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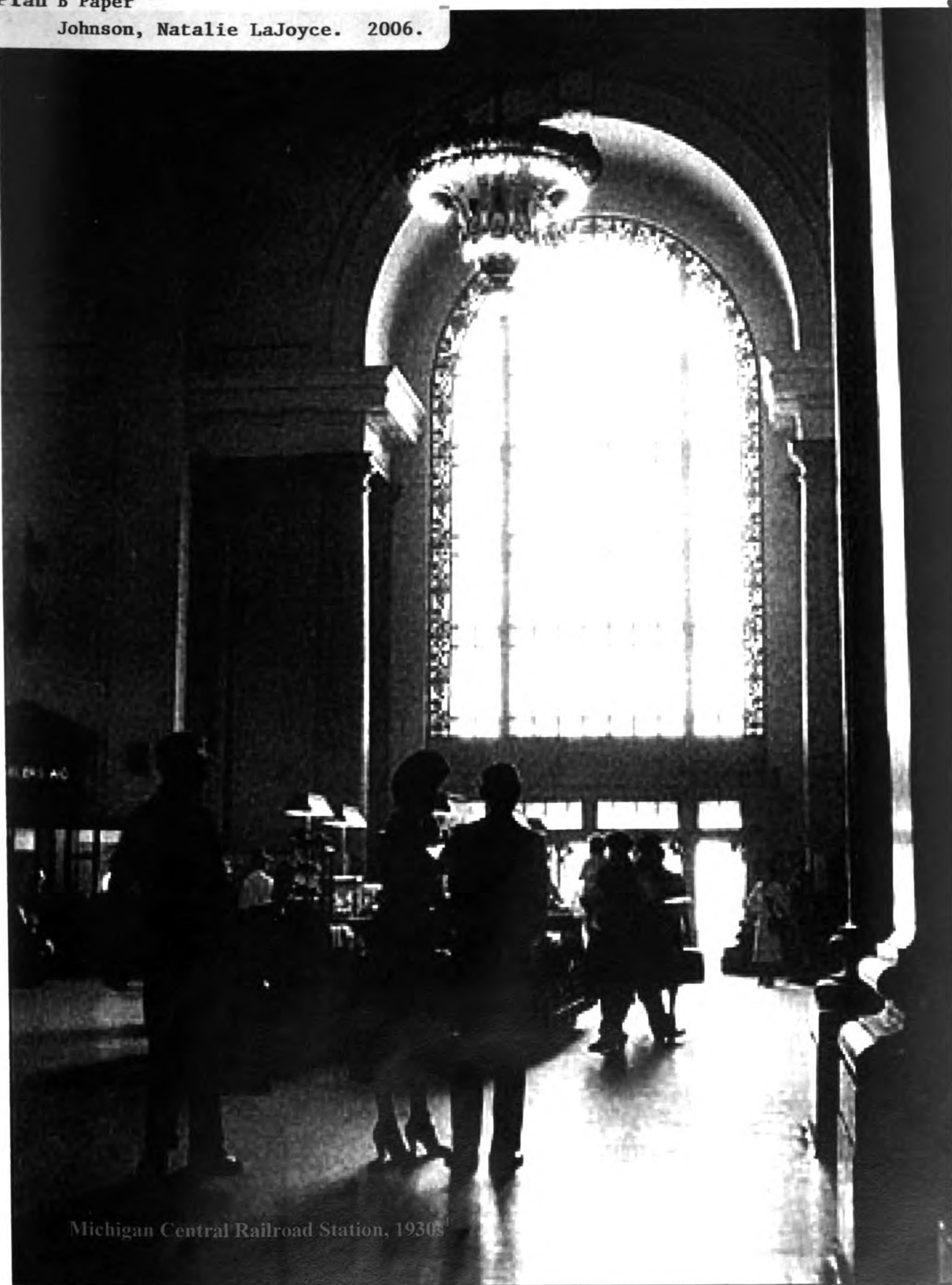
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Michigan Central Railroad Station, 1930s<sup>1</sup>

<sup>1</sup> [www.Detroityes.com](http://www.Detroityes.com)



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**MICHIGAN STATE UNIVERSITY  
REUSE OF ABANDONED INDUSTRIAL SITES  
CULTURAL INDUSTRIAL SITE CONVERSIONS**

**A PROPOSAL SUBMITTED TO THE FACULTY ADVISOR FOR THE DIVISION OF SOCIAL SCIENCES  
IN CANDIDACY FOR THE DEGREE OF MASTER OF  
URBAN AND REGIONAL PLANNING AND DEVELOPMENT**

**SCHOOL OF URBAN PLANNING AND LANDSCAPE ARCHITECTURE  
DEPARTMENT OF URBAN PLANNING AND DEVELOPMENT**

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EAST LANSING, MICHIGAN  
CONVOCATION MAY 6, 2006**

To Barbara, my mom, Audrey, my sister, and  
in honor of Bishop W.S. Wilson, my grandfather,  
thank you for planting the **SEED** and sharing with me **THE FOUNDATION** to build upon.  
You all have inspired me more than you will ever know.



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## INTRODUCTION

Historically, brownfields have been recognized as barriers to the growth of urban communities. Many abandoned industrial sites are the result of the lack of industrial retention in the 1940s.<sup>2</sup> The lack of industrial retention opened the gate for manufacturers to leave the central cities to less dense areas searching for cheaper land and labor. Former industrial sites have been abandoned as the original company either moves elsewhere, fails at global competition, neglects to implement technological change, or simply has outdated equipment. Retention encourages renovations, rebuilding, and innovative transformations that sustain companies and improve the quality of life of their communities.

“The lack of industrial retention caused people to migrate to the suburbs because cities have very little space for greenery; the lack of high-quality green public space...is prompting many people to leave the city. If the increasing suburbanization is to be halted then it is vital to make our cities healthy, versatile and attractive again. The departure of the manufacturing industry gives us the chance to make dramatic, innovative improvements in the living quality of the city. In this respect the incorporation of first rate public space for the urban community is just as important as residential and office space development.”<sup>3</sup>

The reuse of brownfield industrial sites for recreational purposes will be beneficial for communities from an aesthetic, economic, social, and environmental

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<sup>2</sup> Joe Lorenz and Tom Mignery “*Urban Revitalization Requires Local Groups to Learn to Identify Brownfield Sites and Understand the Liability and Environmental Concerns*,” Brownfield Remediation, Environmental Protection Magazine.

<sup>3</sup> [www.creativecity.com](http://www.creativecity.com)



perspective. The goals of reusing these sites are to create an attractive city where people will enjoy living, working, spending their free time, and to create a ‘spill over’ effect, which increases the value of the land in surrounding neighborhoods, thus increasing home ownership and economic development. “Brownfields often have prime locations in ... urban area[s], since they [are] often situated next to a natural transportation corridor such as a river or a railroad line.”<sup>4</sup> These transportation corridors tend to be highly accessible and visible to the public; however, both the private and public sector have shown limited interest in reusing existing contaminated industrial brownfields in these community settings.

Today, it is important for urban planners to identify critical concepts that preserve community activities that respond to the needs of local business investments, increase home ownership, and provide new green cultural spaces that will enhance the urban character in central cities. Applying these concepts will create a proactive environment that will strengthen communities’ economic base rather than a reactive environment which responds to volatile changes. The planning profession requires the incorporation of predictions, preparation, and developments that change, manage and create healthy communities. The implication of this research paper is to provide planners with an ideal model to fight the barriers of industrial redevelopment through change: (CISC) *Cultural Industrial Site Conversions*.

Cultural Industrial Site Conversions is defined as the re-use of abandoned industrial sites for cultural or other recreational uses with full reverence to the site’s original structure, characteristics, historical background and its recreational use potential. The emphasis is on converting the site into complex, cultural, recreational uses without

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<sup>4</sup> *Supra* note 1.

altering the historical building structure. Recreational uses are numerous; therefore, the site's location and structure will be critical factors in determining the recreational use chosen for the site.

Cultural Industrial Site Conversions are similar to *Historical Preservation* with a slight difference. Historical Preservation's goal is to "protect the irreplaceable places that tell America's story."<sup>5</sup> Historical Preservation drives to preserve buildings that provide interesting and attractive surroundings while Cultural Industrial Site Conversion will work to create interesting and attractive surroundings that were not present before. Furthermore, Cultural Industrial Site Conversions lends itself to specific abandoned sites and uses, while Historic Preservation's primary purpose is to acquire historical sites only.<sup>6</sup>

This research paper discusses the decline of the manufacturing industry in Michigan and proposes the development of a policy to reuse contaminated industrial sites for cultural recreational uses. The redevelopment will be based on criteria derived from case studies that examined why reusing contaminated industrial sites is a beneficial strategic action for public and private partners to pursue. This innovative policy is applicable to abandoned contaminated sites in Michigan. The Michigan Central Station is a potential site for redevelopment.

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<sup>5</sup> [www.nationaltrust.org](http://www.nationaltrust.org)

<sup>6</sup> Ibid.

## DEFINITION OF THE PROBLEM

### DEFINITION OF BROWNFIELDS

Brownfields are defined by the United States Environmental Protection Agency (EPA) as ‘abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.’<sup>7</sup>

### EFFECT OF URBAN ABANDONMENT

Industrial displacement has been widespread in central cities.<sup>8</sup> Beginning in the 1940s, the level of suburban manufacturing growth exceeded that of cities. By the 1960s, both suburban and urban economies were restructuring, with continued growth of high valued-added manufacturing in the suburbs, and decline of manufacturing in the cities, where business services were expanding.<sup>9</sup> By the late 1980s, the location of economic concentration for manufacturing in many suburbs was higher than their corresponding central cities.<sup>10</sup> These patterns still exist today. The relocation of many manufacturing plants caused the abandonment of industrial sites and a cycle of deterioration in urban centers throughout Michigan.

The decline of manufacturing has caused significant problems for cities and first ring suburbs in Michigan. One important aspect of the problems is the lack of industrial retention. Industrial retention includes activities that respond to the needs of local

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<sup>7</sup> *Supra* note 5. *See also supra* note 3.

<sup>8</sup> *Ibid.*

<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*





businesses, such as infrastructure improvements, safety concerns, technical assistance in modernization, and employment training. These factors strengthen the city by preserving its economic base, rather than responding to the threat of plant re-locations and closings.<sup>11</sup>

## ENVIRONMENTAL EFFECTS

Contaminated brownfield industrial sites present a number of potential dangerous environmental impacts through the hazardous waste remaining within the site. The EPA defines hazardous waste as “toxic, corrosive, ignitable or reactive materials ... These materials are corrosive to the skin tissue or materials, unstable and can explode or release toxic fumes or have harmful concentration of one or more toxic materials that can leak out.”<sup>12</sup>

Brownfield sites have the potential to pose a threat to public health and safety in two ways. First, nearby residents are at risk if the sites have been exposed and affected by industrial activities or by the storage or disposal of hazardous waste; these sites usually do not have the appropriate enclosures to keep out trespassers.<sup>13</sup> Secondly, brownfields have a dangerous effect on surrounding bodies of water, which destroys our wildlife and present psychological barriers to recreational activity.

