfield redevelopment efforts been in your city?" Responses to this question are then correlated with other responses by city officials. Several groups of factors included in the correlation analysis are discussed along with the rationale for each (Table 4).

Municipal Commitment to Brownfields. City administrations differ regarding the extent to which they view brownfields as a *municipal responsibility* and the time and resources committed to remediation and redevelopment. Respondents were asked to indicate on a five-point Likert Scale the extent to which they perceive brownfields as a municipal responsibility. The Pearson's Correlation Coefficient between the success measure and the degree of responsibility is .392, which is statistically significant showing that city officials who see brownfields as a municipal responsibility more often reported success in the program.

Importance of Brownfields in Managing Growth and Development. Respondents were also asked to rate the importance of brownfields in managing growth and development in their cities. The expectation is that the cities where these projects are considered a more important tool will also report more successes. The correlation coefficient is .369, which confirms this expectation. This result reinforces earlier analyses and interviews suggesting that those municipalities that aggressively include brownfields as an economic development tool move ahead more quickly and report successes.

Table 4. Factors Underlying Brownfield Successes*

Question	Coefficient	Significance Level
Brownfield remediation is a municipal responsibility (Coding: strongly disagree = 1; strongly agree = 5)	0.392	0.008
Importance of brownfield redevelopment in managing growth and development? (Coding: not important = 1; very important = 5)	0.369	0.013
How important are "Balance Growth" concepts in the city development policy? (Coding: not important = 1; very important = 5)	0.340	0.024
Demand for commercial property in municipality (Coding: limited, if any, at present = 1; more demand than properties available and prices are increasing = 5)	0.303	0.045
How much following factors limited the successes of brownfield projects (Coding: no limitation = 1; major limitation = 5)		
Environmental regulations	-0.527	0.000
Lack of understanding of grant requirements	-0.357	0.020
Resistance from property owners	-0.345	0.023
Paperwork involved in applying for funds	-0.311	0.045
Lack of community interest	-0.308	0.047
Inadequate infrastructure for development	-0.284	0.068
Perceived potential liability	-0.261	0.095
Limited or no demand for property	-0.238	0.129
Shortage of local funds	-0.218	0.160
Economic conditions in municipality (Coding: relatively prosperous and better than surrounding area = 1; high unemployment, well above average of the 1990s = 5)	-0.198	0.191
Demand for industrial property in municipality (Coding: limited, if any, at present = 1; more demand than properties available and prices are increasing = 5)	0.173	0.261
Average length properties have been inactive before redevelopment was started (Coding: less than one year=1; more than ten years = 5)	-0.118	0.463

*Success of the brownfield redevelopment efforts in city (Coding: not successful = 1; very successful = 5)

Source: Brownfield Outcomes General Survey, 2002-2003, n = 52.

Incorporating brownfields into state or regional growth or land use plans has also been recommended by other agencies (NGA 2000).

"Balanced Growth" Concepts in City Development Projects. A potential contribution of brownfields is renewal of vacant downtown sites, possibly avoiding greenfield development on the outskirts. This issue is explored in more detail in a Government Accountability Office report stating that "those communities concerned about sprawl rated funding for cleaning up brownfields as more helpful than all other types of federal funding provided for a variety of growth-related efforts, such as transportation" (NGA 2000). The extent to which local officials see this strategy as important for development can direct strategies toward brownfield redevelopment.

Survey respondents rated the importance of “balanced growth” concepts in the development strategy from not important to very important. The correlation coefficient between importance of balanced growth and success of brownfield projects is .340, which is statistically significant. Thus, those communities in which balanced growth is considered important are more likely to pursue brownfields as a development strategy and succeed. The importance of incorporating brownfields in balanced growth planning is recognized by other states and innovative programs have been initiated in Maryland and New Jersey (NGA 2000).

Demand for Commercial Property. The local demand for commercial property is expected to be an important consideration as municipal officials consider brownfield remediation and redevelopment, especially if job creation is also important. Previous surveys showed that local demand for property ranked less important than removing an eyesore but nevertheless important. The correlation (.303) between extent to which demand for local commercial and retail property exists and reported success is statistically significant. Cities with greater demand for commercial property also reported more success with brownfield redevelopment.

Such is not the case, however, with the demand for industrial properties. Since brownfield sites are former gasoline stations and relatively small properties in many small- to medium-sized cities, it may be that not only is the demand for industrial use relatively small but also the size of the site is not suitable for these uses.

Responses by city officials regarding factors limiting the success of brownfield redevelopment projects were also correlated with perceived successes. Several of the more significant factors are discussed next.

Environmental Regulations. Respondents view environmental regulations as a significant obstacle to success with brownfield redevelopment efforts as shown by the statistically significant correlation coefficient of $-.527$. On average, mayors who rated environmental regulations as important impediments to redevelopment also consistently reported less success with redevelopment projects.

Potential investors in brownfield redevelopment must meet relatively stringent environmental standards, especially for housing or recreational uses. While this protection is important, it generates another uncertainty with which developers must contend compared with a greenfield site. Thus, additional attention to these real, or perceived, regulations could contribute to more redevelopment successes.

Michigan undertook an aggressive approach to reviewing standards and providing incentives for developers to meet reasonable standards while still being able to return the brownfield property to productive use (NGA 2000). These efforts might be reviewed for use in other states.

Lack of Understanding Grant Requirements. Brownfield remediation and redevelopment can involve applying to the state or federal government for a grant to undertake assessment or clean-up. While the state outreach programs have expanded substantially during the past several years and local officials interviewed praised the technical assistance grant system, some uncertainty about the availability of grants and/or the process remains.

Lack of understanding of grant requirements is correlated with a lack of success with brownfield redevelopment projects (.357). One implication is that additional publicity and outreach activities by agencies administering grants are still warranted. This lack of understanding is more prevalent with

smaller communities that do not have paid staff with specialized knowledge. An Independent Sample T-Test between cities smaller than 15,000 and those larger showed a significant difference in the lack of understanding of grant requirements. Small cities reported that lack of understanding is a greater impediment (2.5 versus 1.8 on a 5-point Likert scale).

Paperwork Involved in Applying for Funds. The amount of paperwork involved, or perceived as needed, for grants also seems to be a deterrent. A significant correlation (-.311) exists between paperwork as a limitation and a project's lack of success. Once again, this is a special concern of small cities that also are most likely to have the fewest economic development opportunities.

Lack of Community Interest. As noted previously, public outcry for brownfield remediation and/or redevelopment is not a major factor in selecting brownfield projects. This finding was confirmed in personal interviews with mayors. There is a significant negative relationship (-.308) between lack of community interest and successes with brownfield redevelopments. Cities where lack of community interest is important also reported fewer brownfield successes. Based on these findings, a greater public awareness campaign about the potential for brownfield redevelopment and funding available might be warranted. This public information campaign could be at the local or state levels.

Lack of available funds was reported earlier as a major obstacle to involvement in brownfield projects and this was unexpected; however, those cities that rated shortage of funds as a major limitation apparently are not the same as those that reported limited success with brownfield redevelopment projects since this relationship is not statistically significant.

Somewhat of a surprise is that city economic conditions, demand for industrial property, and average length of time that properties had been inactive are not associated with degree of reported success. Many reasons could explain this lack of significance, and additional research on these variables is currently underway.

Literature Review

The roles that brownfields can play in urban and rural revitalization strategies are better understood and appreciated now than previously. States have made substantial progress in reducing the barriers or obstacles faced in brownfield redevelopment. Local officials realize the need to integrate brownfields into broader planning processes when possible.

The literature on several key issues involving brownfield redevelopment and policy is briefly reviewed below to provide a background for later discussion of outcomes in Illinois cities. This review is not meant to be exhaustive; rather, it briefly synthesizes issues raised in brownfield discussions.

Local Impacts Versus Area Impacts. The benefits of brownfield remediation and redevelopment extend beyond removal of on-site pollution and can trigger a series of related investments in properties at other locations. Recognizing these potential benefits raises the issue of how to measure the overall impact on the local economy, especially as it bolsters the argument for including brownfields in an overall development strategy (Meyer 1998). This relatively new focus opens opportunities for local and state governments to reevaluate policies regarding brownfield clean-up and redevelopment.

An especially important issue is how to create a decisionmaking process incorporating the full benefits of brownfield redevelopment projects in a benefit-cost calculation. Not including all of the benefits from the brownfield investment runs a risk of not selecting projects that, had complete

information been included, would have been selected. Based on interviews with local public officials, a system for capturing these benefits is currently not in place in Illinois.

Minnesota provides an example of a comprehensive approach, which includes examining area-wide impacts in project selection. Specifically, the state uses increases in area tax base, expected job creation, reduced threat to public health and environment, and local match provided by the municipality (Minnesota Department of Trade and Economic Development 1998). The local match requirement forces local officials to seriously evaluate the potential impact of the project on the community.

Integration of Brownfields into Ongoing Planning. The greater importance of brownfields in local development planning was documented in earlier interviews with municipal officials in Illinois and was cited as an important factor leading to these projects' success in these communities (Walzer et al. 2004). Recognition of the potential role for brownfields in development led states such as Massachusetts and New Jersey to provide a coordinated outreach initiative that brings multiple state agencies to a statewide development concern. Thus, through stronger collaboration, the special resources of each agency can assist local governments in remediating and redeveloping sites into productive uses again. This statewide collaborative approach has proven effective (NGA 2000).

Potential Liability Issues. The company responsible for contaminating a property is responsible for clean-up. In practice, however, the property may have been contaminated by a previous company that has moved away, and the current owner may have purchased the property well before the current liability issues were in place. Sometimes it is difficult to identify the specific owner who contaminated the property without detailed records of the specific manufacturing processes used, and often these records are not available. In other cases, the former companies no longer exist.

Thus, fear of a potential liability can easily deter business investment in a brownfield site. An approach to managing the risks and costs associated with purchasing and developing a brownfield site is therefore needed. One way is to work with the state environmental protection agency to obtain an NFR letter that may require a city to spend time and funds.

Meeting the requirements for clean-up or remediation can represent a substantial investment not needed with a greenfield site, however. Not all brownfields are seriously contaminated, but usually, determining the amount of contamination and estimating the remediation cost involves additional expense for the current owner. The remediated land is most attractive for investment when there are no land-use controls on the property. Thus, finding innovative engineering approaches and methods to reduce the cost of clean-up and remediation are crucial, especially in small brownfield properties where the economic returns from redevelopment may not be large.

Michigan stimulated brownfield redevelopment by limiting the liability to only the party causing the contamination. It also allows developers to propose clean-up based on "reasonable risk assumption," according to the future uses of the property and the affected resources (NGA 2000, 23). Likewise, developers need only to exercise due care, rather than being required to remediate the entire property before it can be turned into a productive use. The owners who caused the contamination are also responsible for clean-up. In addition, Michigan followed up with a set of programs that assist local governments with the clean-up operations. The result of these approaches is "the pace of Michigan's environmental clean-ups has increased dramatically while costs have been slashed by half" (NGA 2000, 23).

The turnover of personnel in local economic development, planning, or brownfield administration in cities means that first-hand knowledge of projects is limited and, in some instances, the project records are unclear or incomplete. This can complicate identification of responsibility for contamination and also may determine the outcomes of redevelopment efforts. The need for more complete records is becoming better known, and some states have started such processes. Florida and Massachusetts are leaders, and large cities such as Chicago are creating more complete recordkeeping systems to document outcomes and justify local investments.

Measuring Results from Brownfield Redevelopment

As noted previously, the state and federal governments now pay much more attention to outcomes from public expenditures and have called on public officials to justify programs more effectively. The result has been an effort at all levels of government to monitor the outputs and outcomes of public programs.

A clear illustration of the growing public interest in government spending was the passage of the Government Performance and Results Act (GPRA) in 1993 requiring federal agencies to prepare a strategic plan with outcome measures and, in subsequent years, to evaluate programs using those indicators. An outcome was that federal agencies, in turn, required state agencies and contractors to report performance indicators that could be included in federal agency reports.

States, such as Oregon, linked the performance measures or benchmarks to budgeting decisions (Oregon Business Plan 2003). Other states, such as Minnesota and Texas, did not go quite as far but, nevertheless, initiated more accountability so that outputs and outcomes of programs could be more carefully monitored, with performance measures considered in program evaluations. Illinois uses similar measures to monitor the results of public spending and to justify program expansions.

The fiscal stringencies caused by the recent national recession pressure both local and state budgets to be as efficient as possible. Tight funds mean that public projects come under more scrutiny and must be justified more than during prosperous times. Justifying expenditures is easier when a program has documented results.

Brownfield remediation and redevelopment programs fall under the same scrutiny and documentation requirements as other programs. They also face the same difficulties in compiling detailed information to show these results. Brownfields represent special difficulties because the immediate goal or purpose differs by project. The difficulties created by these mixed purposes in compiling specific performance measures will become clearer later.

This section examines the outcomes or results associated with 37 brownfield projects in 25 Illinois municipalities enrolled in the voluntary Site Remediation Program (SRP) administered by the Office of Brownfields Assistance in the IEPA. The sites were selected mainly because of active redevelopment efforts or completeness of detailed information about investment and outcome measures.

Issues Involved in Tracking Results

Tracking outcomes of public investments is difficult, especially when businesses are involved, because of proprietary information, disclosure issues, and the complexity of the business location

and operational decisions. Nevertheless, even with limited data, an examination of the outcomes from the brownfield site remediation program is useful for several reasons.

First, as noted previously, increased investment of public dollars often requires a justification of past expenditures, especially during periods of tight budgets. Meaningful evaluations require detailed information on outcomes such as job retention or creation and other performance indicators of interest to policymakers. Comparisons of internal rates of return or benefit/cost ratios can improve the decisionmaking process.

Second, documentation of results builds support from taxpayers for increased spending to support these initiatives. Taxpayers benefit from economic growth and are more inclined to pay more for programs that generate additional income, high-paying jobs, or increased revenues.

Major difficulties arise in trying to select which performance measures to include in the evaluation process given the diversity of specific brownfield projects and associated outcome measurement. Interviews with local personnel during case studies revealed differences in opinion about which outcomes should count most and even the ability to quantify outcomes of some projects.

Frustration among local officials was evident, especially with the inability to obtain detailed data on projects that do not create jobs directly but which substantially improve the quality of life. The better quality of life may attract population and business investment, but it is difficult, if not impossible, to link these outcomes to initial brownfield investments.

Performance Measures

Listing possible performance measures is not difficult, but selecting those most relevant for a specific project and gathering accurate and detailed information presents problems, especially when job creation was not the first priority for a project. In previous mail surveys conducted by the IIRA to identify motivations and purposes of brownfield redevelopment projects, improving aesthetics in a city was as, if not more, important than job creation. In many instances, natural resource projects or mixed housing was the desired outcome rather than jobs.

Thus, what is the most relevant performance indicator in converting a former factory site or dry cleaners to a park? Job creation will not be high but also was not the intent of the redevelopment project. Measuring park usage and attaching a corresponding monetary value is more difficult than measuring payroll increases or job creation.

Over the long term, however, the increased attractiveness of the city and the resulting higher quality of life can lead to greater private investment elsewhere in the city. The fact that brownfield remediation has area-wide benefits has been documented (Chilton 1998; Meyer 1998). The National Governor's Association (NGA 2000), for instance, noted that "Brownfield clean-up projects can play a central role in urban and rural revitalization and can offer alternatives to new, greenfield development" (NGA 2000, 7).

Understanding the importance of the positive externalities elsewhere in the city is one issue, but linking resulting business investment to the initial redevelopment effort can be difficult, if not impossible, except with detailed information such as by block or Census tract. Likewise, quality of life is one of only several factors in business location decisions and is not usually rated as highly important

(Area Development Online 2004-2005), so making a link between brownfield redevelopment, quality of life, and resulting business startups is difficult.

Nevertheless, in 2000, NGA discussed the need for a more comprehensive understanding of the role of brownfield redevelopment: “Successful brownfields projects can improve the quality of life for a community, which, in turn, increases that community’s economic competitiveness and helps it attract new businesses and workers” (NGA 2000, 9).

Quantifying Outcomes of Public Investments

Many approaches and frameworks can be used to quantify and/or evaluate the performance of public programs. Difficulties in trying to measure or quantify outputs from public services have caused agencies to monitor activities performed rather than results. In 2001, the Kellogg Foundation helped clarify the issues and gained substantial attention at the federal level with a one type of approach.

LOGIC Model. The Kellogg approach distinguishes between five types of measures: (1) inputs, (2) activities, (3) outputs, (4) outcomes, and (5) impact. While policymakers are mainly concerned about the ultimate impact, it is also the most difficult measure to identify and quantify for reasons mentioned above.

In some cases, it is possible to identify intermediate outcome measures that ultimately lead to the desired final impact. For instance, a deteriorated neighborhood that includes a vacant and abandoned brownfield property may attract undesirable activities such as drug dealing. Remediating the property and converting it to an economically productive use reduces the undesirable behavior and ultimately leads to additional housing investment in the neighborhood, lower crime rates, and higher property values. Improvements in these intermediate indicators can show progress toward the final impact, namely a higher quality of life.

Thus, while the number of assessments conducted or NFRs provided measure activities performed and may indicate progress made in reducing contamination, these indicators fall short of measuring the overall impact of the program. They must be supplemented with measures such as jobs created or outcomes such as a better overall economy, reduced crime, and other outcomes associated with prosperity.

Final outcomes or impacts on a community are most important in program evaluation but are also the most difficult to monitor or track over time without extensive surveys or other costly monitoring approaches. Yet, without this information, evaluating the overall impact of remediation and redevelopment efforts is troublesome.

ASTSWMO Guidelines. The Association of State and Territorial Solid Waste Management Officials (ASTSWMO), in a 2004 report, called for state environmental management agencies to design effective monitoring systems to bring about more effective decisions about projects and to justify programs. The report also described efforts underway in various states to monitor and document progress in brownfield remediation programs.

The recommended performance measures include environmental indicators, acreage, social and public benefit indicators, and economic indicators to document completed projects and justify the

continuation of state voluntary remediation programs. Typically, the recommended statewide measures involve indicators readily available to, and under the direct control of, state agencies.

Overall, these measures are important but focus more on activities than outputs and/or outcomes. They certainly help in monitoring budgets and tasks performed. Some are difficult to collect and/or require substantial efforts by local governments working with the brownfield redevelopment projects.

Council for Urban Economic Development (CUED). One of the most complete examinations of outcomes found in the literature was by CUED in 1999. This evaluation was of completed projects with public investment and included data gathered by phone contacts with local administrators, followed by a mail questionnaire.

Extensive information was compiled on 107 projects, with a detailed examination of project size, financing, and results such as estimated job creation. The project also provided estimates of cost per job created, leverage, percentage of costs borne by the public sector, and related statistics. The authors readily admit that, since the survey involved only completed projects, it was not entirely random, and the results cannot necessarily be generalized to other brownfield projects. They also recognized that some benefits are not immediate but, instead, occur over an extensive period of time; thus, current project performance may be underestimated. Specific CUED findings are used as benchmarks in the current study.

The CUED analyses estimated a median public sector cost per job of \$10,998, including all local, state, and federal funds (Gilliland 1999). This figure, however, excludes residential and public recreational properties.² The analyses also show a median leverage of 3.41, indicating that for every dollar spent in public investment, \$3.41 in private investment results. The main public investment is from local governments (50%), and public sector financing represented approximately 30 percent of the total project costs.

The CUED (Gilliland 1999) report concludes that benchmarks commonly used in economic development research, such as jobs created and retained, cost per job, and private sector leverage, must be considered within the context of the program being measured and are not absolute indicators of success. Brownfield projects often result in social and environmental benefits that are difficult to quantify.

The process of identifying and documenting outcomes becomes more complex in moving from inputs to impact for two reasons. First, quantifying outcomes is usually more difficult than inputs or activities, except in job creation or investment. When one tries to measure impact on the community, the data are even more difficult to obtain.

Second, the time required for a brownfield redevelopment project to achieve an outcome or serious impact on the community can take several years. During that time, other factors in the community may change and city personnel may leave, making documentation difficult without an extensive recordkeeping system.

² In the 1999 CUED study, two different methods were used to calculate leverage: (1) *publicly supported debt* identified as *public sector investment*, and (2) *publicly supported debt* identified as *private investment*. For this study, *publicly supported debt* was identified as *private investment* due to the fact that the debt represents a private sector obligation that will be repaid by the private sector; likewise, comparable data from the CUED study will be used.

Likewise, productivity changes can affect performance measures. A new company coming onto a site may require fewer employees than the previous company to produce the same output, making job estimate comparisons difficult to interpret as measures of success.

During IIRA interviews with local public administrators during the current study, the issue of selecting appropriate performance measures was raised several times. There was general recognition that because the intent of brownfield projects differ, so should outcome measures; however, the discussions usually returned to readily available indicators such as job creation, private investment, increased sales taxes, higher assessed valuation, improved business sites, and neighborhood improvements or revitalization.

Indicators used by local public officials in the current study mainly reflect the aims of the redevelopment process. Detailed information on brownfield redevelopment goals was available from the 2002-2003 mail questionnaires of Illinois municipalities (Table 5). Highest among planned uses was returning the property to industrial or commercial use, with 43.2 percent of the square feet, for example, in this category. Second in importance was preparing a property for new industrial or commercial activities (28.7%), followed by mixed residential, industrial, and commercial use (14.2%). Job creation and private investment are reasonable performance indicators for these planned uses.

Another issue complicating documentation is the lack of regular contact between a city and a business. There is little reason for a city to closely monitor job creation unless it has a direct interest in

Table 5. Planned End-uses of Brownfields	Mean	Number
Question		
Percentage of total square feet of brownfield rehabilitated and returned to productive use		
Return to industrial/commercial	43.2	21
New industrial/commercial	28.7	15
Mixed residential/industrial/commercial	14.2	8
Parks/recreation, public space, and open space	2.0	6
Transportation	1.9	5
Public space such as parking lots	1.6	7
Utilities	0.8	3
Residential	0.7	5
Historical preservation	0.7	1
Open space but not developed parks	0.5	3
Held in reserve for future development	5.3	4
Number of square feet of brownfield rehabilitated and returned to productive use (mean)		
Square feet in past five years	326,395	46
Square feet in past year	65,509	45

Source: Brownfield Outcomes General Survey, 2002-2003, n = 52.

the property. Businesses do not disclose confidential information on number of employees, payroll, sales, or other sensitive measures unless required as part of an incentive package.

To estimate the outcomes from brownfield investments in the current project, a sample of 25 Illinois municipalities active in the voluntary clean-up program was asked in the 2004-2005 survey to provide information regarding investment by both public and private agencies and the number of part- and full-time jobs created for 37 brownfield projects.

City officials also reported increases in sales taxes or assessed valuation when available. With current records, identifying sales taxes associated with a specific company is difficult. Because of issues raised earlier regarding length of time between when a property receives an NFR letter and final development, only projects completed or close to completion are included. The focus is on active redevelopment or completion rather than on selecting only successful endeavors. As noted in national studies (Gilliland 1999), this means the sample is not random and the findings are limited to sample cities.

Each of the 87 municipalities included in the 2002-2003 survey had to meet one of four characteristics:

1. An NFR letter from the Site Remediation Program
2. An Illinois Municipal Brownfield Redevelopment Grant
3. A targeted Brownfields Assessment by IEPA
4. A Leaking Underground Storage Tank Pilot Grant (LUST)

The cities ranged from 685 to 150,115 in population, with an average population of 26,087. A mail survey in 2002-2003 yielded a 60 percent response rate. One questionnaire collected information for the city as a whole (Appendix A), and a separate questionnaire was sent to administrators examining each parcel (Appendix B). Both sets of information are used in subsequent analyses.

Summary information from survey respondents (Table 5) shows that an average of 326,395 square feet of space had been rehabilitated and returned to productive use in the previous five years, with an average of 65,509 feet in the previous year. The largest intended purpose of the redeveloped properties was to return to industrial or commercial use (43.2%), followed by creating a new industrial or commercial use (28.7%). These intended uses are likely to generate both temporary construction jobs and permanent jobs.

The 37 projects studied in detail in the 2004-2005 survey are all located in municipalities responding to the 2002-2003 survey: however, cities may not have provided information on the specific project included in the current survey for various reasons, including but not limited to, (1) they may have chosen to only complete the general city survey, (2) the project involved in the current study may not have been in the process of redevelopment at the time, or (3) information regarding the project may not have been available.

