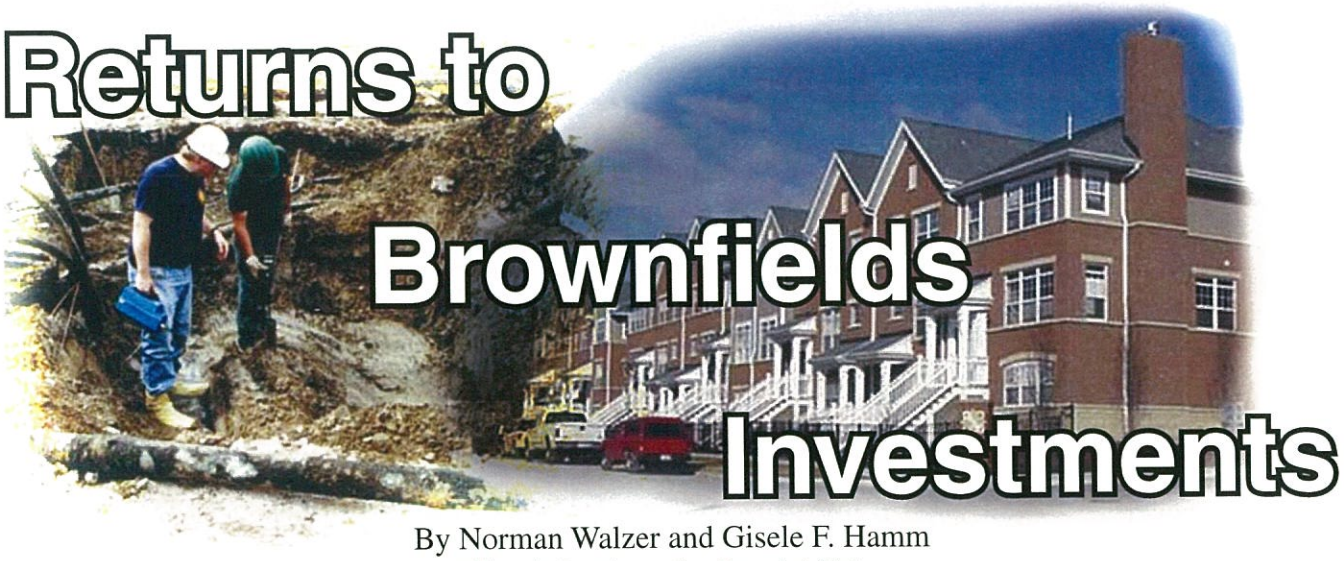
Returns to Brownfields Investments



By Norman Walzer and Gisele F. Hamm
Illinois Institute for Rural Affairs

Brownfields represent more than possible contamination problems in cities; they also represent potential assets in local development, especially as cities struggle to find land available for development or wrestle with balanced growth issues. Often brownfield sites are in strategic downtown locations but have not been considered for development in the past for fear of potential liability or because of relatively high remediation costs.

With a renewed interest in identifying land to develop in high traffic areas, brownfields have received a second look in city redevelopment plans. In addition, state agencies and the federal government have paid more attention recently to the potential of these sites for employment, open space, or other uses. The result has been that brownfields have been converted from eyesores and wastelands to highly useful and profitable properties.

This report focuses on the outcomes from investments —as measured using several generally accepted returns to investment—by private and public agencies in brownfield redevelopment projects in Illinois cities. Case studies and interviews with local public officials and city administrators provide insights into the local decisionmaking process, including methods used to attract private investment. The uniqueness of each brownfield project makes generalizations difficult, but commonalities in approaches and strategies were identified making the research findings useful in planning future projects.

Documenting returns from brownfield redevelopment is especially complicated by the diversity of projects and a lack of detailed information about each. In addition, several years can elapse from the start to completion of a project and turnover by city personnel can be high during this period.

