Municipal Experiences with Brownfield Redevelopment

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Changes in local land use patterns over the past 20 years or so, including the retail gasoline distribution system and the car repair industry, have left many municipalities with abandoned gas stations and other properties that, in some instances, are brownfields. These properties can be problems or opportunities depending on possible contamination, property location, local demand for commercial and industrial property, and other factors.

In areas with a high demand for land for expansion, brownfield remediation and redevelopment may represent good possibilities, especially when the property is strategically located with access to infrastructure. In other areas, the extra costs associated with brownfields may make a property uncompetitive for industrial or commercial use. In those instances, however, a property sometimes can be converted to other public uses such as recreation or parking lots that improve the overall quality of life ultimately leading to job creation or business retention.

In fall 2002, the Illinois Institute for Rural Affairs, working with the IEPA, Office of Brownfield Assistance and the Illinois Municipal League, surveyed 86 Illinois municipalities with brownfield properties that either: a) had received a No Further Remediation letter; b) had been awarded an Illinois Municipal Brownfields Redevelopment grant; c) received a Targeted Brownfields Assessment performed by Illinois EPA; or d) had obtained an USTFields Pilot Grant from the U.S. EPA.

A total of 52 (60 percent) municipalities provided usable information regarding number of brownfields, former uses, remediation strategies, and plans for future uses. A copy of the complete report, *Experiences with Brownfields Cleanup and Reuse in Illinois Municipalities*, is available on-line (www.iira.org).

A second questionnaire was sent to municipal officials regarding 229 *specific* parcels that met the four criteria listed above asking for more detailed information with responses from 121 sites (53%). Questionnaire topics included property ownership, investments by major groups, current status of the property, and expected financial or nonmonetary benefits. In both surveys and this article, redevelopment and rehabilitation are used interchangeably.

Brownfield Characteristics

This article reports some of the findings of the general municipal survey including types of properties being redeveloped, actual or planned uses for the properties, past and expected investment, and expected outcomes. Municipalities responding to the mail survey ranged in size from 605 to 150,115 with an average population of 26,087. Comparisons between cities in the Chicago MSA and downstate were made but, in this article, only statewide averages are shown.

On average, responding municipalities own seven brownfield properties, private owners have five and other entities own four additional properties. By size (square feet), cities own 26.8 percent, private owners have 54.3 percent, and other entities own 19 percent (Table 1). Chicago area respondents differed noticeably from downstate cities, especially in private ownership with 60.3 percent of the square feet in brownfields in the downstate region owned by private companies compared with 36.1 percent in the Chicago area. For downstate respondents, the higher percentage of private ownership is offset by only 13.5 percent owned by other entities.

Table 1. Brownfield Characteristics

Question	All Respondents: Mean/ Number	All Respondents: Number
Number of Brownfield properties in municipality		
Average number of properties owned by municipality	7	28
Average square feet reported	901,677	
Minimum square feet reported	400	
Maximum square feet reported	5,350,000	
Average number of properties privately owned	5	28
Average square feet reported	1,827,042	
Minimum square feet reported	10,000	
Maximum square feet reported	19,602,000	
Average number of properties owned by another entity	4	4
Average square feet reported	4,469,800	
Minimum square feet reported	1,100,000	
Maximum square feet reported	9,583,200	
Square footage (**overall percentages**)		
Owned by the municipality	26.8	28
Owned privately	54.3	28
Owned by another entity	19.0	4
Number of the above properties with environmental assessments		
Mean by City	3	39
Total	118	
Percent of total Brownfield properties	33.4	
Square feet of Brownfield's rehabilitated and returned to productive use		
Square feet in past five years (**mean**)	326,395	46
Square feet in past year (**mean**)	65,509	45

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

Statewide, one-third (33.4 percent) of the brownfield properties have had environmental assessments performed, with relatively small differences between the Chicago area respondents (36.2 percent) and downstate municipalities (31.6 percent). Statewide, the average respondent reported that 326,395 square feet of brownfields had been rehabilitated and returned to productive use in the past five years with an average of 65,509 square feet in 2001.

Actual or Planned Final Uses

Survey respondents were asked to estimate the main actual or planned uses of the rehabilitated properties by square feet (Table 2). The main intended use (43.2 percent) is to return the property to commercial or industrial use with downstate properties leading the effort (1.3 million square feet). The small number of respondents and wide variability in property sizes, e.g. Sterling with almost 700 acres, caused major differences in responses. In the Chicago area, more square feet will be converted to new industrial or commercial use than returned to existing use. Likewise, the average property size reported by Chicago area cities is smaller—perhaps reflecting relatively high cost of land and more intensive land use.

