Center for Economic Development
UWMILWAUKEE

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EXECUTIVE SUMMARY

Over the last two decades, policy makers, planners and urban researchers have been paying

billion (value based on 49 projects). Almost half (44%) of the brownfields had previously been industrial properties, although many had contained other uses, including residential. Most residential units are newly constructed (93%), multi-story (83%), market-rate properties (64%), for both sale (47%) and rent (53%). Almost 36% of all units (2,653) were affordable. Government assistance of $164 million was provided to 18 projects, primarily in the form of TIFs ($104 million), to support multiple aspects of development (e.g., infrastructure, construction, cleanup and assessment, soft costs, etc.), not just brownfields related costs. Those 18 projects are valued at $991 million. As part of their remedial management programs, 32 of the 52 projects have institutional controls in place restricting the extraction of groundwater and slightly over half of them (27) utilize engineered barriers.

To address the second and third questions, data was gathered via personal interviews with twenty-seven residential developers in the two cities (12 in Milwaukee and 15 in Chicago). Interviewees were asked questions related to: (1) the characteristics of the organizations they represent; (2) their attitudes towards the costs, risks, and benefits associated with residential brownfields redevelopment; and (3) the effectiveness of different policies and programs for getting residential projects developed.

In Milwaukee, most developers of brownfields were mature developers that focused primarily on brownfield properties and multi-story projects in the urban market. Factors attracting them to brownfields related primarily to location, but several also pointed out attributes associated with brownfield land (i.e., the low price of land, the availability of an area-wide development plan, subsidy provisions). In terms of barriers to residential redevelopment, the most common response was the cost (or amount) of cleanup required, with two or more respondents also mentioning liability risks, longer project duration, and “unknown” or “surprise” costs. Most of the public sector interventions perceived as necessary for increasing residential development on brownfields in Milwaukee related directly to improving the bottom-line of these projects, whether through some form of direct funding to help cover costs, relaxing regulatory requirements to minimize cleanup and/or time-related costs, or reducing land acquisition costs.

In Chicago, developers involved in brownfields were from established companies, but many were typically involved in slightly more projects on greenfields than on brownfields. Most of the developers interviewed specialized in residential construction and multi-story buildings (80%), although many stated that they also build townhouses/row houses, single-family dwellings, and duplex/tow-flat homes. The most common response in terms of what attracted them to brownfields was the property’s proximity to public transit and the strength of the area’s property market. Three or more interviewees also mentioned proximity to roadways and highways, good neighborhoods, and gentrifying/”yuppifying” neighborhoods. As in Milwaukee, the main barrier to redevelopment was identified as being the cost (or amount) of cleanup. Many interviewees also emphasized regulatory hurdles that added to project duration, as well as barriers related to unknown costs, the difficulty in obtaining financing, weak markets, and a lack of public funding. As for measures for increasing residential development on brownfields, over half pointed out the need to streamline regulatory procedures at both the state and local level, while most other suggestions related to helping them deal with relevant brownfields costs.

The present study has revealed that despite limited attention devoted to the issue, residential redevelopment on brownfields has been rather extensive over the past decade and will likely

the city; this should be tied to a shift from cataloguing sites in an inventory to devising a portfolio of properties containing relevant information for developers.

- Local government must devise strategies for both market rate and affordable housing in conjunction with private developers and non-profits, and work toward generating a broader range of housing types and values.
- Local governments must improve how they track their involvement in brownfields redevelopment so as to better understand redevelopment outcomes related to both housing and economic variables, but also sustainability and equitability oriented ones.

INTRODUCTION

Over the last two decades, policy makers, planners and urban researchers have been paying significantly more attention to methods designed to foster more sustainable development and "smart growth" in America's cities. One initiative that has gained widespread political support, during this time frame, is the redevelopment of hundreds of thousands of underutilized brownfield sites, which are often located in the core sections of urban areas and, as such, are prime candidates for urban revitalization efforts. Governments at all levels have started to implement a wide range of innovative policies and programs designed to lessen the costs and risks associated with brownfield redevelopment, thus stimulating private investment in them. Such measures have met with moderate success, as thousands of sites throughout the country have been cleaned up and redeveloped over the past decade (Simons and Jaouhari 2001, U.S. Conference of Mayors 2003). However, while many communities have started to realize the economic opportunities that can ensue from recycling brownfields into productive industrial and commercial uses, full advantage has not been taken of the significant social, economic, and environmental benefits that residential redevelopment activities on these sites can bring about (De Sousa 2002a). Indeed, the U.S. Conference of Mayor's 2003 report estimates that residential reuse only makes up 14% of brownfield projects, despite the fact that investment in residential construction typically accounts for 60% of private investment and 50% of total investment in the U.S. (U.S. Census Bureau 2003).

Although some researchers have made some headway in gaining a better understanding of the barriers to housing development on brownfields, there has traditionally been relatively little scholarly interest in examining them in an empirical way. The purpose of this project is to do exactly that by addressing four critical research questions:

1) What kinds of residential brownfield redevelopment activities have been implemented in Milwaukee and Chicago in terms of scale, character, value and other key market variables;
2) Is brownfield redevelopment perceived as being less cost-effective and more risky than greenfield redevelopment for market rate and affordable housing?
3) Is government intervention important in this domain and, if so, to what extent and in what ways?
4) What implications does the project have for mapping out a strategy for future redevelopment issues in the cities of Milwaukee and Chicago specifically, and what broader implications does it have for redevelopment generally?

Through a compilation and analysis of development data, interviews, and case studies, this study identifies the nature of the costs and risks to developers and, then, examines which policies make the most sense for supporting the efforts of key stakeholders.

BROWNFIELDS BACKGROUND

The *Small Business and Liability Relief and Brownfield Revitalization Act*, passed in 2002 (Public Law 107-118, H.R. 2869, p.6), defines *brownfields* as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." In the traditional urban science literature, the term *brownfield* has been used in alternation with *contaminated land* and *derelict land*. Today, however, brownfield is the preferred

new tools for the public and private sectors to promote sustainable brownfields cleanup and reuse.

Brownfields grants continue to serve as the foundation of EPA's Brownfields Program. These grants support revitalization efforts by funding environmental assessment, cleanup, and job training activities. Brownfields Assessment Grants provide funding for brownfield inventories, planning, environmental assessments, and community outreach. Brownfields

HOUSING BACKGROUND

Milwaukee

The City of Milwaukee has seen growth in housing development and revitalization over the last decade, involving numerous condominium and other specialty housing projects. Historically, the city underwent large growth from the turn of the century until the 1950's, when de-industrialization began to impact the need for more housing. Of approximately 228,000 housing units nearly 70% are single family, townhome, condominium, or duplex buildings, with the remaining 30% consisting of multifamily parcels (City of Milwaukee 2002).

The market for condominiums has been expanding throughout the downtown and east side areas. In 2001 there were a total of 7,082 new units, of which 5,209 were in the downtown/eastside area. Many of these were condominium, townhouse style, or loft, and the overall investment poured into this development activity (from 1997 to 2004) amounted to 1.3 billion dollars (City of Milwaukee DCD 2004). According to the Department of City Development, 1,210 new housing units are currently under construction or are being planned for the downtown core. The city's housing market is benefiting from the same factors that are enhancing housing projects throughout the nation: low interest rates, high consumer confidence, and low unemployment (Bayer 2005). Further, the easy commute to downtown is bringing many professionals to the area, as well as couples in their 50's and 60's who are looking to reside in a more socially-active locale.