In an effort to clean up the most polluted areas in the Great Lakes, the United States and Canada, in Annex 2 of the Great Lakes Water Quality Agreement, committed

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<sup>11</sup> Joan Fitzgerald & Nancy Green Leigh, *Economic Revitalization: Cases and Strategies for Cities and Suburbs*, Sage Publications 2002. (This book offered an alternative perspective for cities to keep their industrial market, which provides a large tax base for their communities. The lack of industrial retention contributed to the loss of manufacturing.)

<sup>12</sup> U.S. Department of Labor, Bureau of Labor Statistics (1990-2000a).

<sup>13</sup> Ibid.

to cooperate with State and Provincial Governments to ensure that Remedial Action Plans (RAPs) are developed and implemented for all designated Areas of Concern (AOCs) in the Great Lakes basin ... For example, the Detroit River is identified as a Great Lakes Area of Concern.<sup>14</sup> “[T]he governments of Canada, the United States, Ontario and Michigan signed a Letter of Commitment which will re-energize the restoration and clean-up of the Detroit River ... which specifies the roles and responsibilities of the four agencies in implementing and restoring the Areas of Concern shared between Canada, the United States, Ontario and Michigan. These roles and responsibilities include administrative commitments, development of bi-national de-listing process, public involvement and outreach and reporting progress to the International Joint Commission and the public.”<sup>15</sup> “Nine beneficial use impairments have been identified in the Detroit River ... Combined sewer overflows (CSOs) and municipal and *industrial discharges* are major sources of contaminants within the [Area of Concerns].”<sup>16</sup> (Emphasis added).

The reuse and redevelopment of an industrial site will decrease the potential health risks to the surrounding residents, and provide a better land use. That land use will also potentially provide new economic growth through new businesses, which will create new jobs, or a park for the residents to enjoy.

In many instances, owners of the abandoned industrial sites take the chance of contamination being determined upon the sale of the site instead of cleaning up the site beforehand, because remediation of the site will cost more than what the site is worth. Usually as a result, contamination is not known until the site is sold or a health risk has reared its dangerous head. Levels of contamination are determined by qualified

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<sup>14</sup> [www.epa.gov](http://www.epa.gov) See also [www.mnrg.gov/2003roundtable/detroit-report.html](http://www.mnrg.gov/2003roundtable/detroit-report.html).

<sup>15</sup> *Supra* note 12.

<sup>16</sup> *Ibid.*



engineers that assess the site and analyze ecological and human health exposures to determine whether the concentration of chemicals on the site pose concern. Engineering assessments along with zoning restrictions dictate whether a site is suitable for a specific potential use.<sup>17</sup> Once contamination is found, cleanup liability is applied by the federal and state environmental laws.

“Environmental assessment should be conducted as early as possible in the planning and proposal stages of the project for the analysis to be valuable to decision makers and to incorporate mitigated measures into the proposed plans. Timely and efficient environmental assessments result in more informed decision making that supports sustainable development.”<sup>18</sup> There are benefits to conducting the assessments early on in the process; opportunity for public participation, increased protection of human health, sustainable use of natural resources, reduced project cost and delays, minimized risks of environmental disasters, and increased government accountability.<sup>19</sup>

The federal government plays a critical role in the environmental assessment process. “The federal government determines whether it has a responsibility to ensure that an environmental assessment is conducted... [If the federal government determines that a responsibilities present], it contacts other federal authorities, or other responsible parties, that may have a responsibility [in the process]... [Together, the responsible authorities] identify how the assessment will be conducted by looking at the proposed project, the scope of the factors that must be considered when conducting an environmental assessment, and timelines.”<sup>20</sup>

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<sup>17</sup> *Supra* note 11.

<sup>18</sup> [www.ceaa-acee.gc.ca](http://www.ceaa-acee.gc.ca)

<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*

The EPA describes three phases within the *Environmental Site Assessment* (“ESA”) conducted by qualified engineer firms, which takes place when an industrial site is purchased and sold. In Phase I, the history of the site is reviewed; “typically required for transactions involving commercial or industrial properties or any other property having known know history of use that may have caused recognized environmental conditions.”<sup>21</sup> This phase identifies the owners of the site for the past 30 years or more. It determines prior uses of the site, as well as the previous use of the adjacent sites. In addition, the site’s regulatory background is investigated, which reveals the type of permits that have been issued for the site. This phase allows the landowner or bank to claim the “Innocent Landowner”<sup>22</sup> defense provided by law.<sup>23</sup>

In Phase II, samples of soil and water are collected; tailored to the specific conditions identified in Phase I. Potential contaminants are identified, and a formal plan for assessing the property is developed. A timeline is created to investigate the extent of contamination on the site, and a schedule is devised for the final completion of cleanup. Phase II ESAs cost between \$20,000 and \$200,000 or more.

Phase III is the actual cleanup of the brownfield site and offers three treatment options. First, hazardous substances and contaminated materials are excavated and disposed of in either an on-site or off-site landfill, or some can be burned. Containers, such as barrels or drums, of hazardous waste are removed from the site. Contaminated soil is treated or disposed. Second, containment is used to prevent the contamination of the site from spreading to other locations. To accomplish this, the site may need a cap made of asphalt or clay. Third, is treatment, which removes or remediates lingering

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<sup>21</sup> [www.applieder.com](http://www.applieder.com)

<sup>22</sup> Ibid.

<sup>23</sup> See note 20.

contaminates so they no longer pose a threat to human or ecological receptors. Waters, including rivers, ponds, or underground aquifers are remediated, and the soil may be removed, washed or incinerated. Treatment is the most expensive option, but it appears to be the most effective.

## SOCIAL EFFECTS

Brownfield industrial sites provoke negative views and impacts on the communities where they are located. Communities that have inactive contaminated brownfield industrial sites present economic and other social problems. Economic problems are a result of lost tax revenues, decreased surrounding property value, and decreased employment opportunities created by the lack of thriving operations and investment. For some cities, this can total hundreds of thousands of dollars in wages that might otherwise circulate through the area, bringing more economic benefits to communities.<sup>24</sup> As a result of the relocation of manufacturing industrial sites and residents,... cities experience decay and a loss of tax revenues; the city is incapable of maintaining infrastructure and providing civic services to the residents left behind.<sup>25</sup> Those left behind, through their tax dollars, are left with the burden of maintaining the infrastructure of a city that is too large for the current population.

The relocation of residents and jobs to the suburbs has one of the most detrimental affects on cities, economic loss. Detroit suffered an enormous economic loss when its population decreased more than half. It experienced major declines in employment and

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<sup>24</sup> [www.nemw.org](http://www.nemw.org), "Coming Clean, Framework of Environmental and Economic Development Concerns."

<sup>25</sup> See Alan Gordan, *California Brownfields: Neglected, Abandoned and Ignored*. Pub. NO. 98-6, March 1998.

income taxes and an increase in social problems. Its business district continues to suffer from the lack of interest by real estate developers to invest in new development. Cities usually collect 60% of their revenues from property taxes. Detroit, however, has been left with the remaining residents and businesses property taxes which amount to 12% of the city revenues. This is not enough money to support a city that was once built for two million people.

The decline of manufacturing jobs increased poverty levels in cities and promoted Greenfield development.<sup>26</sup> Manufacturing jobs are important to our economy because they pay higher wages than the service industry overall. In 2001, the average weekly earning for manufacturing workers was \$593.03 compared to \$441.94 for service workers. The difference in wages between these two sectors has remained constant since 1990.<sup>27</sup> The number of hours worked and required specialized skills are both important factors when it comes to the differences in wages paid. "Manufacturing employment edged down in August 2005, and has declined by 110,000 over the year."<sup>28</sup> "Motor vehicles and parts manufacturers, the largest industry in Michigan, shed 8,000 jobs in August; since May, employment has declined by 37,000. This industry has accounted for nearly half of all jobs lost in manufacturing over the year. Compared to the service industry, in August, the long-term employment ... has lost 46,000 jobs over the year."<sup>29</sup> Since 1980 to 2006, the average weekly hours worked have fluctuated

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<sup>26</sup> [www.investmentlanddirectory.co.uk/greenfield-land/](http://www.investmentlanddirectory.co.uk/greenfield-land/): "*Land that has not been developed before.*"

<sup>27</sup> *Supra* note 3 at 2000.

<sup>28</sup> [www.swlearning.com/economics](http://www.swlearning.com/economics).

<sup>29</sup> *Ibid.*

tremendously as a result of the changes in the [region and national] economy, which adds to the comparable difference displayed in wages.<sup>30</sup>

Second, abandoned contaminated brownfield industrial sites result in a waste of cities' resources. Existing streets and roads, water lines, rail spurs, and other infrastructure systems go unused; in jurisdictions with numerous brownfield sites, billions of dollars in prior public and private investment are essentially wasted. Brownfields are strategically placed near waterfronts and downtowns.<sup>31</sup> Their dilapidated structures negatively affect their surrounding sites, discourage revitalization and hinder new real estate development projects. "One of the best ways to arrest urban sprawl is to develop brownfields and make them productive pieces of land, where people can live ... and work. By one estimate, for every one acre of redeveloped brownfields, we save 4.5 acres of open space."<sup>32</sup> As manufacturing moves further out, the inner ring suburbs will have to turn their attention to industrial retention. Therefore, a redeveloped brownfield is central to most people, businesses, and already-built infrastructure, making it a more efficient location both in terms of transportation, but also in terms of less government outlay of infrastructure ... by reusing existing infrastructure.<sup>33</sup>

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<sup>30</sup> *Supra* note 3. See also *supra* note 27 at diagrams/data, "...It is evident ... that hours worked provides an excellent indicator of key turning points in the economy. The beginning of a recession is indicated by a decline in manufacturing hours worked. Likewise the end of all three recessions since 1980 are clearly marked by a sharp increase in the growth rate in hours worked per employee. ... The recession in 2001 was indicated by a drop-off in average hours worked beginning in the third quarter of 2000. Since then, average hours worked in manufacturing has fluctuated with no clear trend, though the data through the first two quarters of 2005 indicates a slowdown."

<sup>31</sup> *Supra* note 11.

<sup>32</sup> George W. (George Walker) Bush," *Public Papers of the Presidents of the United States, George W. Bush*," U.S. G.P.O. Publishers, January 11, 2002.

<sup>33</sup> A study by the US Environmental Protection Agency of a Brownfield redevelopment project in San Diego, California. The Brownfield site would require an estimated \$1 million in new public infrastructure, while the same project in a Greenfield site would require between \$5 and \$9 million in new public infrastructure.

Third, contaminations from the abandoned industrial sites affect the health of the surrounding community. One of the biggest fears of exposure to contaminants is cancer.<sup>34</sup> Contaminant exposures may cause other diseases in addition to cancer such as immune deficiencies, asthma, reproductive disorders, neurological disorders, blood and liver disorders, and other health problems and skin conditions.<sup>35</sup> Chemicals can be released into the soil, water or air from spilled or leaking containers, leaking landfills or dumps, through spraying, or released from smokestacks.<sup>36</sup> These chemicals follow a pathway<sup>37</sup> or a route from the time of release to the point of human contact. When a substance enters the ecosystem where it is not normally found, it is called a contaminant. Humans become exposed to these contaminants by touching, breathing, or ingesting substances that contain the chemical.<sup>38</sup>

It is in the cities best interest to make use of the contaminated brownfield industrial sites. Reusing brownfields require solutions designed to attract new businesses, retain jobs, build a stronger tax base, and make communities attractive places to live and work. The challenge facing community members, developers, and government officials in urban and industrial areas is the implementation of a process that facilitates brownfield redevelopment while ensuring that the interests of all key stakeholders, including local residents, are met [with sustainable measures].<sup>39</sup>

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<sup>34</sup> [www.envirottools.org](http://www.envirottools.org)

<sup>35</sup> *Supra* note 36.

