

INTERNATIONAL
BROWNFIELDS
EXCHANGE
1998-1999

The Nature *of* Possibility

DECEMBER 1999



Amsterdam, The Netherlands



Leuna, Germany



Chicago, U.S.A



Buffalo, U.S.A.



Toronto, Canada

December 1999

Dear Friends,

Sustainable redevelopment of our cities' former industrial areas is one of the most pressing issues and opportunities of our time. Many communities recognize the importance of addressing the serious obstacles to regeneration of these old industrial sites and significant progress is being made on many fronts. Other cities and towns are just getting started.

We are pleased to present this summary of the results of the 1998-99 International Brownfield Exchange. In this publication you will find the results of workshops that occurred between October 1998 and March 1999 in five city regions actively engaged in the revitalization of former industrial lands. You will be able to determine the common elements and best practices that characterize international state of art approaches to brownfield redevelopment as well as the unique elements that respond to local economic, environmental, legal, and social conditions.

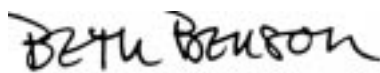
On behalf of everyone who participated in the activities of the Exchange over the past year, we extend our thanks to our international partners and to Environment Canada, The United States EPA and the German Marshall Fund of the United States for their support. In addition, we want to express our appreciation to our many local sponsors for their support of the workshops.

We hope you find this publication timely and helpful. As always, we welcome your comments and suggestions. Please keep in touch.

Sincerely,



David Crombie
Chair



Beth Benson
Executive Director

In 1998 the Waterfront Regeneration Trust launched the International Brownfield Exchange with support from the US EPA, the German Marshall Fund of the United States, and Environment Canada. The objectives of the program are to exchange information, to establish new working relationships, and to develop, test and communicate a set of best practices for sustainable brownfield redevelopment.

Over the past year more than 500 brownfield practitioners from the United States, Canada, the Netherlands, Germany and Spain were involved in the Exchange, participating in professional development and workshops in five cities in Europe and North America. Participants included landowners, investors, banker, regulators and community development specialists.

Find out more about the International Brownfield Exchange by checking our web page: www.waterfronttrust.com or contact us at (416) 943-8080.



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INTERNATIONAL
BROWNFIELDS
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1998-1999

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OCTOBER 26 AND 27, 1998
WORKSHOP SUMMARY

Westergasfabriek: A PARK FOR THE FUTURE

Local Partners

Stadsdeel Westerpark



Westergasfabriek: A Park for the Future

CONTEXT

The Westergasfabriek is a former coal gassification plant which was built on farmland on the outskirts of Amsterdam in 1883. It supplied gas until the 1960's and played an important role in lighting the streets of the city in the early part of this century and providing gas for industry.

The Westergas plant closed in 1967, and the property was conveyed to the local administrative body, the District Council, in 1992. The site consists of 19 buildings, including an immense gas holder. Thirteen of these buildings are protected under Dutch Law. Soil and groundwater contamination resulted from the gas manufacturing process when heavy metals, volatile organic compounds, and benzene leached into the soil.

The reuse plan for the Westergasfabriek site combines cultural activities within the historic buildings of the gas plant, while also integrating traditional park functions. Despite the residual contamination, the local District Council, the project team and the community are working together to build new relationships and strategies for the design of a new community park, the preservation of the historic buildings, and the establishment of the Westergas as an international cultural venue.

Many factors set Westergasfabriek apart as an internationally renowned brownfield project, including local government leadership, community collaboration, the cultural reuse of historic buildings, a phased remediation plan, and the visionary ideas of the project team. As the project moves into implementation, an essential next step is to develop strategies and plans to assist in the maintenance of the physical, ecological and cultural qualities of the site over the longer term.

WORKSHOP OBJECTIVE

After the new 'Park for the 21st Century' is implemented over the next several years, the Westergasfabriek site will be managed and directed by a new administrative body. The objective of this Workshop was to bring together international experts to examine various aspects of the theme of 'Maintenance at the Westergasfabriek'. The Workshop provided an opportunity for the Westergasfabriek team to examine with an expert team planning priorities and strategies that will need to be undertaken to ensure that the vision and the unique nature of the Westergasfabriek is promoted and maintained in this process. The Workshop also provided a forum for the exchange of information between project leaders about the challenges and opportunities in redeveloping former industrial sites in Holland and North America.