Condominium construction has contributed significantly to strong growth in Milwaukee, with specific neighborhoods getting a greater share of this type of housing market. Brewer's Hill, the Third Ward, Walker's Point, Concordia, Coldspring Park, and Washington Heights are increasing in land value at a far greater rate than is the average for Milwaukee (Public Policy Forum 2003). Although, there is some increase in single-family housing on the city's north side, the properties lag behind in average assessed property value. Conversely, the downtown area and eastside have seen such value exceed those of neighboring communities.

Though Milwaukee's housing market is strong, there are several relevant issues that need attention. On a larger societal scale, the issue of segregation remains a problematic one. The Mumford Index of dissimilarity ranks the Milwaukee-Waukesha PMSA third, behind Detroit, Michigan and Gary, Indiana (Public Policy Forum 2003). The Milwaukee region is plagued by discrepancies in segregation patterns, with the outlying areas being comprised primarily of affluent and primarily white residents, whereas the central city core is inhabited largely by non-white residents. Other issues of concern include overcrowding and substandard housing, as well as boarded up homes and graffiti. Many of these problems are concentrated in the north/central part of Milwaukee, with issues of affordable housing related to the downtown and eastside areas.

Strategies being employed to address such issues include the following (City of Milwaukee 2002b):

Only a handful of studies exist on the housing re-use issue in the United States. The work by Greenberg and his research team (Greenberg *et al*. 2001a) presents solid arguments both for reuse (since brownfields constitute an available supply of land for housing which can improve neighborhood quality) and against it (given that incompetence and greed are factors that might make such redevelopment risky on many counts). In an editorial, Greenberg (2002) comes out in favor of residential reuse because he sees it as the best strategy for revitalizing inner city communities, as long as civic leaders and public health officials are involved in the process and developers are provided with financial assistance to help them attenuate costs. The basis for his assessment is a 2001 study (Greenberg *et al*. 2001b) in which Greenberg and his team interviewed 779 New Jersey residents to gauge their willingness to live on redeveloped brownfield lands. The team found that 14% of respondents were willing to do so, most of whom were young and childless families, middle-class Latino and Asian-American families, and economically disadvantaged individuals living in apartments. The authors point out (p. 534) that a "critical challenge is to interest developers in building housing on brownfields", given that "developers have historically made large profits building in the suburbs;" and concluding that

presence of poor markets in some locales, higher cleanup costs for residential projects, and the impact of barriers imposed by the policies of the Federal Housing Authority (including remediation and technical constraints before a loan application can be considered). A study of HUD's site contamination policies carried out by ICF Consulting (2003) also found that many of their policies were not facilitating residential redevelopment and require upgrading. A study by Meyer, Wernstedt, and Alberini (2004) put a monetary value on some of the incentives that could be aimed to redevelop brownfields for residential use. From a survey of over 300 developers, the study found that eliminating third-party liability risk was the most effective strategy, followed by the elimination of cleanup cost risks, and the requirement of holding a public hearing. Other than this study, little work has been done to examine the application and effectiveness of alternative policies and programs to alleviate the barriers to residential brownfields reuse.

Issues related to residential brownfields redevelopment have received more attention in an international context, particularly in the UK where various levels of government have set an ambitious target of building 60% of new brownfield housing (Fulford 1998, Bibby and Shepherd 1999, Box and Shirley 1999, Cozens *et al*. 1999, Walton 2000, Adams et al. 2001, Adams 2004

qualitative and quantitative techniques. This made it possible to gather relevant information on both the attitudes of those directly involved in residential brownfield redevelopment and on the empirically-quantifiable outcomes that such redevelopment entails. The multi-method approach consisted of:

1) gathering data on the location and characteristics of residential brownfield redevelopment activities in the cities of Milwaukee and Chicago from local and state government sources and databases;
2) interviewing developers and other relevant stakeholders involved in the development of market-based and affordable residential development in order to assess their attitudes towards costs, risks, and measures for attenuating or overcoming them;
3) reviewing residential redevelopment case studies so as to draw out implications from them related to the factors leading to project success from the perspective of the developer and the neighborhood.

The city of Chicago was selected because it is a “rust-belt” city with a very strong residential market that has witnessed an increase in its urban population over the last decade. The city of Milwaukee has also witnessed some residential redevelopment activity in certain areas, but it continues to lose population, and its residential market is much weaker than its rket “ru4192 redeve04the last e001(ary w179-7(o)2(pldsn)-10( )]TJ0J-0., redevclurom em.2)8.5.295 0 Td[is 15

because the sites are now remediated and have been developed (or are in the latter stages of development). While the NFR database points out whether a property was cleaned to a residential level, it does not explicitly state whether the resulting project is residential. For a few sites, IEPA records could be cross-referenced with property assessment information from the Cook County Assessors office to obtain property information. However, site visits and telephone calls to development companies were required to determine if the final end-use was in fact residential and to gather project information (given that many sites were not assessed). Once the residential brownfields projects were identified, information on city funding and involvement was gathered from individual city departments given that a single department does not maintain such information as it does in Milwaukee.

While the merger of these databases helps paint a more comprehensive picture of residential brownfield redevelopment patterns and characteristics in these cities, several brownfield sites or residential projects may have been missed for several reasons. First, many new residential properties (with many new addresses) can be constructed on a brownfield property with a single address. Therefore, the boundaries of the original sites had to be used to assess where the new development(s) took place. In addition, the site address may change entirely if developers reorient projects on a corner lot from a main street to a side street or vice-versa. Moreover, address information may be maintained in a different manner depending on the database, which required the use of values and text in multiple searches. Ultimately, however, a field visit was made to each brownfield project to ensure that information in the databases was accurate.

all-encompassing. Suffice it to say that the objective here is to flesh out general patterns in residential brownfields redevelopment that can be used as frameworks for future research efforts.

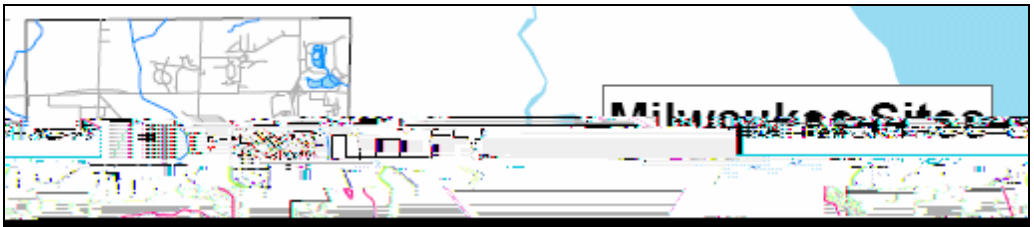
RESULTS OF DEVELOPMENT ACTIVITY ANALYSIS

City of Milwaukee

LOCATION & CHARACTERISTICS OF REDEVELOPMENT

Overall, thirty-two residential brownfields projects have been developed or are in the latter stages of development in the city of Milwaukee. Twenty-one of these projects have received some public support for site assessment, remediation, and/or site preparation activities. These residential projects will be refereed to as publicly-assisted projects and represent 30% of all publicly-assisted brownfields redevelopment in Milwaukee. Eleven projects have not received any public funding for brownfields management, but have been built on properties that had one or more records on the State of Wisconsin's BRRTS (brownfields) database. These projects are referred to as private projects, however, it should be noted that a few of these did receive public funds for affordable housing or other property improvements. Of these thirty-two projects, twenty-eight have already been constructed and four are either under construction or in the latter stages of planning.