Some municipalities reported outcomes for more than one brownfield redevelopment project. In order to identify projects actively involved in the redevelopment process or completed, IIRA conducted phone interviews with city personnel. A majority of the projects included are in the northern half of Illinois (29 or 78%). Only eight projects were located in the southern half of the state. Those interviewed from the southern half of the state indicated that little or no progress had been made on brownfield sites due to stagnant or declining economic conditions in the region, or

more specifically, a lack of demand for the property. In some instances, the projects are not complete, but some businesses are operating on the properties, and accurate employment projections are available.

Returns from Redevelopment

This project includes several indicators commonly used in public evaluation efforts:

- Total investment to state investment
- Private investment to state investment
- Private investment to public investment
- Total investment per job
- Private investment per job
- State investment per job created or retained

The brownfield projects differ by types of investment—some have virtually no city investment while others have no federal investment. To provide useful data for comparison, we present each investment category separately. Each indicator is useful for a specific purpose. For instance, knowing how much the private sector has invested per dollar of state investment can be important when comparing state programs. Presumably, those programs that leverage more private investment meet a “market test” to a larger degree.

Likewise, state agencies sometimes use number of jobs created as a proxy for the benefit to a region from state investment even though the impact of job creation differs by wage levels. Clearly, brownfield project differences mean that there is no absolute standard regarding the appropriate state investment per job created; thus, evaluating programs by this measure can be misleading.

When the public sector is the largest investor in what is, essentially, a private sector project, policymakers can question its economic viability and appropriateness. Consequently, the ratio of total investment to state investment is presented on the grounds that higher leverage of state dollars is desirable; however, this ratio depends heavily on the current stage of the project. State investment often involves assessment costs early in a project and may represent a relatively high investment compared with the overall project cost. This is especially true in projects with serious contamination.

Similarly, projects with low local government investment in the total project cost may be preferred when they trigger major private investments. These ratios are affected by how the project is financed such as whether the city purchased the property and whether it tried to recover the initial investment in property.

Total Investment/State Investment. In the 37 projects, the median ratio of total investment to state investment was \$16.00 to \$1.00, meaning that for each dollar invested by the State of Illinois, a total of \$16.00 was invested by private industry, local governments, or the federal government combined (Table 6). In no instance was the ratio less than one, meaning that the projects involving the state government generated additional investment by a city or business.

Table 6. Brownfields Investment Ratios

Investment Ratios	Median
Total Investment	
Total Investment/Private Investment	1.23
Total Investment/Local Investment	5.96
Total Investment/State Investment	16.00
Total Investment/Federal Investment*	23.33
Private Investment	
Private Investment/Local Investment	4.17
Private Investment/State Investment	7.71
Private Investment/Federal Investment*	8.33
Private Investment/Public Investment	2.41
Jobs Created/Retained (FTE)	66

*Median calculated from the seven projects reporting federal investment.

Source: IIRA Brownfield Investment and Outcomes Survey, 2004-2005, n = 37.

Since assessment grants require a 30 percent match, a lower ratio in several cities may mean that an assessment grant was received and the property was (or is) being remediated but is not far enough along to have private investment. Likewise, a contaminated property that was cleaned and converted to a park or other public use may show low private investment.

Private Investment/State Investment. Policymakers are interested in the extent to which state government investment triggers private investment. While detailed information is not available for a large number of completed or nearly completed projects, the median for the sample is \$7.71 of private investment for each dollar of state investment. As projects reach completion, the ratio of private to state investment will increase. As noted earlier, other state investments, such as employment tax credits, are not always included, possibly causing this estimate to be overstated.

Private Investment/Public Investment. Cities typically try to leverage spending from local funds with private investments. The figures in Table 4 show that, based on the median, the private sector spent \$2.41 for each public dollar spent. The observations differed widely, with some reporting no private investment yet. Nevertheless, for those with private investment, the returns are substantial.

The ratio of private investment to city investment is even higher (4.17). In other words, every \$1.00 spent by a city generated \$4.17 in private investment, again with substantial differences among observations. Again, not all projects reported private investment, and ratios varied widely.

From a state government perspective, \$1.00 invested through the brownfield program in the sample cities generated \$7.71 in private investment, also with wide differences. Nevertheless, the returns to state investment measured in this way are substantial; more complete information is needed to fully document these findings, however.

Investment per Job Created or Retained

The number of jobs created and how much each job represents in public investment are often cited in the news media. The usefulness of this approach for present purposes is limited because brownfield redevelopment projects were sometimes designed for other purposes than to create jobs. This is especially true for mixed housing projects that contribute to the betterment of the city and enhance the neighborhood tax base.

One estimate is that property values increase as much as 10 percent within an approximate radius of 1.5 miles when a brownfield property is redeveloped. Alternately, on average, commercial and industrial properties near brownfields are 10 percent lower in property values after other factors had been considered (Hara 2003).

De Sousa (2002) reports that in Toronto, redevelopment of one parcel of brownfield land is associated an increase of more than 50 percent in the values of neighboring properties. The exact impact depends on the condition of the neighborhood, the size of the brownfield, and other factors. Nevertheless, it is not difficult to show positive externalities from brownfield redevelopment projects (Meyer, VanLandingham and E.P. Systems Group, Inc. 2000).

Comparisons of public investment per job retained or created in Table 5 are presented by median, but no information is provided about the specific types of jobs. The most common state investment in these projects is a Phase I or Phase II assessment or both. In some instances, cities do not apply for assessment funds, so the state investment is zero; while in other cases, the state investment starts the process, enabling a city to obtain other funding.

Determining the full amount of local or state support that can be attributed solely to the brownfield project is somewhat arbitrary. The main source of information for the current project was completed city questionnaires, with personal follow-up to verify numbers. Even during interviews with municipal officials, it was difficult to obtain accurate and complete data. Additional research is needed to make these figures more comparable.

Private Investment per Job Created or Retained. The projects for which data are available have a median average private investment per job created or retained of \$35,478 (Table 7). The investment figures differ widely because not all projects are at full capacity yet. Likewise, the types of business ventures yield substantially different capital to labor ratios. For instance, a major sports arena, such as in Peoria, has a higher capital investment per job created than a fast-food establishment in Calumet City. Relatively high investments per job can also signify projects in the early stage of development with few jobs created.

State Investment per Job. With available data, we could not estimate the cost to the state of providing technical assistance to either the city as it worked through the process or to businesses as they started operations; therefore, the state investment represents mainly assessment costs. In some cases, the businesses are in Enterprise Zones and qualify for sales tax exemptions on building materials, which could be considered as a state investment; however, with detailed records, exemptions were not included. It could also be argued that incentives such as tax exemptions should not be considered as investments because such revenues would not have been realized without the redevelopment.

The median state investment per job retained or created for sample cities was \$598. The state partners with many agencies in these projects; thus, these ratios do not imply that an investment of \$598

Table 7. Brownfields Investment Per Job

Type of Investment Per Job	Median
Private Investment/Job	\$35,478
Local Investment/Job	\$2,989
State Investment/Job	\$598
Federal Investment/Job (n = 6)*	\$2,168
Total Investment/Job	\$69,486
Jobs Created/Retained (FTE)	66

*Median calculated from the six projects reporting federal investment and jobs.

Source: IIRA Brownfield Investment and Outcomes Survey, 2004-2005, n = 37.

by the state government necessarily caused a job to be created; nevertheless, local public officials often reported that the state investment in assessment and technical assistance was key to project development and completion.

Local Government Investment per Job. The relatively limited financial investment by state government is far surpassed by city governments for several reasons. First, the city stands to gain much more from the increased employment or the removal of a local eyesore or health hazard.

Second, the city governments often see brownfield redevelopment as part of revitalization efforts in a section of the city. Thus, they may provide parking facilities and municipal water and sewer, or they may make investments not solely for the purpose of the brownfield project and, therefore, these figures are not included.

The median city investment per job was \$2,989, but the vast differences among cities make generalizations from these figures problematic. It is difficult to apportion all of the city spending—especially technical assistance—to each project, and some local officials were not sure of the amounts spent. City investment per job will decrease with business expansion, and the city investment is usually at the beginning of the project, so these estimates are likely to be high. At most, the estimates are only a snapshot that will change markedly through time and, to be useful, this information must be updated regularly in terms of employment and investment.

Federal Investment per Job. The median brownfield-related federal investment per job in the six sample cities that had both federal funding and jobs is relatively low (\$2,168). The main reason is that relatively few projects in this sample received EPA redevelopment grants. The Economic Development Administration and Housing and Urban Development were contacted to identify municipalities that may have received grants used for brownfields, but relatively few Illinois municipalities received such funding.

The Economic Development Administration or another federal agency may have provided support for business development or expansions, but the funding received could not be apportioned to the brownfield sites. More research and better local records on the types of federal funding used in the redevelopment program are needed.

Total Investment per Job Created or Retained. The median total investment per job created or retained by both private and public sectors is \$69,486. On average, 82 percent of the reported total investment was private; 17 percent was city investment; 1 percent was state government; and less than 1 percent was federal; again, significant differences among projects were found.

While it is tempting to compare the costs per job with other programs, differences among programs and the methodologies used in calculating costs in each program make these comparisons not viable. Even within the current sample, cities differed in what is included in the various investment figures.

The previously cited CUED analysis reported that in their study of 107 brownfield projects almost 30 percent of total project funding was from the public sector, with local governments providing 51 percent of the public funding, state programs providing 38 percent, and federal programs providing 11 percent. The Illinois study showed a somewhat larger proportion (82% compared to approximately 70% from the CUED study) of funding from the private sector.

Multiplier Effects

The jobs and investments created because of brownfield redevelopment include only those that were direct effects, but these investments also cause a ripple effect throughout the local economy. In fact, an economic stimulus usually has three impacts: (1) direct, (2) indirect, and (3) induced.

The *direct* effect is the impact caused during the remediation and redevelopment process as well as the immediate impact from the new use of the site such as a business or other institution that pays wages, purchases supplies, and so on.

The *indirect* effects result because suppliers to the new business also create jobs or purchase materials from other companies, thereby increasing incomes throughout the community.

The *induced* effects arise because the workers hired, or others affected, spend their incomes in the community on other purchases, thereby creating yet another round of spending. These increases continue to generate additional income and spending, with each round of spending having a smaller impact.

The size of the overall impact is determined by many factors, not the least of which is the leakage in purchasing power from the region. In small areas with little retail or other businesses, the effects will be relatively small; however, in medium and large cities, the total effect can be substantial when the incomes are spent locally.

One recent example that compared the effects of brownfield redevelopment is in Canada where a brownfield redevelopment cluster was found to have a total output multiplier of 3.8, meaning that an additional \$1.00 generated because of the brownfield project is likely to lead to \$3.80 in total investment (NRTEE 2003). Thus, using this multiplier, the aggregate investment in Table 1 could be substantially higher than shown when the multiplicative effects are considered. Lack of detailed information prevented similar calculations in the Illinois sample, but research on this issue is underway.

General Observations

While economic development or revitalization is not always the main motivation for brownfield remediation or redevelopment, the comparisons of returns from investment in this sample of cities

show a substantial payoff, depending on the projects in each city. The returns are highest in those cities that did not take ownership of the property unless they could resell at market rates and/or did not provide significant incentives to incoming businesses.

The lowest returns, thus far, are in cities that purchased properties and have not yet sold all of the properties or sold them at a token amount to stimulate development. In some sample cities, however, property owner resistance caused municipal governments to purchase the properties in order to complete the remediation and redevelopment in a timely way. An important point, however, is that the overall impact on the community is most important rather than focusing only on job creation and/or investment even though these outcomes are also important.

Comparisons in this section generate several important facts. First, the city governments are important to the success of these projects and, in many instances, led the efforts to remediate and redevelop these properties. Second, in virtually every instance, successful projects involved an active role by business investors. Third, cities used relatively innovative financing approaches but, most often, relied on TIFs and/or Enterprise Zones to raise the investment funds or provide the incentives needed to make the projects work.

In general, the investments by cities and the state government brought substantial returns, especially at the state level—a median return of \$16.00 in total investment per \$1.00 of state investment in the brownfield program. While state investment does not necessarily cause private investment, the external funding can help the city government provide a productive economic environment suitable for business investment, thus representing a successful public-private partnership.

Factors Affecting Success

The extensive literature on brownfield remediation and redevelopment has generated a body of knowledge on common elements underlying successes. This section reviews these studies, identifies common elements, and then applies them to the case studies in Illinois municipalities.

NALGEP/NE-MW. The 2004 *NALGEP/NE-MW* report found that public investment in brownfield redevelopment is vital to success. In some cases, the remediation costs are higher than the property value, deterring private investment; thus, efforts are needed to level the playing field making private investment in these areas more attractive.

Based on a review of the literature, this report presents 10 key factors that contribute to successes with brownfield redevelopment (*NALGEP/NE-MW* 2004):

1. Field a strong brownfield team with leadership from the top.
2. Connect brownfields with community revitalization priorities.
3. Begin with the end in mind.
4. Involve citizens from the start.
5. Engage the private sector and reduce its risk.
6. Make clean-ups work for you.
7. Leverage the funding.

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8. Join forces with your state.
 9. Partner with key federal agencies.
 10. Nothing succeeds like success.

While many of these items are similar to what might be reported for other programs, they nevertheless support making brownfield redevelopment a part of the overall economic development approach in the community. They also stress the importance of key partnerships with the state and federal agencies involved in these programs. Involving residents is also an important finding of this and other studies of successes.

Six Common Threads. Based on a comprehensive study of nine brownfield projects, in 2003, the National Association of Development Organizations (NADO) Research Foundation identified six common threads found in the successful brownfield redevelopment projects studied.

1. Job creation and retention strategies that include a job-training component based on community needs
2. Properties that are centrally located in the community
3. Incorporation of brownfield sites into regional plans, especially for economic development and transportation
4. Community involvement in all phases of the process: planning, inventory, assessment, clean-up, and redevelopment
5. Leveraging of funds and using a combination of in-kind services and financial support
6. Established administrative capacity necessary to survive the life of the project

The importance of an active redevelopment strategy linked with other regional economic goals, such as job creation, are important considerations for these projects. The NADO Research Foundation (2003) reported differences in approach depending on whether the projects had a regional or a strictly local focus. Of special importance is the ability of a local government, or region, to compensate for deficiencies in other areas when trying to attract businesses or undertake development efforts.

Bartsch and Wells. The extra costs associated with working with brownfield projects are one of their main limitations. Clean-up costs, potential liability, and other issues place brownfields at a substantial cost differential compared with greenfield projects. Bartsch and Wells (2003) addressed the financing concerns faced by private investors in their discussion of several programs and note that past case studies by the Northeast Midwest Institute reinforced the important role played by public sector financing. Pre-development costs for brownfields make greenfield properties more attractive to developers; therefore, enhanced funding opportunities for brownfield assessment and remediation encourage brownfield redevelopment.

In the area of finance, Bartsch and Wells (2003) identify five important considerations vital to the success of brownfield redevelopment:

1. Ensuring a minimum return

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2. Reducing the borrower's cost of financing
 3. Offering terms or incentives to ease the borrower's financial situation
 4. Offering assistance or information that provides comfort to the investor and lenders
 5. Providing direct financing help

Once again, public-private partnerships—in this case, to improve financing arrangements—are key to successful brownfield initiatives. These partnerships can be a natural part of the process in cities where brownfields are incorporated into city development strategies.

Bartsch and Wells (2003) also identified potential risks as the number one constraint for investors and lenders. Successful brownfield redevelopment programs help private stakeholders effectively manage brownfield risks by providing assistance such as loan guarantees, environmental insurance, interest subsidies, tax incentives, information on new technologies or institutional controls, and grants or forgivable loans. Because brownfield projects and situations are unique, the funding mechanisms must vary with specific needs of projects, drawing from private, local, state, and federal resources.

NADO Research Foundation. In a 2001 report, *Reclaiming Rural America's Brownfields: Alternatives to Abandoned Property*, the NADO Research Foundation identified other factors important for local governments to address while working with brownfield redevelopment. Some of these recommendations are aimed at increasing the interest and capacity for brownfields nationally, but others are useful at the local and state levels as well. These include the following:

- State and federal agencies should collaborate with regional development organizations to promote rural brownfield redevelopment.
- Existing brownfield resources and networks should be encouraged to promote productive dialogue about rural brownfield redevelopment throughout rural America.
- A national working group on rural brownfields should be established to promote networking and information exchange.
- There needs to be greater awareness about rural brownfield redevelopment.
- Regional development organizations should incorporate brownfield redevelopment in their comprehensive economic development strategic plans.

Downtown Revitalization Report. In a 2001 study of 11 brownfield projects in urban neighborhoods and small towns, Wells identified six design principles that can promote successful redevelopment:

1. Engaging citizens in identifying a community vision for growth
2. Strengthening pedestrian-friendly neighborhoods that offer a mix of activities within walking distance of homes
3. Reclaiming blighted and abandoned areas to restore the community's economic and social fabric
4. Connecting neighborhoods to regional transportation and land-use systems

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5. Providing public open spaces for recreation and landscapes for civic buildings
 6. Integrating new buildings with the architectural character of the neighborhood, reflecting the best examples of local architecture.

While many of the identified factors are specifically design-related, they nevertheless are important in most projects. Engaging citizens early in the project is especially important as has been shown in the Illinois studies as well.

Illinois Case Study Comparisons. In two reports involving case studies of municipal experiences with brownfield redevelopment efforts in Illinois, Walzer et al. (2001, 2004) identified several key factors common with successes:

- There is a local champion(s) to promote the brownfield redevelopment projects.
- A clear plan of attack exists within the city and is accepted by agencies.
- Public-private partnerships are beneficial, if not crucial, to successful projects.
- Brownfield redevelopment should be part of the overall development process.
- Local governments require access to specialized expertise on issues.
- Persistence until project completion is important.

These factors are certainly not unique to brownfield projects; in fact, they could be applied to other projects involving collaboration between businesses and the city. They just demonstrate the importance of local government involvement in promoting local economic development.

Application to Cities in the Current Study

Several elements that are common in the above studies can be applied to the 11 case studies of Illinois municipalities in this report. Illustrations of how these principles applied to the study cities follow. In addition, relatively unique projects or approaches used by cities are described.

Public-private Partnerships. Active involvement by city government was evident in virtually every project examined in this study except one. In that case, private investors took the lead, purchasing the property and moving ahead instead of incurring the delays associated with pursuing grants from the local or state governments.

The city involvement in the brownfield projects differed. In one instance, the city government purchased the property and then set about identifying potential businesses and aggressively recruiting them to the city, providing the land at a token amount (Calumet City). In another case, the city government helped with clean-up expenses and obtaining the NFR letter but provided virtually no incentives to the incoming business (Mendota). Both projects worked, but the roles of the city government were entirely different. Even so, there was still an active public-private partnership.

In Alton, successful negotiations between the owners of Owens-Illinois, Inc., the city, the developer, and the U.S. EPA helped to move the remediation and acquisition processes along. When neither the owners nor the developer were willing to finance the assessment of the property, the city stepped in and used TIF funds to pay for the assessment.

East Peoria has had strong participation by the Caterpillar Foundation in building a museum of early Caterpillar products to attract tourism. This partnership also provides strong links with industry in its effort to attract investors in emerging technologies. Finding projects with strong benefits to both private businesses and the public can be a significant boost to successful brownfield redevelopment.

Local Champion. A strong local champion(s) for brownfield redevelopment is evident in most cases and is key to the success of the redevelopment process. In Sterling, the mayor and city manager aggressively negotiated with the bankruptcy court and helped identify potential buyers for the property. Their active management of the brownfield site was instrumental in providing an organized and successful transition process.

Likewise, an economic development official in Elgin had the foresight to pursue a gambling boat license as part of a brownfield redevelopment project; this success has provided the financial base for an extensive redevelopment effort that shifted the major focus of the area to tourism.

In both cases, the commitment and vision of local public officials contributed extensively to the long-term success of the redevelopment effort. The projects were not seen as removing a contamination; rather, they were seen as a long-term redevelopment project that could reshape the local economy and that motivated them to champion the projects.

Meet Residential Needs. Several projects in the sample cities actively used the redevelopment projects as a way to expand residential capacity. In addition, several communities focused on residential redevelopment in order to stimulate demand for other redevelopment. East Peoria, for instance, created a marina and high-end condominiums as a way to build a tax base but also revitalize a deteriorated riverfront property. The condominium complex includes retail development, restaurants, and easy access to water recreation.

Several other cities incorporated residential development in their projects as well. For instance, both Calumet City and Franklin Park saw a need for residential expansions adjacent to the revitalized downtown and are planning residential complexes that will include retail on the ground floor to generate sales taxes. In Palatine's updated master plan, the village prioritized "roof top" or residential redevelopment in order to spur complementary redevelopment such as restaurants and retail. Elgin's riverfront revitalization plan includes the construction of town homes and a condominium building adjacent to an extensive riverfront park—all located on former brownfield sites.

Innovative Financing Approaches. Flexible and innovative financing approaches have been a hallmark of the brownfield projects in this report. By and large, the essential funding instrument has been Tax Increment Financing. Most municipalities in this study have either TIFs or Enterprise Zones or both. By leveraging expected future revenues, they have helped businesses with clean-up costs as well as developmental expenses on the properties. The success of brownfield redevelopment has provided additional revenues to be used to redevelop additional properties in the future. In the case of the EZs, businesses have taken advantage of tax relief on purchases of building materials and other tax-expenditure benefits, which can help offset the higher developmental costs associated with brownfields.

Some cities have also added innovative twists to the financing arrangements, even when the source of the funds was a TIF or EZ. Mendota, for example, linked the ability for a company to capture the funds to hiring a certain number of residents. This sends a clear message of interest in maximizing local benefits yet does not impose unreasonable costs on investors.

The City of Elgin established an e-Elgin Incentive Program to provide funding assistance to downtown business owners for technology-related development and improvements.

Rock Island worked with a tax buyer to acquire abandoned properties through tax foreclosures, which allowed the city to obtain sites more quickly and at a lower cost than through eminent domain procedures. In addition, the City of Rock Island offers a TIF Loft Housing Program for commercial properties in which the city will assist owners with TIF funds up to \$20,000 per housing unit or up to 40 percent of the cost.

Incorporate into City Development Plan. Making brownfield redevelopment part of the overall city development plan rather than focusing only on removing a source of possible contamination is an obvious element in most of the successful projects examined in this study. With this approach, the communities had strong involvement by business leaders and others who facilitated the creation of a vision for the community, establishing a process to reach the goals with detailed redevelopment and revitalization plans, including brownfield redevelopment projects. During interviews, local officials stated how choices were made to market the brownfield redevelopment projects—sometimes ahead of other industrial properties.

In most instances, cities found innovative uses for the brownfield properties that could be incorporated into a long-term economic development or comprehensive plan. The compatibility and direct linkage aspects have been important in several municipalities interviewed in this project.

The Village of LaGrange incorporated brownfield redevelopment into its pedestrian-oriented downtown revitalization plans. The village purchased 11 underutilized commercial sites located downtown and established agreements with developers that allowed the village to dictate tenants as well as architectural design in order to maintain a consistent downtown theme.

When Palatine began the process of developing a transit-oriented master plan in 2000, the Village Council identified downtown revitalization as the highest priority. Community involvement and input was a critical element in the creation of the master plan. In 2003, the *Palatine Downtown Land-Use Guide* was unveiled, identifying sites for redevelopment, including highly detailed recommendations for reuse, structural design, and construction. Priority was given to properties considered blighted, existing businesses, and residential development.

Collaboration with Governmental Agencies. Several national studies discuss the importance of collaboration between local, state, and federal governments. Past involvement by the IEPA has been especially strong in Illinois, and local officials said on several occasions that, without this technical assistance, the projects would have been less successful.

While state funding for the assessment process was important in many, if not most, instances in starting a project, an equally important role played by state agencies was to provide access to technical assistance, especially in smaller communities without an extensive staff. The IEPA hosts statewide conferences and seminars on brownfield funding programs and success stories. They also provide on-site technical assistance with grant applications and administrative efforts that lead to an NFR letter.

Summary

Although major strides to remove barriers to brownfield redevelopment have been made in the past decade, some barriers still exist. Issues such as sites deemed undesirable or not suitable for development; fear of environmental liability, both for private stakeholders and localities; inadequate funding, resources, and education; regulatory inconsistencies; lack of demand for property when it is development-ready; and a need for more information on sustainable practices remain as obstacles. Nevertheless, the analyses of brownfield redevelopment projects, both completed and in the development phases, clearly show several positive contributions.

First, communities that aggressively work with the IEPA on brownfield redevelopment have been able to turn property viewed as a potential liability into a productive asset either as a business that generates employment, sales, and income; as a natural resource; for recreational use; or as residential development.