<sup>36</sup> *Ibid.*

<sup>37</sup> *Ibid.* A pathway is (1) The source 9how the contaminant got into the environment, (2) The transportation media (how the contaminant runs through the environmental, (3) The exposure point (How the people cam in contact with the contaminant, (3) The exposure route (how the contaminate entered the body), and (4) The receptor population (how susceptible is the population to the contaminant).

<sup>38</sup> *Ibid.*; *See also supra* note 30.

<sup>39</sup> A. Donati C. Rossi and C.A. Brebbia, “*Brownfields Sites II*”, 2004.

## LOSS OF MANUFACTURING IN MICHIGAN

“Michigan leads the nation in automobile manufacturing and is the home of the Big Three automakers: General Motors Corp., DaimlerChrysler AG and Ford Motor Company. Michigan also manufactures a wide variety of other products. These include non-electric machinery, furniture and appliances, cereal, baby food, chemicals, pharmaceuticals and lumber. The number of workers in manufacturing jobs totals 885,040.”<sup>40</sup>

The loss of manufacturing in Detroit, among other cities in Michigan, and massive corporate downsizing from the 1980s to 1990s, convinced individuals that the manufacturing era had ended. Detroit manufacturing employment changes over the last ten years are due in a large part to actions by global corporations such as General Motors, which has a long manufacturing history in Southeastern Michigan. However, even though the manufacturing employment section of the state remains significant, the “retooling” of the industry has resulted in a number of abandoned industrial sites in Michigan.

Due to major plant closings, job cuts and the change from blue collar to white collar workers caused a great change in the country’s economy. However, manufacturing still accounts for 15.8 percent of the nation’s employment and is still an important component of many urban economies. For example, Detroit’s percentage of manufacturing employment in 1980 was 31 percent, 23 percent in 1990, and 20.8 percent in 2000.<sup>41</sup> (See Figure 1.1.)

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<sup>40</sup> [www.michigan.gov](http://www.michigan.gov)

<sup>41</sup> *Supra* note 7, [www.nationaltrust.org](http://www.nationaltrust.org).

Major plant closing also caused displacement of jobs for residents of Detroit. Manufacturers purchased land in the suburbs for new development of industrial sites, which we refer to as *Greenfield Development*; the fatal attraction of manufacturing to less density and cheaper land.

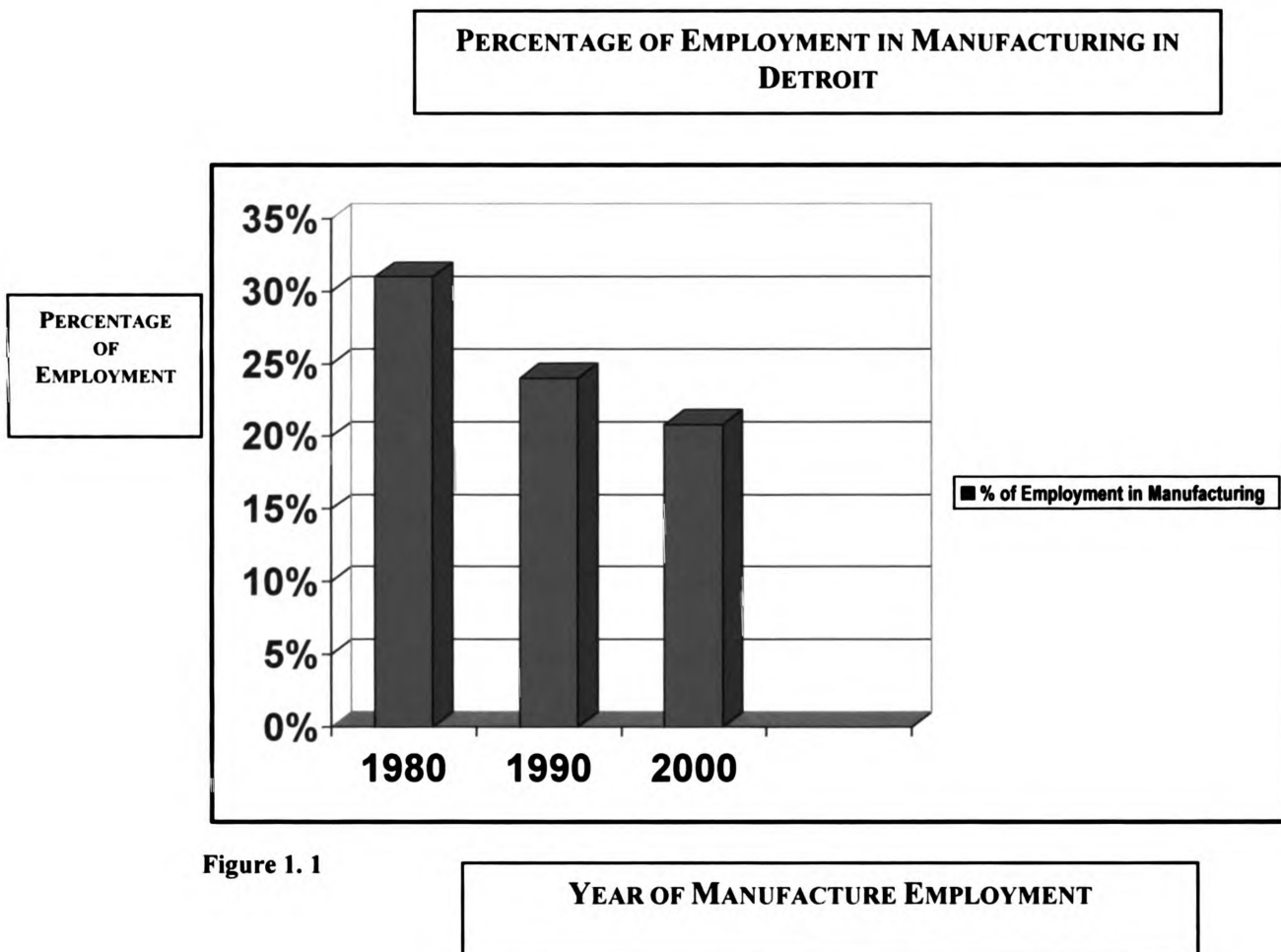


Figure 1. 1



## GREENFIELD DEVELOPMENT

### APPLICABILITY TO BROWNFIELD DEVELOPMENT

Major impediments to the redevelopment of abandoned contaminated industrial sites are the direct cost of cleanup of hazardous materials and the potential liability associated with environmental contamination. The regulations and legal actions that surround brownfield redevelopment, in many ways may have increased the barriers to its success. This has resulted from several federal and state initiated innovative policies and funding to overcome these barriers.<sup>42</sup> The federal government has been working with the states to create memorandums of agreement (MOAs). “A Superfund Memorandum Agreement (SMOA) or (MOA) can be negotiated between a state and the EPA, making the state and EPA partners in the redevelopment process.”<sup>43</sup>

The legal issues surrounding brownfields are complicated and manifold. Multiple parties, such as past and present owners, can be held liable for any legal liability associated with contaminants. However, the government can interject itself to assess and resolve liability through *Environmental Liability Releases*. ... An environmental liability release, is a benefit (concession) granted by Federal, State, and/or local governments to owners or operators of facilities or businesses (including commercial real estate properties) that frees them from all or part of responsibility for environmental cleanup costs under Federal, State, and/or local laws.<sup>44</sup> These liability releases may be structured in advance for prospective purchasers of properties or negotiated between the public

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<sup>42</sup> See *supra* note 15.

<sup>43</sup> Ibid.

<sup>44</sup> *Supra* note 33.

sector and private owners/developers with specified conditions delineating the extent of liability relief granted and the degree of private contribution to any planned and/or unanticipated cleanup effort.<sup>45</sup> The most common types of environmental liability releases offered by State governments include covenants-not-to-sue, no-further-action letters, and certificates-of-release.<sup>46</sup> The problem with the liability relief is that it does not provide complete exoneration from liability when the property changes hands, which subjects the landowners to liability after transfer of title has taken place.

The primary federal law affecting brownfield redevelopment is the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA” or Superfund). CERCLA is the most significant federal statute guiding public officials and private parties through the process of buying and purchasing properties with site contamination. The Superfund deals with past dumping of hazardous materials and the toxic legacy of sites that pose grave threats to public health and the environment. CERCLA is perhaps the most influential environmental law affecting whether and how contaminated sites are cleaned and redeveloped. These aspects of the law should be of particular interest to local economic development practitioners.

The initial intent of CERCLA was to promote cleanup of contaminated properties and to provide opportunities for the EPA to recover cleanup costs from all potentially responsible parties. CERCLA classified potential responsible parties as past and present property owners, lending institutions, and developers even if they did not contribute to the contamination.<sup>47</sup> Due to fear of liability, potential parties are vigilant of taking title, and financial institutions are hesitant to lend on properties that might have previously

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<sup>45</sup> Ibid.

<sup>46</sup> Ibid.

<sup>47</sup> *Supra* note 6.

been contaminated. The concept of liability applied in CERCLA under its common law meaning of “strict” liability (i.e. not requiring any demonstration of wrong-doing on the part of the polluter, showing evidence of pollution only) was created by lawmakers to offer several advantages to the government as it sought ways to control and reduce discharges of hazardous substances into the environment.<sup>48</sup> “Bankers and insurers were drafted into the Superfund’s liability scheme, receiving protection from liability when companies ‘*operate according to environmental laws and avoid enforcement and liability expenses.*’” (Emphasis added).

However, there are two exceptions to CERCLA. First, is the “‘innocent landowners’ defense,” which releases property owners from liability, as long as certain requirements are met. The second exception is that property owners must not have known or had any reason to know of any contamination present on the site.<sup>49</sup>

“In 1977, Congress enacted the Community Reinvestment Act (CRA) to require banks, thrifts, and other lenders to make capital available in low and moderate-income urban neighborhoods, thereby boosting the nation’s efforts to stabilize these declining areas.”<sup>50</sup> Due to this lending requirement the second exception was put in place to accommodate financiers’ conventional underwriting and lending practices. The second exception, the “secured creditor exception,” covers lending institutions. Lending institutions have very limited involvement in the operation of a property. The key here is that lending institutions will not be liable if they maintain a security interest in the property *only*. The theory behind this is that lenders’ participation is encouraged to help

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<sup>48</sup> *Supra* note 11.

<sup>49</sup> *Ibid.*

<sup>50</sup> *Ibid.*

further the public interest to address the problem of pollution and clean up site contamination.<sup>51</sup>

Lenders and developers tend to avoid getting involved in projects with companies and properties with environment risks. The size and financial resources of the current owner now influence a site's marketability and reuse potential. For example, prospective purchasers may buy an industrial site from a large, thriving corporation that can afford the necessary site remediation. Therefore, if the EPA sues for cleanup, the new owner can go after the seller to recover remediation costs, or the EPA can go after them directly.<sup>52</sup> Allocation of responsibility and cleanup cost should be clear in the purchase and sale agreement.