Figure 1 reveals that a cluster of these projects is concentrated along both sides of the Milwaukee River in an area known as Beerline B which is in close proximity to downtown, although several sites are scattered throughout the south and north sides of the city. In terms of size, the sites take up over 91.5 acres with publicly-assisted sites using more than private ones in terms of total, average, and median size (71 versus 21 acres, 3.4 versus 1.9, 1.0 versus 0.8). Slightly less than half (43%) of the publicly-assisted projects are less than one acre in


Milwaukee Sites

To get a general idea of the proportion of all residential development in Milwaukee that has been carried out on brownfields, the projects examined were cross-referenced with a list of developments maintained by the City of Milwaukee. Unfortunately, that list does not include single-family dwellings and is organized by project name, not address, so that not all projects could be matched. On the basis of the 20 projects (10 of 21 public and 10 of 11 private) that were matched, residential brownfields redevelopment represents 18% of the projects built in the city between 1991 and 2004 and accounts for 37% percent of the total units (1,926) constructed. In total, 2,476 units (not including single family and duplexes) have been constructed or are being proposed on brownfields examined here, while 1,926 were developed in the city between 1991 and 2004.

	Number of units	**Percent of PA units**	**Percent of All units**
Publicly Assisted (PA) Projects			
New	1609	96%	61%
Rehab	60	4%	2%
Private Projects			
New	538	55%	20%
Rehab	441	45%	17%
All Projects			
New	2,147		81%
Rehab	501		19%

Table 6: New versus rehabilitated units on brownfields, Milwaukee

The vast majority of publicly-funded projects involve new construction versus rehabilitation of exiting structures, while the private sector has been more involved in the conversion of industrial and warehouse properties into lofts.

	Projects	**Number of units**	**Percent of PA units**	**Percent of All units**
Publicly Assisted Projects			PA	All
Sale	11	830	50%	31%
Rent	8	839	50%	32%
Mixed Sale/Rent	2	606	36%	23%
Private Projects				
Sale	9	542	55%	20%
Rent				

While twice as many brownfields projects generated sale versus rental housing, the split in terms of units was almost equal overall, and similar for publicly-assisted and private projects. It should be noted, however, that a large share of the rental units are part of three mixed (sale and rental) mega-projects in Milwaukee. The vast majority of the residential units on brownfields in Milwaukee are market rate (87%) versus affordable (13%), and all but one of the eight affordable projects were carried out using public funding for brownfields related expenses. Interestingly, none of the projects combined market rate and affordable units as many projects in Chicago are seeking to do. As for the private projects, most are market rate except for those built by a company that specializes in rental housing for the affordable market. With regard to who the developers are, most are for profit, followed by a group of non-profit developers (6), one project that was carried collaboratively between and non-profit and a for-profit entity, and one listed here as "city-based", given that the city was responsible for preparing land and making it ready for sale to individual property owners or builders (see City Homes case study).

	Projects	Units	Percent PA	Percent All
Market Rate	14	1417	85%	
Affordable	7	252	15%	
Mixed	0		0%	
For Profit	14	1417	85%	
Non Profit	6	209	13%	
City	1	43	3%	
Market Rate	10	879	53%	
Affordable	1	100	6%	
Mixed	0	0	0%	
For Profit	10	551	33%	
Non Profit	0	0	0%	
For/Non Profit	1	428	26%	
Market Rate	24	2296		87%
Affordable	8	352		13%
Mixed	-	0		0%
For Profit	24	1968		74%
Non Profit	6	209		8%
For/Non Profit	1	428		16%
City	1	43		2%

Table 8: Market rate versus affordable units, Milwaukee

COST INFORMATION

In total, the thirty-two residential brownfields redevelopment projects examined here are valued at almost $500 million dollars, or $15.6 million per project. The publicly-assisted

projects are worth approximately $329 million ($15.7 million per project) and private ones approximately $170 million ($15.5 million per project). Half of the projects range in value from $5 million to $25 million dollars, while 37.5% are valued at below $5 million, and the remaining four are worth more than $25 million. Based on the 2005 tax rate for Milwaukee County, the 32 projects will generate approximately $13.5 million annually in gross taxes, with $4.6 million of that going to the city.

Publicly Assisted Projects	21
Total Redevelopment dollars	$ 329,580,000
Total Redevelopment per project	$ 15,694,286
Private Projects	11
Total Redevelopment dollars	$ 169,952,208

City of Chicago

LOCATION & CHARACTERISTICS OF REDEVELOPMENT

As mentioned, residential brownfield projects in Chicago were identified using the Illinois EPA's No Further Remediation (NFR) database. 210 NFR letters were granted to 159 projects by the IEPA as of August 2004 for cleanup carried out to residential standards (some sites received multiple letters). Of those, 52 were determined to be residential on the basis of site visits. Unlike the Milwaukee case, funding data maintained by the city of Chicago includes all project costs for site acquisition, construction, soft costs, and developer's fees. Brownfield assessment and remediation expenditures were not separated out for the vast majority of projects.

Of the fifty-two projects identified, 25 received public assistance and 27 did not according to information obtained from relevant city departments and developers. Figure 2 on the following page reveals that projects in Chicago are scattered throughout the city. In total, residential redevelopment covered 133 acres of brownfields, with publicly-assisted sites taking