Second, investment in brownfield redevelopment has been attractive for private investors and the various levels of government when measured in terms of ratios or even cost per job. For instance, the analysis of projects found that each dollar invested by businesses caused an average of \$1.23 in total investment, reflecting the public-private partnerships described earlier. An investment of \$1.00 by state government is typically associated with a total investment of \$16.00 in the project. These are already substantial recovery rates without considering the multiplicative effects from the initial investment stimulus.

Third, perhaps most important is the fact that communities can remove an eyesore and a potential health or safety hazard. The property remediation, regardless of specific intended use, has a positive impact on the neighborhood as well as the overall city. For instance, redesigning a decaying downtown with combined retail and recreation can position the city for the next decade or more.

Brownfield redevelopment can undoubtedly be a difficult and challenging process; however, the successes of Illinois municipalities as shown in this study were accomplished during an economic recession. As the state and national economies recover, even more successes might be expected. This is especially likely because many projects reported are still in the relatively early stages of development.

Brownfields Case Studies

The previous sections summarized the types of brownfield redevelopment projects underway in Illinois as well as the outcomes in terms of investment and employment creation. The next section presents a more detailed discussion of the redevelopment projects in each of the 11 cities to elaborate on the earlier findings. The brownfield projects discussed next include diverse industries and approaches, reflecting the different needs and opportunities in each city.

To present the information in a way that highlights the similarities and unique features of the approaches used, the mini-case studies are organized into three groups while recognizing that the projects really represent more of a continuum than distinct and separate approaches. The projects examined in this report conveniently fit into three broad categories: industrial, recreation-riverfront, and downtown revitalization. In some cases, the projects could be included in more than one group, especially when multiple sites are involved.

Industrial. Four cities in the current study have redevelopment projects that mainly involve industrial projects. Alton and Sterling have large projects that involve steel production. In the case of Alton, private investors have opened a business that involves specialized steel production; and in Sterling, a portion of the brownfield site is devoted to steel production as well. In Mendota, a plastics manufacturer was recruited to a former motor wheel manufacturing site. Harrisburg, however, intends to convert a former industrial site into a mixed manufacturing retail site, with manufacturing as the main intended use.

Recreation-Riverfront Development. Some cities converted former industrial properties along a river into downtown revitalization and/or recreational uses. East Peoria has an extensive multidimensional project underway that will involve tourism as well as provide opportunities for businesses to expand as they develop new technologies. Elgin converted former industrial property into a casino and recreational development and, in the process, revitalized the downtown.

Downtown Revitalization. Rock Island renovated a city block downtown that will revitalize the surrounding neighborhood. This project is part of a broader downtown revitalization program. LaGrange converted a brownfield site into a major retail complex, including restaurants, an art store, and other retail businesses, to support a residential complex and to attract trade to the downtown area. Calumet City attracted several fast-food franchises as well as other businesses to bring employment and traffic to the downtown. To revitalize its downtown area, Franklin Park worked with a mix of residential and service establishments including restaurants. Palatine also focused on attracting a combination of residential and consumer-supported businesses.

Each of the following cities used the brownfield projects to address local needs but also to build on local assets. The diversity of these successful projects highlights the flexibility of the brownfield redevelopment program and the fact that it can work successfully to address a variety of local needs.

Industrial Redevelopment

Alton, Illinois³

Alton, Illinois (pop.30,504, Madison County), a city once flourishing with riverfront industries, has experienced significant changes to its economic environment in the past several decades. Within the span of a decade, two of the city's major industries, Owens-Illinois, Inc. and Laclede Steel, closed their Alton plants. Alton was faced not only with the challenges of how to deal with a declining population and high unemployment but also with the implementation of redevelopment plans for two brownfield sites of substantial magnitude—both in physical size and cost. In this case study, the challenges and successes incurred by the City of Alton in the remediation and redevelopment of two major brownfield properties are examined.

Alton Demographics. Alton is located on the north side of the Mississippi River in southwestern Illinois, 25 miles north of St. Louis. Known as part of the “River Bend” region, Alton was once a thriving industrial community, benefiting from its transportation advantages. In 1912, Alton's riverfront manufacturing district comprised 102 industries, with growth and expansion continuing

³ The authors thank Philip Roggio and Rita Backstrom, Director and Deputy Director, Department of Development and Housing, and Raymond Stillwell and Mark Spizzo, Alton Steel, Inc., for providing most of the information on which this section is based. The authors assume full responsibility for any errors of fact or interpretation.

through the 1920s. As industries faced aging and deteriorating plant infrastructure, however, plants ceased operation. No longer defined by industrial growth, Alton began to experience, simultaneously, decreasing population and increasing unemployment. In the 1960s, the population of the City of Alton was approximately 45,000 residents; by 2003, the population had dropped by one third to 30,496. The city's average annual unemployment rate from 1980 to 2001 was 8.5 percent, while the U.S. average annual unemployment rate for the same time period was 6.0 percent (RBGA-SI 2002).

Owens-Illinois, Inc. History

Owens-Illinois, Inc. (originally Illinois Glass Co.), producer of glass containers, had been a part of Alton's industrial history since 1873. At the height of production, the Owens-Illinois Alton plant employed 4,000 people and Owens-Illinois Glass was the largest hollowware manufacturer in the world. Due to increased competition from plastic and metal container manufacturing, product demand began to slow. By the mid-1970s, employee layoffs were steadily occurring, and in October 1983, Owens-Illinois closed the 110-year-old bottle manufacturing plant. Consequently, 312 employees were terminated, resulting in a monthly payroll decline of \$500,000. The 1988 merger of Owens-Illinois and Brockway, Inc. made the combined company the nation's largest glass container manufacturer, with 40 percent of the industry's sales. The remaining Alton employees anticipated that this merger would provide more business and job security. Instead, four years later, Owens-Illinois, Inc. announced the closing of both the remaining mold shop and the foundry, representing a loss of 338 union and non-union jobs, with a payroll of approximately \$1,080,000 per month.

Owens-Illinois Remediation and Redevelopment. The City of Alton was now confronted with the challenge of the remediation and redevelopment of the former Owens-Illinois Glass (OIG) site—a 153-acre brownfield site—most of which had been sitting idle for 14 years. Unfortunately, due to poor economic conditions, the city itself was in no condition to finance such a project. It was apparent, however, that some action needed to be taken to remediate the eyesore at the city's front doorstep, as well as to encourage job retention and creation. Located at the foot of the Lewis and Clark Bridge at the intersection of Illinois Route 143 (Berm Highway) and Broadway, the OIG site possessed multiple transportation modes—the nearby Mississippi River, railroad lines, interstate, and airports—and the site was clearly advantageous for commercial exchange. The city, under the guidance of the city's director of business and economic development, had experienced positive results with the \$15 million redevelopment of the Alton riverfront project, which focused on tourism and recreation. Once the city identified the direction it was to take with the brownfield project, the director of business and economic development was instrumental in the creation of a 23-year TIF district, enabling the city to partially fund the project through the additional tax revenues that eventually would be generated by improvements on the OIG brownfield site. Clark Properties, Inc., a St. Louis-based redeveloper, expressed interest in purchasing the OIG brownfield site for development of a business park. Clark Properties had prior experience with brownfield remediation and redevelopment, including the successful Union Seventy Center, a 161-acre industrial business park on the site of a former General Motors Corporation plant located in North St. Louis.

The first step in the remediation process of the OIG brownfield site was to conduct an initial environmental assessment of the property. Neither party in the relationship was willing to pay for this

assessment, however. Owens-Illinois, Inc. was unwilling to finance an assessment for property that they were abandoning, and Clark Properties Inc. did not want to invest in an assessment for property they had not yet acquired. Therefore, the city was ultimately obliged to use \$150,000 in TIF funds to pay for the environmental study so that the redevelopment could proceed.

After more than three years of ongoing negotiations among Owens-Illinois, Inc., Clark Properties, the City of Alton, and the Environmental Protection Agency, an agreement to purchase the property was finally reached, with Clark Properties accepting responsibility for the environmental clean-up. The process of negotiation was complex, involving a 500-page environmental agreement, with deliberations among the involved parties regarding terminology, definitions, and accountability. Ultimately, liability insurance policies were acquired by the City of Alton, Owens-Illinois, Inc., and Clark Properties—an action that was instrumental in moving the property acquisition forward.

Once the OIG sale was finalized, Clark Properties, in partnership with Clayco Construction of St. Louis and the City of Alton, was prepared to proceed with Phase One of the remediation and redevelopment plan. The goal of Phase One was the development of what was to be known as the Alton Center Business Park, suitable for bulk warehousing, light manufacturing, and distribution. Clark Properties was prepared to immediately step in and begin the environmental clean-up and demolition processes at the brownfield site; however, the site was found to contain asbestos as well as heavy metal contaminants, including lead and arsenic; organic solvents; and fuel storage tanks containing gasoline and oil. Additionally, before the developers could reap any state tax benefits, on-site landfills would need to be cleared. Environmental Operations, Inc. of St. Louis, an environmental compliance consultant, received a \$2.6 million contract for environmental contamination evaluation and clean-up of the entire site. Environmental Operations worked closely with both the IEPA and the U.S. EPA to ensure that all regulatory requirements were met. Mike Clark, principal of Clark Properties, called Environmental Operations a “key player” in the redevelopment project (Downtown Alton Builds for Bright Future, 2000).

Phase One of the project included the demolition of approximately 15 structures, representing one million square feet of space, as well as the renovation of two warehouses, totaling 450,400 square feet of usable space. In addition to \$6 million in TIF funding slated for Phase One of the project, the Alton Center Business Park received \$11.6 million in tax-exempt moral obligation bonds from the Southwestern Illinois Development Authority (SWIDA). Because the bonds were backed by the State of Illinois, SWIDA could offer them at a much more favorable interest rate to the developers. SWIDA loaned an additional \$500,000, obtained through Illinois FIRST, to Alton Center Business Park, LLC. Although the amount of private investment dollars for this stage of the project was not released to the public, it is estimated that Phase One would cost an estimated \$22 million.

Alton Center Business Park has entered Phase Two of the renovation project, which entails the construction of additional properties along the frontage of Broadway as demand arises. Overall costs of the remediation and redevelopment of the Owens-Illinois brownfield site is estimated between \$45 million and \$50 million. The City of Alton obligated but has not yet expended \$2.0 million in TIF funds for infrastructure, with an additional \$750,000 earmarked for the \$11 million project to extend Indiana Avenue through Alton’s Industrial Corridor between Illinois Route 143 and Broadway. For the Indiana Avenue construction, the city also received \$4.3 million from the Illinois Commerce Commission, an additional \$4.3 million from the federal Transportation Efficiency Act for the 21st Century (T-21) program, and commitments from Madison County for funding. The

redevelopment plan for the Alton Center Business Park project included a stipulation that Clark Properties would donate two parcels of property for the extension of Indiana Avenue to the city so that they could transfer title to AmerenUE once an NFR letter had been issued. Additionally, 14 acres of land had to be acquired from 15 separate owners for the project. Because the construction of the Indiana Avenue extension would impact 2.5 acres of wetlands located on the property, the city has had to implement a wetland mitigation plan to create nine acres off-site. The goal of the city is to coordinate the Indiana Avenue extension project with a plan that would utilize Illinois Commerce Commission funding to upgrade the railroad crossing and realign the railroad track.

Marketing the Property. The continued success of the Alton Center Business Park development is dependent upon the ability of Clark Properties and the City of Alton to attract new businesses to the property. Clark Properties has collaborated with a commercial broker to promote the business park. Together, they have incorporated standard marketing practices such as cold calling, print advertising, and direct mailings, into their marketing strategy. Additionally, they are seeking out companies outside of the region that might benefit from a Midwest location. Originally, the focus was on promoting the property primarily for light industrial and warehousing businesses; however, due to the overabundance of warehouses in the St. Louis region and the desire to attract types of businesses that would offer a greater number of jobs, a marketing shift occurred, with the city and the developers promoting the business park as a “mixed-use” development instead. A major selling point for the City of Alton is the availability of incentive programs such as the TIF district, an EZ, and an abundance of trained labor. Businesses located within the EZ could receive investment and job tax credits, utility and sales tax exemptions, and potential property tax abatement.

American Water Works, Alton Center Business Park’s first and only tenant, began operation in April 2001 and currently employs approximately 500 people at their national customer response center, which is located in one of the renovated warehouses. The company offers their employees an hourly wage of \$9.00 and above and an attractive benefits package. Since the Alton Center Business Park facilities are “built-to-suit,” American Water Works was able to have a 42,551 square foot, state-of-the-art call center. The company was also given a “right of refusal,” granting them a level of sanctioning power regarding other potential adjoining tenants. Through the auspices of the City of Alton, American Water Works received a Linked Development Grant in the amount of \$462,000 for job creation to be applied toward capital purchases. Alton city officials and Clark Properties have estimated that Alton Center Business Park could potentially bring 1,000 jobs to the city when completely redeveloped. Projected costs to bring the project to completion are estimated at \$80 million.

Laclede Steel History

Laclede Steel, manufacturer of carbon and alloy steel products, was a major employer in Madison County, Illinois, for almost 90 years. The company produced about 200 grades (chemical combinations) of steel and produced steel from recycled scrap steel using electric arc furnaces. The Laclede property occupied a 400-acre site in Alton, Illinois, which included main offices, rolling mills, warehouses, a tube mill area, an electric melt shop, a wastewater treatment plant, and landfills.

At the peak of its operation, Laclede employed approximately 4,000 employees; however, in the late 1990s, the U.S. steel industry began to experience increased competition from low-price imports, resulting in a severe decline in demand for domestic steel. Due to plunging steel prices, growing debt, and increasing pension costs, Laclede Steel filed for Chapter 11 bankruptcy reorganization in

November 1998 and attempted to resurrect the struggling mill. Unfortunately, the company had to file for bankruptcy dissolution in July 2001, just seven months after emerging from Chapter 11. The bankruptcy dislocated the remaining 560 employees and left the property vacant.

At the time of the plant closing, numerous environmental issues were reported by company staff, including asbestos; tanks and containers of various contaminants such as sulfuric acid, PCBs, waste oil, and grease; clarifier sludge; lime residue; lead and chromium wastes; chlorofluorocarbon-containing appliances; and batteries and fluorescent bulbs.

In 2002, IEPA requested a consultation from the Illinois Department of Public Health to assess whether the brownfield site represented a public health hazard. Soil samples were collected from nearby residential neighborhoods and, in September 2002, the residents of fifty nearby homes were notified that the site did not pose a health hazard to the neighborhood.

Property Acquisition and the Start of Operations. Shortly after the mill ceased operations, a father and son formerly employed at Laclede Steel, along with a small group of local investors, formed the “C” corporation called Alton Steel, Inc., and initiated plans to produce specialized steel products on a portion of the Laclede brownfield site. Through an agreement with the U.S. Bankruptcy Court, the corporation purchased the entire 400-acre brownfield property for \$1 million. The proceeds from the sale were subsequently placed in a trust fund for environmental clean-up.

Alton Steel, Inc. (ASI) assumed ownership with a stipulation that it would bring the property into compliance with the Resource Conservation and Recovery Act (RCRA). The U.S. EPA held a \$125 million claim against Laclede Steel for RCRA noncompliance since 1998; however, ASI has projected remediation costs to be below the amount of the claim. Through negotiations with U.S. EPA and IEPA, an agreement was reached allowing ASI to complete the environmental remediation process over a longer period of time.

ASI successfully negotiated a five-year contract with United Steelworkers 3643, which gave union employees an average wage of \$13.20 per hour and eliminated the concept of “work rules” so that employees could be reassigned within the company as needed. In turn, the company implemented an impressive employee benefits package, including complete family health insurance coverage, a 401K retirement plan with supplementary bonuses, and an innovative gainshare program. This gainshare program, developed by the company’s CEO, can add up to 30 percent to an employee’s paycheck. A baseline standard, measuring productivity, safety, quality, no time lost, overall efficiency, and crisis management in the three plant divisions—(1) electric melt shop, (2) bar mill, and (3) administration—was established by a consultant; and any measure above the standard is paid on a rolling average of three weeks. Employees receive earned gainshare bonuses during each pay period, which, on average, has increased employee pay by 15 percent.

Overall, employee morale and productivity is high, due in part to the attractive employee compensation. A majority of employees hired at the facility during the first year were former Laclede Steel employees; however, the company has recently begun hiring younger, less experienced employees, with the experienced steelworkers serving as “mentors/trainers” to the new hires. After 16 months of operations, ASI has had no employee lost time from work-related accidents in a business known for dangerous work conditions, due in part to an emphasis on training and safety.

In June 2003, ASI hired approximately 25 employees—mainly former Laclede Steel employees—to begin the clean-up and remediation process. Steel production at the facility officially started on September 11, 2003, with 129 employees. As of October 2003, 800 tons of steel bars were produced per day with output equaling product orders. By September 2004, 200 people were employed at the facility, and production had increased to 900 tons per day, with annual sales of nearly \$100 million. ASI started a second shift in late 2004, adding another 40 employees during the seasonal decline in utility costs, bringing the total number of employees thus far to 240. The company anticipates sustained growth in employment and sales to continue over the next few years.

Project Investment and Financing. Thus far, ASI has invested \$25 million in the acquisition, remediation, and redevelopment of the former Laclede Steel brownfield property, including 400 acres with 1.8 million square feet of structures. Phase I environmental assessments cost ASI under \$30,000. Phase II environmental assessments are currently underway, and the City of Alton has agreed to provide financial assistance toward the Phase II assessments. The City of Alton has provided \$30,000 in property-generated TIF funds for groundwater monitoring, and in November 2004, Alton coordinated with the county to make \$250,000 available in Community Development Block Grant (CDBG) funds. These funds will include a low-interest loan from the county and a grant from the city to apply towards environmental assessment. In addition, the city has unsuccessfully applied twice for a U.S. EPA Brownfield Grant, which would have included \$350,000 for site assessment, \$200,000 for clean-up and remediation, and \$1 million in revolving loan funds for the brownfield site. The city is considering submitting a third application. In 2004, ASI was awarded a \$225,000 Opportunity Returns workforce training grant through the Employer Training Investment Program administered by the Department of Commerce and Economic Opportunity (DCEO).

The City of Alton, area taxing districts, and ASI produced a property tax relief agreement resolving unpaid real estate taxes owed by Laclede Steel for the years 1998 to 2002. ASI is not legally responsible for the delinquent taxes, but the company sought resolution in order to avoid possible tax lien claims against the property in the future. In fall 2003, the Madison County Board of Review agreed to lower the assessed market value of the property from \$12 million to \$2 million for tax year 2003. The City of Alton and area taxing districts negotiated an agreement with ASI to make the lower assessment effective retroactively to the 1999 tax year. ASI promptly remitted the amount of the reduced delinquent taxes once the agreement was reached.

Although the Laclede Steel property is located within a TIF district, the City of Alton will most likely not realize increment because of the recently approved lower assessment value. When the TIF was established in 1994, the Laclede Steel property was assessed at a significantly higher value, thus, real improvements on the property will probably not be substantial enough to produce an increment.

Redevelopment Status and Outcomes. ASI has concentrated production on value-added products and niche markets due to market studies that indicated unmet demand for special quality bar steel. In addition, the special quality bar division of the Laclede Steel plant had realized profits until production ceased. Reflecting their dedication to quality and efficiency, the company recently achieved QS-9000 quality standard certification within nine months from the start of operations and within six months of actual steel production. On average, QS-9000 certification takes 18 months for a company to achieve. This certification allows ASI to sell products to higher-grade customers, including those in the automobile industry.

Prior to founding ASI, the company CEO had had years of experience in management and consultation in the steel industry. As co-founder of Bluff City Steel in Memphis, Tennessee, he implemented a cost-accounting strategy at the mill that minimized raw material and product inventory. The same practice has been adopted at ASI. After less than a year of production, demand for the company's specialized steel products exceeds supply and continues to grow. Although ASI expects significant expansion and plant upgrades in the future, the company realizes the importance of sensible growth and management practices. They have constructed a well-defined business strategy, developed and maintained sound operational practices, embraced an impressive company culture, and established a practical organizational structure. ASI currently occupies 170 acres of the brownfield property, and parcels of the property are leased by other businesses, some of which serve complementary roles to the steel mill. These businesses include Mullins Salvage, Azcon Corporation, and Stein Steel Mill Services. Additional tenants include Riverbend Contractors, D&R Machine, Celsius Motorworks, C&C Construction Co., Inc., and the Armed Forces Museum. The eight tenants currently employ a total of 101 people. The ongoing success of the Laclede Steel redevelopment project has been the result of the ingenuity and commitment of the owners of ASI. Because of the recent collaborative efforts between ASI and the City of Alton, economic regeneration on the massive brownfield property—once seen as an environmental nightmare—will have a positive effect on the community.

The continuing success of the Owens-Illinois Glass and Laclede Steel brownfield site remediation and renovation projects has been the result of several underlying factors.

Utilization of Various Financing Mechanisms. Although it was evident that the City of Alton lacked the funds to underwrite the project, city officials were diligent in their efforts toward procuring capital for the renovation and redevelopment process. This is evident in their utilization of a TIF district, the EZ, and various government grants to support various elements of the development. The TIF district, originally created for the Alton Center Business Park project, has developed into an impressive revenue generator for the city, bringing in over \$3 million in tax and interest revenues during the first half of its 23-year life span. These TIF funds have enabled the City of Alton to finance a range of city development and improvement projects involving highways, buildings, and water and sewer infrastructure.

The city and county governments developed an agreement with ASI to retroactively lower the assessed valuation of the property for the time period in which the former Laclede Steel owners failed to pay property taxes. Although ASI was not liable for any delinquent taxes incurred by Laclede Steel, they agreed to pay the lowered tax settlement amount in order to avoid any possible tax lien claims in the future.

Commitment and Collaboration. From the onset, city officials recognized the economic impact that a project of this magnitude represented to the City of Alton and its surrounding communities. The mayor, the director of business and economic development, as well as other city officials were steadfast in their commitment to the project. Another key element to the notable level of achievement with the Alton Center Business Park project was the collaborative approach of city officials, the private sector, and government entities.

The ASI redevelopment project has been defined by the private investors and the local steelworkers union working together with the common goal of creating a viable company for the benefit of the community. When faced with seemingly insurmountable environmental issues, ASI successfully

negotiated a plan with the U.S. EPA to extend the remediation process over a mutually agreeable period of time. In addition to the assistance received from experienced legal representation and counsel, support from the city and state government will most likely prove to be vital component to the success of the Laclede Steel brownfield project.

Brownfield Redevelopment as Part of Overall City Plan. Additionally, the OIG brownfield project was not seen as a single entity but, rather, as part of an overall city plan for economic renewal. The Hunterstown revitalization plan, involving federally designated “Weed & Seed” neighborhoods, and the Marina Riverfront master plan, aimed at the development of the riverfront for commercial, recreation, and tourism purposes, are also part of the City of Alton’s community renewal efforts. Due to its close proximity to the business park property, the Laclede Steel brownfield project ties in well with the Alton Center Business Park. The extensive Indiana Avenue road construction project will be beneficial for both properties, opening up a considerable region for sustained commercial development.

Conclusions

As the recipient of two brownfield awards for the Alton Center Business Park project—the Phoenix Award presented by the EPA for environmental remediation efforts and the Illinois Tomorrow Award for “outstanding balanced growth initiatives”—the city has demonstrated the ability to overcome common obstacles to brownfield redevelopment. Although the city itself did not have sufficient funds to finance the Owens-Illinois Glass project, alternative methods of funding were utilized such as the TIF district, EZ, and government grants. The issue of environmental liability was perhaps one of the most daunting concerns faced by the parties involved in the redevelopment plan; however, after careful negotiations and acquisition of liability insurance, the project could move forward. Although property ownership is often a frequent reason for nonparticipation in brownfield redevelopment, the City of Alton was fortunate in that a purchasing agreement was achieved between Owens-Illinois Glass and Clark Properties so that property ownership was never a concern for the city itself.

In addition, the city was fortunate to attract private investors for the Laclede Steel site without any city incentives. The remediation and redevelopment of the Laclede Steel site represents major progress in the City of Alton’s renewal plans. Not only does the redevelopment of the 400-acre site eliminate the city’s largest eyesore, the current and future job creation and investment resulting from the redevelopment of the site represents a major benefit to the local economy.

Although the Owens-Illinois Glass and Laclede Steel redevelopment projects have already proven to be successful, the full potential of each of the projects has yet to be realized. The City of Alton has made great progress in the areas of economic and social revitalization of their community, and brownfield redevelopment will most likely continue to be a crucial element in the overall plan for community renewal.