Goals of Brownfield Redevelopment

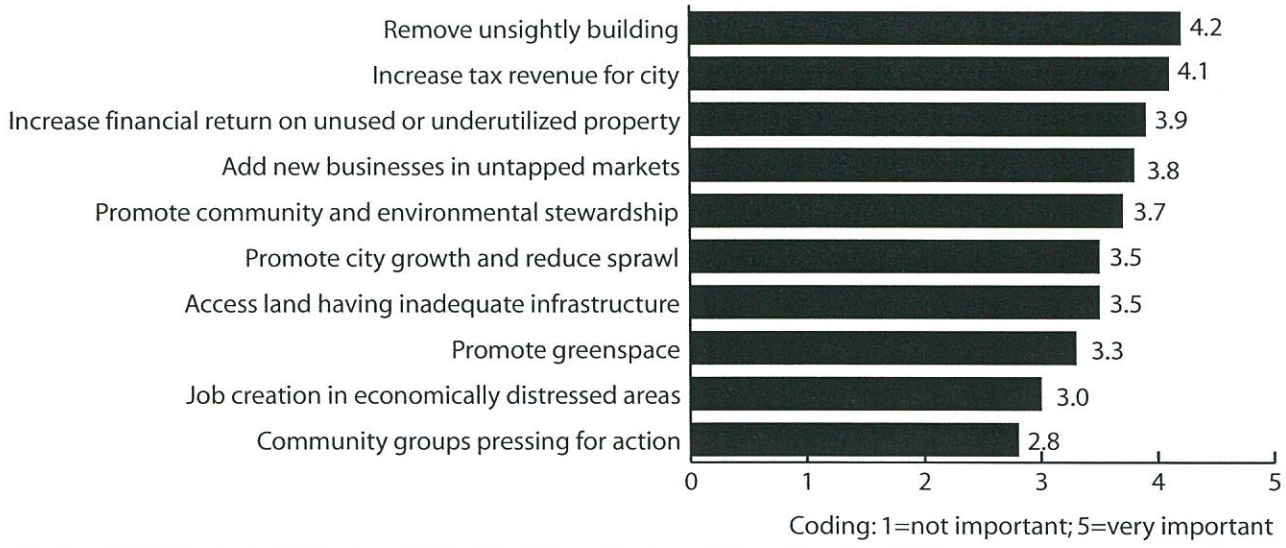
Cities undertake brownfield redevelopment for many reasons. In a 2000 statewide survey of Illinois municipalities (Walzer, Duncan, and Sutton 2001), the most important consideration is the removal of unsightly buildings, followed by a desire to increase city tax revenues (Table 1). Respondents also want to increase the financial return on unused or underused property and add businesses in untapped markets. Other reported reasons for redevelopment include providing greenspace and environmental stewardship.

While these findings do not minimize the importance of health and safety hazards, they do emphasize that aesthetic and economic considerations are important factors in project selection and development alternatives. The case studies illustrate the importance of brownfield properties in revitalizing various areas within a community. In some instances, they were a major stimulus for reshaping how the downtowns were used or for reviving abandoned industrial locations. Other redevelopment efforts have created new residential or recreational developments.

Effective projects were often associated with brownfields that are part of the comprehensive city

Table 1. Clean-up and Redevelopment

Rate the Importance of Reasons for Redeveloping Environmentally Contaminated Abandoned Properties in Your Municipality



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

development strategy. Cities such as Elgin, East Peoria, and Palatine, among others, have achieved considerable success by incorporating brownfields into their local development plans. Many successful brownfield projects were initiated by private developers with city government providing technical assistance and/or financial support for business development or expansion.

Obstacles Faced in Brownfields

While 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 issue as an obstacle, but some cities formed alliances with property owners who were effective players in the redevelopment effort.

It is important that substantive expected returns from projects justify the investment and effort. An obstacle, especially significant in small rural communities, is lack of demand for industrial and commercial property when their economies have been relatively stagnant. Brownfields redevelopment is more challenging when small municipalities have little, if any, expertise in dealing with brownfield issues. Fortunately, state agencies such as Illinois Environmental Protection Agency (IEPA) have filled some of this knowledge gap.