States have the authority to manage state level programs in accordance with federal law. "Individual states manage their federal programs as long as the state proves that their program is at least as stringent as the federal program in order for them to be permitted to manage a state level program. In many cases, state level programs are more stringent than the federal program."<sup>53</sup> For example, Michigan has implemented a liability reform, which unlike federal law does not impose liability on a property owner merely because of property ownership; liability is imposed upon those causing the release of contamination. Liability for remediation is imposed generally only on those who own or operate a facility, which is or was responsible for an activity causing the contamination at the facility.<sup>54</sup>

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<sup>51</sup> *Supra* note 11.

<sup>52</sup> *Supra* note 11.

<sup>53</sup> *Supra* note 33.

<sup>54</sup> D.S. Card and R.H. Kummier, "Michigan Brownfield Regulatory Review," Hazardous Waste Management Program, Wayne State University 1999.

The state programs mentioned above are useful and necessary to make Phase 1 of the Environmental Site Assessment more efficient by making the site history more accessible. Shielding property owners from liability is a cooperative initiative.

While significant public policy has been implemented to limit the liability of those redeveloping a contaminated brownfield industrial site, the added cost of cleanup and reconstruction are still impediments to the process of redevelopment and reuse. The next section will examine financial federal and state programs intended to reduce the financial impediment.

#### CRITICAL ELEMENTS

Brownfield redevelopment has been replaced by farmland conversions, i.e. *Greenfield Development*. “Greenfields include ... undeveloped land, restored land, agricultural properties, and parks. These areas have high ecological, social and community values.”<sup>55</sup> Greenfield development is critical because it destroys the health and viability of inner cities with its direct effect on economic development. On the other hand, some believe it is beneficial because it provides an alternative for residents and businesses to the busy, fast-paced city life. Most people believe the suburbs or rural areas are perfect to raise a family because they appear to be safer and more community oriented. Businesses prefer greenfield development because it offers more space at a much lower price than in urban areas. “Rather than reus[ing] former urban industrial sites, businesses instead moved to suburban or rural ‘greenfields,’ which carry fewer perceived risks to development.”<sup>56</sup> As a result, the migration of manufacturers to the

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<sup>55</sup> [www.sustainableschools.dgs.ca.gov](http://www.sustainableschools.dgs.ca.gov)

<sup>56</sup> [www.epa.gov/brownfield/other\\_bf\\_related\\_laws.htm](http://www.epa.gov/brownfield/other_bf_related_laws.htm)

suburbs physically and economically destroyed urban neighborhoods by draining cities of their middle-class tax base. (See Previous Section: *Definition of the Problem*).

Greenfield development increased sprawl by encouraging developers to build *out*, not *up*. Traffic commutes have become longer and more congested for city residents and those that commute there to work and spend their leisure time. “Transportation policies have consistently favored suburban migration. For most of the 20th century, all levels of government have funneled money into highway construction.”<sup>57</sup> Sprawl (unplanned development of undeveloped land) resulted from these policy decisions. “Urban Sprawl is a synonym for *Suburbanization*, the geographical expansion of urban areas at or beyond the fringes of the inner city.”<sup>58</sup> “In an effort to preserve the character of Michigan, the 26-member council was charged with addressing the trends, causes, and consequences of unmanaged growth and development in Michigan. The council provided more than 150 recommendations to the governor and the legislature designed to minimize the impact of current land use trends on Michigan's environment and economy.”<sup>59</sup> As it relates to this topic, “creating vibrant hip cities that combine the best of the old with the new redeveloped buildings promote a healthy balanced viable environment.”<sup>60</sup>

Brownfield redevelopment is an alternative to greenfield development.<sup>61</sup> “Redevelopment of current buildings provides the benefits of reusing all or part of old buildings, thus saving money on labor, materials, improvements to parking areas, and all other unused existing infrastructure.”<sup>62</sup>

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<sup>57</sup> Ibid.

<sup>58</sup> [www.wikipedia.org](http://www.wikipedia.org)

<sup>59</sup> [www.michiganlanduse.org](http://www.michiganlanduse.org) finalreport.

<sup>60</sup> Ibid.

<sup>61</sup> See note 17.

<sup>62</sup> Ibid.

## FEDERAL FINANCING INITIATIVES

Successful financing of environmental cleanups are often the result of leveraging resources at the Federal and State level and the knowledge of funding available.

Federal funding mechanisms<sup>63</sup> are:

- **Block/formula Grants:** payments made by a Federal Government agency to States, counties, cities, or towns according to a statute-based or regulation-based formula. The allocation formula typically is based on the State's or other recipient government's population. Some block/formula grant programs require the government receiving the grant to allow residents to be substantially involved in developing plans with grant funds.
- **Direct Loans:** loans from a Federal Government agency to a borrower for a specific time period, with a reasonable expectation of repayment. Terms of the loan may or may not require the borrower to make interest payments.
- **Guaranteed/insured loans:** financial assistance from a Federal Government agency in which the agency indemnifies a private lender against the possibility that a borrower will not repay the loan.
- **Insurance:** financial assistance provided by a Federal Government agency to ensure reimbursement for any losses that may result from specified occurrences (such as a flood). Insurance coverage may be provided directly by a Federal Government agency or through a private insurance company.
- **Project Grants:** payments made by a Federal Government agency to another government such as a State, county, or city or a private organization for a specific project or the delivery of a specific service or product. Project grants include, but are not limited to, demonstration grants, planning grants, technical assistance grants, and construction grants.
- **Sale, Exchange, or Donation of Property and Goods:** an arrangement in which a Federal agency provides for the sale, exchange, or donation of Federal property or other goods including land, buildings, equipment, food, and drugs.

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<sup>63</sup> [www.nemw.org](http://www.nemw.org)

- **Superfund Trust Fund:** the Superfund Trust Fund, also known as the Hazardous Substance Response Trust Fund, was established in 1990 to pay for cleanup and enforcement activities at waste sites. Superfund Trust Fund monies are also being used to fund brownfield national demonstration pilots as part of US EPA's Brownfields Economic Redevelopment Initiative. This dedicated trust fund has historically been financed primarily by petroleum excise taxes, chemical feedstock excise taxes, and environmental income taxes. The fund has also received monies through cost recoveries from parties determined responsible for contaminating particular sites, penalties, income taxes, and interest income.
- **Superfund Program:** The Superfund Program has cleanup activities, short-term removal actions and/or long-term remedial actions, underway or planned for the approximately 1300 seriously contaminated sites on US EPA's National Priority List. Actions at Orphan Sites, where no responsible party can be identified, are funded by the Trust Fund. The Trust Fund also funds actions begun at sites with responsible parties but prior to a final determination and acceptance of liability. USEPA always tries to identify those responsible for contaminating a site and then to make them pay for its cleanup. These responsible parties may include the site's past and current owner(s) and operator(s), the original hazardous waste generator, and the transporters of hazardous waste to the site.

The Federal sources of funds include the Environmental Protection Agency, Department of Agriculture, Department of Commerce, Department of Defense, Department of Energy, Department of Housing and Development, Department of Interior, and the Department of Transportation.

For example, the U.S. Department of Housing and Urban Development can play a critical role in local economic development by using their resources to support a wide variety of financial assistance programs such as loans, loan guarantees, and grants.<sup>64</sup>

*Community Development Block Grants* (CDBG), a federal program controlled by local governments, provides direct funding for activities that support the reuse of industrial sites. These resources can be used to fund rehabilitation of privately owned buildings and sites, covering specific costs related to labor, materials, construction, renovation,

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<sup>64</sup> *Supra* note 11.



entrepreneurial counseling, and preparation of work specifications, loan processing, and site inspections. This grant is “well suited for the ‘new generation’ of industrial site reuse projects that require a much stronger focus on environmental concerns.”<sup>65</sup>

Projects focused on remediating environmental contamination must meet at least one of the program’s national objectives:

- ❖ Providing benefit to low and moderate-income persons;
- ❖ Aiding in the elimination or prevention of slums or blight; or
- ❖ Meeting other urgent community needs.

This program was changed to increase the flexibility at the local level to make it more sufficient for specific problems delaying site reuse activities unique to communities.

Section 108 Loan Guarantees enables local governments to finance physical and economic development projects too large for front-end financing with single year CDBG grants. Localities issue debentures to cover the cost of such projects, pledging their future CDBG grants as collateral. Local governments can use their annual CDBG grants to pay off the loan; however some use income generated from the development projects for some or all of the payments. Activities under this loan must meet the same requirements under the CDBG program. These funds have been used for property acquisition, clearance or rehabilitation of obsolete structures, and constructions of public improvements. Brownfields are included as a permitted use, specifically for removing hazardous waste and toxic contaminants.<sup>66</sup>

Empowerment Zones (EZs) and Enterprise Communities (ECs) are geographic areas targeted to receive special federal treatment and incentives in order that private

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<sup>65</sup> Ibid.

<sup>66</sup> *Supra* note 11.

investment and other economic activity might be attracted to them. Designation brings several benefits to the selected areas, including \$100 million in social service grants for each of the urban EZs. In addition, these communities can compete for as much as \$2.5 billion in new tax incentive to induce investment in the targeted distressed areas. These incentives include:<sup>67</sup>

- ❖ New tax-exempt facility bonds, available in both EZs and ECs, that provide business up to \$3 million to finance construction of new facilities or expansion of existing ones, and to acquire equipment and machinery;
- ❖ Employer wage credits for companies located in EZs of up to \$3,000 per year per employee; these credits offset the salaries and training costs for employees who both work and live in the zone; and
- ❖ A \$20,000 increase is permitted Section 179 expensing to allow EZ-based companies to take greater depreciation deductions for equipment in the year it's acquired (bringing the annual total up to \$37,500).

Applicants are required to explain how they will use these funds to confront economic distress and unemployment.

#### STATE FINANCING INITIATIVES

Today, brownfield redevelopment needs are very diverse; states believe the answer is a combination of sources.<sup>68</sup> States have recognized the critical role that financing initiatives play in resolving brownfield reuse issues and have started financing initiatives that focus on brownfield reuse cases. These funds are focused on small to mid-

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<sup>67</sup> Ibid.

<sup>68</sup> *Supra* note 11.

size companies that go through state voluntary cleanup programs. For example, Ohio firms can receive a ten-year state tax abatement for increase in property values, and localities can offer an additional ten-year waiver ... Ohio also plans to make low-interest loans available for brownfield uses.<sup>69</sup> The Taxpayer Relief Act was originally signed into law in August 1977<sup>70</sup>, but was amended in December 2000<sup>71</sup>. This law included a tax incentive to spur the cleanup and redevelopment of brownfields in distressed urban and rural areas. “It intended to remove many of the financial disincentives preventing the cleanup and reuse of [contaminated abandoned industrial sites].”<sup>72</sup> Federal tax law requires expenditures that increase the value of or extend the useful life of property to be capitalized. However, “under the Brownfield Tax Incentive, environmental cleanup costs are fully deductible in the year they are incurred. The government estimates that while the tax incentive costs approximately \$300 million in annual tax revenue, the tax incentive is expected to leverage \$3.4 billion in private investment and return 8,000 brownfields to productive use. This ability to spur investment in blighted properties and revitalize communities makes the tax incentive a valuable tool for restoring brownfields.”<sup>73</sup>

State funding initiatives can be useful in the completion of redevelopment of brownfields. Although, redevelopment of brownfields is perceived as a risky investment, a joint venture with the state increases leverage for developers and encourages positive results. The programs listed in this section are most useful with brownfield redevelopment.