Sterling, Illinois⁴

Sterling (pop. 15,596, Whiteside County), a rural agricultural community in northwestern Illinois, experienced a major brownfield issue when the Northwestern Steel and Wire (NWS&W) Company closed a manufacturing plant situated on more than 750 acres along the Rock River. At its peak, this

⁴ The authors thank Jay Wieland, City Manager of Sterling, for providing most of the information on which this section is based. The authors assume full responsibility for errors of fact or interpretation.

plant employed nearly 5,000 workers, but at its closing, it employed approximately 1,400 workers with an annual payroll of \$66.6 million. The company declared bankruptcy in December of 2000 and ceased all operations in May of 2001.

The impact on the Sterling-Rock Falls area was substantial because more than 9,000 retirees living in the area lost their pensions and health insurance benefits. In addition to the direct loss of employment and payroll, an additional 600 workers were employed by subcontractors of NWS&W. The overall effect was devastating, but city officials, working with nonprofits and governmental agencies, were able to manage the abandoned property, reverse the downturn, and sell some of the properties to start-up businesses.

City officials, with help from legal counsel, petitioned to join the bankruptcy proceedings as an interested party because the city obviously had a major stake in what happened to the properties. By working with the bankruptcy court, the city was able to have input into court decisions regarding the most suitable uses of the properties and the timing of the sales. The city also was able to play a major role in marketing the properties and otherwise assisting in the property dispersal management processes.

The City of Sterling created the Rock River Development Area that included the property formerly occupied by NWS&W. The local management group within the city developed working relationships with several local economic development agencies such as the Greater Sterling Development Corporation (GSDC), the Illinois Department of Commerce and Economic Opportunity (DCEO), and private development groups. These working relationships and their support were influential in the accomplishments to date on the brownfield property.

City officials also contacted the IEPA Office of Brownfields Remediation, to identify programs available in the areas of site assessment and remediation, as well as to obtain assistance for redevelopment. They obtained funds for a Phase I assessment to determine if properties should be enrolled in the Illinois Site Remediation Program, and also obtained grant assistance to conduct Phase II assessments to determine the extent of remediation needed on each property that they were interested in initially marketing.

The city obtained grants from the IEPA amounting to \$340,000, which included a joint U.S. EPA-IEPA pass-through grant and Environmental Site Assessments valued at \$180,000. In addition, through the Brownfields Economic Redevelopment program, the U.S. EPA awarded another \$1.2 million in grant funds to the City of Sterling, which included two grants—one totaling \$400,000 to conduct assessments on contaminated areas within the former NWS&W site, and a second grant totaling \$800,000 in revolving loan funds to finance on-site clean-up efforts.

Due to the magnitude of the project, the city had to leverage local funds, and, through much local cooperation and community support, it was successful in its efforts. Because of the contacts during the early phases, a momentum was created that moved the project along more quickly than otherwise might have happened. The fact that the properties were being dealt with, and, in some instances, sold, impressed upon residents and potential investors alike that the city was serious and that the properties had value.

Initially, the brownfield property was organized into 16 sites to make the properties easier to market to private investors and for the city to manage. Each site had special assets or location factors of interest to specific investors; and the group managing the brownfield property aggressively marketed

the sites to potential buyers using several approaches such as identifying companies with former connections to NWS&W. Because the city had several priority sites to redevelop early in the program, these sites were the focus of attention in marketing and other initiatives.

In addition, the City of Sterling committed TIF revenues, city general operating revenues, and staff time or in-kind services as local match for these various project initiatives. The intent was to secure NFR letters so that potential buyers of the property were assured of no further liability for clean-up, which, in turn, increased the marketability of the properties.

The city took an uncommon approach in securing TIF revenues for the project. Because Sterling Steel is the largest investor and key to the redevelopment of the properties, the city created an arrangement in which the main investor in Sterling Steel issued the TIF bonds with a letter of credit to cover the good faith protection of the bonds. Increments received above the necessary bond payments are split 75/25 between the private investor and the city. This approach is relatively innovative and works to the advantage of the investor as well as the city since it virtually limits the risk to all parties. There is clear evidence of public-private cooperation throughout this redevelopment project.

Description of Property

The former NWS&W property included several steel manufacturing operations with slag deposits and other contaminated areas, along with buildings with specialized functions such as furnaces, overhead cranes, scales, and areas with access to nearly 30 miles of rail lines. The sheer size of the property and its specialized nature meant that the most reasonable approach was to subdivide the parcels and market them separately to interested buyers.

The process in Sterling is somewhat unusual in that each property had special characteristics or structures that could be marketed to target groups. City officials worked to market the properties in such a way as to have the most positive impact on Sterling's economic revitalization. That approach worked well and has yielded substantial employment increases in a relatively short period of time. Thus far, nine businesses have been attracted, some of which are linked to Sterling Steel's operations.

Each of the major businesses that started is described briefly below. For confidentiality reasons, only general estimates of the employment increases are presented; whereas, more precise numbers are included in the final calculations of the overall employment effects. The city did not purchase the property for resale; rather, it worked with incoming businesses to finance the sale of the property from the bankruptcy court. One distinct advantage of this approach is that the property remains on the tax rolls.

Sterling Steel Company. A major customer of NWS&W was contacted about purchasing part of the site (approximately 250 acres) to produce billets and rods for its nationwide operations. Sterling Steel Company, LLC, was formed and now has more than 200 permanent full-time jobs at \$15 to \$17 per hour, with an investment of more than \$35 million, including property purchase and on-site improvements. The main attraction for Sterling Steel was the presence of an operating blast furnace on a portion of the property and a trained labor force that was adaptable to their intended operations.

Expectations are that the company will invest approximately 10 percent (\$3 million to \$4 million per year) for capital during the next two to four years. These investments will increase plant productivity, which will translate into higher output but not necessarily large employment increases. The

estimated increase in assessed valuation was \$6 million. Sterling Steel is especially suited because it makes effective use of a large portion of the brownfield site and provided a substantial increase in employment, using a readily available skilled workforce.

In addition, Sterling Steel is an anchor or stimulus for other businesses as suppliers. These businesses are described in detail below. Not all of their business is linked to Sterling Steel, but the company is a major customer for them.

Azcon Recycling. The large amount of iron left on the site following the NWS&W closure allowed an opportunity for a company to start a recycling business and that is what Azcon does. This company recycles the iron as well as steel from other sources and is the primary scrap provider for Sterling Steel. The company is located on 50 acres of the brownfield site and has invested as much as \$6 million on upgrading the rail line, refurbishing the facility, setting up a scale operation, reinstalling radiation detection equipment, and generally cleaning up the site. No state and/or federal investment was involved. Azcon employs approximately 20 full-time employees and 10 temporary workers at between \$13 and \$15 per hour.

Because Azcon Recycling supplies Sterling Steel, its growth depends heavily on the growth of Sterling Steel. Current estimates are that employment will increase marginally over the next several years, but the company expects to invest \$500,000 to \$750,000 during the next two years, depending on the growth of Sterling Steel and other market conditions. In addition, the company expects to spend an additional \$250,000 on related equipment and site facilities.

Stein Slag Recycling. Another supplier for Sterling Steel processes the mill slag. This company uses approximately 50 acres of the brownfield property and has spent approximately \$1 million refurbishing rail access, setting up sidings, and making other improvements. No local, state, or federal investment was involved. The company created approximately 10 full-time jobs, paying approximately \$15.00 per hour.

At this time, no substantial employment growth is expected in the near future, but the company expects to invest between \$250,000 and \$300,000 in operations during the next 36 months. An additional \$150,000 to \$200,000 in capital may be spent on scrubbers and other environmental facilities activities. A side benefit of the Stein Slag Recycling operation is that it is a heavy user of rail cars, which expands market opportunities for the Union Pacific Railroad—a key asset for this property.

MATX. A short-term company was started to purchase and recycle slag previously stored on the site. It used 40 acres of the brownfield site and represented an investment of \$1 million in scales and other activities, with a local investment of approximately \$50,000 in the form of grants and low-interest loans. Four full-time jobs were created, paying approximately \$12 per hour. After MATX ceased operations, the property was sold to Sterling Industrial Park, LLC.

Young Enterprises, LLC. Seventy acres of the brownfield site are occupied by a distribution operation of Young Enterprises, LLC. The business represents a \$2 million to \$3 million investment, plus the cost of the land purchase. The City of Sterling provided \$25,000 in support, and a state investment of \$40,000 was made to assist with Phase I and Phase II environmental assessments. The company has approximately 12 full-time employees at approximately \$15 per hour, plus six temporary jobs.

This operation provides substantial growth opportunities for warehousing because of its excellent access to rail services. Also important is the close proximity to the interstate highways—I-80 and

I-88—which provide easy access to Midwestern markets such as Chicago and St. Louis. The property also will be useful as WalMart expands its distribution operations in the area.

In addition, Young Enterprises expects to invest substantial amounts in infrastructure and refurbishing during the next several years. Also under consideration are efforts to create a green space along the Rock River, which will add substantially to the appearance of the city and the quality of life but will not create many jobs. This investment could be as much as \$1 million. Preliminary discussions are underway to create a large steel-making museum because NWS&W was the first “mini mill” steel operation in the Midwest. A museum could be a significant tourist attraction and would be strategically located with access to I-80 and I-88.

Young Enterprises expects to refurbish a building and add a freight rail car repair operation. This facility could create an additional 10 to 12 jobs in warehousing, plus approximately 50 jobs at \$12 to \$15 per hour in the rail car refurbishing facility. The rail car refurbishing facility could cost \$1 million, with additional costs of between \$1 million and \$1.5 million.

Rock River Lumber and Grain. A portion of the brownfield site contained storage facilities with rail access. A grain elevator operation in nearby Prophetstown, interested in expanding its market by exporting local grain to poultry-raising operations in the Southwest, purchased 102 acres of the brownfield site for a grain uploading facility, which would incorporate the rail access. One gain from this operation was an increase in the value of corn sold, and one estimate provided is that 5 cents per bushel was added to each bushel of corn purchased and sold by the company for a total of 14 million bushels of grain the first year or approximately \$700,000 of additional revenue in the local agricultural economy.

The Rock River Lumber and Grain Company (RRLGC) uses another portion of the property it purchased to transport lumber to the region by rail and then distribute it to various regional markets. Sterling is an excellent regional location for this type of operation, and the rail access is crucial. The site is also attractive as a trans-shipment point because of its access to Interstate 88, which connects Chicago and the Quad Cities and points beyond on Interstate 80.

The RRLGC invested approximately \$2.5 million in the property and structures, plus an estimated \$500,000 in rail improvements. State government support amounted to \$30,000 and the federal government invested an additional \$20,000. The company employs approximately five people at an average wage of \$14 per hour.

The estimated increase in assessed valuation is \$800,000, and the estimated increase in sales for the facility is \$13.2 million. Current plans are for a further investment of \$1 million or more in additional storage facilities and expansions in addition to a possible \$500,000 in rail improvements. Additionally, the company is planning to construct a retail/wholesale lumber outlet on the site. This project will consist of the construction of a number of new buildings and facilities, which will result in an additional capital investment of at least \$3 million.

Wilbert Vault Company. A company that produces and distributes cemetery vaults occupies approximately 20 acres of the brownfield property. The owners have invested \$.5 million on the purchase, clean-up, and refurbishing of the existing building. The city spent \$12,000, and the state investment was \$15,000 for Phase I and Phase II environmental assessments. An additional \$30,000 in public sector improvements is also expected. The company’s current operations employ 20 to 25 individuals.

Current plans are to relocate some Wilbert Vault Company's operations from another state to Sterling, which could involve a capital investment of from \$2 million to \$4 million and the creation of 10 to 15 additional jobs. The expected increase in assessed valuation is \$50,000.

Sterling Industrial Park. Casey Equipment Company purchased a portion of the former NWS&W property that included a structure that has rail running the entire length of the 900,000 square foot building. This building has been converted into a full-service industrial park aimed at manufacturing operations that might need a high-ceiling structure with half-ton crane capability. Capital investment to date has been \$6 million, including the purchase of the property. This project involves 100 acres of the brownfield property.

Thus far, Sterling Industrial Park has created as many as 10 jobs at approximately \$15 per hour; however, at full capacity, the industrial park could attract three to five companies, with possible job creation of up to 100 employees. Expectations are to invest an additional \$3 million during the next five years or so. Additional investment of more than \$300,000 for site clean-up and additional rail is also expected.

Weinstead Wood Products. Weinstead Wood Products recently purchased a 25-acre site. They will be relocating their wood processing and shipping products operation to the site from their current location in rural Whiteside County. The company anticipates investing over \$1 million in structures and new equipment. They anticipate increasing their workforce from 10 to 25 employees within two years. The company also intends to construct a retail facility on a portion of the property within the next three years. The capital investment anticipated from the retail operation will be in excess of \$1.5 million and will employ approximately 10 persons.

Mendota, Illinois⁵

Mendota (pop. 7,272, LaSalle County), has experienced an increase in population since its 1990 level of 7,018 but had experienced declines in manufacturing as did many other communities of its size during the past decade or so. A motor wheel factory of approximately 201,900 square feet, which produced cast metal automotive and tractor wheels and employed 300 workers at its peak, closed in 1996. The Mendota plant used sheet steel, coiled steel, and pre-punched steel discs as inputs in the wheel manufacturing process.

The property was originally owned by California Packing Company as a cannery but was sold to Goodyear Tire and Rubber in 1966. It was sold again to Motor Wheel Holdings, Inc. in 1986. In 1996, Motor Wheel Holdings, Inc. merged with Hayes Lemmerz International, Inc., which closed the plant. Thus, the property had a long history of varied manufacturing uses, resulting in a somewhat convoluted environmental history.

At closing, the plant employed between 250 and 300 workers. The auto industry was changing from steel to aluminum wheels and the owner (Hayes) had other plants able to produce aluminum wheels, and, relocated its production to those sites. Some clean-up had occurred in 1997 and 1998, but some equipment was still in place during the 2003 assessment process.

⁵ The authors thank Don Adams, Economic Development Director, City of Mendota, for providing much of the information used in this report. Any errors of fact or interpretation belong to the authors.

Hayes had a part-time caretaker monitor the property and heated it during the winter. The owner also used the property for storage, so the facility was not allowed to deteriorate substantially while it sat idle, though only minimal maintenance was performed after 1996. The city tried to market the property periodically during the eight years it was vacant but with no success. At the same time, the city developed an industrial park, which it also tried to market. Nevertheless, the property was an unpleasant reminder of a large employment loss and, being located in a central area of the city, became an eyesore in the community.

Since Mendota had other properties to market for industrial development, it was not until 2002 that local officials placed a top priority on remediating and redeveloping this brownfield property. One reason is that the physical structures had been maintained and were still suitable for use. Had they been allowed to deteriorate by the previous owners or had they been ignored by the city, the complex would have likely deteriorated beyond the point of renovation and become a major liability for the city. Local development officials had recognized this possibility and acted strategically to prevent it from happening.

One difficulty with marketing the former Motor Wheel Holdings, Inc. property was a lack of complete information about potential environmental issues. Earlier assessments had identified contamination, and some of these concerns were addressed. Later assessments in 1993 and 1999 showed that the environmental monitoring and maintenance systems were in order and that the risk of off-site contamination was low. During the assessment, soil samples had been tested and several monitoring wells had been installed that revealed contamination. In 2003, during the Phase I environmental assessment, additional contamination was identified. An NFR letter was needed to successfully market the site to potential buyers.

Economic Development Assets

Mendota has several competitive advantages for economic development, including easy access to I-39 (an increasingly popular logistics corridor running between Rockford and Bloomington) as well as relatively easy access to I-88 on the north (20 miles) and I-80 on the south (15 miles). The city is on the Burlington Northern San Francisco (BNSF) mainline, which offers excellent transportation opportunities as a trans-shipment point (highway and rail). In 2004, an intermodal facility was completed 30 miles north of Mendota and is expected to have a significant impact on development in the area during the next decade.

The fact that Mendota is approximately 75 miles from Chicago and considerably closer to the western suburbs, with daily passenger service, gives it excellent access to major markets for certain types of products. Thus, Mendota is in a strategic location for a producer that requires either highway access, rail access, or both. It also has had a history of successful manufacturing activities and has a high-quality workforce. In addition, the region, as a whole, has been in a labor surplus status for many years, keeping payroll costs below average.

Financial Tools

Successfully marketing a brownfield property is easier when city officials have the necessary financial tools to support business decisions. Two tools that have been especially effective in marketing

brownfields are EZ and TIF districts. EZs typically offer a variety of incentives such as exemptions from sales taxes on building materials and other items as well as tax credits for hiring employees. EZs allow cities to provide property tax rebates for businesses investing in a designated blighted area of the city. A TIF district is created in such a way that cities leverage the expected tax revenues generated by investments in the TIF district to finance improvements in the properties. Both of these tools are used by cities in competing for business investment and are considered essential in many cities.

Mendota has an EZ and several TIFs. In the case of the Motor Wheel Holdings, Inc. brownfield site, the city had created a targeted TIF district for this property to make additional funds available to work with a new investor. Prior to the sale, however, Hayes was able to obtain a significant decrease in property taxes on the grounds that the building was empty and unused, thereby giving it a lower value. The effect of this reduction in taxes was to reduce the existing property tax level to a figure low enough that any future redevelopment would not result in a revised assessment sufficiently high enough to generate a TIF revenue stream. Fortunately, however, the city was able to use funds from an adjoining central business district TIF for improvements on the brownfield site.

In 2002, the recently hired economic development director contacted the IEPA requesting a Phase I environmental assessment of the site with the understanding that the city would apply for a Phase II assessment ultimately leading to an NFR letter through the Voluntary Site Remediation Program (SRP). The properties were found to be contaminated with petroleum and hazardous waste. A process was then initiated to clean the property, an NFR letter was obtained, and the site was marketed.

The city obtained a Phase I assessment grant (signed on March 31, 2003), providing up to \$120,000 for a 12.85 acre industrial site plus two other parcels (.14 acres and .30 acres, respectively) that previously were an auto service station and an auto repair shop. The actual cost of the assessment was \$66,487, and when the assessment was conducted, the funds could not be used for clean-up as is now the case with the revised program. The Phase I environmental assessment was completed in October 2003. Mendota then paid approximately half of the cost (approximately \$42,000) of a Phase II assessment of the property.

The way in which the Phase II costs are shared is relatively innovative. The city pays for costs specified in the agreement, but the city payments are based on the number of workers hired from Mendota. In essence, the incoming company receives nearly a \$5,000 credit for each person hired according to the stated conditions. So, the maximum value of the benefits would be reached by hiring eight to nine persons from Mendota, although the company is free to hire employees from other area municipalities as well. The city considered this requirement a way to ensure some level of local employment without unduly restricting the company's hiring options. While the city had initially worked to help it benefit from State of Illinois incentives through its EDGE program, the company elected to forego this opportunity in order to move forward on the Mendota site as quickly as possible—perhaps in testament to the city's prospective recruitment capabilities.

The company, Fagerdala World Foams, purchased the brownfield site in November 2003 with plans to open the plant in spring 2004. This sale came after the city had negotiated with several other potential buyers interested in the property on a speculative basis. The city had offered much more in the way of incentives in those instances, so it was fortunate when the conditions of the sale were reached.

Fagerdala also has a plant in Rantoul, Illinois, and produces a variety of foam and plastic products. The company has operations in 13 countries, and the Mendota operation will be its fifth U.S. plant. It recently sold its Tempur™ division, that made the well-known “memory” foam used in mattresses.

The company chose the Mendota building for several reasons, including size, transportation access, and location. Its stated intention is to make the site both a manufacturing location and a distribution center, which means highway access is especially attractive. In a press release announcing the purchase, the company manager indicated that the plant will run 3 shifts, 24 hours per day, five days a week.

An especially attractive feature for the region is that Fagerdala World Foams is the fourth company in the area that manufactures products from plastic and, thus, will help the area form a plastics industry cluster. Diversifoam, Plano Molding, and Advanced Drainage Systems are also located in the region. This concentration of plastics manufacturing companies could help attract other plastics companies and industry suppliers to the area, and Mendota wants to participate in this type of regional economic development.

Fagerdala is expected to produce three product lines. The first is polystyrene foam, which is environmentally friendly and recyclable. It is used in the manufacture of insulation and for cushioning uses such as in bicycle helmets.

The second product is a specialty resin used in the automotive industry in plastic body parts of vehicles. The product is lighter in weight, can withstand higher temperatures, and is less expensive than its competitors. Thus, it is positioned well in the market and offers opportunities for growth. Given the large automobile manufacturing plants in Belvidere and Bloomington, there seems to be a potential market for this product. A relatively small production unit that manufactured this product was purchased from a company in Peru, Illinois, and will be relocated to Mendota.

The third product line is an architectural concrete and plastic mixture used for architectural detail and trim on buildings. Mendota will be the first production plant for this product in the U.S., although the product has been marketed successfully in Europe. This market will have to be developed in the U.S., but Fagerdala is optimistic regarding the product’s potential in this country.

The plant is expected to open in early 2005, but until then, Fagerdala has rented a portion of the building (approximately 90,000 square feet) to Del Monte, which expects to expand its processing operations in Mendota. Ultimately, the building may be used for warehousing by Fagerdala when it reaches full operation.

Fagerdala paid approximately \$750,000 for the building and invested about \$1 million in renovation for a total of \$1.75 million. Additional expenditures of \$50,000 to \$100,000 are expected in the future for exterior improvements. Expectations are that the company will start operations with approximately 25 employees (management and staff) at an average annual salary of \$26,000. With expected growth, the employment could increase to as many as 40 employees, utilizing 110,000 square feet initially. With an additional 90,000 square feet expansion possible, future employment could be double that number or more, depending on product line growth. Twenty temporary construction jobs also were created.

While the number of employees hired initially by Fagerdala may not match the number employed by Motor Wheel Holdings, Inc. in the past, they represent a serious private investment in the

Mendota economy and one which is expected to increase in the future as the business grows. Moreover, and perhaps most importantly, the city avoided the increasingly likely possibility that the site would deteriorate to the point where a costly demolition would be required before any redevelopment could occur.

When the plant operates at capacity, the city expects an increase in assessed valuation of between \$300,000 and \$400,000. As noted previously, the actual city investment will be a relatively low \$42,000, assuming Fagerdala hires a sufficient number of Mendota residents to receive the full incentive. The state investment was through the assessment grant.

Other Brownfield Projects

Two other brownfield projects are underway in Mendota. One is a former gasoline station and restaurant facility. This property had a Phase I assessment and is currently enrolled in the SRP. The tanks are still in the ground, and the best use of the property and ways to proceed are currently being determined by local officials and consultants. The property is in a strategic location with highway access, should be marketable when fully remediated, and is part of an organized development plan within the city. The second property is a former car dealership and repair facility. Phase I and

Phase II assessments found no tanks or serious contamination on this property. It is now suitable for development and currently has an ice cream shop that employs six people, with other space ready for development as opportunities arise.

With the success of the Motor Wheel Holdings, Inc. brownfield redevelopment and plans in place for the other sites, Mendota anticipates enrolling at least three additional sites in the IEPA Brownfields Grant program in early 2005.

Summary

Mendota had a positive experience with the brownfield remediation program, ultimately leading to the productive use of a large manufacturing facility that otherwise could have become a major liability. While the city also has a large industrial park available, the economic development director placed a higher priority on remediating and redeveloping the former Motor Wheel Holdings Inc. site. This strategy proved to be successful within a relatively short time frame. The addition of Fagerdala, a company with growth potential that seems especially suited to the region, given the plastics businesses that are already in place, should position the area to attract other businesses.

Also important to recognize is the way in which the city financed the remediation process. First, the city invested relatively little in the development process—approximately \$42,000 for the Phase II environmental assessment plus an in-kind match of labor provided to manage the process. Second, in order to fully access the city-provided funding, the private investor must hire a certain number of employees from Mendota, maximizing the impact on the local economy. City officials considered this local employment linkage to incentives a successful “pilot program” and will incorporate a similar strategy in future incentive negotiations.

Third, local economic development officials took serious care in helping to manage the sale of the property by recommending the City Council decline a developer’s proposal for speculative purposes

and by working with potential buyers to arrange a productive use of the property. Discussions with the local development leaders indicated that the brownfield remediation program played an important role in converting what could have been a major liability into a productive economic development asset.

Harrisburg, Illinois⁶

Harrisburg (pop. 9,318, Saline County) is located in southeastern Illinois. An area historically supported by coal mining, this part of Illinois has suffered from long-term population and economic declines or stagnation. Harrisburg has experienced a lack of high-paying jobs in the region, above-average unemployment, and erosions of the downtowns of many communities.

Declining tax bases and related economic difficulties have caused community and regional planners to make economic revitalization a high priority. The redevelopment and marketing of brownfield properties within Harrisburg using a Brownfields Redevelopment Grant from IEPA has helped achieve that goal and illustrates how collaboration between a municipality and the IEPA can lead to a successful rehabilitation effort.