Table 2. Final Uses of Rehabilitated Properties

Question	All Respondents Mean	Number
Main actual or planned final uses of rehabilitated properties (estimated square footage)?		
return industrial/commercial	1,328,059	22
new industrial/commercial	1,294,628	15
mixed residential/industrial/commercial	1,195,431	8
public space such as parking lots	158,160	7
parks/recreation	223,113	6
transportation	263,248	5
residential	99,168	5
held in reserve for future development	897,130	4
utilities	183,707	3
open space but not developed parks	117,933	3
historical preservation	479,160	1
Percentage of total square feet		
return to industrial/commercial	43.2	22
new industrial/commercial	28.7	15
mixed residential/industrial/commercial	14.2	8
public space such as parking lots	1.6	7
parks/recreation	2.0	6
transportation	1.9	5
residential	0.7	5
held in reserve for future development	5.3	4
utilities	0.7	3
open space but not developed parks	0.5	3
historical preservation	0.7	1

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

The next largest planned use (28.7 percent) was converting to new industrial or commercial use (1.294 million square feet) followed (14.2 percent) by mixed residential/industrial/commercial use (1.195 million square feet). However, mixed residential/industrial/commercial use was not nearly as common in the Chicago area cities (48,613 square feet) as in downstate cities (2.343 million square feet).

Respondents also reported public space such as parking lots and parks or other recreation as important planned uses, with these activities being much larger in the Chicago area than in downstate municipalities. This difference makes sense in light of the higher population density in Chicago area and possibly a greater perceived need for open space. Holding land in reserve for future development (5.3 percent) was common but represented a relatively small proportion of the uses, especially in downstate cities.

Employment and Investment

Respondents were asked about both the actual or potential part-time and full-time construction jobs created during the rehabilitation efforts. Statewide, the average municipality created 94 full-time construction jobs and an additional 32 potential jobs for rehabilitation projects (Table 3). In addition, respondents stated that 39 actual and 25 potential part-time construction jobs were associated with the rehabilitation projects.

Municipal officials also reported an average of 41 full-time jobs and 61 part-time jobs *retained.* In addition, they reported creating an average of 85 full-time positions and 35 part-time positions in these projects. The relatively small number and uniqueness of the projects make it difficult to generalize from these results, but clearly some projects have made substantial contributions to employment generation. The fact that so many projects are currently in their early phases means that employment generation should increase in the future.

Brownfield projects have attracted substantial investment by various agencies. The sample properties were classified by investment size into the smallest, medium, and largest thirds and also by private, state, federal, and local government (Table 3). As one might expect, substantial differences exist among the various cells. Private equity investment represents the largest investment category, regardless of size. Significant investment in brownfields was also obtained through federal grants as well as local governments.

General Observations

Rehabilitation and remediation of brownfields offer opportunities for business investment, especially in expanding municipalities that need additional space. The results of our surveys demonstrate that these properties, when developed, can add substantially to the employment base and can attract significant private investment. Responses from participating municipal officials show that the process is far from easy; however, with help from agencies such as the IEPA, Office of Brownfield Assistance, and DCEO, jobs can be created, eyesores removed, and neighborhoods improved. A future article will describe processes used in rehabilitating and redeveloping brownfield properties. ■

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Table 3. Employment and Investment

Question	All Respondents Mean	Number
Actual or potential construction related jobs created during rehabilitation efforts		
Average actual full-time	94	14
Average potential full-time	32	8
Average actual part-time	39	10
Average potential part-time	25	4
Number of jobs created by redevelopment efforts		
Average full-time retained	41	6
Average full-time created	85	21
Average part-time retained	61	5
Average part-time created	35	12

Investment in Brownfield redevelopment projects in the past five years (estimated).	Investment Size by Category: Smallest Third Amount	Number	Medium Third Amount	Number	Largest Third Amount	Number
Private equity investment						
Mean	50,318	11	2,950,000	6	8,375,000	4
Median	22,500		2,850,000		8,250,000	
State grants						
Mean	31,368	13	108,571	14	460,471	8
Median	30,000		117,000		270,000	
Federal grants						
Mean	34,500	4	275,000	5	1,025,000	2
Median	35,000		300,000		1,025,000	
Local government investment						
Mean	15,943	12	202,145	13	4,877,238	11
Median	11,409		200,000		4,000,000	

Only nine respondents provided leverage information for this question. Telephone follow-up indicated confidentiality issues. In some cass, private investors were reluctant to disclose financial information.

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