Factors Associated with Success

Mayors were surveyed regarding their perceived success with brownfield redevelopment. Their responses were then analyzed in terms of their concerns. The research findings and interviews with local elected officials confirm several common factors in successful redevelopment. Highest on the list is a strong commitment by municipal officials. This commitment is shown in many ways as city administrators work closely with state agencies and local private investors on redevelopment projects. Cities play several roles from actually starting projects to providing support such as technical assistance.

In some instances, the city government simply played facilitating and coordinating roles without investing any serious dollars. In other instances, they bought property, cleared it, and then resold to private developers for a token amount. Both strategies work but involve very different costs to the city. The specific approach used is unique to the city goals, decision-making environment and resources available.

The importance of brownfields in city plans to manage growth and development is related to success as

reported by mayors (Table 3). Cities in which balanced growth issues are more important are also more likely to report success.

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 related with the likelihood of reporting successes.

Also important for success is an understanding of grant requirements. Mayors reporting a lack of understanding of grant requirements as an important issue less often reported successes. This finding may suggest a continued need for publicity and information sharing on best practices at conferences and educational programs aimed at cities with higher potential.

The paperwork involved in applying for funds also is a deterrent, and cities reporting this concern less often reported project successes. In addition to less demand for property for development, it is more difficult for smaller cities to apply for grants because they often have smaller, less experienced staff.

Demonstrated community interest in brownfields is related to the likelihood of success and city officials who start a redevelopment effort will need public support to implement it successfully. However, pressure by community groups is not a major stimulus for brownfield projects.

Impact Measures

Measuring overall impact of involvement in brownfield redevelopment is difficult with the available information 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 is no central place either in cities or in a state agency that routinely collects comprehensive data on employment or investment increases. Therefore, the available data are often inconsistent, limited, or not directly comparable among cities.

The current project reviewed 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 levels of job creation, investment, or other characteristics had to be estimated.

In some instances, several agencies were involved and a business may have received tax benefits of which local officials are not aware. Relevant federal agencies such as the U.S. EPA, Economic

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

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

Table 3. 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 avg. 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.

Development Administration, Housing and Urban Development, and the Illinois Department of Commerce and Economic Opportunity were contacted to determine whether grants were used for brownfield projects in the sample cities.

The current analysis is based on 37 projects in 25 Illinois municipalities that provided detailed information regarding brownfield projects. The median number of jobs created or retained was 66; however, this is an underestimate because some projects are not complete and/or additional employment is expected in the future. The sample includes projects: (1) for which as much complete information as possible exists and (2) that are as close to completion as possible or when reliable estimates were available for incomplete projects. Thus, the sample is not a totally random sample and the analyses are not intended as an evaluation of the brownfield redevelopment program.

This project is an attempt to document the results achieved, thus far, by municipalities actively involved in the voluntary site remediation program and those that have pursued local development efforts. Thus, the results illustrate the possibilities when city, state, and federal agencies 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 showing the partnerships with the city and state governments (Table 4). Median total investments per $1.00 invested by state government was $16.00. The return to state investment appears higher due to the fact that the majority of state investment represents Phase I and II assessments which in general make up a small amount of the overall investment costs. However, since other forms of state investment such as tax incentives and workforce training expenditures were not always measured, actual return to state investment may be overstated.

Oil tank being removed in LaGrange

The projects in this sample show a median private investment of 4.17 times the city investment. Likewise, the private investment is 7.71 times the state investment and the median private investment is 8.33 times the federal investment. Differences in project, by purpose and size, significantly affect comparisons of investments ratios.

The ratio of direct 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) (Gilliand 1999).[1] Discussions with local public officials revealed a variety of approaches used to stimulate private investment. The use of these different approaches, especially regarding city investment affect the reported rate of returns as do the magnitude of specific projects. No recognition has been given to the multiplier effects from these projects. Various multipliers have been suggested in the literature but even at a relatively conservative 1.5, the impact will be substantially higher then reported. More work is needed to define these additional effects.