DAY ONE SUMMARY

Site Tour

Evert Verhagen, Project Manager of the Westergasfabriek and Femke Barendrecht Public Relations and Communications Assistant, led the group on a tour, providing an overview of the history and physical form of the site.

At the Zuiveringsgebouw, Marc van Warmerdam, the Director of the famous Dutch music theatre company, captured the unique and important role that this former industrial site plays in sustaining and promoting cultural development in the Netherlands:

'A lot of cultural activity and opportunity comes together in a project like this. Here you can bring commercial elements together with culture. What you need to further your work is to bring young, creative people together, in a large space. This is where it can happen – and these buildings in the Westergasfabriek make it possible'.

The group also toured the gasholder, a venue for events ranging from operas to rock concerts and congresses to house-parties, as well as the building housing Toneelgroep Amsterdam and a variety of other buildings currently in use as small offices, theatres and exhibition space.



Gasholder

Source: Westergasfabriek

UNDERSTANDING THE SITE AND THE CONTEXT

Evert Verhagen began the Workshop by situating the Westergasfabriek project within the context of the growing international movement to restore and revitalize abandoned industrial sites. He noted that there are several common themes which tie together projects in different cities from Kansas Missouri, to Amsterdam, and from Dessau, Germany to Chicago, Illinois. The characteristics that these sites share include the fact that such sites are often polluted and in an isolated location, they are located in dense urban areas with a lack of green space connections and habitat, and are home to important historic and cultural monuments. He further suggested that the common successes of these projects have much to do with the ability to connect the project to local politics and the community, the ability to make the project economically viable, and the ability to capture and nurture vision within the community and the project team. He noted that above all, successful projects must have a team with experts in all forms of communication.

Byril Willamsen, Project Coordinator for the Park at Westergasfabriek, described the plans for the integration of the buildings into the larger new park, and outlined the process of collaboration undertaken with the local district council and the community.

Liesbeth Jansen, Westergasfabriek's General Manager, described the ongoing leasing program, and the role of cultural programming in attracting increasing numbers of people to the site. The long and short term leasing program has the aim to increase employment, while also strengthening the dynamic qualities and unique character of the site. Currently some 260 people work at the Westergasfabriek.

RELATING NORTH AMERICAN EXPERIENCES OF REDEVELOPMENT

An equally important part of this Workshop was to provide the Westergasfabriek team with an opportunity to learn from the approaches and experiences of project managers involved in redevelopment projects in North America.

Kevin Greiner, Vice President, Project Development at the Buffalo Economic Renaissance Corporation, described the challenges faced by Buffalo, New York in its Brownfields Redevelopment program, and the strategies used to return lands to productive economic use. Of interest to the Amsterdam team were the strategies used to foster vision in projects led by private sector investment. Tom DeSantis from the Department of Community Development of Niagara Falls, New York illustrated through his presentation the tools undertaken to reawaken community interest in the revitalization process in Niagara Falls and how the master plan evolved into an important visioning project for the community and the municipality. James Murray, Director of the Wayne County Department of Environment, Detroit, outlined the bioregional and watershed-based approach to revitalisation in his jurisdiction, and discussed the difficulties in carrying out revitalisation initiatives with local communities with divergent economic and cultural backgrounds. The challenges for Chicago to achieve environmental clean-up while creating jobs was described by David Reynolds, Deputy Commissioner of Environment, for the City of Chicago. The policy advancements undertaken by the City to promote redevelopment through tax advances,

municipal site controls, and the use of tax increment financing was of particular interest to the Amsterdam team.

Ellen Kennedy, representing Citizens' Action for New York, Buffalo described the important role played by community groups and coalitions in influencing decisions about quality of life and economic development in the Buffalo area. Charlie Bartsch, from the Northeast-Midwest Institute, Washington, provided participants with an overview of the US policy framework and the approach to intergovernmental industrial revitalization and clean-up.