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<sup>69</sup> Ibid.

<sup>70</sup> Brownfield Tax Incentive, Public Law 105-304 Tax Payer Relief Act

<sup>71</sup> Public Law 106-554, Appendix G. H.R. 5662.

<sup>72</sup> [www.epa.gov/brownfieldsfactsheet](http://www.epa.gov/brownfieldsfactsheet)

<sup>73</sup> *Supra* note 74.

The state funding programs are<sup>74</sup>:

- **Industrial Development Funds:** special funds established by state and local governments for the purpose of improving real estate properties in order to make them suitable for industrial development. These funds are economic development tools that governments use to attract or retain industry. Industrial Development Funds may be structured as direct pass-through funds or as special purpose revolving funds. They draw funding through a variety of mechanisms including special property and other taxes, industrial development bonds, unappropriated surpluses in the controlling government's budget, and the proceeds from the sale of real estate and other property.
- **Revolving Funds:** a source of money that provides loans to specified parties. The parties reimburse the fund for the loan amount plus interest. Through payback of principle and interest, the fund is able to maintain the same or increased levels of funding. Revolving funds are typically developed through revenue disbursement from a trust fund.
- **State Grants:** can provide communities with the funding needed for cleanup and development incentive packages within brownfield programs. Also, grants can be made from state trust funds for local establishment of revolving funds.
- **Tax Abatements:** Tax abatement is a temporary moratorium on charging the usual tax rate on a new investment. It may take the form of a full or partial exemption from taxes such as tangible personal property and/or real estate. The exemption will only be in effect for a specific period of time such as five or ten years. The tax abatement granted might be restricted to new development in special designated areas such as empowerment zone/enterprise community, or it may be targeted on a case-by-case basis to particularly desirable individual development. Tax abatements are individually tailored regarding time and scope to allow the State or local government to calculate the exact cost of the tax change, and thus, the exact tax benefit offered as well. Tax abatements can make otherwise uneconomical projects attractive to property owners, developers, and financial supporters. These abatements can often provide a substantial incentive for all parties to participate in particular projects. If the new development is properly structured and successful, the community tax base will grow at a rate, and to a size, that more than offsets the loss of taxes due to the abatement.

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<sup>74</sup> *Supra* note 66.

- **Tax Incentives:** include a wide variety of mechanisms used to encourage redevelopment of brownfields through use of public taxation tools. These often take the form of tax credits or tax deferrals. By crediting or deferring taxes to be paid on property, income, or sales, governments can provide businesses with the incentives needed to create redevelopment opportunities for brownfields.
- **Tax Increment Financing:** is created through local government's assessment of property values. Special assessments are made on properties that are expected to accrue particular benefits from a general improvement, or from 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.
- **Trust Funds:** special accounts developed to receive and disburse revenues from taxes and/or fees for dedicated purposes. These funds differ from revolving funds in that they do not maintain funding capacity through payback of loans, but through new injections of revenue through taxes and/or fees.

Brownfield sites in urban areas are inherently dangerous investments. One obvious concern is the redevelopment almost never produces enough returns to meet or exceed remediation cost; therefore, grants are greatly coveted for industrial sites in urban areas. Grants will assist current owners to remediate their site without losing an enormous investment. Listed below are “samples of state assisted programs that provide for areas where these sites are typically found:”<sup>75</sup>

- ❖ Connecticut’s Urban Sites Remediation Action Program was capitalized with \$30.5 million in state bond funds for assessment and remediation of sites in distressed municipalities and targeted investment communities.

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<sup>75</sup> Ibid.

- ❖ Massachusetts' Brownfield Redevelopment Fund has focused \$30 million of funds for low-interest loans and grants for site assessment and cleanup in economically distressed areas.
- ❖ Ohio's Urban and Rural Initiative Grant Program provides grants to municipalities or nonprofit organizations in distressed areas.

Loan programs will put the state in the position of a commercial lender by lending money directly to the consumers. However, the state has to be willing to take some risk. On the other hand, the state will have a large security interest in the success of the redevelopment. The state may want to be more involved in the project than a lending institution, which will place more responsibility on the state to ensure stable economic development specifically of abandoned industrial sites.

Loan guarantees will allow the state to minimize various risks for financial institutions and for themselves. Loan guarantees are based on the state's pledge to cover most or all of the outstanding balance of a loan made by a private lending institution in the event a borrower defaults. For companies, loan guarantees help increase the availability of capital and often reduce the cost of borrowing. For lenders, they lower the fiduciary risks of lending.<sup>76</sup>

The Michigan's Funding Mechanisms implemented the Environmental Response Division (ERD), which administers the Michigan Department of Environmental Quality (MDEQ) programs that involve the cleanup and redevelopment of contaminated sites. Funding assistance for Brownfield redevelopment is available from a number of state sources including:<sup>77</sup>

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<sup>76</sup> *Supra* note 6.

<sup>77</sup> *Supra* note 28.

- ❖ **Site Assessment Grants:** The Department of Environmental Protection's Site Assessment Grant (SAG) Program offers financial assistance to small businesses to help them find ways to reduce pollution, wastes, energy use and related costs.<sup>78</sup>
- ❖ **Site Reclamation Program:** seeks to reclaim blighted property, including land previously used for mining, commercial, or industrial purposes, and to convert that property to useful recreational, residential or commercial purposes.<sup>79</sup>
- ❖ **Clean Michigan Initiative (CMI):** The Clean Michigan Initiative (CMI) is a \$675 million bond approved by Michigan voters on November 3, 1998 to improve and protect Michigan's water resources.<sup>80</sup>
- ❖ **Waterfront Redevelopment Grant Program:** Brownfields Assessment Grants that fund environmental site assessment work.<sup>81</sup>
- ❖ **The Cleanup and Redevelopment Authorities:** encourages redevelopment of environmentally contaminated property by providing financial incentives for both the cleanup and redevelopment.<sup>82</sup>
- ❖ **Single Business Tax Brownfield Credit (SBT):** Eligible Tax payers may claim a Michigan Single Tax Brownfield Credit under the SBT Act for a percentage of certain eligible investment in a brownfield development project.
- ❖ **Coastal Management Program:** The National Coastal Management Program is a federal-state partnership dedicated to comprehensive management of the nation's coastal resources, ensuring their protection for future generations while balancing competing national economic, cultural and environmental interests.<sup>83</sup>
- ❖ **Michigan Transportation Economic Development Fund:** Michigan legislation provides an exceptionally strong program to encourage solutions to historical contamination while protecting health and the environment.
- ❖ Other sources.

Brownfield redevelopment is not expressly excluded from the funding mechanisms above; therefore, these funds can be used for Cultural Industrial Site Conversions.

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<sup>78</sup> *Supra* note 39.

<sup>79</sup> *Supra* note 79.

<sup>80</sup> *Supra* note 39.

<sup>81</sup> [www.mciauth.com/waterfront\\_redevelopment](http://www.mciauth.com/waterfront_redevelopment)

<sup>82</sup> *Supra* note 39

<sup>83</sup> [www.ocrm.nos.noaa.gov/czm/](http://www.ocrm.nos.noaa.gov/czm/)

## **MICHIGAN'S POTENTIAL FOR CULTURAL INDUSTRIAL SITE CONVERSIONS**

In spite of numerous public acts limiting the liability of new landowners of previously contaminated industrial sites and the availability of a variety of public financial incentives to differ the cost of rehabilitation, hundreds of abandoned sites continue to depress the economies of the older industrial communities in Michigan. According to The Detroit News, “in Detroit Metropolitan area alone there is an estimated 3,000 Brownfields existing on tens of thousands of acres of land.”<sup>84</sup>

Other forces maybe at work that inhibit the redevelopment and reuse of key industrial sites, but what portrays the greatest impediment to reuse is a “weak” manufacturing market in the U.S.

International competition coupled with rapidly changing industrial technology has forever changed the nature of the manufacturing enterprises. The potential for Michigan to attract or create the sheer number of private manufacturing or industrial enterprises that might reuse the vast number of abandoned sites seems highly unlikely in today's global economy. This obligates the public to play a greater role when public health and safety is at risk. The environmental, cultural, and historic nature of the site offers unique advantages, such as the potential to stimulate further redevelopment in communities where the opportunity to leverage unique public and private resources may exist. Given this scenario, what options does a state or locality have to “green” its abandoned industrial jungles? This is particularly critical for these sites that are highly visible and have a depressing effect on the larger community.

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<sup>84</sup> *Supra* note 2.



In scattered locations across the world, communities are developing a unique and innovative reuse strategy for redevelopment of specific industrial sites. “Greening” of abandoned industrial sites has a number of potential benefits to a broad set of public and private institutions. The following section introduces selected case studies of this innovative strategy of industrial reuse.

#### METHOD OF ANALYSIS

The Michigan State University Urban Policy Team composed of graduate students under the guidance of Dr. Rex LaMore, undertook a fifteen week analysis of existing green industrial reuse in the fall of 2004. The team identified cases with brownfield industrial sites that underwent redevelopment for recreation uses that preserved the original structure. Reuse of the industrial site is critical when the nature of the site offers unique advantages. The method of analysis included examining a group of case studies according to their:

- ❖ Previous uses,
- ❖ Size of the parcels,
- ❖ Character of the new structure,
- ❖ Surrounding neighborhoods,
- ❖ Accessibility or ease of access,
- ❖ Infrastructure,
- ❖ Number of jobs created from new development,
- ❖ Nature of the partnership that initiated redevelopment,
- ❖ Cost of redevelopment,

- ❖ Economic impacts,
- ❖ Implications, and
- ❖ Sources of information (contact information).

The case studies included are 1) Toronto, Canada, 3) Duisburg, Germany, and 4) Jeongseon, Korea. Although all the case studies are different, our research produced a useful framework to determine appropriate sites for cultural industrial site conversions.<sup>85</sup> This paper takes the research a step further and applies the criteria to an abandoned industrial site in Detroit, Michigan to determine the feasibility of a cultural industrial site conversion on the site. Examining a specific site under the criteria will provide a template for planners to determine appropriate sites for this concept in the future.

## SUMMARY OF 2004 REPORT

### **TORONTO, CANADA**

#### **1. Previous Uses**

As an estuary in the Don River where silt would collect, aboriginal communities likely used the Brickworks site for centuries as a source for clay. In more recent history, from 1889 to 1984, the Brickworks site was one of Canada's pre-eminent brickyards. Today, the Brickworks represent the evolution of one of Toronto's oldest industrial sites, from a brownfield to a natural environment park.

The Don Valley Pressed Brickworks Company was established in 1889. The plant produced a wider variety of bricks and kiln fired clay products than any other brick plant in Ontario. The present Brickworks complex building dates back to this period and documents the historical manufacturing process.

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<sup>85</sup> Report available at [www.cedp.msu.edu](http://www.cedp.msu.edu).