The City of Harrisburg had purchased the Southern Railroad Corporation's train service yard and right of way in 1993 for approximately \$150,000. The city obtained more than 60 acres, with an additional right of way along 22 miles of track. A portion of the land outside of the city limits was transferred to the State of Illinois in exchange for in-kind services such as blacktopping of streets.

In 1997, the city divided the brownfield property into four distinct parcels—Properties A, B, C, and D. Property A was not contaminated and therefore was not entered in the SRP. A total of \$640,000 was used to redevelop Properties B, C, and D, with \$340,000 from an EDA grant and an additional \$100,000 from USDA-Rural Development. The remainder was funded locally from a TIF district that started in 1994 and expires in March 2013.

The city then sold multiple lots on Property A that were developed into several service businesses, including a daycare facility, a University of Illinois Extension office, a Social Security office, a T-shirt retail shop, an insurance company, a doctor's office, a dentist's office, and a banquet hall, with one lot left for future development. Since Property A had no contamination and has been fully developed, Properties B, C, and D became the focus of the brownfield remediation program.

The city had purchased the properties without full knowledge of the extent of contamination, if any, and understood that redevelopment required site assessments. In 1997, municipal officials enrolled Properties B, C, and D in the IEPA SRP. Because of the expected costs associated with remediation and redevelopment, the city decided to approach the brownfield properties in several phases.

The expected costs of Phase I and Phase II site assessments on Properties B and C caused city officials to apply for a Brownfields Redevelopment Grant to assist in the assessment process. An IEPA grant of \$39,706 for Property B and C was received on November 17, 1999, and required a 30 percent local match that was met by in-kind services, including time spent by administrators and municipal employees as well as the use of city equipment.

⁶ The authors thank Bob Holmes and Bill Watson for providing most of the information on which this discussion is based. The authors assume full responsibility for any errors of fact or interpretation of the data.

Brownfield Remediation and Redevelopment

Properties B, C, and D are the main focus of current municipal redevelopment efforts. Property B is approximately 19 acres. Property C is approximately five acres, and Property D is 16 acres. These lots were intended to attract retail and light manufacturing after remediation. The properties are attractive for several reasons, including an expected by-pass (within a few blocks) that will provide access to major highways.

Properties B and C. The city started with Properties B and C, which it packaged as one parcel. To afford the rising cost of preparing the properties for development, Harrisburg and the Southeastern Illinois Regional Planning and Development Council (SIRP&DC) applied for a grant from the Economic Development Administration (EDA). The city received a grant of \$340,000 to cover the costs of basic infrastructure improvements, including utilities, to make the property and surrounding area development ready.

The allocated EDA funds allocated could not be spent until an NFR letter had been issued, however. Due to an approaching deadline on the EDA grant, the city applied to IEPA for an assessment grant. Relatively little contamination was found, but some encapsulation and soil replacement was required. An NFR letter was issued by IEPA for Properties B and C in 2000.

Substantial concerns were raised regarding the impact of the development on the municipal sewage treatment facility. Harrisburg's wastewater treatment facility was near maximum treatment capacity and, at one time, the community had a moratorium on expansions so as not to further strain the local facilities. Thus, to proceed with the development of an industrial park on Properties B and C, Harrisburg had to improve and expand the wastewater treatment facility. The required wastewater treatment upgrade would cost approximately \$3 million but would also accommodate further growth in the city should economic development cause further population or business expansion.

The remediation work was completed, and a light manufacturing business was the first to locate on this site. This business started building wall framing for homes and businesses in the St. Louis area and now markets its products to subdivisions in the Paducah, Kentucky area.

The same area is strategically located for retail because of the high traffic. The city sold two lots to a private developer to build a dialysis treatment center with an option to purchase a third lot for expansion later. The city also sold a lot to a restaurant and an additional lot to an insurance agency. The lot sizes in Properties B and C are flexible, with the city able to market sites from one-half acre to five or six acres on request. The city will sell the remaining lots with prices varying according to the number of jobs created and the location of the property.

Property D. After digging at three feet and six feet levels, Property D was found to be contaminated throughout, and all 16 acres were encapsulated with three feet of top soil. All of these costs were paid by the city because, prior to the revised brownfield program, they were not covered. Although an NFR letter was obtained on Property D in October 2003, the city is concentrating on marketing and redeveloping Properties B and C first as Property D will require major infrastructure improvements prior to development such as water and sewer extensions as well as street paving and so forth.

In the future, the city plans to apply for additional grants for infrastructure development on Property D. TIF revenues have been used to fund improvements such as sidewalks and walking paths in the

area. Recently, developers have expressed interest in Property D, including an 11-acre lot for a small factory, but no transactions have taken place thus far.

While the brownfield properties are in a TIF district, they are not in either an EZ or an Empowerment Zone, and local development officials see this as a disadvantage. In two instances, prospective clients, including agencies involved with rural health and agriculture, selected another city that was able to provide property tax abatements because it had an EZ or an Empowerment Zone.

The Brownfields Assistance Grant played a significant role in helping the city assess the extent of contamination on the sites so that the property could be remediated and an NFR letter could be issued. The EDA would not release funds for infrastructure improvements—measures necessary to market the properties to potential developers—until both Properties A and B had received NFR letters from IEPA.

Because the intended end result was an industrial park rather than a use more sensitive to contaminants such as a residential development, the acceptable solutions are different. Continual testing of the property was necessary due to the movement of the soil on the property during the grading and leveling operations. Thus, the extent of the testing made the process even more expensive and, therefore, the project required additional grant funds.

The overall costs of the remediation process in Harrisburg were not small for this size of city. In approximate terms, the purchase price of the property, including the brownfield property, was \$150,000. The bid for installing the water, sewer, and 1,000 feet of roadway was approximately \$407,000, partially covered by an EDA grant.

Businesses and Employment

Several businesses have located on Properties B and C, and each is described briefly below. The local government investment totaled \$110,000, with a state investment of \$65,000 and a federal investment of \$375,000.

Greystone Group. The wall framing company made a private investment of approximately \$75,000 and has created eight jobs ranging from \$20,000 to \$24,000 per year. This company has accessed new markets and is currently developing subdivisions in Paducah, Kentucky, with the potential for future expansion.

F.M.C. Saline County. The dialysis center represents a private investment of \$1.2 million and created 15 jobs with an average salary of \$35,000. The extensive complex allows for a large number of patients to be treated per day. Because other medical services are required by the patients receiving dialysis treatment, the local hospital and medical practices have experienced an increase in clientele. Medical procedures often take hours and families of the patients will often patronize local businesses. Because the dialysis center is located in the community's major retail business district, local retail businesses have benefited from the increase in customer traffic; thus, bringing in additional revenues to Harrisburg.

Restaurant. Nancy's Restaurant is currently under construction, with private investment expected to total approximately \$.5 million. Employment is estimated at 40 people, with an average wage of about \$16,000 per year. The restaurant is expected to be completed by the third quarter of 2005.

Insurance Agency. An investor paid \$15,000 for land and invested approximately \$40,000 to \$50,000 for construction of a Country Companies Insurance Agency. Currently, three people are employed at the agency.

The assessed valuation of Property B and C has increased by approximately \$650,000. Thus far, TIF revenues resulting from the increases in assessed valuation have been minimal since redevelopment has just begun on the property; however, significant future TIF revenues are expected.

While property D has only recently been remediated, the city has spent approximately \$116,671 in assessment, remediation, demolition, and excavation. As noted earlier, the properties are currently being marketed, with initial interest already being shown.

Summary

This project shows that IEPA brownfield programs can succeed in even relatively small communities if several factors are at work. First, the city was committed to the project because rural communities in the region have struggled to compete with larger metropolitan communities for revenues. As large manufacturing enterprises relocated out of the region, revenues to finance public services had to be replaced by growth in other businesses.

Second, the city government made effective use of TIF-generated funds that were available to improve the properties. These funds permitted the purchase of the railroad property, which, in many ways, started the development process and allowed Harrisburg to formulate plans for the industrial park.

Third, the city participated in a land trade with the county and was able to obtain financial assistance from a variety of external sources, including the EDA, Illinois First, IEPA, and other sources. These funds were essential to the financial viability of the project.

The Brownfields Redevelopment Grant from IEPA, while a relatively small portion of the overall project, was especially important in the success and overall completion of this project because it allowed the city to meet the deadline for an EDA capital grant that required an NFR letter. Without this grant, the wastewater treatment system could not have been expanded to meet local development needs.

The property has been completely remediated and is ready for redevelopment. Property A—the uncontaminated portion of the property—is completely occupied with businesses. Properties B and C are moving ahead with a mix of retail and light manufacturing businesses. Property D has been through the remediation process but has yet to be developed. Parcels are being sold, and the city plans to construct streets and install other infrastructure. Water/sewer and roads will be accessible on site, and access to major highways will also be available.

Recreation-Riverfront Development

East Peoria, Illinois⁷

East Peoria (pop. 22,638, Tazwell County), located along the Illinois River, has long been home to several major manufacturing industries. As these industries have downsized or relocated over time, the city has proactively acquired strategic parcels or partnered with local corporations such as Caterpillar Inc. to implement innovative approaches to remediation and redevelopment. Of special importance are the efforts to revitalize the local economy with industries better suited for the new technology-driven economy. Current and proposed remediation efforts are clearly building on local assets and are dramatically improving both the quality of life for residents as well as employment opportunities in the city.

East Peoria's efforts are just some of several in the Peoria area that look to build on local assets and institutions in order to revitalize the economy and prepare it for the future. The overall initiative seeks to create links throughout the metropolitan area to develop a major regional concentration with a focus on technology transfer, biomedical, nanotechnology, and healthcare initiatives. This regional approach seeks to build on the major research and development efforts occurring in the Greater Peoria area.

Peoria NEXT (www.peorianext.org/index.php), for instance, seeks to change the economic base from largely heavy industry to innovative businesses, with a focus on technology, medical and health care, light manufacturing, and biomedical operations. In 2001, several institutions, including the Economic Development Council for Central Illinois, the University of Illinois School of Medicine at Peoria, Bradley University, the USDA National Center for Agricultural Utilization and Research (NCAUR), Caterpillar, area hospitals, and other large employers formed an initiative to increase the number of new start-up businesses based on research and technology.

This regional collaboration allows East Peoria to capitalize on and advance existing assets. One of its primary assets is Caterpillar Inc., which started in East Peoria and continues to have a strong presence in the community. Where Caterpillar Inc. once had industrial facilities on nearly 85 acres, today, a partnership among Caterpillar, the city and community and business leaders is creating the Peoria Area Technology Park. This prime urban location is the largest parcel of developable land within the Peoria Urbanized Area. A new road through the site, Technology Boulevard, will offer walkable connections to the riverfront and to a hotel and conference center. The adjacent Michel Bridge links East Peoria and Peoria's urban centers and, along with nearby Interstate 74, provides access in five minutes to Bradley University, USDA-NCAUR, and Peoria's business incubator.

The incubator is, itself, undergoing a transformation by spinning off new businesses built on the latest technologies to generate new products, some of which will be used by Caterpillar in the future. East Peoria is an attractive location and, because of the strong tie to Caterpillar as a major potential customer, these companies will have an inherent interest in remaining in the area.

East Peoria's second asset is its location along the Illinois River with connection to Peoria by four major bridges. With this access, East Peoria has been able to capitalize on recreational and

⁷ The authors thank City of East Peoria officials for providing much of the data on which this section is based. The authors assume full responsibility for any errors of fact or interpretation.

commercial development opportunities. Two major waterfront attractions in East Peoria are the Par-A-Dice Hotel Casino and a very successful mixed-use marina that was a former brownfield site. More recently, the city has been strategically acquiring riverfront property in order to guide redevelopment along its riverfront with a privately owned Embassy Suites Hotel and publicly owned conference center, which together are estimated to cost \$53 million. By redeveloping brownfield properties, the city has been able to create mixed-use residential and commercial developments.

A third asset is the positive attitude of cooperation exhibited by Caterpillar Inc. in its willingness to work with the city on redevelopment. A few examples are the Caterpillar Foundation's donation of land for Technology Boulevard and an associated right-of-way, its donation of land for a planned Caterpillar Heritage Center project initiated by the city, and its agreement to designate company representatives to serve on committees and boards that will provide oversight on implementation of the redevelopment process.

East Peoria is effectively building on its assets as it engages in several major brownfield endeavors. This report examines the processes involved with three major brownfield properties, which were redeveloped into a shopping center (45 acres), a mixed-use residential/commercial/marina complex (26 acres), and a planned technology park (85 acres).

It is important to understand that these brownfield remediation and redevelopment projects are part of a comprehensive revitalization program in East Peoria that involves much of the downtown and riverfront areas. This illustrates one of the findings of earlier surveys and case studies—namely, that the most successful brownfield projects have been integrated into the overall economic development strategy of the municipality. This makes sense because by reason of the integration, the projects receive more focused attention and the resources necessary to make them succeed.

Brownfield Projects

In the 1950s, several Caterpillar factories and other related manufacturers collectively employed as many as 20,000 workers in East Peoria. As Caterpillar and other manufacturing firms consolidated operations and/or moved some operations out of state, several large facilities became idle, and by 2003, East Peoria had only about 6,000 persons employed in manufacturing. Because of the previous uses and manufacturing processes, some of these sites were contaminated.

Riverside Center. This development is located on the site of the former Wallace Power Station, a coal-fired power generating plant once owned by Central Illinois Light Company. The former large plant's coal processing operations contaminated the approximately 68-acre site. While the exterior of Wallace Station still had appeal, the large interior, with its huge coal burning furnaces and large turbines, would have required such a large investment to make it usable that numerous attempts to market the site for alternative uses failed. Thus, Central Illinois Light Company, the owner, imploded the building in 1995. In 1997, an NFR letter was obtained, but the city did not buy the entire property. It only purchased Riverfront Park, which is located behind a portion of the property and along the river.

On the former brownfield site, a large, 700,000 square foot shopping complex was constructed consisting of nine building lots. This site is strategically located with easy access to Interstate 74 and frontage on the Illinois River. Opened in 2000, it currently houses a Wal-Mart Super Center, Office Max, Lowe's, Chili's Bar & Grill, Texas Roadhouse, Applebee's, Schlotzsky's Deli, Radio Shack, Fashion Bug, Smoothie King, and Ming Wok. Combined, the stores in the Riverside Center currently

employ approximately 1,000 workers but that number will increase with expansion and as additional stores are added to the shopping complex.

The city agreed to pay for infrastructure and land write-down costs for the center. In addition, East Peoria agreed to pay a portion of the costs up to \$7.4 million for the relocation of a substation.

Harbor Pointe/Eastport Marina Complex. A second brownfield property involved a former junkyard in a swampy area along the river. Fortunately for the City of East Peoria, relatively little contamination was found in the assessment process, so the remediation expenses were not substantial.

Given the location, this site was especially suitable for a mixed commercial and residential site for upscale housing units. It has river frontage and direct access to a publicly built and owned marina. The project, initiated in 1993 with the creation of TIF district, has 102 townhomes—72 with a river view and 30 with interior landscape views. These two- and three-bedroom units have as much as 2,600 square feet, with prices starting at more than \$200,000. The intended residents are empty nesters and young professionals. Close proximity to the marina makes these housing units especially attractive to water recreation enthusiasts.

A retail complex adjacent to the housing units includes several restaurants, offices, and convenience retail. The estimated cost of the Harbor Pointe project was \$45 million—approximately \$25 million for the private housing units and commercial shops and \$20 million for the public marina. Financing for the marina included \$5.165 million from the Illinois Department of Commerce and Economic Opportunity, approximately \$1.6 million annually from the TIF district, and gaming revenue to service the bond debt incurred by the city.

The way in which the Harbor Pointe Development was financed illustrates the advantage of a TIF district because the project did not require increases in current tax rates and made only limited use of gaming revenues. Other local taxing districts received 20 percent of the incremental increase in real property tax from day one. In 1993, the value of the site was only \$35,000, but today the value of the private development approaches \$29 million. Eighty percent of this incremental increase in the property taxes collected is utilized to pay for the public improvements made to the site such as remediation, fill, and necessary infrastructure.

The financial arrangement used by the city was to make a commitment of no less than \$19 million for public infrastructure improvements for the marina, laying the groundwork for the private investment. In turn, the developer had to agree to a construction plan that would generate \$29 million of valuation increases. In this way, the city was able to recoup its initial investment in the project.

Initially, the value of the commercial build-out and housing units did not reach the targeted value. With prodding by the city, private improvements were made so that the increase in assessed value is nearly on target. The city owned the land and sold it at a discounted price to the developer.

The Harbor Pointe Development created almost 100 temporary jobs during construction of the marina and site infrastructure, and it created 300 permanent jobs at the hotel, restaurants, offices, and retail shops on the site, although the main purpose of the redevelopment was not job creation. It, instead, was to provide public access to the riverfront for citizens, provide an upscale marina and residential housing units, and create permanent increases in the tax base. By developing an upscale housing area with river walks and related amenities, the area capitalized on a major asset

in East Peoria, namely, the Illinois River. It also appealed to its target audience—young couples and empty nesters. Today, the Harbor Pointe complex is complete and fully occupied.

Peoria Area Technology Park. The largest brownfield site in East Peoria is now owned by the Caterpillar Foundation, but was in use by Caterpillar Inc. until the early 1990s and not demolished until 1997. At its peak, thousands of employees assembled tractors and related equipment on the site, which had nearly two million square feet under roof on an approximately 85-acre site, including two parcels—65 acres and 15 acres, respectively—split by a road. The remediation and redevelopment of this site illustrates how an effective public-private partnership can be created to address a brownfield issue.

Planning for redevelopment started in 2000 with completion of an Opportunity Analysis that created a market-based vision for the site and an implementation schedule. An NFR letter was received in July 2004 on this property. The Peoria Area Technology Park is designed as a business accelerator location where start-up companies created within local businesses or growing out of the technology incubator in Peoria can relocate to establish permanent operations. Although the project is in its infancy, one business has already expressed interest in building a four- to five-story commercial building on the site, that the city hopes will house a technology transfer center. In addition, a portion of the property, known as the Caterpillar Heritage Center, has been designated as the campus site for displaying restored antique Caterpillar tractors and equipment.

Initial estimates of the job creation from the Technology Park site are 1,600 to 2,000 high-tech office jobs and 500 additional retail positions, growing the tax base an additional \$75 to \$100 million, and bolstering the economy with \$25 to \$35 million in additional gross retail sales annually (Vandewalle & Associates 2004). While the park is just in the beginning stages, there can be little question that if the project succeeds, the impact on the local and regional economies will be significant, especially when the local multiplicative effects are considered.

Overall, the Peoria Area Technology Park is a major undertaking, which requires substantial upfront infrastructure investments such as road, water and sewer. Both Illinois Governor Blagojevich and IDOT Secretary of State Tim Martin have declared that funding for the infrastructure is a priority. Infrastructure needs include a planned Technology Boulevard and Heritage Drive, which will provide access to the research, development, production, and commercial facilities that will create the jobs. The city is relying on a promised state investment through Opportunity Returns to help finance the infrastructure through the 68-acre site. Without this type of infrastructure investment, the location will not be as attractive for potential business investment.

Thus far through 2004, the Peoria Area Technology Park has had an estimated \$1.5 million investment from the public and private sectors. Caterpillar has spent approximately \$1.05 million in demolition, assessment, and excavation on the property. The IEPA provided assessment grants of \$240,000 to determine the extent of contamination and to implement redevelopment activities. The City of East Peoria spent nearly \$200,000 on related planning, engineering, and infrastructure development costs.

Another attraction of the property is that it is located in both a TIF district and an Enterprise Zone, each providing substantial incentives for private investment, especially new construction. For a relatively small public investment, this property has the potential to generate large increases in assessed valuation and substantial long-term increases in property tax revenues as well as provide a

substantial number of high-paying jobs for residents of the larger region. The property is strategically linked to Peoria, and the strong connection with Peoria NEXT provides a useful transition for incoming businesses seeking a place to expand.

The private sector is involved in this project in yet another way. Morton Community Bank, which has a presence in East Peoria, is ready to approve up to \$10 million in low-interest loans for viable projects “with roots in the technology park” (Smothers 2004). This type of commitment will provide seed money for new and expanding businesses as well as lead to additional lending opportunities for local financial institutions. Local initiatives such as this are vital to the success of the technology park concept.

East Peoria is a model in brownfield redevelopment on several fronts. First, it recognized local assets on which to build a major economic development initiative, including future manufacturing, tourism, and recreation. Second, it formed a public-private partnership with the Caterpillar Foundation to finance a major renovation on a brownfield site. Third, it supports other major expansions along the Illinois River as well as the existing casino. Finally, the brownfield redevelopment initiative recognizes the role that East Peoria can play in a major regional economic development initiative, together with its larger neighbor, Peoria.

Elgin, Illinois⁸

The City of Elgin (pop. 94,487, Kane County) is located 38 miles northwest of Chicago along the shoreline of the Fox River. Due to Elgin’s close proximity to Chicago and its transportation access—the Metra commuter rail system, major interstate and highways, rail transit, and nearby airports—the city continues to be a major industrial center in the northern Illinois region as it has been since the 1800s. Elgin has, however, experienced economic downturns and other evolutionary changes in the dynamics of the city.

From 1864 to 1967, the Elgin National Watch Company was a major employer for the city and surrounding region, at one time employing 4,000 people in a city of 35,000 people. Numerous idle and deteriorating properties left over from the watch factory as well as left over from other industries during recent decades prompted the City of Elgin to become proactive with revitalization and redevelopment efforts.

Redevelopment Incentives and Financing Tools. Elgin has implemented several innovative tools to encourage redevelopment and revitalization. It currently has four TIF districts plus one Enterprise Zone. Also, the city has a Façade Improvement Grant Program, and a Neighborhood Business Improvement Grant Program which provide matching grants for businesses in the eligible zones. Commercial businesses can access a business loan program with low-interest rates. The e-Elgin Incentive Program provides downtown business owners with funding for technology-related improvements and advertising. In order to encourage private investment, the city has also offered job incentives in which a company is offered a one-time per job payment for jobs created at or above a specified salary level.

⁸ The authors thank Ray Moller, Director of Economic Development and Business Services, City of Elgin, and John Nardozi, Terracon, for providing most of the information used in this report. Any errors of fact or interpretation belong to the authors.

In 1983, the City of Elgin created a comprehensive plan focusing on preservation and rehabilitation of the city's older neighborhoods and historic landmarks. During the following 20-year period, the city also introduced several "special area plans," which provided area-specific strategies for future land use. One such plan, the Elgin Center City Master Plan introduced in 1991, concentrated on downtown development. In 1994, a group of volunteers formed a community advisory committee to oversee downtown redevelopment efforts. The mission of the New Century Partnership was to promote implementation of downtown revitalization plans specified in the 1991 Elgin Center City Master Plan by utilizing city and state funding and incentive programs.

The City of Elgin has had many years of experience with brownfield redevelopment even prior to the implementation of the IEPA Brownfields Redevelopment Grant Program. Currently, the city has projects in various stages of redevelopment and with varying degrees of complexity. The brownfield redevelopment projects also vary in size, type, and cost, and utilize various funding mechanisms.

South Grove Avenue. Once known as "Dealers Row," South Grove Avenue was a commercial strip of car dealerships and retail enterprises on the east bank of the Fox River. The properties started to deteriorate during the recession in the late 1970s and early 1980s. By 1980, the city had a strip of vacant and dilapidated buildings with no formal plan for redevelopment.

A TIF district was created in 1984 to encourage redevelopment on the south end of the downtown area. In 1985, the city issued bonds and spent \$4.3 million to acquire and demolish buildings on 94 parcels, which comprised 24 acres and included the former Elgin National Watch Company property, two major petroleum distribution facilities, auto dealer and repair shops, and a power substation.

Major contamination was found on the site, with more than 50 leaking underground storage tanks. Remediation costs due to Leaking Underground Storage Tank (LUST) contamination were substantial, so the city applied for funding through the IEPA LUST program (Moller 2004).

Elgin entered into an agreement with a developer to construct a shopping center and grocery store on the far south side of the property. During the excavation process, the developer discovered radioactive material from the watch factory. Funds raised from bonds were used to remove the contaminated soil. The total city investment for the assessment and remediation of the shopping center/grocery store redevelopment project was \$770,000, and the total private investment for the construction of the shopping center/grocery store was \$4 million. An estimated 150 jobs were created from the retail redevelopment project, and annual property tax revenues average \$200,000.