The interactive discussion in the last session of the day focused the group's attention back to the Westergasfabriek site. The participants identified a need to examine the relationship and balance between what the group termed 'hardware' (physical form of buildings and park) and the 'software' (cultural programming/leasing) in shaping the future of Westergasfabriek. It was agreed that the focus of discussion about the future of Westergasfabriek should not be limited solely to the issue of park design, and the design of space between buildings. There should be recognition of the important and intimate relationship between cultural programming and the physical design of the site. This issue was noted as a topic of ongoing discussion between the project team and potential private sector partners.

Day One Comments from Participants:

It is important to recognize in these projects that vision is based on change.

Evert Verhagen, Amsterdam

When you take time to nurture and develop a vision you also have to understand what the potential threats are to that vision in your planning process.

Kevin Greiner, Buffalo

I've learned that here in Europe... you have been integrating cultural activities and environmental restoration for quite a while.

David Reynolds, Chicago



Historic Buildings

Source: Westergasfabriek

DAY TWO SUMMARY

Workgroup Discussions

The Workshop was divided into three groups to carry out detailed discussions about how 'maintenance' can be achieved in three different but related areas of the park.

Maintaining the Vision- Group One

HOW DOES ONE MAINTAIN THE VISION?

The first Workshop group suggested that it was essential for the Westergasfabriek to develop a short and concise vision statement in the near future. The current vision statement reads: 'Our vision is to privatize the reuse of the buildings in the Westergasfabriek complex so that they may continue as a meeting place for people and ideas. We aim to generate new life on a derelict and contaminated site, whilst providing culture and entertainment for the people of Amsterdam. The further development of our plans for the new Westerpark will hopefully provide a green and spacious setting for this former factory complex'.

The group suggested that the a vision statement should be reviewed and formalized through consultation with stakeholders. The group suggested that a formal vision statement which has broad consensus is essential for future marketing and strategic planning activities, and the development of the detailed business plan.

Some key themes which should be addressed by this plan are issues having to do with connectivity and linkage, the important role of early action (starting points that encourage people to reconnect to the site), and the importance of the integration of a diversity of uses in further planning (i.e. cultural, social, ecological, and economic activities).

What kind of organization can sustain the whole vision? The group felt that it could be problematic if the future management of the site was relegated to a private enterprise, and that it was therefore essential that the local District Council continue to play some role in the future management process. Owing to both the national and international significance of the site, this group suggested that the site be administered in the future by a foundation or a trust that would have the capacity to organize and sustain a campaign of support. The use of tax incentives as a means to encourage donation and contributions could also be a useful idea for the fundraising initiatives concerning the park.

HOW DOES ONE ACHIEVE THE VISION?

The group outlined a few key suggestions for how the vision can be achieved, or 'how to get there':

- a. Develop a sound vision statement, and implementation plan
- b. Expand the local advisory council
- c. Examine opportunities to use the not-for-profit, loss-leader concept as a means to attract private participation
- d. Ensure that the strategic planning process brings together as many stakeholders as possible (school boards etc.) particularly from the local community
- e. Encourage public private partnerships
- f. Build requirements into your business and contractual agreements which include requirements for maintenance and local hiring practices
- g. Establish the "Friends of the Westergasfabriek", and encourage people to subscribe to and support the vision

The group noted that it will be essential to evaluate and communicate progress on an ongoing basis as to how the project is relating to local and city wide needs, and whether the vision is being fulfilled. Other questions which the group suggested merited further discussion at a future time were those such as: How do you share the vision? What are the threats to the vision? and How do you sustain the vision while embracing change?