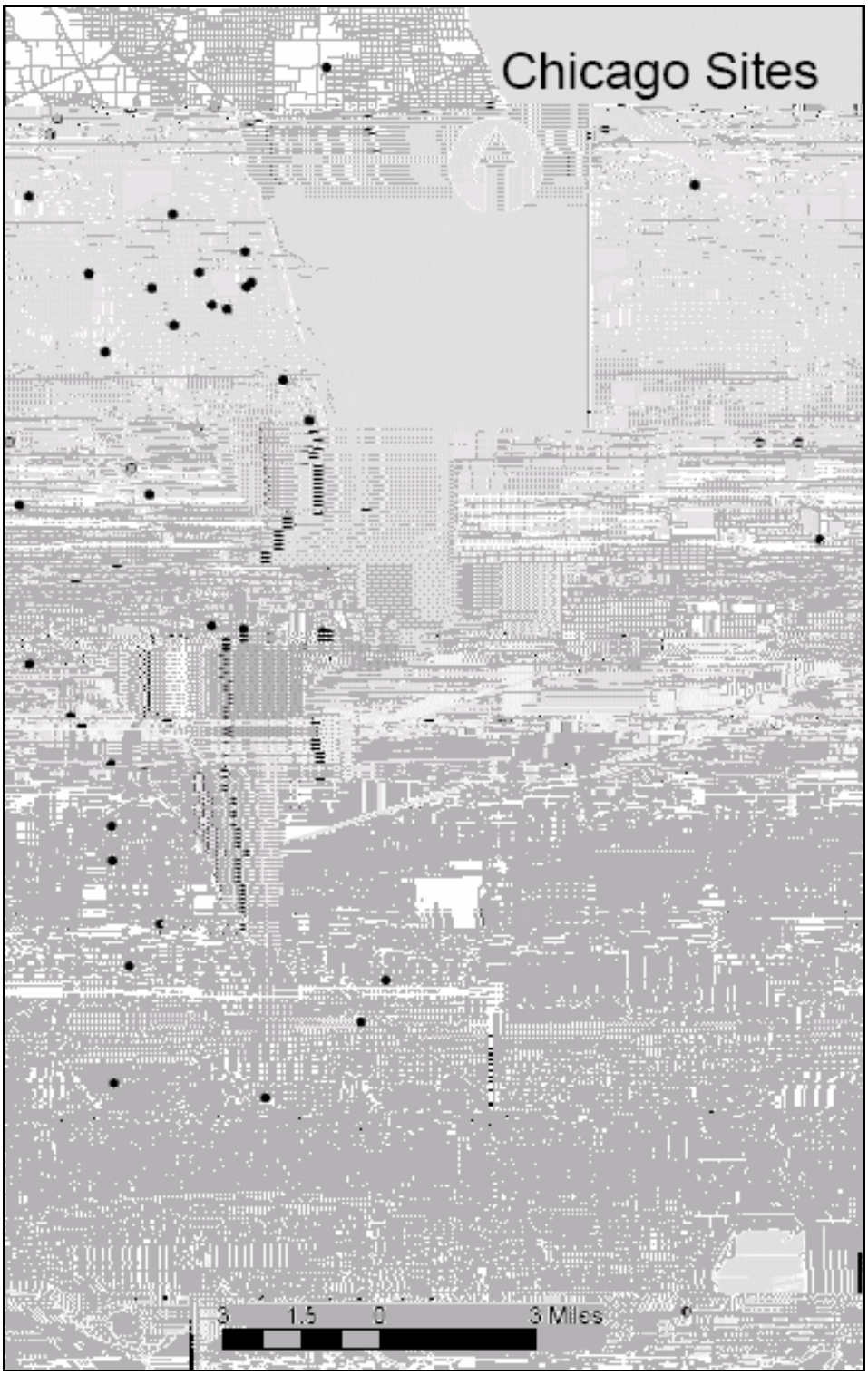


Figure 2: Residential Brownfields Projects, City of Chicago (1997-2004)

regard to who the developers are given that a smaller percentage of Chicago developers were interviewed. Most are for profit (41 projects), followed by a group of non-profit developers (3

uses. Interestingly, several of the publicly-assisted sites were former public housing properties that had been torn down or transferred to another owner. These may have required remediation due to LUST spills, leaks from adjacent land, or historically-elevated levels of contamination that many developers claim affects the entire city and are tied to the Chicago fire of 1871 and historic filling practices. Indeed, a few developers mentioned that background levels maintained by the IEPA are cleaner than most of the residential soils in Chicago. Private sites showed a similar previous-use typology, although few had been residential and outlined multiple uses.

History	Industrial / Warehouse	Transportation	Retail	Commercial	Residential	Vacant	No Data	Multiple
Public								

Table 1.9: Former LEPA sites and residential to b

Bldg. Foundation	Multiple
	11

Half of the Milwaukee developers were constructing affordable housing, (with half of those concentrating on it exclusively). All but two engage in other forms of redevelopment (commercial retail or office), largely as adjuncts to residential projects. When asked generally what they felt about the condition of the brownfields market in Milwaukee, all stated that the market for brownfields redevelopment was good or very good, particularly for those experienced with brownfields. As one interviewee put it, "brownfields continue to be a great niche market for a handful of developers because it still tends to help scare away the competition."

PROJECT DEVELOPMENT

When asked to list and rank the factors/features that attracted them to a particular brownfield site, the most common response was the property's proximity to the downtown core, followed by access to services, good neighborhoods, proximity to natural amenities, the low price of land, and attractive views (see table below for additional factors). Most of the factors related to location, but several also related to attributes associated typically with brownfields (i.e., the low price of land, the availability of an area-wide development plan, subsidy provisions, large lot sizes, availability of buildings for reuse, and constructions that qualify for historical designation), or to the desire to address typical urban problems (i.e., redevelopment as a good catalyst for renewal, for stabilizing neighborhoods, for providing affordable housing).

	Milwaukee
	Frequency
Proximity to Downtown	5
Access to Services	4
Good Neighborhood	4
Proximity to Natural Amenities	3
Low Price of Land	3
Attractive Views	3
Strong Property Market (feasibility)	2
Proximity to Public Transit	2
Guidance of a Development Plan	2
Qualify for Subsidy	2
Proximity to Roadway/Highway	2
Large Lot Size	2
No Adverse uses Close by	2
Good Catalyst for Renewal	2
Stabilize Neighborhood	1
Provide Affordable Housing	1

The respondents revealed a similar outlook when they were asked to rank on a scale of 1 (not effective) to 5 (very effective) individual tools for facilitating redevelopment. Overall, respondents in Milwaukee felt that all but the creation of a brownfields inventory would be moderately effective (3 and over). All of the financial instruments were looked upon very

year on average (2 median), versus 3 greenfield (or clean site projects) (2 median), with most

preparation was considered much more difficult (4.4 mean, 5.0 mode) because of the additional time required for assessment, cleanup, and review. In regards to financing, many interviewees still found it slightly more difficult to obtain (3.9 mean, 3 mode).

Planning and development, marketing, and stakeholder involvement were considered only moderately more challenging (3.5 mean, 3 mode). While profitability was considered virtually the same (3.1 mean, 3.0 mode), there was general agreement that project duration was more difficult (4.1 mean, 4.0 mode) due to the need to obtain multiple approvals from regulatory agencies.

Increasing Residential Redevelopment on Brownfields

When asked to point out measures for increasing residential development on brownfields, just over half of those interviewed pointed out the need to streamline regulatory procedures in order to make them less time-consuming and onerous. Indeed, two of the interviewees pointed out that no more public involvement is required because, as they put it, "their involvement only complicates matters." Most other suggestions related to relevant costs (i.e., additional funding, TIF financing, funding for residential use specifically, and reducing land costs), while the remainder related to regulation (i.e., loosening cleanup standards, leveling the playing field in terms of access to brownfields, and developing a comprehensive brownfie[s)u8

[redacted]

potential contamination issues, and possible govern

RECOMMENDATIONS

Results from the analysis of re

can integrate economic, environmental, and community-based aspects of redevelopment.

- Local governments must come up with both area-wide and site-specific strategies for redevelopment, preferably in consultation with the development community, to maximize the potential of infill development and to support large scale projects.
- Local government must devise strategies for both market rate and affordable housing in conjunction with private developers and non-profits.
- Local governments must better track their involvement in brownfields redevelopment so as to better understand redevelopment outcomes related to both housing and economic variables, but also sustainability oriented ones.

CASE STUDIES

Trostel Square, Milwaukee

Developer
Mandel Group, Inc.

Date completed
2004

Site area
4.5 acres

Number and type of units
126 residential units, 27 condos and 99 apartments

Floor area
Apartments - from 772 to 1,346 square feet
Condos - from 1,100 to 2,500 square feet

Pre-development usage
Tannery

Condo sale price
$260,000 to $480,000

Rental price
From $1,040 to $1,680

Trostel Square is a residential community located on the banks of the Milwaukee River in close proximity to the downtown core and popular neighborhoods. Valued at approximately $20 million, this 126-unit residential community consists of 99 apartments located in two three-story buildings along North Commerce Street, and 27 condominiums located in three clusters along the river. The development has added to the public Riverwalk and also generated some open space for the neighborhood. It also includes a private clubhouse and boat slips for residents. It is one of several residential redevelopment projects constructed within the City's Beerline "B" Master Plan area. This area was a former industrial corridor dating back to the early 1800s with a railroad route that served various industrial facilities including the Schlitz and the Pabst breweries, ergo the beer line.

Figure 3: Trostel Square, Milwaukee, Wisconsin (2005)

The project was carried out by Mandel Group, Inc., a large residential multi-family developer operating primarily in the greater Milwaukee area. The Mandel Group is an integrated real estate services firm with operations in development, construction, and property management. Since its formation in 1991, it has developed and constructed over $200 million in residential and retail develo

Figure 4: Former Trostel Tannery (from Misky 2005)

development, the Beerline "B" Plan includes strategies for improving public infrastructure, enhancing recreational space, increasing public access to the river, and connecting the area to the adjacent Brewer's Hill neighborhood.