Grand Victoria Casino. Most of the 24-acre South Grove Avenue site remained vacant for eight years until 1993 when Elgin received the tenth Illinois riverboat gambling license. The large expanse of vacant property along the riverbank that had been a problem became an asset when the gambling license was received.

With a 12 month deadline for the riverboat project and extensive site contamination, the city contacted the IEPA regarding the assessment and remediation process. Consequently, the riverboat was constructed in 10 months rather than the expected 12 months, and it officially opened for business on October 6, 1994. Elgin spent a total of \$1.3 million for assessment and remediation for the riverboat site but was reimbursed \$1 million from the IEPA LUST fund (Moller 2004). Private investment for the construction of the casino complex is estimated at \$75 million.

The City of Elgin retained ownership of the riverboat casino property and, therefore, did not have to obtain an NFR letter for the site. The city granted a 30-year lease to Grand Victoria Casino for a portion of the casino's annual after-tax income—approximately \$2.9 million in 2003 (Apollo 2004).

Because the casino property is publicly owned but used for a nonpublic purpose, it is assessed and taxed. During the first 10 years of the 23-year TIF district, the tax increment was minimal due the lack of redevelopment within the district; however, since the construction of the casino, the South Grove TIF district has generated \$13.6 million in TIF dollars for the city (Moller 2005).

The casino's adjusted gross revenue in 2003 was reportedly \$381 million (Walker 2004), with 2.8 million visitors that year. In addition to the lease payments, Elgin receives a dollar for every casino patron and five percent of the casino's total gaming receipts.

Elgin, in turn, uses the revenues generated from the casino to fund capital projects such as the Centre of Elgin recreational facility, a new public safety building, road construction and repairs, and a 911 communications system. Because of the riverboat revenues, the city also has eliminated the motor vehicle license fee and provides a \$200 property tax rebate to senior citizens (Walker 2004).

The city wisely implemented a policy to ensure that it does not become financially dependent on riverboat revenues. The policy stipulates that proceeds from the riverboat cannot be used for operating expenses; instead, they can only be used for "capital expenditures, one-time non-operating expenditures, and agency/organization funding" (Spirit 2004). In addition, Elgin has set aside surplus revenues in an emergency fund.

Total city revenues from the casino project average more than \$20 million annually. Over 10 years, the Grand Victoria Casino revenues have exceeded \$2.8 billion, with \$176 million of this being paid to the City of Elgin in tax revenues. During this period, the Grand Victoria Foundation received a total of \$120 million to fund social service agencies (Daily Herald 2004). The casino employs approximately 1,600 people and is the third largest employer in the city.

Elgin Law Enforcement Facility. In 1993, Elgin made plans to construct a law enforcement facility using TIF revenues expected from the riverboat site. The city bought a city block, which housed former warehouses and three gas stations. Because of previous experiences with the riverboat redevelopment project, the city took special care to conduct due diligence on the site. Remediation costs on the property were estimated at approximately one half of the total land value, so the city negotiated a deal with the private owner to acquire the site for a reduced selling price.

Property remediation included removal of numerous tanks, including LUSTs and contaminated soil removal. The city again requested reimbursement through the LUST program; however, since the city had never operated the tanks, they were precluded from receiving these funds. The city was able to establish more favorable site-specific clean-up objectives with the IEPA, which helped to reduce the costs of remediation. The law enforcement facility was completed in 1996 with a total cost of \$15.8 million.

Elgin Riverfront/Center City Master Plan. In September 1999, Elgin hired consultants to conduct a study and formulate plans to revitalize the riverfront and center city. The comprehensive master plan for the riverfront and downtown region would provide a 10- to 15-year vision and implementation strategy, building on the 1991 Elgin Center City Master Plan. The process involved the formation of a steering committee made up of leaders, with resident involvement through public forums.

During the public forums, residents suggested needed improvements and changes, with the removal of eyesores, such as unsightly buildings or structures, commonly indicated as a priority. Thus, the remediation and redevelopment of brownfield properties in the city became an essential component in the overall plan. The Riverfront/Center City Master Plan, introduced in 2000, has two main goals that utilize the river and revitalize the downtown: (1) “River as Resource” and (2) “Alive Downtown.” In addition, several other plans were introduced during this time, including the Parks and Recreation Master Plan, Sanitary and Sewer Master Plan, Water Master Plan, and the Far West Planning Area Development and Design Guidelines.

City of Elgin Comprehensive Plan and Design Guidelines. The Elgin City Council hired a consulting team of land planners, real estate market analysts, and architects and began the planning process in 2000 to update the 1983 City of Elgin Comprehensive Plan. An advisory team comprised of officials, community members, and the community development manager was appointed to work with the team of consultants to develop the plan. In 2004, the City of Elgin’s *Comprehensive Plan and Design Guidelines* was drafted and adopted. The new comprehensive plan is designed to support and/or improve upon previously adopted planning documents and places emphasis on elements such as smart growth, historic preservation, and growth management.

Townhome Site/Crocker Theater Site/Festival Park. The Crocker Theater was a 1.5-acre downtown property that had been vacant for more than 20 years. The property was purchased in 1994 for \$400,000 by a private owner who had plans to redevelop it into an adult entertainment venue; he was unable to obtain city approval, however, and the property remained idle.

In spring 1999, the New Century Partnership for Elgin offered the private owner \$600,000 for the property but was unable to reach an agreement with the city about specific conditions connected to the loan guarantee made by the city. In December 1999, the city purchased the property directly from the owner for \$600,000.

The remaining 11 acres of the South Grove TIF property, including the Crocker Theater site, remained undeveloped until recently. The casino had an option to construct a hotel as part of the riverboat casino project; however, the riverboat already had more customers than it could accommodate due to the success of dockside gaming and, thus, had no need to provide lodging. Because of this, alternative uses for the property were considered.

As part of Elgin’s downtown redevelopment efforts, the city issued an RFP for a residential redevelopment project and after a review process, selected a developer, and prepared a development agreement. During the due diligence process, contamination was found on the proposed residential site and in the flood plain area along the Fox River where proposed park improvements were planned. The city moved ahead with plans to design a park on 6.2 acres north of the riverboat and across the street from the proposed residential project. By undertaking the environmental assessment, the city recognized that the park property was also a brownfield site and would require substantial remediation.

The developer took a cautious approach to the residential/park project and wanted minimal environmental restrictions, if any, on the grounds that would affect the marketability of the residential units. To address the environmental issues, the city undertook comprehensive site investigations, identified remediation objectives, and developed remedial action plans for both properties.

The developer requested remediation to satisfy the Tiered Approach to Corrective Action Objectives (TACO) guidelines for residential standards. Total cost for environmental assessment and remediation of the residential and park properties was \$1 million, with most of the excavation costs on the park property paid by an Illinois FIRST grant.

The residential site will be the first large-scale, market-rate residential housing project in downtown Elgin, including 116 townhomes (Townhome Redevelopment Site) and an eight-story, 66-unit condominium building (Crocker Theater Site). The residential development was originally estimated to have private investment of \$28 million, and the city will receive an estimated \$900,000 per year in property taxes, which it will generate from the district TIF until 2008. Construction of the townhouse units and Festival Park improvements are currently in progress. Market demand for the new housing options in downtown Elgin has exceeded both the city's and the developer's expectations.

Elgin plans to invest \$13 million in Festival Park, which will be a center for community events and activities. The park is designed to be pedestrian- and cyclist-friendly with the river as a focal point. In addition, a performance stage is being constructed as an entertainment venue. The residential developer was a greenfield developer and had not pursued an urban brownfield project previously; however, IEPA assistance and the flexibility and perseverance of the city made the project succeed.

In 2003, a major pharmacy chain expressed interest in purchasing a former bank property on the city's east side, but they later backed out when contamination was found on the site, with remediation costs estimated to be \$480,000. In response, the city offered the company a development incentive grant of \$300,000 to entice them to move forward. The \$1.2 million pharmacy development is expected to create 20 jobs; annual sales tax revenues are projected to be \$75,000; and increased property tax revenues are projected at \$80,000 annually.

Elgin uses TIF revenues from the riverboat project to aggressively purchase property for redevelopment projects. A mixed residential/retail development is planned that will include 211 market-rate condominiums with street-level retail and 383 parking spaces. The city owns the property, and in addition to the \$1.6 million in land, will invest \$7.3 million in the redevelopment project. Private investment in the project is estimated at \$44 million, representing a 4.94 public investment/private investment ratio. In addition, the redevelopment will produce an estimated \$23 million in tax increments during a 23-year period, a portion of which will repay the city investment.

As a progression of its downtown revitalization efforts, the city recently purchased several parcels to consolidate a 20-acre site for an additional upscale, high-density residential development to the immediate north of the downtown area. The sites included lumberyards and a salvage yard. Not only was the salvage yard portion a major community eyesore, it had been designated a Superfund site in the late 1980s. The U.S. EPA had required the owners to remediate the property to commercial/industrial standards; the owners were then allowed to continue operating the salvage business with certain constraints and modifications.

At one point, the city notified the property owner of its interest in purchasing the parcels if and when they became available. Initially, the city did not have a financing plan arranged but was able to obtain government assistance to facilitate the project. For the lumberyard sites, the city obtained an IEPA Municipal Brownfields Grant to pay for site assessment. For the salvage yard, the city was able to

obtain a \$4.85 million state grant to fund property acquisition, business relocation, environmental assessment, and remediation. The city has performed due diligence in regards to the properties to ensure that the necessary clean-up will be completed. Environmental investigation is currently underway, and the city has enrolled the sites into the SRP. Demolition of the unsightly salvage yard buildings and initial clean-up activities are planned for completion in spring 2005.

The City of Elgin has experienced periods of economic downturn but has been able to revive the community economically and promote sustainability by planning ahead and utilizing their resources in an optimal manner. The city has successfully integrated brownfield redevelopment into its plans for community revitalization, and several factors have been fundamental to the city's progress.

Responsible, Aggressive Local Leadership and Public-Private Partnerships. When faced with a deteriorating downtown region, local officials took action to acquire and remediate blighted properties—initially without specific redevelopment plans in mind. In each project, the city worked closely with consultants, developers, and the IEPA, which resulted in a smooth and efficient remediation and redevelopment process.

Incorporation of Brownfield Redevelopment into Revitalization Plans. The City of Elgin recognized the need to face the challenges of brownfield redevelopment and incorporated strategies for redeveloping blighted areas into an updated comprehensive plan. The city's comprehensive plan outlines specific details and timelines for projects located across the community. Elgin takes a macro approach by viewing each project as a continuation of an ongoing community redevelopment process.

Community Involvement. Community volunteers have been involved in the downtown revitalization process through the New Century Partnership, which was formed in 1994 to support downtown renewal efforts. Residents were an integral part of the planning and development of the 2002 Elgin Riverfront/Center City Master Plan in which brownfield redevelopment was prioritized. During this process, the city obtained community input and built consensus for community revitalization plans through workshops, questionnaires, and extensive media coverage. Community involvement has also been an important facet in the initiative to update the city's comprehensive plan.

Innovative Financing and Incentives. The city has utilized a variety of funding mechanisms and incentives to promote brownfield redevelopment. The establishment of TIF districts represents the impetus that provided the funding that enabled the city to move forward with redevelopment projects. Environmental consultants and the IEPA have helped the city obtain available public funds for remediation costs. The city offers a variety of incentives as stimuli for private investment, including several more innovative tools such as technology-related investment assistance and incentives linked to job creation.

Downtown Revitalization

Rock Island, Illinois⁹

The City of Rock Island (pop. 39,684, Rock Island County) is located on the Mississippi River in northwestern Illinois and is part of the Quad Cities (376,000 metro population)—a bi-state metropolitan area which also includes Moline, Illinois; Bettendorf, Iowa; and Davenport, Iowa.

⁹ The authors thank Sally Heffernan, Special Projects Manager, City of Rock Island, for providing most of the information used in this report. Any errors of fact or interpretation belong to the authors.

Since the 1960s, the city has experienced a continual population decline primarily caused by an exodus of industrial businesses. In addition, as shopping malls and retail centers came about in the 1960s and 1970s, urban sprawl became an issue in Rock Island, with the majority of the city's growth occurring in outlying greenfield areas. Concurrently, downtown businesses closed and numerous brownfield properties in the older areas of the community remained vacant. Consequently, Rock Island has vacant and abandoned industrial and commercial properties in the downtown area and along the riverfront.

In efforts to revitalize the community, several organizations in the City of Rock Island focus on community and economic development, including three that have formed a collaborative group known as Renaissance Rock Island. The Rock Island Economic Growth Corporation (RIEGC) was created in 1982 to promote neighborhood revitalization. The Development Association of Rock Island (DARI) was established in 1988 to "create a public-private partnership to attract money, support, and new businesses for downtown redevelopment" (Turner 2005).

The Downtown Rock Island Arts & Entertainment District (The District) (2005) is a not-for-profit organization of merchants that formed in 1992 to promote downtown revitalization. In addition, the Quad City Development Group, an older organization of private companies, governmental leaders, and community colleges which formed in 1961, helps recruit industries to the Quad City area.

In terms of brownfield redevelopment activities, the city had been "reactive" in the past, remediating and redeveloping properties on an as-needed basis. Since 2000, it has adopted a more "proactive approach" (Heffernan 2004). The increased focus on brownfield redevelopment for community revitalization was initiated by an organizational process in which the city made an effort to inventory and prioritize brownfield projects throughout the city.

With information from IEPA and other environmental information sources, the city inventoried more than 40 brownfield properties in and around the downtown area and riverfront in 2001 to identify potential projects to enter into the IEPA Brownfields Redevelopment Grant Program. Twelve sites were desirable in terms of location, condition, funding sources, and owner cooperation. City officials and IEPA staff conducted meetings with property owners to narrow the field to six sites.

Along with the six identified sites, Rock Island also undertook remediation of two additional downtown sites located on 3rd Avenue without the assistance of the IEPA Brownfields Redevelopment Grant Program. The city wanted to move ahead with properties that had immediate potential for development and did not want to engage in the grant application process.

Illinois Casualty. Illinois Casualty, a food and beverage insurance company originally located on the fringes of the downtown, worked with the city to acquire a city-owned parking lot in another downtown location to construct a corporate headquarters building. Two gas stations had been located on the property prior to its conversion to a parking lot, and the city contributed \$30,000 in TIF funds for site assessment. The property had a relatively low level of contamination, so no soil removal was required and the placement of an engineered barrier served as remediation. The city used \$45,000 in TIF revenues for removal of the blacktop surface and provided a \$159,000 land write-down, selling the land for \$1.00. In addition, the company received a \$100,000 low-interest loan from the city and \$93,000 in Enterprise Zone sales tax savings on construction materials. Private investment by Illinois Casualty totaled \$3 million, with 80 jobs created and 42 jobs retained.

Robert Young Center. Originally located in a commercial district in downtown Rock Island, the mental health center enlisted the help of the city to identify a more desirable location to construct a new facility. The city donated \$78,660 in TIF funds to purchase the property for the facility. The new downtown location had a previous LUST incidence recorded, and previous groundwater and soil assessment had been done on the property. The city contributed \$3,175 of \$12,700 for the updated environmental assessments needed for receipt of an NFR letter for the property, as well as \$4,300 for one half the cost of demolition of an existing structure. Construction of the 24,000 square foot Robert Young Center mental health facility resulted in \$2.5 million in private investment, with 40 jobs retained.

Tim's Car Wash/McDonnell Station. The city loaned \$100,000 to the Rock Island Economic Development Group (RIEDG) and used an additional \$100,000 in TIF funds to purchase an abandoned car wash located at a highly visible location in the city. LUST incidences had been recorded on the property from a fuel leak found during a tank removal in 1988; since the owner had not previously registered the tanks and the insurance deductible on the property was at the maximum amount (making clean-up impractical for the former owner), the site could be entered into the IEPA Brownfields Redevelopment Grant Program. Assessment costs totaled \$35,407, one half of which was covered by the IEPA Brownfields Redevelopment Grant with a match from a Community Development Block Grant (CDBG).

Little contamination was found on the site, and no remediation was required; however, in order to issue an NFR letter, IEPA required a prohibition on drinking wells in the area. A private owner purchased the property from the city for \$200,000, allowing the city to recoup the original purchase price for the site. Approximately \$350,000 in private investment went into the renovation of the car wash and the addition of an oil change/lube center, creating 15 new jobs.

Taxi Barn. The Taxi Barn commercial property was purchased from a tax buyer by the city. The property was in poor condition, had been vacant for several years, and the absentee owner did not comply with code enforcements set forth by the city. The city conducted a title search, which came back clear, and subsequently purchased the property from a tax buyer for \$10,000.

Little contamination was found on the site; however, during the assessment process, legal issues arose due to discovery of a party wall agreement that had been issued under a different legal transaction. An agreement was reached with the owner of the neighboring building with the shared party wall so that the building could be demolished. Using TIF funds, the city also purchased another building adjacent to the Taxi Barn property to assemble a larger parcel for redevelopment. Remediation on the Taxi Barn site has been estimated at \$26,000 and will be paid through TIF revenues.

Roth Tank. The Roth Tank site was a century old former industrial site with two 60,000 square foot buildings. The property was purchased by the city in 2002, not for immediate marketing purposes, but instead to remove an eyesore at an entrance area into Rock Island. The city conducted a \$26,000 assessment of the site prior to purchase, as is their policy for any environmentally suspect property. This was paid for with IEPA Brownfields Redevelopment Grant Funds and matching CDBG funds. The property was appraised at \$110,000, with environmental remediation costs estimated at \$18,000. The city purchased the site for \$92,000, taking into account clean-up costs.

A Underground Storage Tank filled with sand and gravel was found on the site, but soil tests showed that the ground was free of contamination around the tank. As the building and foundation were

demolished, a concrete bunker containing numerous five-gallon buckets of old paint was discovered; the buckets remained sealed and were easily removed. A second bunker containing a 55-gallon drum of solvent mixed with paint was found but the removal did not go as smoothly. The drum was pierced during removal and required special measures to properly dispose of the hazardous waste and contaminated soil.

Gaming revenues from the riverboat casino paid for the demolition and remediation costs, which totaled \$185,000. The demolition contract for the Roth Tank site was well below estimates because scrap steel and white pine beams were salvaged and sold for recycling. Now that the Roth Tank site is clean and development-ready, the city plans to acquire additional properties adjacent to the Roth Tank site for the purpose of creating a larger, more attractive, and, therefore, more marketable location for new development.

Dale's Cycle. The city purchased the former small engine repair facility from a tax buyer in 2004 for \$18,000. Prior to the small engine repair facility, the site had been a gas station and, subsequent to that, an auto dealership. An assessment of the property revealed a high level of contamination. The city used IEPA, CDBG, and federal Economic Development Initiative grant funds to finance the \$85,000 assessment. Rock Island purchased three additional nearby properties with plans to donate the land to a not-for-profit botanical center for expansion and construction of a children's garden. The botanical center's proposed design plans for the property include extensive berming of the area, which will substantially reduce the city's costs for remediation.

Sylvan Slough Natural Area. Three brownfield properties along Sylvan Slough, a channel dredged by the Army Corps of Engineers in 1871 along the Mississippi River, are targeted for clean-up and demolition to create a five-acre natural conservation area. Two of the three industrial properties were purchased by the city for the appraised value of \$320,000 using 50 percent funding from an Illinois Department of Natural Resources (IDNR) Grant and 50 percent funding from riverboat gaming revenues.

The third property, currently a storage site for salvage, was recently acquired by the city via eminent domain. Assessment costs totaling \$60,000 were paid with an IEPA Brownfields Redevelopment Grant and CDBG matching funds. Two of the three properties had minimal contamination. Remediation of the contaminated property—a former fueling station, bulk petroleum storage facility, and warehouse facility—will be funded through a U.S. EPA grant and is estimated to cost \$75,000.

The city intends to use the contaminated property as a demonstration site and plans to incorporate compost bioremediation practices on the petroleum facility. The bioremediation process will involve mixing the contaminated soil with manure and woodchips, placing the mixture into piles, and allowing it to cure, resulting in the degradation of contaminants by microorganisms.

Once contaminants have been broken down and the soil is tested clean, it will be returned to the ground. The city is working with RiverAction, a natural riverfront development organization in Davenport, Iowa, to create a demonstration site for the organization's "Retain the Rain" program—a water-runoff program implemented to decrease the amount of pollutants entering the Mississippi River.

When completed, the site will have natural plantings, rain gardens, and bioswales. The project will be financed with riverboat gaming funds. Because the City of Rock Island has been required by the U.S. EPA to submit a supplemental environmental project in lieu of a fine, due to an earlier water

sanitation violation, the city will also contribute supplemental environmental project funds for the natural riverfront development.

Former Yerbury/Dana Dry Cleaners. The Yerbury/Dana Dry Cleaners site had operated as a dry cleaning facility for 50 years, closing in 1990. The city pursued redevelopment of the property when assessment of the Illinois Casualty site located across the street revealed the existence of TCE solvents, chemicals commonly used in dry cleaning facilities.

In addition, because the downtown district experienced a surge in redevelopment, renovation of the property would increase the area's attractiveness for further redevelopment. The dry cleaning site had undergone three transfers of ownership since the closure of the dry cleaners, and shortly after purchasing the property, the third owner received notification of the existence of underground tanks and was instructed to remove them.

The city assisted the current owner by placing the property in the IEPA Brownfields Redevelopment Grant Program and using the grant funds for soil assessment. The assessment revealed only minimal contamination; however, the underground storage tanks still needed to be removed and neither the city nor the current owner had funds to pay for removing the tanks. The U.S. EPA provided the city with \$10,000 for tank removal with no match required.

Although only three tanks were registered, four tanks imbedded in limestone were removed, and tank removal totaled just under \$10,000. Once the NFR letter was received, the owner was approved for bank financing to proceed with the mixed-use redevelopment project. Planned end use for the property is a coffee shop on the lower level with residential housing on the upper level. The city will financially assist the owner through Rock Island's TIF Loft Housing Program, which offers up to \$20,000 in funding per housing unit with the stipulation that the assistance represents no more than 40 percent of the redevelopment costs.

Summary

The City of Rock Island has recognized the potential for brownfield remediation and redevelopment to spur other revitalization projects. The Robert Young Center and Taxi Barn redevelopment projects were seen as catalysts for other development along 3rd Avenue (Heffernan 2005). Businesses that move into redeveloped brownfield properties in dilapidated areas typically want the neighborhood aesthetics improved.

The City of Rock Island has a variety of funding mechanisms and incentives for brownfield redevelopment projects in addition to IEPA and U.S. EPA grant funding. A majority of the downtown region is in an EZ which provides sales tax exemptions on construction materials, low-interest revolving loan funds, and tax credits. In addition, the three TIF districts in the city fund land acquisition, remediation, demolition, and redevelopment. In addition, TIF funds are used to fund the Loft Housing Program, which provides five-year forgivable loans for loft housing projects. The Façade Improvement Program provides rebates for exterior improvements, and Historic Tax Credits are offered for historic building preservation projects. CDBGs and a Commercial and Industrial Revolving Loan Fund (CIRLF) are also used as incentives for redevelopment. City revenues from riverboat gaming have been a major source of leverage for brownfield projects as well.

Although the City of Rock Island has not recently updated its comprehensive plan, it has created several area-specific plans that are updated regularly, including the Downtown Development Plan and Parkway Plan. As part of a riverfront revitalization strategy, the City of Rock Island partnered with neighboring Davenport, Iowa, to create a River Vision Plan, a study developed to formulate a plan for future development along the cities' riverfronts.

Through its downtown revitalization plan, Rock Island has worked to create a downtown identity focusing on arts and culture. The city and community organizations have invested in residential redevelopment projects both downtown and on the riverfront in a community-wide revitalization effort.

Efforts to revitalize the downtown Rock Island area appear to have succeeded thus far. According to community surveys, downtown Rock Island was indicated as the “worst” in the Quad Cities in 1990; however, surveys in 2000 and 2002 listed downtown Rock Island as the “most active” in the Quad Cities (Rock Island District N.d.).

Rock Island has plans for brownfield redevelopment projects, including redeveloping the Quad City Industrial Center area into a mixed-use development with commercial, industrial, residential, and recreational uses.

Rock Island is a prime example of a city that has addressed brownfields in a systematic way in order to revitalize several areas. The city worked with private investors on funding issues, guiding them in a development process that will benefit the city for many years to come. By redeveloping an entire neighborhood, including services, the city has fostered future investment by the private sectors in a renovation process. The city also has been innovative in working with a tax buyer in a way that can reduce the costs of acquiring properties.

Through its innovative approaches and its view of brownfields as part of an overall development plan, the city has succeeded in not only removing contamination but also in making a significant development impact on the city. It also has worked effectively with both the state and federal EPAs.