MAINTAINING THE SPECIAL ATMOSPHERE OF THESE BUILDINGS-GROUP 2

The second group advocated that there are three important elements that should be considered in future efforts to preserve the special atmosphere of the buildings.

a. Establish a physical development plan

A static physical development plan could assist in defining 'special attributes' and could also define performance standards, programming priorities, and design standards for built form.

b. Solidify organizational and jurisdictional arrangements

Similar to group one, this group advocated the need for a foundation or trust to be established that could stitch together different elements of the physical plan. It was suggested that this organization should be guided by a board of directors (made up for example of tenants, artists, politicians, private sector and community representatives, etc.). It was also suggested that the role of the board would be to maintain and guard the vision, while operational issues would be best managed by an executive director and professional staff (a not-for-profit model).

c. Establish a Business Plan

The opportunity to fuse the physical plan with program and management strategies lies within the development of a comprehensive business plan. Ideally this plan should further examine and define the relationship between physical space and revenue (i.e. relationship between functions, uses, rent-payers, rents etc.). It will be important to establish an early 'anchor' (tenant of significant stature) and this can assist in demonstrating the development goals for the site, and build confidence. The business plan needs to ensure that it balances and integrates the competing interests and objectives relating to culture issues, education, environment, maintenance, financial and community affairs

There were several suggestions in particular about how the atmosphere could be maintained inside the buildings. It was suggested that the Westergasfabriek could

- have a range of 'finished spaces' (ensuring that alterations are not altogether permanent and do not damage the interior)
- have a range of programming alternatives
- have a range of price alternatives
- hire and retain local residents

There were additional suggestions about how to enhance the atmosphere outside and also link it with the buildings:

- artists could be engaged in activities working outside
- windows and door design should link to the outside
- the edge of the canal is a very strategic space for programming for the community

A model example for the Westergasfabriek could be that of the Chataqua Institute, owing to their success in the integration of park areas, with the programming within buildings.



Historic Buildings

Source: Westergasfabriek

MAINTAINING THE PARK – GROUP 3

Echoing many of the comments of the two earlier groups, group three included that further work in four main areas could assist in future development and maintenance of the Westergasfabriek's 21st century park.

a. Further Define Organizational Structure for the Park

This group suggested that the best mechanism to guide the use and the development of the park would be through the establishment of a board of directors. Reflecting on the experience of Ontario and Illinois, it was noted that community organizations such as Friends of the Park, or business oriented NGO's (i.e. Chicago's Open Lands) could play a significant role in raising public and political support, and managing financial donations for park maintenance over time.

b. Understand and Integrate the Interests of the Community

Before you can maintain the park you need to know what interests of the community are in the park. There exists a need to foster activities and facilitate local involvement in the park's development in order to make the community proud of the site. It is also important to link the site with the creation of jobs for people in the surrounding community.

c. Give Structure to Community Involvement

Maintenance of the park can be informally encouraged by giving structure to community involvement in the form of activities such as treeplanting, clean up days, information days, and the involvement of schools in the development of gardens, park activities, and the development of a local newsletter.

d. Ensure that the Park Values are Strongly Reflected in the Business Plan

Lastly, the group advocated that the business plan include adequate provisions and guidelines as to how the park will be administered, financed and maintained. The business plan should include a specific section which includes comprehensive guidelines on performance and quality standards relating to park maintenance and operations. There exists within the business plan an opportunity to integrate these guidelines into the contractual relations with tenants, and other stakeholders. Where possible, all attempts should be made in the business plan to encourage and enhance the economic values and employment potential associated with the development of green infrastructure.



A New Green Infrastructure

Source: Westergasfabriek

James Murray, from Detroit commented in the closing of the program:

'I am really interested in the approach that you have taken here. I've learned a lot here that I plan on taking back with me.'

CONCLUSIONS

This Workshop facilitated an important exchange of information for all participants. This time at the Westergasfabriek allowed North American participants to understand in detail the key elements to the success of this project, and its ability to integrate economic and environmental revitalization through a strong and vibrant “cultural enterprise” program.

Similarly, it provided an opportunity for the Amsterdam team to further understand the nature of urban redevelopment and industrial revitalization in cities in the US and Canada. It provided a window into some innovative mechanisms being used by municipalities and communities in unlocking the potential of abandoned sites, and in particular the significant role played by the private sector in North American projects.