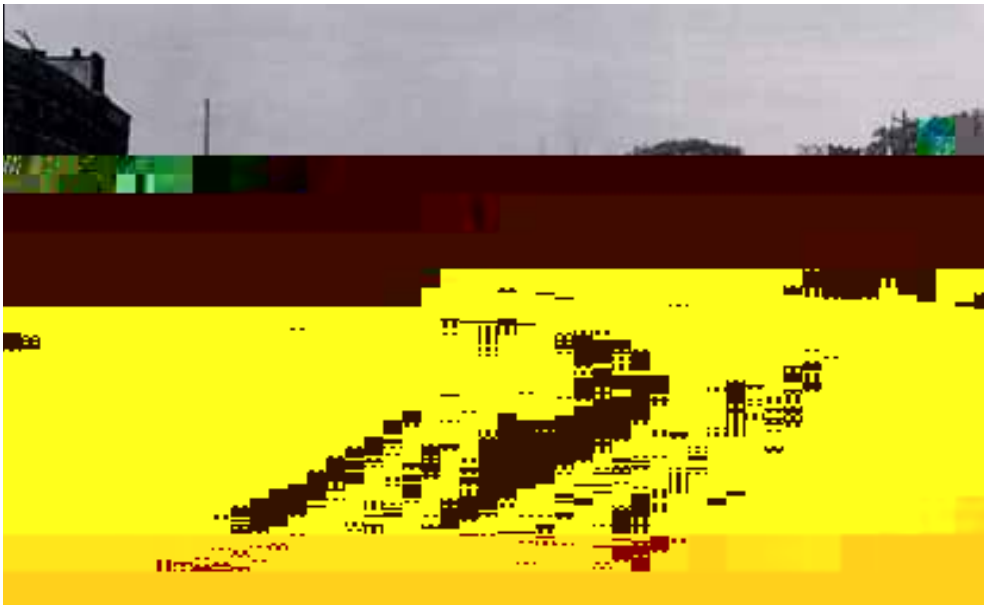
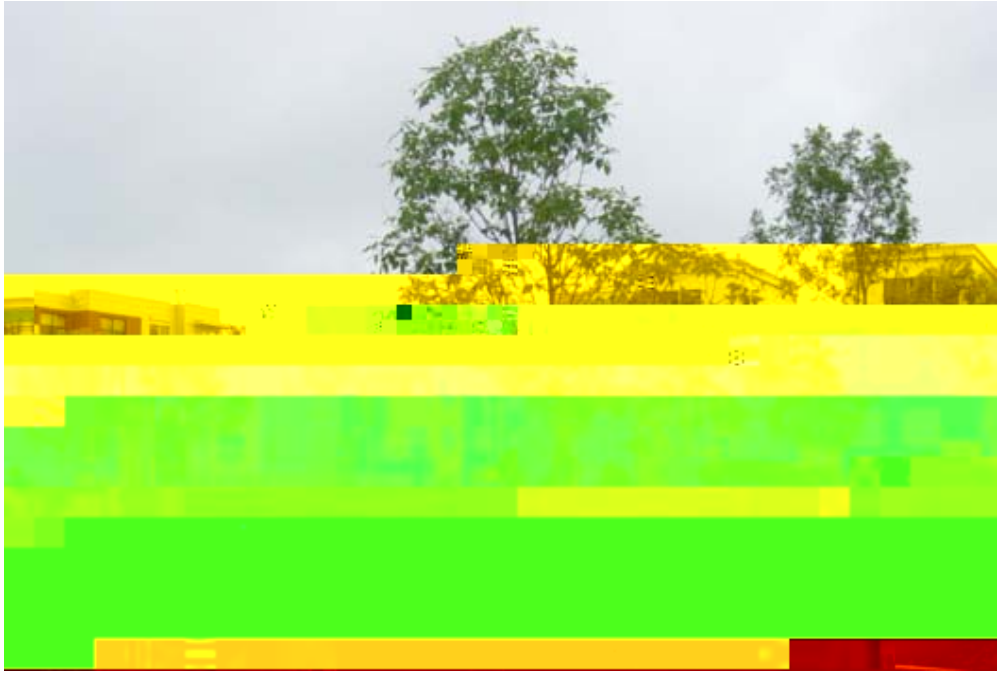


Figure 5: The Beerline "B" (Misky 2005)

Guided by the Plan, which many developers noted created a predictable setting for investment in the community, development in the area has occurred at a rapid pace and has received little negative reaction from the public. Some residents of nearby Brewers Hill and Riverwest communities have been concerned about the loss of green space and about a growing gentrification problem. However, city officials note that usable parkland in the area has actually increased, while developers argue that the surrounding neighborhoods are among the primary beneficiaries from the removal of blight that traditionally plagued the area. Another community concern relates the high density of several new projects and the fear that some developers are placing too many units along the river.



Milwaukee's City Homes Project

Developer
City of Milwaukee, Department of City Development & Independent Builders

Date completed
Residential brownfields project completed in 1995, although the CityHomes program is ongoing

Site area
Project: 6.6 acres

Number and type of units
43 single-family dwellings

Pre-development usage
Vacant land

Sale Price
$100,000 - $150,000

CityHomes is a public-private partnership coordinated by the City of Milwaukee's Department of City Development aimed at revitalizing urban neighborhoods in decline. The original CityHomes project was initiated in the early 1990s on an area of highly concentrated vacant lots, many of which the city acquired because they were tax delinquent. The first CityHomes project consisted of 43 parcels that were prepared for development by the City and sold to prospective homebuyers and small builders for the construction of single-family dwellings. CityHomes is a new urbanist style development reminiscent of early 20th century homes that blend in with the surrounding neighborhood. While the neighborhood is located just two miles from downtown Milwaukee and has good access to public transportation and the interstate, it had suffered from decades of disinvestment that made it unattractive to private development. The success of the first phase of the program has led to its expansion in the area, which includes new development, as well as city assistance for the rehabilitation of existing homes.

The original CityHomes project was constructed on cleared underutilized land. The property was designated by the Wisconsin DNR as an Environmental Repair Program site, but environmental assessment and management costs were relatively minor at just over $72,000. Indeed, the main problem at the site, which had been primarily residential decades earlier, was the need to remove many old basements that had been buried.

Figure 8: Cityhomes Milwaukee, 2005

The residential project has been very well received locally because it has played a central role in breathing new life into the community. New families are interested in moving into the neighborhood, and existing residents feel more secure in investing and improving their properties. Private investment is also entering the neighborhood in the form of new residential and retail development. The positive response has been a good thing for the city given its initial concern about whether anyone would buy the parcels that they had readied for housing. However, the lots turned out to be needed and in high demand due to several factors, including; their attractive location, proximity to downtown, buyer's perception of investment in the community, the desire by many buyers who grew up in the neighborhood for new housing, and a sufficient concentration of land that could contribute to the formation of a new "neighborhood."

City Homes is an example of a housing project that has converted a highly concentrated, vacant, city-owned brownfield into a thriving community. Despite the uncertainty regarding interest in the project and the low value of property in the area, the project turned into a significant success that exceeded expectations. The model was soon replicated in the neighboring Lindsay Heights community and the city intends to replicate its success in other parts of the city on other underused brownfields properties.