Toronto's skyline owes much to the Don Valley Brickworks. Many of the city's most prestigious buildings have been made from bricks manufactured at the Brickworks, such as the Hart House, Trinity College, Convocation Hall, Casa Loma, Old City Hall, Queen's Park, Osgoode Hall and Massey Hall. All were made from shale and clay extracted from the quarry and manufactured at the Don Valley Brickworks.

## 2. Size of Parcels

- Location: 550 Bayview Avenue, on the west side, just north of the Bloor Street Bridge
- Site Area: 16.4 Hectares/ 40.7 acres
- Zoning: Public Open Space
- Total Number of Buildings: 15
- Total Floor Space: Approximately 250,000 square feet



**Figure 2. 1 Previous Site**

## 3. Character of the New Structure

This site doesn't have any new structures; previous buildings were used for redevelopment.

## 4. Surrounding Neighborhoods

Don Valley Brickworks is located in a suburban area of the city of Toronto. The surrounding areas of the Brickworks site are parks and river areas.

## 5. Accessibility

- **Parking:** Approximately 300 cars, 9 buses
- **Transportation and Access:** 200 m north of Don Valley Parkway's Bloor Street exit, which allows car access from the Bayview Extension. There is walking trail access to Rosedale and Moore Park. No public transportation to the site. The nearest subway station is Castle Frank.

## 6. Infrastructure

Most infrastructures already existed. However, clean up was required because of the brownfield status of the site and the plans to redevelop the site into a public space.

## 7. Number of Jobs Created from New Development

When the Don Valley site was redeveloped, many jobs were created, but the details of the jobs created are not available. Evergreen Foundation is mainly operated with volunteers.

## 8. Nature of the Partnerships that Initiated Redevelopment

This project addresses a range of social and environmental challenges. It will help charitable, non-profit organizations and socially conscious private enterprises working on these issues expand their reach and impact by providing an innovative program and office space at very competitive rates.

Cities need places that inspire, captivate our imaginations and build natural, social, and economic capital as well. Toronto needs such places. As cities grapple with a range of challenges (poor air and water quality, degraded natural environments, deteriorating public infrastructure) they must also create places that offer solutions. Solutions need the strength of diverse partners, the energy of our collective creativity, and the tremendous potential of volunteers. Toronto needs real, practical solutions to make it a more vibrant, livable city.

As public concerns over environmental quality continue, our increasingly fast-paced lifestyles and the lack of meaningful community life continue to rise, the need for health, environmental and cultural organizations to take a greater collaborative approach to tackling problems becomes more pronounced.

Evergreen has recognized the tremendous opportunities for developing an innovative mixed-use program facility modeled on the themes of nature, cultural and community for organizations that have a strong experiential focus to their mission delivery. These opportunities are greatly enhanced by its location at the Don Valley Brickworks.

Because of the above reasons, the city of Toronto decided to redevelop the Brickworks site, and following the organizations helped the redevelopment project.

- Toronto and Region Conservation (TRCA)
- Bridgepoint Health
- Gardiner Museum of Ceramic Art
- Jamie Kennedy Kitchens
- Health Knowledge Lab, Centre for Effective Practice, University of Toronto
- Health Knowledge Works
- Outward Bound Canada
- ReCreate, ReUse Centre for the Creative Arts
- Toronto District School Board (TDSB)
- YMCA of Greater Toronto

After the redevelopment project, the 16.5-hectare land became publicly owned and was designated a Natural and Industrial Heritage Site. The restoration of the Brickworks began in 1995, led by the City of Toronto and the Metropolitan Toronto and Region Conservation Authority. Planting began in 1997 and the site was officially opened as a park in the fall of that year.

## 9. Cost of Redevelopment

The remediation cost of Don Valley project was \$80,000 (U.S. Currency) and the capital cost was \$500,000. About 45 percent of capital is from the Toronto and Region Conservation (TRCA) and the city of Toronto provided 5 percent of the

capital. The remaining 50 percent of the capital was donated by individuals, and the EVERGREEN Foundation. Also, some organizations in the community helped the redevelopment plan with funds and volunteers. Currently, the EVERGREEN Foundation is launching a \$30 million dollar capital campaign.

#### 10. Economic Impacts and Implementation

Don Valley Brickworks doesn't pursue economic benefit but the improvement of citizen's welfare. Don Valley Brickworks comprises industrial buildings representing the history of Brickworks, and surrounding park land.

Don Valley Brickworks provides the following programs:

*Evergreen Gardens*: a 100,000 square feet native plant nursery and market garden. Using urban-sized demonstration gardens, the nursery will teach home gardeners how to create naturalized, pesticide-free gardens, educating them about ecological landscaping and supplying them with the tools and materials to improve their gardening skills. Plants propagated at Evergreen Gardens will be sold to gardeners along with environmentally appropriate garden supplies.



**Figure 3. 1 Nursery**

*Restaurant and 'Café on the Green'*: serves organic regional and local produce including food grown in demonstration gardens on-site. Food preparation and the sharing of meals will be treated with respect as demonstrated in the growing 'slow

– food’ movement. An organic farmers’ market will be offered throughout the spring, summer, and fall.

Cultural Classes: children’s art programs, ceramic classes, and a sculpture garden.



**Figure 4. 1 Pottery**

Youth Leadership: summer camp programs on site such as woodworking studies, skills training for youth, the hiring of at-risk youth at Evergreen Gardens; and urban-based leadership programming. Other programs include children’s teaching gardens, food growing gardens, heritage, geological and environmental tours, demonstration gardens and a training venue for teachers, parents and community organizers.

Winter Activities: outdoor ice-skating and hockey.



**Figure 5. Ice Hockey**

*Health and Wellness:* program offered as occupational therapy for long-term care patients. This program engages patients in gardening, food growing, ceramic programs.

#### **DUISBURG, GERMANY: NORTH LANDSCAPE PARK**

The Duisburg North Landscape Park is located in the northern part of Duisburg, Germany. The former site was 20 Hectares. The city of Duisburg has 515,000 residents and lies at the edge of the conurbation on the Rhine and Ruhr – consisting of 17 cities – with more than 5 million residents. For more than 20 years the city of Duisburg has been undergoing profound structural change; more than 120,000 jobs were lost due to the shrinkage of the coal and steel industry. The redevelopment of Duisburg North Landscape Park Project started in 1989 within the context of the “IBA Emscher Park 1989 – 1999”. This international building exhibition was held in 1998 and led by the state government (Land of North Rhine: Westphalia) as an attempt to take a different path



for the development of the region with a legacy of contaminated land and a redundant workforce.<sup>86</sup>

#### 1. Previous Uses

The Duisburg North Landscape Park was a site of iron works including pits as well as a coking plant of the company, Thyssen. Industrial use of the site was abandoned in several steps between 1965 (coking plant) and 1984 (blast-furnace plant).

#### 2. Size of Parcel: 2 million square meters (494 acres, over 200 hectares).

#### 3. Character of the New Structure

The concept of the redevelopment project, which was proposed by the landscape architecture Professor, Peter Latz, was not to demolish the most important old plants, but to integrate them in the new park layout. There are intensively usable open spaces, trend sport areas laid out especially for juveniles, and natural retreat areas for many rare species of animals and plants. In addition, the buildings in the park were redeveloped for new uses. For example, the old administration building is used as a hotel and the blast furnace was converted to an open-air theater.

#### 4. Surrounding Neighborhoods

100,000 people were living in north Duisburg situated between two densely populated areas of the city.

#### 5. Accessibility: Not Available

#### 6. Infrastructure: Not Available

#### 7. Number of jobs created from new development: Approximately 300.<sup>87</sup>

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<sup>86</sup> Ingrid Helsing Almaas, Regenerating the Ruhr – IBA Emscher Park project for the regeneration of Germany's Ruhr region, 1999.

#### 8. Nature of the Partnership that initiated redevelopment:

The Duisburg brownfield redevelopment project was implemented in the context of the International Building Exhibition, Emscher Park 1989 – 1999, a collaboration of IBA (International Bauaustellung), IG Nordpark, Society for industrial Culture and the Parks Department of Duisberg City Council, and Thyssen Entsorgungstechnik, a waste technology company.

#### 9. Cost of redevelopment

The cost of redevelopment was DM 100 million (about 58.5 million dollars). The IBA administered no project funds of its own. All project funds came from existing public and private funding available through regional, national and inter – European subsidy programs.<sup>88</sup>

#### 10. Economic Impact

The Duisburg brownfield redevelopment project achieved significant cost savings with overall expenditure of DM 100 million (approx. 58.5 million dollars). The potential demolition costs, without remediation of contaminated soils and re-design, were estimated at approximately DM 80 (approx. 100 million).

#### 11. Implications

##### *Psychological Impacts*

Even if there is scientifically well-founded knowledge about contaminated site safeguarding, it is obviously not sufficient to completely overcome the psychological barrier, the “fear” of potential hazards at a revitalized old location. Also, there was a considerable obstacle to obtaining positive acceptance of revitalization because of the image of the site, which included not only the fear of

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<sup>87</sup> Martin Linne, Workshop Report, Experience of reactivating measures in the city of Duisburg, National Brownfields Conference (Chicago), 2001.

<sup>88</sup> See *Supra* note 44.

potential physical hazards at the contaminated site, but also the emotional impact of the lost jobs.

### *Legal Impacts*

It was difficult to identify who was legally responsible for contamination. The actual time of the pollution was not sufficiently clarified due to the ownership changes of the contaminated site. After the enactment of the Federal Soil Protection Act as of January 1999, the seller of the site was to be made liable for all contamination of the site to the extent that they knew or had known about it at the point of sale. In addition, there were no generally applicable criteria for the treatment standards for different reuses. This made the actual local marketing difficult.

### *Flexible Planning*

The selected design concept was achieved through an unusual planning process. The innovative decision could have been made easier for the city with more related contents and financial support within the scope of the International Construction Exhibition Emscher Park starting in 1989.<sup>89</sup>

### *Communication and Participation Impacts*

The experience of the city of Duisburg shows two things. First, it shows great importance to qualify a project idea in advance of a public discussion to the extent that a rational presentation is made possible and second, its intense public debates about costs and benefits of the project. These steps are crucial if financial involvement of the public is linked with the project implementation.<sup>90</sup>

### *Social and Cultural Impacts*

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<sup>89</sup> See *supra* note 45.

<sup>90</sup> Ibid.

Duisburg North presents itself as a successful combination of ecological, open space, sports and leisure aspects. Today, the Duisburg North Landscape Park has developed into one of the most important cultural performance venues.<sup>91</sup>

#### *Other Unique Physical Elements*

The night-time illumination of the blast – furnace works was designed by Johnathan Park, a lighting designer from London who worked for Pink Floyd. This element of the project led to an incredibly positive change with regard to the public consciousness of the park. The light art caused international attention and turned out to be the image highlight of the park.



**Figure 6. 1 Previous Site**

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<sup>91</sup> Ibid.



**Figure 7. 1 Current Site: Blast Furnace Converted into a Open Air Theatre**

## **JEONGSEON CASINO RESORT IN KOREA**

### **1. Previous Use:**

The previous use of the site was a former coal mine area located in Baewoosan, Gohan-up, Jeongseon-Kun, Kangwon-do, which is east of Korea.