LaGrange, Illinois¹⁰

LaGrange, Illinois (pop. 15,608, Cook County), located 14 miles west of Chicago, has successfully included brownfield redevelopment into the village's efforts to revitalize its downtown area. With the advent of large shopping malls in the 1970s and 1980s, private investment in downtown LaGrange dwindled, leaving buildings to deteriorate. In the mid-1980s, the village adopted a redevelopment plan with clear goals to revitalize the downtown and surrounding areas. A 23-year TIF district was created in 1986 to encourage redevelopment.

The Village of LaGrange has transportation advantages. It has accessibility to interstate highways, and it has two commuter rail stations with regular service to Chicago. In addition, two major airports—O'Hare International and Midway—are within a few minutes via the expressways. A stable local tax base due to high residential property values is also an asset; residential property taxes account for the greatest source of local revenue in LaGrange.

To take advantage of the significant amount of traffic passing through the downtown area, LaGrange focused on transit-oriented/pedestrian-friendly development. Since the implementation

¹⁰ The authors thank Patrick Benjamin, Community Development Director, Village of LaGrange, for providing most of the information on which this section is based. The authors assume full responsibility for errors of fact or interpretation.

of the redevelopment plan and TIF district in 1986, LaGrange has experienced a significant resurgence of its downtown, which began with an influx of restaurants followed by retailers, including a number of smaller specialty shops.

Triangle Properties. In 1999, a developer expressed interest in brownfield properties located in the central business district. The village implemented a plan to utilize revenues created by the TIF district to purchase underutilized properties in an effort to further development. Between 2000 and 2001, LaGrange purchased 11 underutilized commercial properties, totaling six acres downtown, identified as Triangle Properties. Former uses included a bank, gas stations, automotive repair facilities, a fast-food restaurant, a doctor's office, and a dry cleaning facility.

Although eminent domain was used on several sites, acquisition agreements were reached with all property owners prior to final hearings. In total, LaGrange paid \$11.5 million over a 1½-year period to acquire the properties, which were then reassembled into four sites and enrolled in the SRP.

Phase I and II environmental assessments were conducted with \$20,000 to \$30,000 in U.S. EPA Brownfields grant funds obtained in 1999 through the West Central Municipal Conference (WCMC) and \$120,000 from the IEPA Brownfields Redevelopment Grant Program. In addition, the village used TIF funds and in-kind services to match the grant dollars. U.S. EPA provided free laboratory services for assessment.

During the Phase I environmental site assessment, several underground storage tanks, some leaking, were identified. During Phase II investigations, soil borings were performed, and petroleum contaminated soils were identified on four of the eleven properties.

In addition, localized groundwater had been impacted by petroleum constituents, so a Memorandum of Understanding was required by IEPA stating that no wells would be drilled in the village and the existing wells would continue to be monitored. Asbestos was identified and removed from two sites. From the Phase II investigation results, additional testing was performed and remediation costs were estimated. Remediation costs totaled \$500,000, exceeding the estimated amount of \$330,000.

Although not all 11 sites located within Triangle Properties were contaminated, the developer/partner stipulated that NFR letters were needed for all sites involved. The IEPA does not typically issue NFR letters for property identified as clean; however, an agreement between the IEPA and the Village of LaGrange allowed for the enrollment of all 11 sites in the SRP so that all sites would receive NFR letters. By 2003, NFR letters were received for all sites located within Triangle Properties.

Although the demand for property in the district was strong, the village implemented a land write-down policy to encourage redevelopment. Properties were offered to the developer for an average of 50 percent of fair market value, with the stipulation that any development meets the historical flavor and small-town atmosphere that the village desired to maintain.

In addition, the village retains the right to approve tenants to maintain a consistent theme and appearance in the downtown district. As additional development incentives, a portion of TIF revenues—obtained from both property taxes and sales taxes—are used to fund downtown streetscape beautification and interest-free façade loans for businesses.

Redevelopment of the Triangle Properties includes commercial/retail and residential properties. To capture dollars flowing out of the community due to the lack of a major grocery store located within

the village, LaGrange had originally requested the developer to pursue locating a large chain grocery store within the Triangle Properties. Because larger grocery store chains were already established in close proximity to the village, however, no chain was interested in the location. Ultimately, the original developer selected through the RFP process left the project.

A second developer was selected because of a proven ability to attract quality retail tenants in compliance with the downtown development plans of the village. Due to the inability to attract a major grocery store chain, the developer and the village agreed instead to pursue the construction of a 78-unit condominium building in addition to a commercial development.

Commercial/retail properties located within the Triangle Properties redevelopment project include Trader Joe's Grocery, Pier 1 Imports, Borders Books, Corner Bakery, Walgreens, Caribou Coffee, Cingular Wireless, and Baja Fresh Restaurant. The 78-unit condominium building is 85 percent occupied, with the purchase price of units ranging from approximately \$350,000 to \$560,000.

Total private investment in the Triangle Properties redevelopment project is estimated at \$34 million, with local government investment estimated at \$10 million. Therefore, each dollar of local government expenditures has produced \$3.40 in private investment. Thus far, the Triangle Properties redevelopment project has resulted in a total of approximately 63 full-time jobs created, 23 full-time jobs retained, and 32 part-time jobs created, representing an estimated annual payroll of \$2.86 million (Dotson 2004).

The total increase in assessed valuation from the redevelopment is estimated to be \$3.7 million. Annual city property taxes on the Triangle Properties have increased \$750,000, and annual city sales taxes have increased \$325,000. In the next five years, the existing businesses estimate a total increase of 28 jobs (Dotson 2004).

Strategies for Success. The Village of LaGrange has adopted an attitude and measures conducive to smart growth—economically and environmentally sound, sustainable, and community-friendly development. In 2003, LaGrange hired a consulting firm to create a revised comprehensive plan as a guide for future community development. Funding for the comprehensive plan update was provided through grants from the Regional Transportation Assistance Program and the Illinois Tomorrow fund; in addition, the village contributed matching dollars.

The preparation of the comprehensive plan was coupled with the development of a Burlington Northern Corridor plan with an overall focus on transit-oriented development. The planning process included a marketing study to examine development trends along the transit corridor and community visioning workshops to identify issues and priorities.

The village prioritized infrastructure updates and improvements in the downtown redevelopment process. Also, inadequate parking in the downtown area had hindered further business growth and was a concern that the village has addressed. Plans are underway to construct a parking deck adjacent to the Village Hall in the heart of the downtown.

LaGrange also has an additional parcel under consideration for a future project which would include a parking structure. This parcel has been identified by the IEPA as an additional phase of the most recent brownfield project so that the Village can continue to take advantage of its current brownfield grant, rather than reapplying to the IEPA.

Summary

The Village of LaGrange has successfully transformed the formerly blighted downtown district that existed in the 1980s into a thriving downtown business community, consisting of more than 300 shops and restaurants and uplifting the economy, property values, and tax base. Brownfield redevelopment has proven to be an integral part of the economic revitalization of downtown LaGrange.

The success of the LaGrange Triangle Properties redevelopment project is due to careful planning and research, perseverance by the village board, and collaborative efforts by all parties involved. When actual remediation costs exceeded original estimates, the village had planned ahead and was prepared to provide the additional funding needed to complete the remediation process. In addition, the village adopted innovative uses of TIF funds that not only allowed the village to purchase the Triangle Properties, but also provided mechanisms to spur downtown revitalization and redevelopment.

The importance of creating alliances and enlisting the help of professionals was a vital strategy used by village officials involved in the redevelopment project. While the project was still in the early planning phase, officials met with the utility service providers for the village to discuss plans and ensure cooperation to move the project along quickly and in an organized manner.

When selecting a developer of record for the Triangle Properties project, LaGrange chose a developer with a proven track record for attracting quality retail tenants. Also key to the success of the project was the development of a close working relationship with the IEPA Office of Brownfields Assistance. The IEPA provided the necessary funding, technical assistance, and advice crucial to moving the project forward.

Palatine, Illinois¹¹

Palatine, Illinois (pop. 65,479, Cook County) is located 31 miles from downtown Chicago. It has experienced continued growth in population and economic prosperity since 1991. The median family income in 2000 was \$76,270—153.8 percent of the U.S. median family income; and the village ranked as the seventh wealthiest community out of 27 Illinois municipalities with a population of 50,000 or larger. The village is on the Metra's Union Pacific Northwest line, providing daily commuter service to and from Chicago.

The Palatine Village Council began to focus on revitalization of the downtown district in the 1980s after businesses started relocating from the downtown and areas surrounding the commuter rail station to outlying areas. In 1991, landowners and business leaders, along with the village mayor, formed the Downtown Palatine Redevelopment Corporation (DPRC) to promote revitalization. The DPRC initiated the establishment of a TIF district, the construction of a new commuter station, two small residential redevelopments, and plans for a park.

As part of the revitalization efforts, in 1993, Palatine commissioned a consulting group to prepare a redevelopment plan; however, relatively little development resulted from the plan initially. Therefore, in 1999, the Village of Palatine hired a consulting firm to develop a more detailed, transit-oriented master plan, which includes redeveloping brownfields into both commercial and residential projects.

¹¹ The authors thank David Fieldman, Director of Planning and Economic Development, Village of Palatine, for providing much of the information on which this section is based. The authors assume full responsibility for errors of fact or interpretation.

The views of residents were incorporated into the planning process through informational meetings, thereby initiating a community development process. The outcome of this planning process was the *Palatine Downtown Land-Use Guide*.

The *Palatine Downtown Land-Use Guide*, adopted in 2000, identified approximately 40 sites including 100 acres for redevelopment, with specific guidelines such as reuse recommendations, construction and design specifications, and parking requirements. The master plan placed high priority on redeveloping blighted properties, improving existing places of business, and starting with residential redevelopment projects in order to stimulate demand for downtown businesses. The plan also included a proposal to consolidate commuter parking lots into a central parking facility, making more land available for residential redevelopment.

The village uses TIF funds as a primary financing tool to assist developers with land write-downs or remediation costs, and three TIF districts were created between 1995 and 2003. Palatine also offers other incentives such as infrastructure upgrades, low-interest loans/revolving loan funds, technical assistance from village staff, and zoning concessions to attract businesses. In addition, the village has obtained four IEPA Brownfields Redevelopment Grants to assist with brownfield assessment and clean-up activities. In addition, the Village Council approved a façade loan/grant program for downtown businesses in 2002.

In 2001, Palatine initiated redevelopment efforts with several sites that were identified in the 2000 strategic plan, and at least three projects that were located on former brownfield sites have been completed to date.

Gateway Center. The first brownfield redevelopment site, located near the Metra station, included a bank, train station, and a former shopping center property containing a former dry cleaning facility. Local officials knew of the existing contamination on the five-acre site and acquired the property through quick-take condemnation authority. Prior to the start of the remediation project, the village hired an environmental consultant to prepare an application for an IEPA Brownfields Redevelopment Grant and was awarded a grant for \$60,000 in September 2000.

The consultant subsequently performed on environmental investigation and assessments on the property. Contamination was mainly isolated to the middle of the site, and the remedial action plan called for a portion of the parking deck to act as an engineered barrier for the contamination. As soon as the barrier was installed and documented, the village received an NFR letter on the property.

Known as the Gateway Center, the property now includes a 1,244-space parking deck, a four-story, 100,000 square foot office building, and a 20,000 square foot restaurant/bar/entertainment facility. The office building currently is 75 percent occupied, with approximately 200 to 300 employees; however, most of the employees were relocated from offices located in other towns.

The restaurant/bar/entertainment facility was originally in a smaller building downtown—approximately 1,500 square feet—and employed 20 people; since its relocation, it has expanded substantially—to approximately 20,000 square feet—and has hired 50 more employees. Thus far, total private investment in the Gateway Center is estimated at \$20 million (Fieldman 2004). The village has invested approximately \$15 million, mostly in the parking deck portion of the project. In addition, \$1.5 million was received through grants from the Illinois Department of Transportation (IDOT) and the Congestion Mitigation and Air Quality (CMAQ) program.

Before redevelopment, the property was almost completely vacant and producing negligible revenues for the village. Since redevelopment, the property has experienced a significant increase in assessed valuation. Currently, the office building located in Gateway Center generates approximately \$700,000 in annual property taxes to the village, while the restaurant/bar/entertainment establishment represents approximately \$130,000 in property taxes per year.

Wellington Court Condominiums. A second completed project was on a one-acre site, which included a former single family home and commercial building used as a gas/service station and subsequently a dry cleaning facility. A private developer acquired the property with plans for a residential redevelopment. The village then partnered with the developer, obtaining a \$10,000 IEPA Brownfields Redevelopment Grant and assisting with the assessment in order to develop a remediation plan once the property owner agreed.

The village agreed to assist with the remediation costs, paying for part of the clean-up with \$400,000 in TIF revenues. Private investment in the 43-unit Wellington Court Condominiums was an estimated \$7.2 million. The ability of the village to provide a portion of the remediation costs as well as technical assistance was key to the success of the project.

Emmett's Brew Pub and Office Building. A third brownfield site, a former gas station and auto service center on 1.5 acres, has been redeveloped into a three-story, mixed-use commercial building, consisting of a 10,000 square foot restaurant on the first floor with 20,000 square feet of office space above. In the agreement with the developer, the village was responsible for acquiring the property, and obtaining an NFR letter. The village filed a quick-take condemnation to acquire the property paying \$1.1 million for land acquisition. Widespread contamination was discovered on the property, and the village remediated the site by disposing of the contaminated soil off-site and using the parking lot as an engineered barrier. The village obtained a \$18,586 IEPA Brownfields Redevelopment Grant to cover assessment and some of the remediation costs. In addition, the village contributed an additional \$400,000 towards remediation of the property. Private investment for the brew pub and office building is estimated at \$6 million.

The Village of Palatine has several other projects currently in the process of remediation, including an entire block with six separate sites. Through negotiations and quick-take proceedings, the village acquired all six parcels with the plan of developing a mixed-use project to include 18,000 square feet of retail and 112 condominium units. The village obtained an IEPA Brownfields Redevelopment Grant of \$26,269 for assessment costs, and costs to the village for remediation totaled \$100,000.

A former service station and auto repair facility located adjacent to the Wellington Court Condominiums property was identified as a LUST fund site and was enrolled in the voluntary clean-up program by the property owner in the 1990s. The Wellington Partners and the village approached the property owner in an attempt to acquire the property for a condominium redevelopment. The property owner was reluctant, however, due to environmental reports indicating that the contamination was drifting into nearby village streets.

Ultimately, the property owner agreed to pursue an NFR letter with the stipulation that the village would provide a highway authority agreement, thus shifting some of the risk to the village. The highway authority agreement identified the existence of low levels of contamination below the Tier I objectives as well as a hotspot exceeding Tier I objectives within the village-owned right-of-way. No remediation was required within the right-of-way, however.

In the agreement, the village assumes responsibility to notify contractors in the area of the existence of possible contamination so that precautionary measures can be followed. The highway authority agreement allowed for the issuance of an NFR letter; without the agreement, IEPA would have required the property owner to take further remediation action.

The Village of Palatine has successfully incorporated brownfield redevelopment into its downtown revitalization efforts and several factors are key to the outcomes.

Creation of a Highly Detailed, Site-Specific Redevelopment Plan. As noted previously, Palatine hired a consulting firm to assist with the development of a comprehensive master plan. Residents were informed of the proposed development options and were encouraged to participate in the planning process. The *Palatine Downtown Land-Use Guide* describes explicit guidelines for the desired transit-oriented village redevelopment and revitalization, including site-specific density and height parameters and parking ratios. Priorities have been placed on redevelopment of blighted properties, improvements to existing businesses, and centralized parking facilities. The clearly defined guidelines and timetables in the plan allow the village and developers to work through the redevelopment process in a quick and efficient manner.

Creation of TIF Districts. Three TIF districts in the village served as financing mechanisms and catalysts for redevelopment. Prior to the establishment of a TIF district in the downtown corridor, the village experienced a decline in the downtown tax base and property values. Using TIF revenues for environmental remediation and public improvements, the village encouraged private investment without increasing taxes on residents or using revenues from the general fund. Thus far, \$40 million in TIF funds have leveraged \$240 million in private investment for various redevelopment projects in the village, producing a 6 to 1 leverage ratio (Fieldman 2004).

Incentive Packages Offered to Developers. The Village of Palatine has played the role of “gap financier.” Developers are required to submit proformas, including both costs and revenues, so that the village can determine if they meet industry standards. The village has used quick-take condemnation powers to acquire a large portion of underutilized and/or contaminated property and has thus avoided lengthy and costly negotiations. In addition, the village in the past has partnered with developers during the remediation process, using IEPA Brownfields Redevelopment Grant funding for assessment and clean-up of properties. Because the village agreed to assume some of the environmental risk from contaminated properties, developers were more willing to undertake brownfield redevelopment projects. Once property is acquired and has been remediated, the village offers it to developers at a reduced price as part of an incentive package. The revenues generated from the sale of the land are then used to acquire additional property for redevelopment.

Commitment of Local Officials. Leadership by village officials has been crucial to the development and successful implementation of Palatine’s redevelopment and revitalization plan. The Village Council identified downtown revitalization as its highest priority in 2000 (Campaign for Sensible Growth 2003). They recognized brownfield redevelopment as a vital element to revitalization of the downtown and created financing mechanisms to encourage an influx of private investment. In addition, soliciting community involvement and forming partnerships with stakeholders has led to the success of the village’s revitalization efforts.

Franklin Park, Illinois¹²

The Village of Franklin Park (pop. 19,434, Cook County), located 11 miles northwest of Chicago, possesses a robust economy due to its prevailing industrial base—Franklin Park is the fourth largest industrial suburb in Illinois. Approximately 1,000 businesses are located in the community, employing 50,000 people from the region. Franklin Park is an attractive location for businesses due to its close proximity to Chicago and major airports, highway and interstate access, strong labor force, and extensive rail hub. Although the village continues to maintain a thriving industrial base, the Franklin Park economy has shifted to include a greater commercial focus than in the past.

Franklin Park has a Metra station in the downtown area on the Milwaukee District West Line. A second Metra station is currently under construction to serve the North Central Metra Line. The new station, expected to be operational by December 2005, will provide additional commuter traffic to the village, hence more opportunities for growth in the retail sector.

The first comprehensive plan for the village was prepared in 1969, with a planned life expectancy of 15 to 20 years (Fieldman 2004). In 2002, in order to address the current economic climate of the village, a planning firm revised the comprehensive plan. During the planning process, residents were encouraged to participate through two public visioning workshops; in addition, the consultant met with various community groups to obtain input.

The revised comprehensive plan, expected to be adopted in the spring of 2005, contains plans to revitalize the downtown area, convert vacant or obsolete industrial areas to commercial developments, and construct additional townhomes and condominiums as an alternative to single-family homes to conserve space and meet the needs of residents. In addition, the Village of Franklin Park initiated a more detailed planning study of the downtown area. The study, funded in part by a grant from the Regional Transportation Authority, focuses on transit-oriented development in the downtown region, with special emphasis on the location of the existing Metra station.

Downtown Redevelopment. In 2003, Franklin Park obtained an IEPA Brownfields Redevelopment Grant of \$240,000 to conduct environmental assessments on two blocks located in the downtown area. The village is in the process of acquiring property via TIF revenues on behalf of a developer to construct 165 condominiums and 40,000 square feet of retail space. The two-phase project involves construction of two six-story complexes, with ground floor retail, underground parking, and upper-level condominiums.

The first phase is currently underway and involves 75 new condominium units and 18,000 square feet of retail. Thus far, Franklin Park has used approximately \$120,000 of the IEPA Brownfields Redevelopment Grant funds to complete an environmental study for the entire site and for clean-up in the first phase of the project. Additional property is yet to be acquired by the village for the project, including a former dry cleaning facility; thus, additional clean-up is expected.

Projected total investment for the mixed-use redevelopment project (not including IEPA grant funding) is \$45 million, which includes \$9 million of local investment from TIF revenues. Employment projections for new retail establishments were not available.

¹² The authors thank Jeffery Eder, Director of Economic Development, Village of Franklin Park, for providing most of the information on which this section is based. The authors assume full responsibility for errors of fact or interpretation.

This project is part of the village's overall plan to redevelop and revitalize a declining downtown. Although the majority of downtown storefronts remain occupied, the downtown retail and commercial sector has been mainly made up of small businesses with limited financial resources. Consequently, the area has experienced a relatively high turnover rate. Thus, the goal of the village is to integrate chain or franchise-type businesses with the independent, locally owned businesses located downtown.

Unimast Site. In 2000, Unimast, a subsidiary of U.S. Gypsum, relocated from a five-acre Franklin Park site—its location for an estimated 50 years—to a larger facility. U.S. Gypsum was aware of contamination on the site, and because of the potential liability, the company set aside substantial funding for remediation purposes and agreed to pay environmental remediation costs as part of the sales transaction agreement.

Early in the process, three developers expressed interest in purchasing the brownfield site, but each eventually backed out of the project due in large part to unfamiliarity with the brownfield redevelopment process (Eder 2004). Walgreens, a retail chain pharmacy, was interested in relocating from its current Franklin Park location to a 1.5 acre parcel on the Unimast property, and the village was ultimately able to find a developer with the experience necessary to move the project forward.

The developer had concerns about the location and dimensions of the parcels and the fact that the retail market in that area was untested. As an incentive, the village agreed to allow the developer to hold a Put Option on the remaining three parcels on the site, so that in the event that he was unable to sell the parcels after a definite time, he could exercise the Put Option, forcing the village to purchase the land at an established price.

In 2002, Walgreens entered into a long-term lease for the site from the developer and constructed a new facility for an estimated cost of \$1.4 million. Thirty-eight employees were relocated to the new store. Since the relocation, Walgreens has experienced a 20-25 percent increase in sales.

A local credit union also announced plans in 2002 to relocate to the property. The developer decided to exercise the Put Option on the property prior to the sale to the credit union, selling the three remaining parcels to the village for \$2 million. A majority of the contamination found existed on these three parcels, and the decision by the developer to exercise the Put Option was due in part to the length of time required to obtain an NFR letter on this portion of the site. The village sold a one-acre parcel to the credit union for \$777,600, and construction costs for the credit union facility totaled \$1.75 million. The credit union currently employs 26 people.

The village next focused on recruiting restaurants to the remaining property; however, concerns about village income levels, lack of complementary retail, lack of support staff, and inadequate traffic levels were seen as hindrances to potential restaurants. In addition, unexpected contamination issues arose, placing further delays on obtaining an NFR letter for the vacant parcels.

A Taco Bell franchisee purchased one of the two remaining sites in 2004 for \$884,000. Construction of the Taco Bell restaurant is estimated at \$675,000 and is expected to be completed in the spring of 2005. Culver Franchising System purchased the final site for \$400,000 in February 2005, with the construction of a Culver's restaurant to be completed by the summer of 2005 at an estimated cost of \$1,250,000.

Industrial Redevelopment. The Village of Franklin Park has several other redevelopment projects currently underway which involve the demolition of vacant industrial sites and the construction of new industrial facilities. The village has been fortunate in that a majority of the sites they have chosen have had little or no environmental contamination.

Opus North Corporation, a large national developer, began construction in spring 2004 on a new \$4.9 million, 175,000 square foot speculative facility, located on a 10.5 acre site. The former office and distribution center property had minimal contamination, which included asbestos and two small underground storage tanks. A European food import company has a contract to purchase the spec building and will invest additional funds for finish-out. The company is expected to create approximately 50 jobs. The Village of Franklin Park has issued a Cook County 6B Incentive Classification, which effectively reduces the taxes paid by half for ten years.

Koch Foods constructed a frozen foods distribution center in 2002 on a former manufacturing and warehouse site to facilitate expansion of current operations. Some environmental contamination was found on the site, and the extent of contamination and cost of clean-up are still not known. The company has already invested approximately \$9 million to construct a 130,000 square foot freezer distribution center, generating 35 jobs. Koch Foods is also considering an additional 60,000 square foot expansion on the site.

Chicago Records Management broke ground in fall 2004 for a 103,200 square foot records storage facility to be completed in summer 2005 at an estimated construction cost of \$4.7 million. Both Koch Foods and Chicago Records Management were offered the Cook County 6B Incentive Classification. In other cases, however, the village has not offered any incentives for redevelopment such as in the case of a recently constructed asphalt plant on a former warehouse site.