New Covenant Housing, Parkwest Development, Phase I & II, Milwaukee

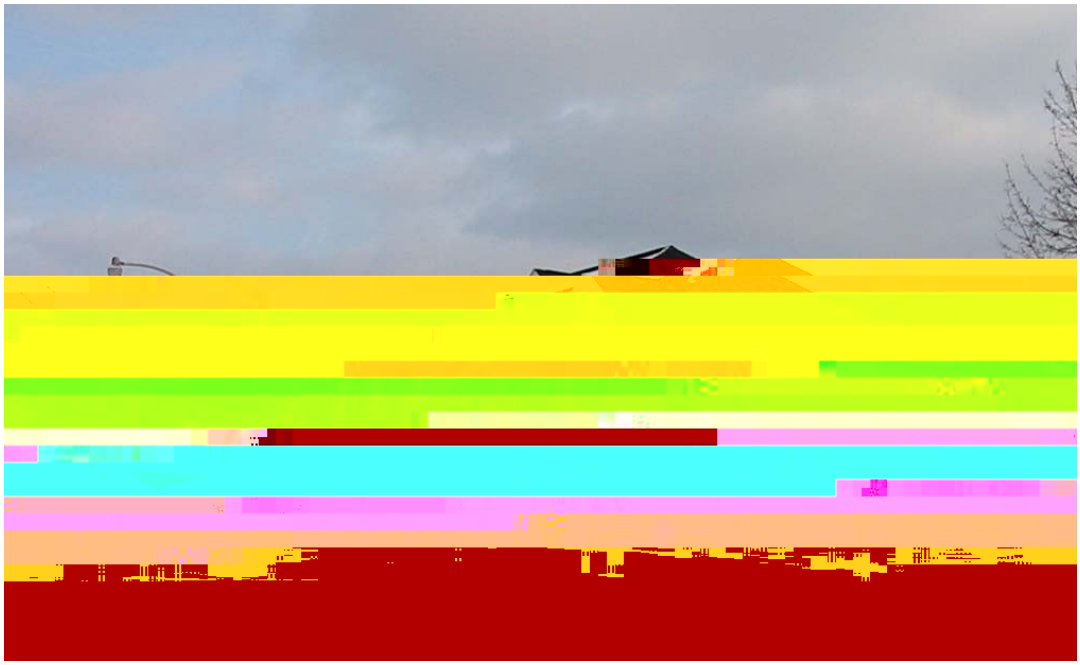


Figure 9: New Covenant Housing, Milwaukee 2005

The Parkwest project was developed on land that had been cleared in the 1960s for a freeway that was never constructed. Although the freeway project was ultimately abandoned, numerous properties were knocked down in the process, leaving a vacant blight in the community that accelerated disinvestment. Fortunately, the area cleared was primarily residential and contamination issues were minimal, (under $20,000) consisting of site assessment and the removal of a leaking underground storage tank. Assessment and cleanup costs were covered by Milwaukee's redevelopment authority and community development block grant funds.

NCHC sponsored the $8 million development and is currently responsible for its management. The Wisconsin Partnership for Housing Development, a nonprofit corporation that forms partnerships for affordable housing in Wisconsin, acted as a development consultant to help with project planning, feasibility analysis, and the coordination of the two-phase development plan. The Partnership also assembled the financing for both phases, which included federal Low Income Housing Tax Credits, public and private grant funds, and debt financing. A tax incremental financing district formed for the North Avenue district by the city also brought public improvements to the site.

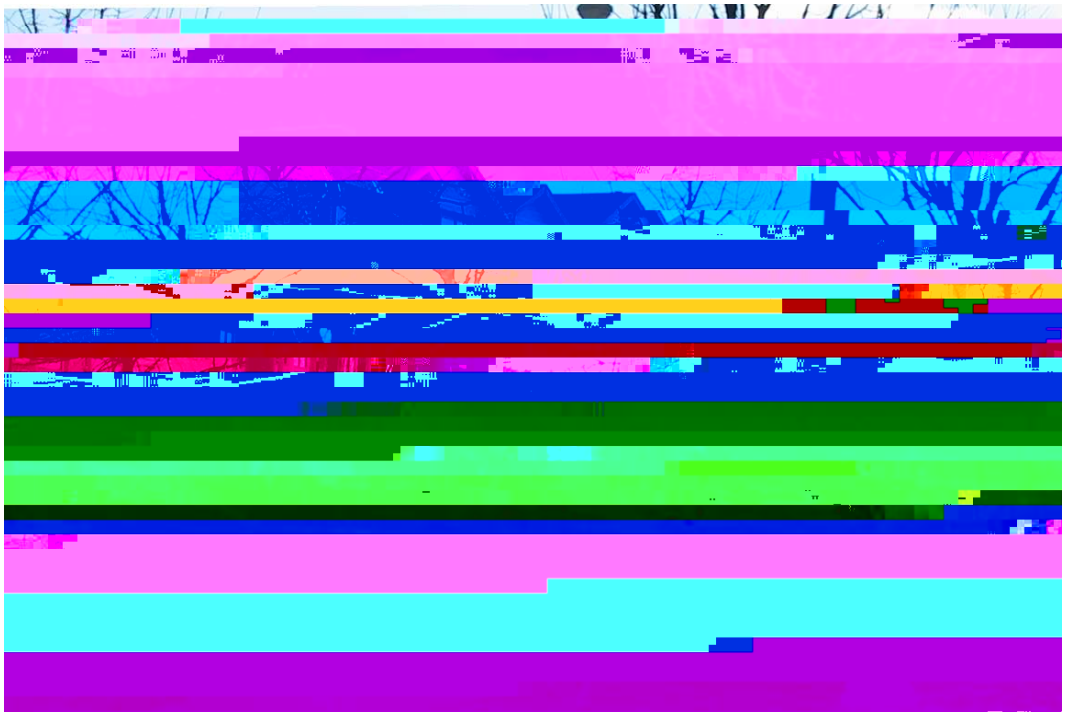


Figure 10: New Covenant Housing, Milwaukee 2005

Milwaukee's Department of City Development has targeted North Avenue with a tax incremental financing district between N. 31st St. and N. Sherman Blvd. The $1.5 million district provides slightly over $1 million for streetlights, wider sidewalks, and an improved city-owned parking lot. The district also includes a $400,000 business development fund, which provides building facade grants and seed capital for new businesses. The higher property tax revenue generated by new development in the area will recover the fund

commercial space. Both the non-profit and private-sector efforts are receiving support from the city of Milwaukee, the Milwaukee Economic Development Corporation, several Milwaukee banks, local foundations, and other non-profit groups such as LISC (Local Initiatives Support Corporation, the nation's largest community development support organization).