Investments per job created or retained are also presented. Median figures take into consideration both jobs created and retained, and full-time equivalent is calculated for part-time positions. 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. Federal investment per job was only reported by six projects with a median of $2,168.

Since the full cost of technical assistance provided by state agencies is not known, the reported median figure for the state government may be low. Differences in size and purpose of the projects and investment patterns make generalizations difficult. Nevertheless, even this broad analyses suggest a substantial return from public investments in the sample projects.

Case Studies

Several elements common in the above studies can be found in 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 state or local governments.

[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 has been identified as private investment due to the fact that the debt represents an obligation that will be repaid by the private sector.

Table 4. 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 Invesment/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.

City involvement in the brownfield projects differed. In one instance, the city government purchased the property and then proceeded with identifying potential businesses and aggressively recruiting them to the city by providing the land at a token amount (Calumet City). In another case, the city government helped with clean-up expenses and obtaining the No Further Remediation (NFR) letter but provided virtually no incentives to the incoming business (Mendota). Both projects worked and although the roles of the city government were entirely different, 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 was willing to finance the assessment of the property, the city stepped in and used TIF funds to pay for the assessment.

East Peoria had strong participation by the Caterpillar Foundation in building a museum of early Caterpillar products to attract tourism. This relationship 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 a 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 and this success has provided the financial base for an extensive redevelopment effort that shifted the focus of the area to tourism.

In both cases, the commitment and vision of local public officials contributed extensively to the considerable success of the redevelopment effort. The projects were not seen as simply removing a contamination; rather, they were seen as long-term redevelopment projects that played an important role in revitalizing the local economy, and this vision was the basis for the officials championing the projects.

Meet City 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 not only as a way to build a tax base but also to revitalize a deteriorated riverfront property. The condo complex includes retail development, restaurants, and easy access to water-based recreation.

Other cities incorporated residential development into 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 (TIF). Most municipalities in this study have either TIFs or Enterprise Zones (EZ) or both. By leveraging expected future revenues, they helped businesses with cleanup costs, as well as, developmental expenses on the properties. The success of brownfield redevelopment provided additional revenues that will 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 TIF or EZ. Mendota, for example, required a company to hire a certain number of residents to qualify for the funds. This sends a clear message of interest in maximizing local benefits yet does not impose unreasonable costs on investors.

Rock Island worked with a tax buyer to acquire abandoned properties through tax foreclosures, allowing the city to obtain sites more quickly and at lower cost than through eminent domain procedures. In additional, 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.

The City of Elgin established an e-Elgin Incentive Program to provide funding assistance to downtown business owners for technology-related development and improvements. Also, the city has a Facade Improvement Grant Program and a Neighborhood Business Improvement Grant Program which provide matching grants for businesses in the eligible zones. In order to encourage private investment, the city has offerec job incentives in which a company is offerec a one-time, per job payment for jobs created at or above a specified salary level.

Integrated 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. This facilitated the creation of a vision for the community outlining a process to reach their goals with detailed redevelopment and revitalization plans including brownfields projects. During interviews, local officials stated how choices were made to market the brownfield projects sometimes ahead of other industrial properties.

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

Abandoned gas station

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 Government Agencies. Several national studies discussed 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 to start a project, an equally important role played by state agencies was to provide access to technical assistance. This was especially true 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 a NFR letter.

General Observations

The comparisons of brownfield redevelopment projects in the sample Illinois cities illustrated three main points. First, the returns to both state and local government investments in these projects have been positive and substantial in terms of dollars and employment generated. When the projects are complete, the expectation for increases in the tax base are also considerable.

Second, many local public officials, especially in smaller cities, could benefit from additional educational programs and technical assistance on brownfields issues. Although, some apprehension still exists regarding liability issues, local officials have made significant progress in redevelopment projects.

Third, seeing brownfields as integrated into the city's overall economic development plan and strong partnerships with business investors are crucial to successful projects. With those factors in place, city officials have many options or ways to succeed in brownfield redevelopment as manifest by the diversity of approaches shown in this project.

References

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