Summary

Franklin Park is fortunate to have increasing or stable property values with an influx of private sector investment, thus requiring little or no incentives or public investment. The village does not customarily offer property tax reductions as an incentive, but some projects have qualified for a Class 6b Incentive Classification, which provides a real estate tax reduction for the development or rehabilitation of industrial facilities. Under the incentive, the qualifying real estate receives a 16 percent assessment level for the first 10 years, 23 percent in year 11, and 30 percent in year 12, and then returning to a full assessment level in year 13. In addition, the village has created TIF districts in areas to help finance property and infrastructure improvements. In the case of the Unimast brownfield redevelopment project, the use of a Put Option on the property was key to stimulating interest in the property.

The village recognized the need for an updated comprehensive plan and solicited a professional firm to assist with the planning process and development. Community participation and input was encouraged, which not only served as a catalyst for idea sharing but also had a positive effect on community buy-in for future plans. Franklin Park has successfully incorporated brownfield redevelopment into community revitalization efforts in the downtown/commuter rail station area as well as in the industrial and commercial locations. With the completion of the new comprehensive plan and downtown transit-oriented development plan, the village of Franklin Park will have a guideline to help define future development. The Village is taking an active role in the redevelopment of

vacant or underutilized real estate in all market sectors; they currently use TIF district funds as a mechanism to assist developers with assembling properties and are willing to introduce incentives for redevelopment when necessary.

Calumet City, Illinois¹³

Calumet City (pop. 39,000, Cook County), comprises an 11 square-mile area bordering Hammond, Indiana, and the Illinois municipalities of Dolton, Harvey, and Lansing and its public officials had several goals for brownfield redevelopment. First, there was a desire to remove several businesses that included adult clubs and other activities that did not fit well with the city plans for downtown development. Thus, brownfield remediation represented an opportunity to convert community eyesores into productive employment opportunities in key downtown locations. The city has only a limited amount of vacant land to be developed, and officials believe that retail development has major development potential.

Second, the city was interested in generating employment for residents by expanding the business base. It faced a loss of businesses that were moving to surrounding areas to capture new markets. The fact that Calumet City is landlocked added more urgency to the process because it needed to increase the intensity of land use and the employment-generating potential of existing land. Retail shopping has long been viable at the River Oaks Shopping Mall in the southeast corner of the city and, while it provides substantial sales tax receipts and continues to grow, upgrading the downtown area was important because these properties are especially suited for retail in size and location.

The brownfield properties were initially purchased by the city, and the city encountered significant difficulties in the remediation and redevelopment process, especially in identifying tanks and other structures that had to be removed. Calumet City differs from some other cities because the city government, in an attempt to speed up the process, bought the properties and thereby accepted the liability for removing the contamination.

The specific brownfield properties examined in this report included approximately 12 acres formerly used as a machine shop and service stations as well as several adult entertainment enterprises. The area was not only an eyesore, but it also limited the potential of the city for redevelopment along other more acceptable lines. In the early 1990s, city administrators purchased the properties to make them more suitable for redevelopment. This action was seen as necessary to encourage businesses to invest.

During the remediation process, however, the number of tanks that had to be removed was underestimated, leading to expenses beyond what had been budgeted initially. Inadequate information was available on prior uses of the properties to identify the types of contamination involved, partly because the properties had had a large number of owners and previous uses.

The city used a TIF district to leverage \$13 million in General Obligation bonds in order to purchase 18 blocks of properties along Stateline Road and State Street in 1994. With this purchase, Calumet City obtained ten brownfield properties, which it intended to sell to private businesses. In total, the properties include approximately 12 acres within the city limits. All 10 of the known brownfield parcels have had

¹³ The authors thank Jim Gigliotti, Community and Economic Development Director, Calumet City, for providing much of the detailed information used in this section. Any errors of fact or interpretation belong solely to the authors.

environmental assessments performed, and one half of the parcels had been rehabilitated and returned to productive use by 2004. The planned uses for all of the properties are commercial or light industrial, and several sites are currently in the planning or construction stage. The properties were purchased at fair market value and are in one of four TIF districts in the city. The buildings were razed and the properties were sold to private investors, but the properties had to be “buildable” before businesses would invest.

While most of the properties are 25 by 125 square foot parcels and best suited to continued retail use, it was possible in some instances to consolidate or convert the properties to other uses. In fact, a number of mixed uses resulted from the properties. The brownfield properties are strategically located in the community and have access to telecommunications and other infrastructure facilities. They also are in high traffic areas of the downtown area. The following is a brief discussion of each property and its redevelopment use.

Brownfield Experience and Approaches

State and federal agencies provided extensive assistance to Calumet City in working with the brownfield redevelopment projects. In 1988, the city received a grant from the U.S. EPA for \$200,000 for a Phase I assessment project; this initiative found substantial contamination on several parcels. Of special concern were underground tanks such as gas station storage tanks and home heating units left by previous users. Overall, the city officials estimate that 30 to 35 tanks were removed from the properties—12 of these were removed from one block alone. The city received a second grant from IEPA of \$88,305 to help remediate the three parcels currently being developed.

Although the city government had invested nearly \$13 million from bonds in the current properties or in their redevelopment, as a marketing strategy to obtain the types of uses desired, the city sold the properties to investors for \$1.00 when they provided a suitable development plan accepted by the City Council.

Stateline Area Project. This project involves redeveloping a retail business district, including two fast-food establishments and possible retail space in the future. The area is in both a TIF district and an Enterprise Zone. Wendy’s Old Fashioned Hamburger Restaurant purchased a one-block area and built a retail operation with a large parking lot to accommodate busses from a neighboring church. This project involved removing a large number of underground storage tanks to make the site development-ready. The Wendy’s operation created approximately ten full-time and five part-time jobs and retained nine more. The jobs pay minimum wage, with some supervisory staff included. The estimated private investment was approximately \$1 million in demolition and excavation expenses, and Wendy’s began operations in 2002.

While a segment of the property purchased was designed to park busses, that configuration changed, and now the plan is for the property to be developed into other retail establishments in the future. This likely will increase the job creation potential in the area as well.

The Popeye’s Chicken establishment is also a part of this project. The property received an NFR letter in July 2000, which triggered a private investment of approximately \$865,000. The city investment in this development is approximately \$200,000. This restaurant created five full-time

jobs and seven part-time positions, with three full-time jobs retained. Both establishments are currently in operation.

Linz Meats. A local meat-cutting establishment, which distributes meats nationally, relocated to one of the brownfield sites in order to build and expand its operations. The business probably would have relocated to Will County had property in Calumet City not been available. Thus, in a very real sense, the redevelopment project involves both job retention and expansion, retaining nearly 40 jobs and creating ten more. This operation represented a private investment of \$450,000 or more, and the project was completed in October 2004.

Haase Construction. This long-term construction company expanded its business by building a storage warehouse and adding a business office center that can be used by contractors in the area. The business has been in operation since 1920 and used the brownfield property to expand its operations. Haase has a total of 120 full-time workers on the brownfield site, with an approximate average wage of \$25.00 per hour. They invested approximately \$1.5 million in the property.

Central Door. This company is a wholesale distributor of wood and steel doors of all sizes, serving as far north as Milwaukee, Wisconsin; south to Kankakee; west to DeKalb; and; east in Michigan City, Indiana. Central Door employs 22 full-time and two part-time workers, with an average hourly wage of approximately \$14.00. They have been in business since 1985 and have invested approximately \$3 million in this project, which was completed in October 1998.

Advanced Products. Advanced Products engages in the assembly, warehousing, replacing, storing, and distributing of steel component parts to original equipment manufacturers. It has been in operation since 1998 and has four full-time and 18 part-time workers. The average hourly wage is approximately \$14.00, and the company invested \$350,000 in this operation.

Doreen's Frozen Pizza and Distribution. After several changes over the years, Doreen's has evolved into a major distributorship in the region. Calumet City enticed them to move their facility from the current location in Chicago Heights to Calumet City. This business will be ready to open in March 2005. It serves as a manufacturing and regional distribution center. The initial investment was approximately \$850,000, and they employ 30 full-time and ten part-time workers.

Stateline/Memorial Drive Project. This site is in the block immediately south of the Stateline projects, which incorporated fast-food restaurants and a soon-to-be-built retail plaza, including specialty shops. Calumet City requested bids from private developers on this project. They chose a senior housing development project over a retail strip center; however, in an attempt to generate retail sales taxes on this property and to provide additional retail opportunities for residents, the city and developer agreed to include retail development on the street level. This project is still in the planning stages and is scheduled for completion in February 2006.

The properties that have been sold or remediated and are available for use constitute approximately two thirds of the total brownfield acreage in Calumet City. Negotiations are underway with three other investors, and letters of interest have been submitted. If these investment prospects materialize, an additional 47 jobs are expected. At that point, virtually all of the brownfield properties will be in the redevelopment phase, or at least committed to the development process. Not all of the land has been rented in the strip mall, but the development process is underway.

Process Followed

The process followed in Calumet City for contacting potential developers is relatively informal. Since the city does not have an outlined economic development action plan, the Community and Economic Development (CED) coordinator works closely with the mayor and City Council in the development process.

First, the CED coordinator places advertisements in as many media outlets as feasible and keeps good relations with many developers and brokers to spread the word about properties that are available. In addition, a local engineering, consulting, and testing firm works with the city to market some of the properties to clients. The CED coordination has also aggressively used the Internet as part of the marketing strategy, where public and private properties may be accessed through links to a state website the coordinator administers. Word has spread relatively quickly that the city may sell the land for \$1.00 in addition to negotiating a beneficial incentive agreement with developers who submit plans that meet the approval of the City Council.

As part of the application process, after first contacting the CED coordinator, a developer must submit a blueprint on the size of the property, space for parking, and other components needed to successfully manage the proposed business. In addition, the developer must provide an artist's sketch of the proposed structure, ideas for how it will be used in a business situation, the estimated cost of the structure, and the number of potential jobs to be created. The plans submitted are reviewed first by the CED coordinator and, if acceptable, they are then sent to a development committee of the City Council and then to the entire City Council for a decision on whether to direct the city attorney to draft an agreement with the developer.

Thus far, decisions have been made on a case-by-case basis. Because the city does not want to limit its options, it has no formal established criteria in place with which to decide about prospective businesses. The City Council takes into consideration the estimated sales tax to be generated, the increase in property taxes, and the number of jobs. The sales tax increase benefits the city treasury directly, and sales taxes are a major revenue source in many suburban cities such as Calumet City, which is land locked. The investment made in the property increases the assessed valuation, which, in turn, brings in additional property tax revenues. Since the city owns some of the property but is shifting it back to the private sector, it places the property back on the tax rolls. Because the properties are in a TIF district, the tax increment is used to retire the debt incurred to remediate the property.

The number of jobs created and incomes generated directly benefit the city through increased spending and the multiplicative effects. Thus far, the City Council has worked with companies that submitted proposals because it needed to start the development process. Some of the jobs created pay well, but retail jobs typically are not high-paying, so the city is seeking a variety of uses to provide job opportunities at different levels.

Because the entire city is within an EZ, investors qualify for state benefits, including a waiver of sales tax on construction materials. In addition, the city may waive local permit fees and can sign off on Cook County property tax abatements. City officials can also guide investors regarding financing support from local lending institutions.

Financing Profile

The Calumet City brownfield projects provide an example in which the city government took charge and made a major investment of local funds (mainly borrowed) to start the process. Essentially, the city has invested \$13 million that it raised in bonds, plus approximately \$340,000 of a \$1 million line of credit to purchase the properties and prepare them for development. In addition, the city received a grant of \$200,000 from the U.S. EPA to undertake the Phase I assessment process. This grant was followed by a grant of \$88,300 from the IEPA to help remediate the property.

Combined, the two restaurant establishments have invested approximately \$1.865 million in buildings and infrastructure improvements. The five commercial businesses—Linz Meats, Haase Construction, Advanced Products, Doreen's Frozen Pizza and Distribution, and Central Door—represent \$6.15 million in private investment. The planned strip mall is expected to result in an investment of approximately \$3.5 million when completed. This does not include expected additional investments by future tenants.

Thus far, the total expected private investment in the properties is \$11.515 million, signifying that the city investment has triggered substantial investments by the private sector. The expectation by the city is that increases in assessed valuation and sales taxes will reimburse the \$13 million original investment to purchase and remediate the properties. In addition, the perception of the city as a viable place for economic development and ridding the city of undesirable property uses adds to the overall quality of life for residents and will bring long-term benefits to the area in many other ways.

Summary

The local government investment in these brownfield properties by Calumet City is substantially more than in most other cities simply because previous city administrations purchased the properties to rid the city of undesirable land uses. During this time, the current brownfield assistance programs did not exist and the city was not specifically trying to remove a brownfield; rather, it was trying to encourage appropriate development.

Likewise, once the city had embarked on this redevelopment process, it encountered significant unexpected site remediation costs such as tank removals. Had better records been available and had the city administration better understood the redevelopment process, some of these costs might have been avoided or the initial purchase price might have been lowered to adjust for the site development costs.

Nevertheless, even in a landlocked city, it is possible to undertake successful remediation and redevelopment if the mayor and City Council are committed to such a process. The experience in Calumet City shows that aggressive actions by the city can bring about positive results in a reasonable amount of time. The amount of time it will take to fully recover the more than \$13 million investment by the city is not known. This initial investment should not be considered solely a brownfield cost, however; rather, the brownfield project was part of a larger revitalization effort by the city to improve the aesthetics and to change perceptions about Calumet City. According to local officials, the estimated brownfield related costs are \$2.4 million for the city and the estimated increases in retail sales taxes from the brownfield property are \$4.5 million.

The Calumet City revitalization process has benefited from close contacts with the IEPA Office of Brownfields Assistance and the U.S. EPA. Technical assistance and the funds provided were instrumental in allowing the city to make substantial progress on the remediation issue. Local officials are quick to point out the benefits from the guidance received.

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Appendix A

Brownfield Outcomes – General Survey

Contact Name _____ Telephone _____

E-Mail Address _____ Municipality _____

Population _____

1. Describe the economic conditions in your municipality: (check one)
 - relatively prosperous and better than surrounding area
 - prosperous but signs of economic slowdown are evident
 - stable with no significant changes expected in the next year or so
 - substantial employment decline in the last two years
 - high unemployment, well above average of the 1990s
2. How do you perceive the economic future of your city within the next three years? (check one)
 - optimistic, local businesses are growing and seem to be prospering
 - positive with some businesses expanding but others stagnant or declining
 - stable with no significant business expansions or contractions
 - several large employers are in decline and may have to reduce employment
 - more than one large employer closed and the replacement prospects are dim
3. Describe the status of industrial and commercial properties in your municipality: (check one)
 - less than 1 percent of all properties are vacant or not fully utilized
 - between 1 and 5 percent are not fully utilized
 - between 6 and 10 percent are vacant or not fully utilized
 - between 11 and 20 percent are vacant or not fully utilized
 - more than twenty percent are vacant or not fully utilized
4. Describe the demand for property in your municipality:
Commercial (check one)
 - limited, if any, at present
 - some demand for inexpensive buildings
 - significant demand for land on which to build
 - waiting list for available properties at market price
 - more demand than properties available in city and prices are increasing

Industrial (check one)

- limited, if any, at present
- some demand for inexpensive buildings
- significant demand for land on which to build
- waiting list for available properties at market price
- more demand than properties available in city and prices are increasing

5. Does your municipality have a comprehensive plan involving future land use?
 yes no *If yes, what is the date of the plan?* _____ (year)

6. Approximately how many Brownfield properties currently exist in your municipality?
_____ # of properties owned by the municipality
_____ # of properties owned by the state
_____ # of properties privately owned
_____ # of properties owned by another entity (specify) _____

What is the approximate square footage they represent?

_____ # square feet of land owned by the municipality
_____ # square feet of land owned by the state
_____ # square feet of land privately owned
_____ # square feet of land owned by another entity (specify) _____

7. Approximately how many of the above properties have had environmental assessments performed?

_____ # of properties

8. Approximately how many square feet of Brownfields have been rehabilitated and returned to productive use in your city?

_____ square feet in the past five years _____ square feet in the past year

9. What are the main actual or planned final uses of the rehabilitated properties (estimated square footage)?

_____ # square feet returned to industrial/commercial (only)
_____ # square feet new industrial/commercial (only)
_____ # square feet residential (only)
_____ # square feet mixed residential/industrial/commercial
_____ # square feet utilities
_____ # square feet transportation
_____ # square feet parks/recreation
_____ # square feet public space such as parking lots
_____ # square feet open space but not developed parks
_____ # square feet historical preservation
_____ # square feet held in reserve for future development
_____ # square feet other (specify) _____

10. On average, how long have properties been inactive before redevelopment was started?

- less than one year
- one to five years
- five to ten years
- more than ten years

11. Approximately how many jobs did the redevelopment efforts create?

Full-time		Part-time
_____ retained		_____ retained
_____ created		_____ created

12. Estimate the actual or potential number of construction related jobs created during rehabilitation efforts?

Actual	_____ full-time	_____ part-time
Potential	_____ full-time	_____ part-time

13. How involved have local private financial institutions been in Brownfield rehabilitation projects in your city?

inactive 1 2 3 4 *very active* 5

14. If known, how much (estimated) money was invested in all of the Brownfield redevelopment projects in your community in the past five years?

\$ _____ private dollars invested in equity
\$ _____ leverage by financial firms (loans, if known)
\$ _____ state dollars invested (grants)
\$ _____ federal dollars invested (grants)
\$ _____ local government dollars invested

15. What is the total expected net increase in assessed valuation of the Brownfield properties:

\$ _____ net increase

16. If known, what is the estimated increase in retail sales tax for redeveloped properties:

\$ _____ conservative estimate \$ _____ optimistic estimate

17. How many building permits have been issued for Brownfield properties in your municipality?

_____ # residential
_____ # industrial
_____ # commercial/retail
_____ # other (please specify) _____

18. Will the Brownfield properties require additional public funds (beyond assessment/cleanup) to attract private investment? yes no don't know

19. Will additional city actions be used to attract businesses? yes no

If yes, which actions will be taken: (check all that apply)

- infrastructure upgrades
- low interest loans/revolving loan funds

31. How much were the following groups involved in promoting Brownfield projects?

	<i>not at all</i>			<i>very involved</i>	
mayor or village president	<input type="checkbox"/>				
city council	<input type="checkbox"/>				
city administrators	<input type="checkbox"/>				
property owners	<input type="checkbox"/>				
business investors	<input type="checkbox"/>				
IEPA representatives	<input type="checkbox"/>				
DCCA representatives	<input type="checkbox"/>				
other state agency representatives (specify) _____	<input type="checkbox"/>				
federal agency representatives	<input type="checkbox"/>				
private consultants	<input type="checkbox"/>				
financial institutions	<input type="checkbox"/>				
local colleges/universities	<input type="checkbox"/>				
local environmental groups	<input type="checkbox"/>				
regional planning commissions	<input type="checkbox"/>				
economic/community development corporations	<input type="checkbox"/>				
public health agencies	<input type="checkbox"/>				
non-governmental organizations/community groups (specify) _____	<input type="checkbox"/>				
general public	<input type="checkbox"/>				
others (specify) _____	<input type="checkbox"/>				

32. What have been the most successful aspects of Brownfield redevelopment projects from a local perspective?

33. During the past two years, has your municipality utilized community outreach techniques to garner support for current and future redevelopment initiatives?

- yes no don't know

If yes, please indicate: (check all that apply)

- public forums
- environmental education programs/curriculum
- creation of a community advisory committee or task force
- dissemination of promotional materials (pamphlets, information packets, etc.)
- public service announcements
- workshops/seminars for potential property owners
- (other) specify _____

34. How have the attitudes toward Brownfields and policy evolved during the past two years in your community?

35. What assistance/information would enable local officials to more adequately address issues and concerns associated with Brownfield redevelopment?

- don't need additional assistance or information at this time
- more printed material about options and programs available
- seminars and workshops about IEPA and USEPA programs
- information specifically about financing alternatives
- comparisons of successful programs in Illinois
- on-site technical assistance by IEPA Division of Remediation Management
- other (specify) _____

Please (✓) if you wish a copy of the results.

Please return completed survey to:
Illinois Institute for Rural Affairs
518 Stipes Hall
Western Illinois University
1 University Circle
Macomb, IL 61455

Appendix B

Brownfield Outcomes – Parcel Specific Survey

Contact Name _____ Telephone Number _____

E-Mail Address _____ Municipality _____

Site Name _____ Site Address _____

1. Please indicate the square footage of the Brownfield property: _____ # of square feet
_____ project start date
(mo./yr)

2. What was the former use of the property? (check one)

- | | |
|--|---|
| <input type="checkbox"/> gas station | <input type="checkbox"/> chemical/petroleum product warehouse/store |
| <input type="checkbox"/> dry cleaner | <input type="checkbox"/> foundry |
| <input type="checkbox"/> manufacturing operation | <input type="checkbox"/> establishment selling oil/gas/chemicals |
| <input type="checkbox"/> mill | <input type="checkbox"/> automotive repair shop or dealership |
| <input type="checkbox"/> painting business | <input type="checkbox"/> other (specify) _____ |
| <input type="checkbox"/> refinery | |

3. At what stage is the redevelopment effort?

- planning phase in progress completed

4. For how long was the property inactive before the redevelopment project started? (check one)

- less than one year six to ten years
 one to five years more than ten years

5. Who currently owns the property?

- municipality private owner other (specify) _____

a. If city owned, was eminent domain or municipal authority used to take the property?

- yes no don't know

b. If privately owned, has the city worked with owner(s) to remediate this property for redevelopment?

- yes no don't know

6. In the past five years, has your municipality sought legal access to this property to secure it from trespassers, perform an environmental assessment, or otherwise protect public health and safety?

- yes no don't know

7. Has your municipality used regulatory authority such as liens, ordinance violations, zoning, etc. on this property?

- yes no don't know

-
9. Please indicate the planned end-use of this property (estimate percentage in each)
- | | |
|---|--|
| _____ returned industrial/commercial (only) | _____ public space such as parking lots |
| _____ new industrial/commercial (only) | _____ open space but not developed as parks |
| _____ residential (only) | _____ historical preservation |
| _____ mixed residential/industrial/commercial | _____ transportation |
| _____ utilities | _____ held in reserve for future development |
| _____ parks/recreation | _____ other (specify) _____ |
10. Because of the redevelopment effort, how many jobs were?
- | | | |
|---------------------|---------------------|------------------------|
| Full-time permanent | Part-time permanent | Temporary construction |
| _____ retained | _____ retained | _____ created |
| _____ created | _____ created | |
11. Compared with five years earlier, was the number of jobs created by the redevelopment effort:
- fewer than existed previously
- fewer because technological advances have resulted in more efficient operations
- more than existed previously
12. Compared to wages paid previously, was the estimated wage paid for jobs created following remediation:
- less than greater than approximately equal
13. *To the best of your knowledge*, how much investment (estimated) has *already* been made in the redevelopment project including demolition?
- \$ _____ private dollars in equity
- \$ _____ leverage by financial institutions (loans, if known)
- \$ _____ state investment (grants)
- \$ _____ federal investment (grants)
- \$ _____ local government investment
14. If known, what is the estimated *remaining cost* involved in rehabilitating the property and bringing it to completion?
- \$ _____ estimated remaining cost don't know
15. Is the Brownfield property located in a: TIF zone Enterprise zone both
16. What was, or is, the expected net increase in the assessed valuation of the affected property:
- \$ _____ net increase don't know
16. If known, what is the estimated increase in retail sales tax, if any, for the redeveloped property?
- \$ _____ conservative estimate \$ _____ optimistic estimate
- don't know

17. What is the current status of the rehabilitated property? (enter percentages as appropriate; 100 percent equals the entire property)

<i>Status</i>	<i>Portion</i>
purchased within the past six months	_____ percent
purchased within the past year	_____ percent
sale pending	_____ percent
listed with a realtor	_____ percent
vacant, not listed with a realtor	_____ percent

18. What nonmoney benefits have occurred due to the Brownfield rehabilitation effort?

	<i>no effect</i>			<i>major effect</i>	
aesthetics of neighborhood have improved	<input type="checkbox"/>				
property values in neighborhood have increased more than elsewhere in the city	<input type="checkbox"/>				
crime, drugs, etc. in the area have decreased	<input type="checkbox"/>				
the area is much more marketable to residents or businesses	<input type="checkbox"/>				
vacancy rates in area have decreased	<input type="checkbox"/>				
new, more environmentally friendly industry or business have located	<input type="checkbox"/>				
residents are more conscious about environmental issues	<input type="checkbox"/>				
increased green space/recreational opportunities	<input type="checkbox"/>				
current rehab project stage still too early to assess potential impacts	<input type="checkbox"/>				
not much expected to happen because of this project	<input type="checkbox"/>				

19. What has been the overall impact of this Brownfield remediation project on the city?

Please (✓) if you wish a copy of the results.

Please return completed survey to:
 Illinois Institute for Rural Affairs
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