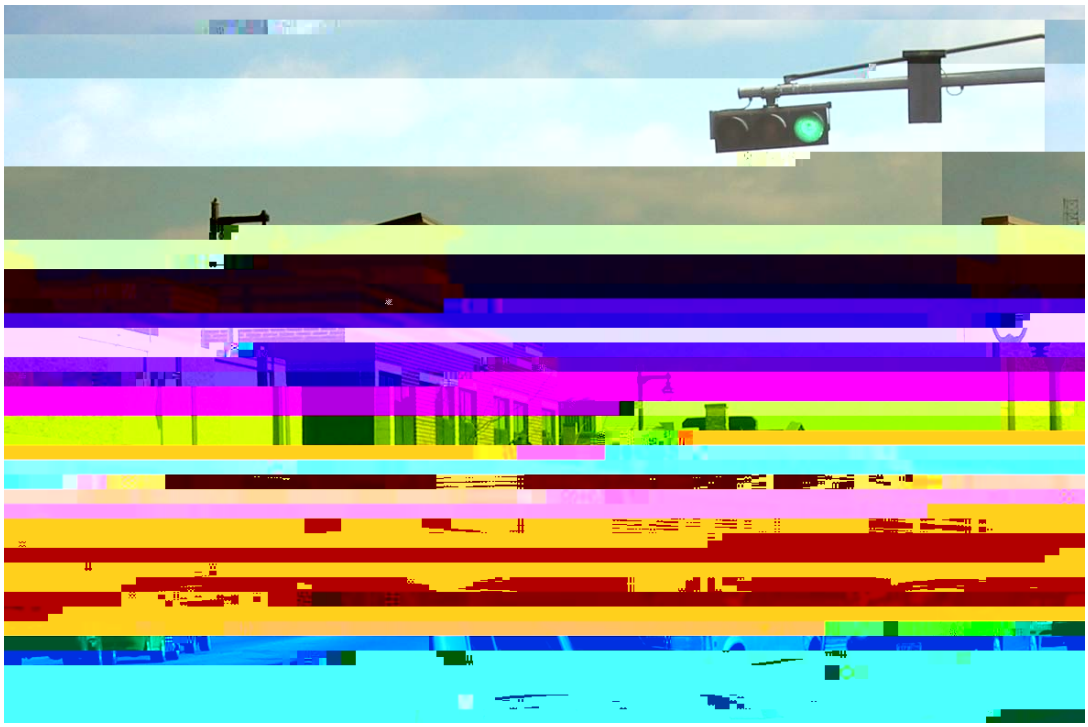


Figure 11: Renewed buildings along North Avenue, Milwaukee 2005

New Covenant's Parkwest project provides an example of how a faith-based non-profit with no redevelopment experience, but high expectations, turned a vacant brownfield into a catalyst for inner city renewal. The development not only provided needed housing for families in the community, but also caught the attention of public and private investors willing to be a part of an up-and-coming neighborhood. It has also encouraged other faith-based institutions to consider residential redevelopment of brownfields in their communities as a means of sparking renewal.

Columbia Pointe, Chicago

Development Team
Woodlawn Preservation and Investment Council, The Woodlawn Community Development Corporation, the Chicago Center for Community Development Enterprise, and the Neighborhood Rejuvenation Partners

Date completed
Phase 1 ongoing, Phases 2 and 3 currently under funding and planning

Site area
Phase 1 5.5 acres

Number and type of units
Phase I - 51 homes, Phase II and Phase III initially planned for 89, however 209 additional units now under consideration

Pre-development usage
Vacant commercial property

Price range
$200,000 - $400,000, with 20% affordable

The Columbia Pointe Housing project is the result of four neighborhood organizations-the Woodlawn Preservation and Investment Council, The Woodlawn Community Development Corporation, the Chicago Center for Community Development Enterprise, and the Neighborhood Rejuvenation Partners-coming together to build a place to live for community res98

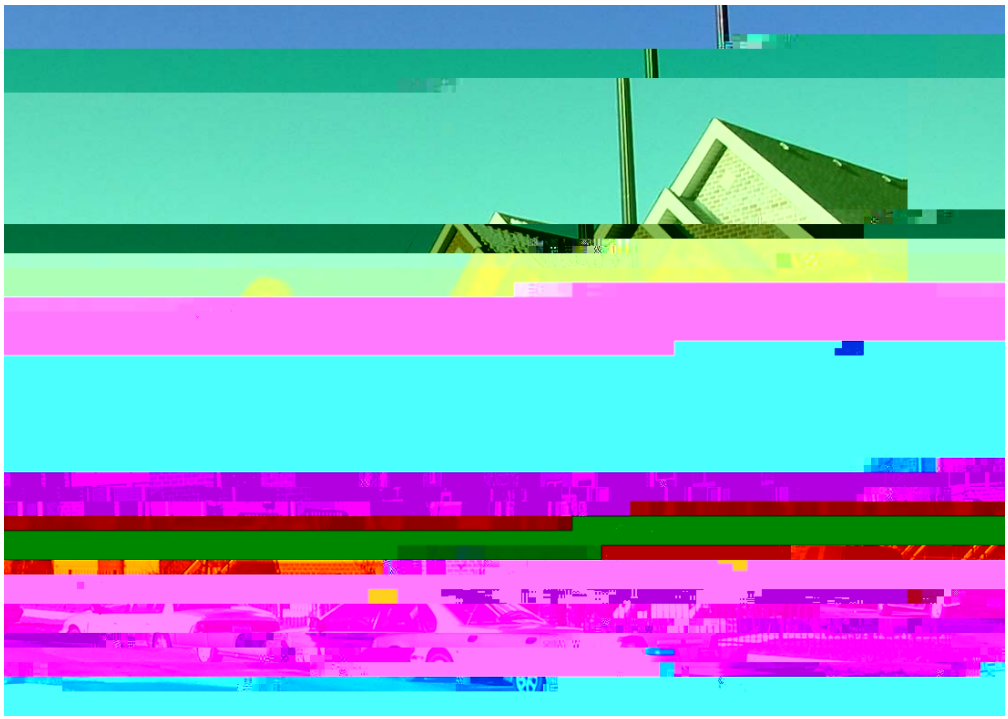


Figure 12: Columbia Pointe (Phase 1), Chicago 2005

As mentioned, the project is being developed via a collaboration of four key partners. The Woodlawn Preservation and Investment Corporation (WPIC) is the lead agency for the New Communities Program, which in alliance with LISC (Local Initiatives Support Corporation), supports community development in 16 Chicago neighborhoods, including Woodlawn. The five-year program seeks to catalyze redevelopment and revitalization in Woodlawn and to build housing "that poor people can live in, not poor people's housing." WPIC is committed to increasing residential housing opportunities and supportive commercial uses to achieve an economically and racially integrated population in Woodlawn. The Woodlawn Community Development Corporation (WCDC) was founded in 1972 to serve as the umbrella for The Woodlawn Organization's real estate development and management activities. The Woodlawn Organization is a not-for-profit community-based organization founded in 1960 that consists of an alliance of block clubs, churches, tenant councils and other civic and institutional entities organized to build a viable and healthy Woodlawn community. The WCDC has developed more than 1,659 units of single family and senior housing in fourteen different developments and is experienced in creating site, phasing and financial plans, determining unit mixes and working extensively with government subsidy programs. The Chicago Center for Community Development Enterprise, operated through Citibank, provides financing packages to help bring community development projects to fruition. The program offers for-profit and non-profit developers and businesses financing packages for projects in low and moderate-income areas in cities across the United States. Lastly, the Neighborhood Rejuvenation Partners is a for-profit group LLC.

The Columbia Point site had previously been home to various commercial establishments, including a laundromat, hardware store, and a public library. The property was contaminated and had become a visual blight for the community consisting of abandoned

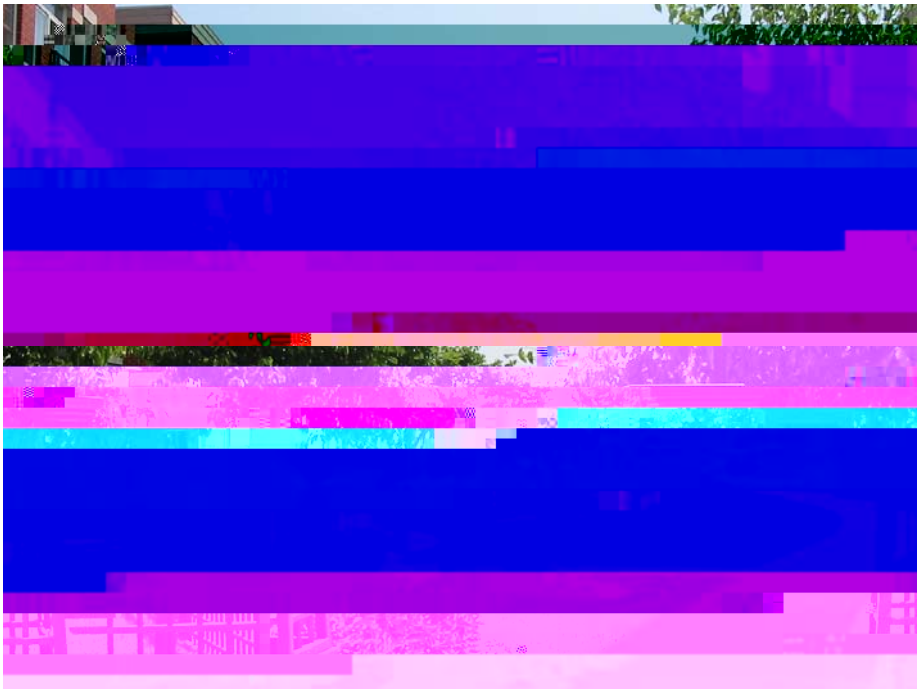
buildings and vacant lots. Initial investigation indicated that the surface of the site consisted of fill material to depths ranging from three to nine feet containing polynuclear aromatic hydrocarbon compounds (PNAs), bis(2-*cloroethyl)*ether, and lead at concentrations exceeding the Illinois Environmental Protection Agency's Tier 1 Soil Remediation Objectives for residential property. Benzo(*a)*pyrene and lead were also present at a level exceeding the objectives for construction worker exposure. In total, approximately 245 tons of lead-impacted soil, 2,000 tons of PNA-impacted soil, and a 1500-gallon underground heating oil tank were removed from the property prior to development. Assessment and remediation were performed in accordance with the Illinois Environmental Protection Agency's (IEPA) Site Remediation Program and a 'No Further Remediation' letter was obtained for the property.