### **2. Size of Parcels: 6,611 square meters**

### **3. Character of the New Structures:**

This project was aimed to provide an international casino resort for both Korean citizens and tourists that would operate as a family resort with year-around facilities suited to meet various requirements for people from all walks of life. It is an eco-friendly resort where visitors can relish the scenic beauty in a remote mountain area, as they relax with the natural surroundings. The cultural resort provides visitors the opportunity to experience many cultural wonders and enjoy themselves with festivities and special events all day long.<sup>92</sup> Today, only the hotel casino is operating; other facilities are under construction.

### **4. Surrounding Neighborhoods: This area is secluded and surrounded by many mountains.**

### **5. Accessibility: Due to the location of the site, transportation is challenging.**

### **6. Infrastructure: Not Available**

### **7. Number of Jobs Created from New Development: This project employed about 2,000 residents whom make up 50% of total employees.**

### **8. Nature of the Partnerships that Initiated Redevelopment:**

The project was spearheaded by a new corporation, Kwangon Land, which was founded by the government and private partnerships. The public sector invested 51 percent and private sector, 49 percent into the investment fund.<sup>93</sup>

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<sup>92</sup> <http://www.kangwongcasino.com>

<sup>93</sup> Ibid.

## 9. Cost of Redevelopment

First, private and public sector invested 17 million dollars (US Currency) to build a small casino. They will invest an additional 1 billion dollars to construct more infrastructures, such as roads to improve accessibility.

## 10. Economic Impacts

This project is also making an effort to foster local businesses by giving them contracts for janitorial work or road management (estimated to be worth 18.5 million dollars annually). Moreover, it supplemented local municipalities' financial needs through payment of local taxes and a development fund for closed coalmine areas. From 2000 to 2002, this project gave the local government 20.5 million dollars in taxes and invested 57.6 million dollars for the closed coalmine areas.

## 11. Implications

This project was developed to stimulate the recovery of the distressed local economy in closed coalmine areas. As a result of the coal consumption and a change of government coalmine policies, most of the coalmines in Kwangwon-do have closed since 1989.<sup>94</sup> Consequently, the living conditions and social base facilities have deteriorated in those abandoned mine areas. The government has gone over various alternatives to revitalize the depressed local economy. However, because the area was in a remote place surrounded by the mountains and transportation was inconvenient and costly, it was difficult to induce manufacturing industries to locate here. The government concluded to develop a comprehensive tourism resort complex making the best use of the land in that location. However, it remained that transportation conditions and the decline in the coal industry hindered public access. The project was not expected to be a success, so the area needed a new concept to compete with other resorts such as a

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<sup>94</sup> <http://user.chollian.net>

golf resort or a ski and coast resort. The government concluded that a casino resort for domestic citizens as well as tourists was best.<sup>95</sup>

The success factors of this project could be classified two aspects:

- Unique as compared to all other resorts in Korea in spite of low accessibility. A hotel casino is a completely new type of development in Korea, and
- Strong support from various organizations. The government vigorously backed this project with enacting a special legislation, which enabled the domestic citizens to enter the hotel casino.

This project also offers a Gambling Clinic Center, which is designed for the prevention of addictions to gambling and treatment of addicts.

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<sup>95</sup> Ibid.





**Figure 8. 1 Previous Site: Coal Mine**



**Figure 9. 1 Current Site: Casino and Hotel**

## APPLICABLE CRITERIA

The criteria below were derived from an examination of each case study after comparing the current use of the site with its previous use and its potential for redevelopment. The six criteria can help planners determine an appropriate site for Cultural Industrial Site Redevelopment.

### CULTURAL REUSE CRITERIA

	HIGHLY VISIBLE WITH DEPRESSING AFFECT	UNIQUE CULTURAL USE POTENTIAL	Unique Structure	PUBLIC/PRIVATE SECTOR LEADERSHIP FOR REUSE OF THE SITE	POTENTIAL TO STIMULATE OTHER DEVELOPMENT
Case 3		X	X	X	X
Case 2	X	X	X	X	
Case 1		X	X	X	X

Figure 10. 1

First, the *depressing affect* the current structure has on its surrounding community is a very important component. In relation to other structures in its surrounding community the applicable site should have been highly visible and so influential that its operations had a significant effect on the aesthetics and economic development of the entire surrounding community. For example, in case study #1, the Brickworks industrial site, was one of Canada's pre-eminent brickyards. It was used for centuries as a source of

clay and became one of Toronto's oldest industrial sites. Canada depended on Brickworks for its clay products than any other plant to build prestigious buildings. When it became a brownfield, because its surrounding community was only parks and river areas, the surrounding affect was not necessarily aesthetic, but mostly economic. As a result of its history and economic affect on the community, the redevelopment was successful in improving the social effects of the region.

Second, *unique cultural use potential* is very much dependent on its relationship to surrounding communities. The structure and its use should reflect and connect the surrounding communities and preserve the historic structure of the site. For example, the Duisburg North Landscape Park was a site of iron works. It is located between two densely populated areas in the city. The redevelopment reflects urban characteristics and preserved the current structures by integrating them into a new building park layout.

Third, the *unique structure* provides the opportunity for a unique cultural reuse. The Brickworks site reuse is an innovative mixed-use program facility focusing on the themes of nature, culture and community for organizations that share in the vision for incorporating culture in communities. Also, the Duisburg North Landscape Park is now one of the most important cultural performance venues. For instance, it has nighttime illumination of the blast-furnace which is the image highlight of the park.

Fourth, *public/private leadership* is essential for the success of redevelopment. Leadership provides guidance for decision makers regarding community concerns of social equity, environmental quality and economic development and the cost for cleanup of the brownfield site. The Brickworks project addressed a range of social and environmental concerns and helped charitable and private organizations expand their

influence in the community through pioneering programs with the goal to improve citizen welfare. The redevelopment costs were divided among the regional and local government authorities, private individuals, and private foundations that assisted in cleanup and redevelopment. The collaboration of these major stake holders presented social equity in the decision making process, which guaranteed a successful result.

Lastly, the *stimulation of other development* is a key factor in the economic expectation from investors. The potential for further development is highly dependent on the location of the site and its accessibility to surrounding communities. While the Cultural Industrial Conversion site should be the focal point of development the surrounding business community should benefit from the target service area of the applicable site. All future development success depends on stable accessibility hoping to capture business from the anchor business produced in the community. In other words, further economic development should grow from the increased community investment. For example, the Brickworks project is highly accessible to communities by car, bike and pedestrian traffic. Future businesses will consider this an economic opportunity. Most likely future businesses will take advantage of the accessible target service area the redevelopment has created. Today, office space is provided for new businesses and current investors at competitive rates. On the other hand, the Jeongseon Casino Resort although surrounded by mountains making the accessibility challenging, future development has and will have to stem directly from the success of the casino and through partnerships with the casino. Through public and private partnerships the casino has created more jobs in the community.

## **APPLICABLE SITE: MICHIGAN CENTRAL RAILROAD STATION (MCS)**

The Michigan Central Railroad Station was selected as a potential site because of its historic value, visibility, location, and cultural reuse potential. The criteria derived from the case studies are applied to this site to determine whether the potential for a Cultural Industrial Site Conversion redevelopment project exist.

### **HISTORY**

The MCS is located on the southwest side of downtown Detroit just off Michigan Avenue between Mexican Town and Corktown. The station was built in 1913 and abandoned in 1988, seventy-five years after it was opened. “The MCS is particularly noteworthy for its Beaux Arts design, and its historical significance. For more than half a century, the station was the hub at which commuting and adventure began and ended across the Northern Transportation Corridor. Gradually that ended with the consolidation and closing of many train lines, a result of air travel's popularity and America's increasing obsession with the automobile.”<sup>96</sup> “For the first half of the 20th century, before airline travel was common, the Michigan Central Railroad Terminal was the starting point for most immigrants coming to Detroit. The immigrant shown in figure 3, fresh from Ellis Island, arrived as many had before him; alone and with little but what he could carry on his back”<sup>97</sup> (See Figure 11.1).

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<sup>96</sup> [www.ferestenphoto.com](http://www.ferestenphoto.com)

<sup>97</sup> [www.ruether.wayne.edu](http://www.ruether.wayne.edu)



**Figure 11. 1 Immigrant arriving at MCS, c. 1912 <sup>98</sup>**

Today, this building stands as eighteen stories of dilapidation and “as a reminder of a flourishing pre-renaissance era of Detroit from the early twentieth century.”<sup>99</sup> Unfortunately today, it fits right in the dilapidated neighborhood in which it is located. “At the time it was constructed, it was one of the largest and tallest buildings in the world.”<sup>100</sup> “On January 6, 1988, at 11:40 am, the train number 353 left Detroit’s Michigan Central Station headed for Chicago. It was the last passenger train to depart from Michigan Central Station.”<sup>101</sup>

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<sup>98</sup> [www.detroityes.com](http://www.detroityes.com)

<sup>99</sup> <http://members.tripod.com>

<sup>100</sup> *Supra* note 98.

<sup>101</sup> *Ibid.*

## SCALE

The MCS was described as a very beautiful unique building that commanded the attention of the surrounding community.

“The MCS was designed by the renowned architects that also designed the Grand Central Station in New York City; the MCS ... is 500,000 square feet and consists of a 3 story train station with an 18 story office tower. The building contained 7,000 tons of structural steel, 125,000 cubic feet of stone, and 7 million bricks.”<sup>102</sup> “The tower section provided thirteen floors of office space. The top five floors never had the interiors completed. The railroad itself used most of the office space for its own business. Behind the station were eleven tracks with covered platforms. In addition to the eleven passenger train tracks, there were seven more tracks for staging freight trains using the tunnel.”<sup>103</sup> “As one would enter off Roosevelt Park, they would enter ... a 54.5 feet tall waiting room modeled after a roman bath, stretches the length of the building and is decorated with Guastavino arches, columns, and three arched 21 by 40 feet windows flanked by four smaller windows. Beyond the waiting room, you could buy your ticket from one of the many ornate ticket counters, or walk down the 28 feet tall arcade to visit a newsstand, drugstore, cigar shop, or barbershop.”<sup>104</sup>

What was once described above as a reflection of the pre-renaissance era is, today as an eye sore for its surrounding community and the city of Detroit.

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<sup>102</sup> Ibid.

<sup>103</sup> [user.mc.net/~louisvm/depot/det-mc/det-mc.htm](http://user.mc.net/~louisvm/depot/det-mc/det-mc.htm)

<sup>104</sup> *Supra* note 64.





**Figure 12. 1 MCS Compared to Nearby Buildings<sup>105</sup>**

## **CRITERIA APPLIED TO MICHIGAN CENTRAL STATION**

### **DEPRESSING AFFECT ON SURROUNDING COMMUNITY REGION**

Michigan Central Station (MCS) is located at on the southwest side of Detroit just off Michigan Avenue between Mexican Town and Corktown. Due to its massive size in relation to other buildings in the surrounding neighborhood the MCS is highly visible from the major street, Michigan Avenue, and the Ambassador Bridge. Similarly to the case studies, the MCS was a great resource to the community for many years and established an inseparable connection to the city of Detroit. Today, an eye sore, the MCS is a large decaying, dilapidated building. Its affects have spilled over unto the immediate surrounding neighborhoods that included small businesses and office buildings.