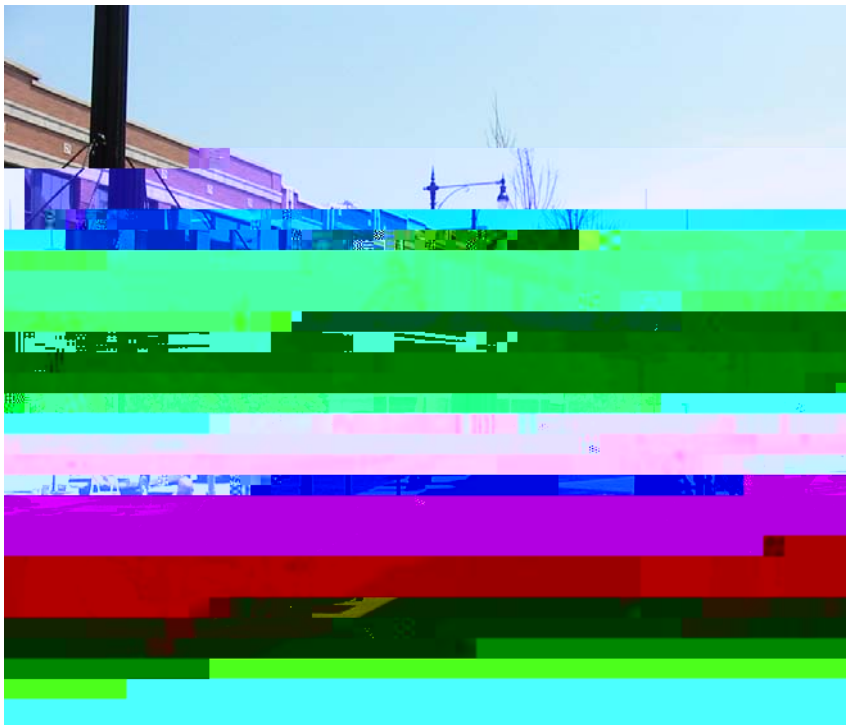
The City of Chicago invested nearly $480,000 to research and ultimately remedy the environmental damage at the site (for phase 1) via the Department of Environment. The Citibank Center for Community Economic Development (CCDE) provided two financing vehicles for the Columbia Pointe project: (1) a $5 million revolving line-of-credit from Citibank to be used by the Woodlawn Park, LLC to redevelop the site; and (2) special "first-time" mortgages "d-5(to)2(r)-6(th)-4(e(Obj)-ffi]TJhicaoity E)y t(C

In terms of marketing, phase 1 of Columbia Pointe sold out within two weeks of opening to the public, and therefore, not much was required beyond advertising in small local and larger regional newspapers. The features and prices were attractive enough to potential buyers that essentially 'word of mouth' was sufficient to fill the housing quickly. The proximity of Columbia Pointe to Lake Michigan, the Loop, Hyde Park, and convenient transit (Metra), all in a project that provided relatively ample lot sizes, supplied all the marketing necessary. Though no specific communities or groups were specifically targeted for sales, the intent of the development was to draw from a range of potential buyers. Within this goal of creating a

Figure 14: Conceptual Plan of University Village, Chicago

The South Campus Development Team is a consortium of three development organizations in Chicago- Mesirow Stein Real Estate, Inc., The New Frontier Companies, and The Harlem Irving Companies-each with long histories of residential, retail, commercial and institutional development in Chicago. Mesirow Stein, the real estate arm of Miserow financial, is one of the Midwest's largest development firms and carries out real estate development and consulting activities for the public sector, private corporations, and individuals. The New Frontiers Companies is a group of 11 firms with expertise in new construction, real estate development and retail/residential management. The Harlem Irving Companies are involved in retail development, leasing and management. Together, the consortium is responsible for developing the private housing component of the site and is the program manager for UIC's part of the development.





After the Great Chicago Fire of 1871, the property was filled with charred detritus from the conflagration. Added later were canal and harbor-mouth dredging from the expansion of the area east of Michigan Avenue. In the 1960s, urban planners decided it would serve as the site of a mega-development called Illinois Center, but the economic downturn of the 1970s caused the eastern half of the retail-and-office complex to be scaled down. Briefly considered as the location of a new Chicago Bears stadium in the 1980s, the site was later reborn as a nine-hole downtown golf course. The old docks and boat slips of the harbor, which were buried under the fill, presented some concerns during early work. The site's problematic history was revealed further when early testing showed traces of thorium, which is a radioactive element. Between landfill operations and the construction of locks to reverse the river's flow at the beginning of the 20th Century, some of that thorium made its way into the ground. Thorium at the site was excavated as far down as 13 feet into the ground, and excavation throughout the site was done in 18 inch lifts so that the material could be scanned in an ongoing manner. The contaminated materials were transported to a facility near Moab, Utah for management. The $4 million dollar assessment and cleanup costs were borne by the developers and the only public assistance provided for this project was in the form of a public improvement bond for sewer and water infrastructure.

The developers of Lakeshore East have recently refinanced the massive mixed-use project w.6pti9s9 Tm(T-23.0ln6( )5(w AFPs.0156 Tw -c)3(ed t-0O pe0.00011 Tw -0.nd-5(e)10.1844oriu)-nsa

ACKNOWLEDGEMENTS

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- **Medium priority** means that contamination exceeds one or more preventive action limits in NR 140, Wis. Admin. Code.
- **Low priority** means that contamination did not exceed any of the preventive action limits in NR 140, Wis. Admin. Code.

Spills. A spill is a discharge usof hazardous substances that may adversely impact, or threaten to adversely impact, public health, welfare or the environment. Spills are usually cleaned up quickly.

Superfund. Superfund is a federal program created by Congress in 1980 to finance cleanup of the nation's worst hazardous waste sites. Thirty-nine of these sites may presently threaten human health and/or the environment in Wisconsin.

Tax Increment Financing (TIF). Tax increment financing is created through the assessment of property values. Special assessments are made on properties that are expected to gain particular benefits from a general improvement or from an environmental activity (such as a cleanup). The incremental difference in tax revenues between the original assessment rate and the new, higher assessed rate is then used to finance the improvement activity.

VPLE (Voluntary Property Liability Exemptions). These are exceptions that apply to sites in which a property owner conducts an environmental investigation and cleanup of an entire property, and then receives limits on their future liability.

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