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<sup>105</sup> [www.forgottendetroit.com](http://www.forgottendetroit.com)



Businesses that once thrived as a result of their prime location near to the MCS, experienced ill affects as a result of its abandonment in 1988.

#### UNIQUE CULTURAL REUSE POTENTIAL

MCS has tremendous potential for a unique cultural reuse. It is located between Mexicantown and Corktown; two vibrant thriving cultural communities.

“Mexicantown is a neighborhood located one block north of the Ambassador Bridge. It is Detroit's small, but thriving Hispanic community with a few very popular eateries and shops along the neighborhood's main strip and the east and west sides of the interstate 75 service drive.”<sup>106</sup> It is a great place to find authentic Mexican cuisine. “This community has had a thriving economy in recent years, evidenced my new housing, increased businesses, and a forthcoming Mexicantown Welcome Center.”<sup>107</sup>

Furthermore, Mexicantown has its own community development corporation. The mission of the Mexicantown Community Development Corporation (MCDC) is “to foster economic development in the Hispanic community of Southwest Detroit, as a means of eliminating blight, creating skilled positions for residents of the neighborhood, and providing opportunities of small business development by local entrepreneurs. MCDC is a not-for-profit, Michigan, 501(c)(3) corporation in which its board of directors consists of residents, business owners and community and business development experts.”<sup>108</sup>

“MCDC was formed in 1989. Its goals and programs include promoting Mexicantown restaurants, shopping, and its cultural district to audiences across

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<sup>106</sup> *Supra* note 61.

<sup>107</sup> *Ibid.*

<sup>108</sup> [www.mexicantown.org](http://www.mexicantown.org)

southeastern Michigan ... It offers cultural programs and activities that educate and enrich the lives of residents of the neighborhood and the southeast Michigan region ... Physical improvements and maintenance in the Mexicantown district include parks and streetscapes; entrepreneurial training and incubation to increase the economic self-sufficiency of neighborhood resident's reuse of vacant land and development of the Mexicantown International Welcome Center and Mercado.”<sup>109</sup>

Corktown, Detroit's oldest surviving neighborhood and center for Irish culture and history, has its own Community Development Corporation as well, the Greater Corktown Development Corporation (GCDC). “The Primary Mission of the Greater Corktown Development Corporation, a community-based housing development organization since 1976, is to facilitate the redevelopment of a diverse, vibrant and affordable urban village in the Greater Corktown area ... Corktown's main thoroughfare is Michigan Avenue, which is also the sites of the annual St/ Patrick's Day Parade.”<sup>110</sup>

Corktown and Mexicantown have collaborated through a Greenlink program that will develop greenway linkages connecting the Greater Corktown and Mexicantown/Hubbard Communities to Detroit's West Riverfront.

These communities, fronting on the Detroit River, are bounded by West Grand Boulevard on the West, Martin Luther King Boulevard on the North, and the Lodge Freeway on the east. This project is an integral part of a riverfront greenway plan that extends along the Detroit River from Belle Isle to Riverside Park. It is part of a far-reaching greenway system, now under development, extending into Monroe County along the Detroit River and to the western suburbs along the Rouge River. Ultimately, seven Southeastern Michigan counties will be interconnected by this greenway network. This program ... “will facilitate enhanced public access to and along the Detroit River through and from the Greater Corktown and Mexicantown/Hubbard

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<sup>109</sup> *Supra* note 106.

<sup>110</sup> *Ibid.*

Communities.”<sup>111</sup> “The unique aspect of this project is that it links two significant multi-cultural neighborhoods within Detroit to one purpose. It will be a tremendous step toward accelerating the revitalization of these communities, [building cooperative relationship needed to facilitate sustainable development] and strengthening the viability of the area as a place to work, live and play.”<sup>112</sup>

The environmental potential is related to the cleanup of the site through remediation. Currently, the MCS is not targeted for a CDBG grant; however, as mentioned previously in this text, there are a number of federal and state initiatives available for assistance with cleaning up the site, such as the CDBG, Superfund Trust Fund, Project Grants, Industrial Development, Tax Increment Financing, and other tax incentives.

The surrounding cultural communities, through their community development corporations along with the city and state have already demonstrated their willingness to work together to promote a vibrant and healthy community.

There have been redevelopment and restoration projects in other cities that provide support for a MCS redevelopment project. Studies have shown that America's historic rail stations have driven economic development and community revitalization while serving a larger need in regional development throughout the United States. In some cases, rehabilitating these stations has restored a form of transportation to the areas they once served.<sup>113</sup>

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<sup>111</sup> [www.corktowndetroit.org](http://www.corktowndetroit.org)

<sup>112</sup> Ibid.

<sup>113</sup> Ibid. South Boston acquired \$450 million from the U.S. Federal Transit Administration to redevelop underground bus rapid transit stations adjacent to their World Trade Center, a new Convention Center and the new courthouse. Additionally, in 1991 Congress made the rehabilitation of historic transportation facilities eligible for transportation enhancement funding. Money is included for improved pedestrian access, landscaping, public art, and nearby streetscape improvements.

## UNIQUE STRUCTURE

The unique structure is ideal for creative reuse that focuses on community. The historic nature of the building displays an existing rich and unique design. There is ample amount of open space in front and adjacent to the building, that should be kept as open space. The front of the building is complimented by a U shape driveway that is accessible from Michigan Avenue. The building sits back at the bottom of the U Shape, which allows the building to command the attention of all the passerbyers.

The station's most distinctive architectural feature was the office tower rising above the station, which actually housed offices. The lower floors had marble lined corridors while the upper floors were bare and the top floor was never finished. Architecturally this mass was joined to the station with a band or pilasters running around the upper floors. A massive basement level provided facilities for baggage and mail.<sup>114</sup>

The building options range from focusing on preserving the history of the building, such as a museum, or reflecting the culture of the surrounding communities through a business incubator that incorporates a community welcome center.

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<sup>114</sup> *Supra* note 104.



**Figure 13. 1 MCS<sup>115</sup>**

#### POTENTIAL TO STIMULATE OTHER DEVELOPMENT

The potential to stimulate other development is high. Its location off a major thoroughfare, close to Interstate 75 service drive and the Ambassador Bridge is a tremendous asset. Its location provides accessibility, which will be increased “with the current planning efforts of the Corktown and Mexicantown/Hubbard communities to ... enhanced public access to and along the Detroit River through and from these ... communities.”<sup>116</sup> “It is ... possible that the redevelopment of [MCS] could be a vehicle that creates jobs in areas outside of the downtown core of Detroit.”<sup>117</sup>

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<sup>115</sup> Kavanaugh, Kelli B., *Detroit's Michigan Central Station*, (Chicago: Arcadia Publishing, 2001).

<sup>116</sup> *Supra* note 110.

<sup>117</sup> [www.thedetroiter.com](http://www.thedetroiter.com)

## PUBLIC AND PRIVATE LEADERSHIP FOR THE REUSE OF THE SITE

The surrounding cultural communities in corporation with the city and state have already recognized the need for redevelopment and economic development through their effort in implementing other initiatives to recreate a viable community.

“Control Terminals Inc., a part of businessman Manuel Moroun's CenTra Inc. trucking and a transportation company, acquired the 18-story depot in the mid-1990s.”<sup>118</sup> “Throughout the 1990s to date, the building remained wide open to trespassers, and during that time vandals seized the opportunity and stole items of value such as brass fixtures, plaster, and copper wiring. In the late 1990s, the building owner erected a razor wire fence and proposed an international trade processing center that never materialized.”<sup>119</sup> (See Figure 14.1). “In 2004, Detroit Mayor, Kwame Kilpatrick, planned to use the building as Detroit's police headquarters, but no other activity has occurred.”<sup>120</sup>

Although a few proposals for different uses for the MCS have been introduced, they were to no avail. The Cultural Industrial Site Conversion model will incorporate the best elements of the old community and the fresh new qualities the present community has to offer. Redevelopment of this site will reestablish the MCS's historical presence and its impact on the surrounding business community.

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<sup>118</sup> Jennifer Dixon, “Decaying Depot May Get a Tenant: Michigan Central Talks Serious, Detroit City Council is Hopeful,” *Detroit Free Press*, 2 January 2002.

<sup>119</sup> [www.snweb.com](http://www.snweb.com)

<sup>120</sup> *Supra* note 116.



**Figure 14. 1 MCS Surrounded by a Razor Wire Fence<sup>121</sup>**

## **FINDINGS & RECOMMENDATIONS**

### **FINDINGS**

The MCS site fits within determinations from the analysis of an applicable site for the Cultural Industrial Site Conversion Model. The MCS has rich history, a very unique structure, and its surrounding communities are abounding with culture.

### **RECOMMENDATIONS**

After examining the research and case studies, it seems very plausible to reuse selected abandoned industrial sites for Cultural Industrial Site Conversions (CISC). The criteria should be used to assess an appropriate site for CISC model. The state and local governments should consider implementing a pilot project funding specifically for the

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<sup>121</sup> *Supra* note 98.

reuse of abandoned industrial sites with cultural and/or historical character. In order for the model to be successful recreational and cultural use should be the target activity; however, stakeholders should be required to make valid arguments showing whether the recreational use will contribute to further economic investment and public benefits beyond the project.

Keys to the success of this pilot program will be the selection of two to three sites in Michigan that can demonstrate the viability of this reuse concept. Criteria for the selection of these sites should include:

- ❖ The potential for private sector redevelopment is low due to site size or cost of cleanup;
- ❖ The site has a unique cultural or historical, environment, and recreational potential;
- ❖ The site is highly visible and thus has a depressing affect on the surrounding community or region;
- ❖ The site has unique structures that lend themselves to creative reuse;
- ❖ The site has the potential, when reused, to stimulate other development within the adjoining community; and
- ❖ There are capable and effective public and private organizations to provide leadership and support for the reuse of the site.

Based on my analysis and findings above, I recommend that this site to be considered as a pilot project for the Cultural Industrial Site Conversion Model.



## **CONCLUSION**

The goal of the Cultural Industrial Site Conversion model is to promote sustainable development, enhance communities' assets to attract further economic investment and provide a sense of place for surrounding communities.

The criteria established in this study should be used as a reference for planners in locating applicable sites for the Cultural Industrial Site Conversion model. The criteria applied shows that a community that lend themselves to this model should include depressed urban communities with a considerable presence of diversity and culture.

Depressed communities are not hard to identify; however, I must address some indicators that planners must look for to identify communities specifically for the CISC model. Depressed communities are identified by number of abandoned buildings, the income levels of community residents, crime levels, real estate property values, and state unemployment rates.

Diversity includes presence of a variety of ethnic groups (Non-English speaking groups) and a mixture of cultural activities and places, which include but are not limited to museums, theatres, ethnic restaurants and shops. In other words, communities that embrace the differences in ethnicity and culture and provide an array of mechanisms that reflect community support are applicable.

This assessment tool is unique in that it applies to specific structures that may be considered for the Cultural Industrial Site Conversion model. Some may think that this tool will not contribute to redevelopment of urban cities because of its specifications. It is quite the opposite; this tool doesn't focus on quantity of redevelopment, but the quality

of redevelopment and its potential to promote economic development and interrelated communities.

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