The Workshop concluded that one of the most important priorities for the Westergasfabriek will be to solidify organizational and jurisdictional arrangements for the future management and development of the site. Whether this is best accomplished through a board of directors (or some other form) was not decided. However it was recommended that this should be the subject of further discussion with potential investors and other local stakeholders and that the business plan should specify these arrangements.

A second area of consensus focused on the recommendation that the Westergasfabriek address a number of future planning questions through the formation of a strategic business plan. The business plan will provide an opportunity to ‘stitch’ the building and the park together and allow a physical plan to be related to performance and design standards. It will also provide an opportunity to fuse the physical plan with program planning.

Workshop participants suggested that:

- the business plan should provide an opportunity to solidify and promote the future vision of the site
- this plan should strengthen and formalize the framework for the administration and management of the site
- a priority of this plan must be to strengthen the relationship between the existing buildings (built form) and the park
- guidelines and performance criteria relating to the use of the site should be included in this plan and should link stakeholders in the site to its maintenance.

The Workshop also raised some important questions for the future consideration of the Westergasfabriek team:

- How can the relationship between the built form and the park be strengthened? Can this be accomplished through programming?
- What is the role of the private sector and the development community in this process ?

It is hoped that the ideas exchanged here will encourage participants to cultivate new and creative ideas for projects in their own regions, and instill renewed energy to seize new revitalization opportunities in their own communities.

Participants in Westergasfabriek Workshop

Evert Verhagen, Project Manager, Westergasfabriek, Amsterdam

Femke Barendrecht, Public Relations and Communications, Westergasfabriek, Amsterdam

Charlotte Buys, Ingenieurs Bureau, Amsterdam

Katja van Buitenen, City Planner, District Council, Amsterdam

Klazien Duijvelshoff, Assistant Project Manager, Westergasfabriek, Amsterdam

Maurice Hanegraaf, Project Leader , Infrastructure, Westergasfabriek, Amsterdam

Liesbeth Jansen, General Manager, Westergasfabriek, Amsterdam

Charlotte Kruiver, Office Manager, Westergasfabriek, Amsterdam

Fre Meijer, Project Coordinator, Park Westergasfabriek, Amsterdam

Byril Willamsen, Project Leader, Park, Westergasfabriek, Amsterdam

Charles Bartsch, Northeast-Midwest Institute, Washington, D.C.

Beth Benson, Waterfront Regeneration Trust, Toronto, Canada

Sabine Brustmann, Culture and Communications, Expo 2000 Sachsen-Anhalt, GmbH

David Carter, Waterfront Regeneration Trust, Toronto, Canada

Sarah Campbell, Waterfront Regeneration Trust, Toronto, Canada

Thomas DeSantis, Department of Community Development, City of Niagara Fall, New York

Kevin Greiner, Buffalo Economic Renaissance Corporation, Buffalo, New York

Ellen Kennedy, Citizen Action for New York, Buffalo, New York

James Murray, Wayne County Department of the Environment, Detroit, Michigan

David Reynolds, City of Chicago-Brownfields Initiatives, Chicago, Illinois

Dale Medearis, Office of International Activities, US EPA, Washington, DC

City of Leuna

State of Saxony-Anhalt, Germany

OCTOBER 31 TO NOVEMBER 1ST, 1998
WORKSHOP SUMMARY

Transformation of an INDUSTRIAL GARDEN CITY

Local Partners

Expo 2000 Sachsen-Anhalt
Ltd.

INFRALEUNA
Infrastructure and Service
Ltd.

City of Leuna



We would like to thank Expo 2000 Sachsen-Anhalt Ltd., the City of Leuna, INFRALEUNA, and Marco Hansch of CO-PLAN for their assistance in the preparation of this workshop summary.

Transformation of an Industrial Garden City: Private Sector and Community Perspectives

On October 31st and November 1st 1998 an International Workshop concerning the redevelopment of industrial lands was held in Leuna, in the State of Saxony-Anhalt, Germany. This Workshop was hosted by Expo 2000 Saxony-Anhalt GmbH and was part of the International Brownfields Exchange Program organized by the Waterfront Trust and sponsored by its partners the US Environmental Protection Agency, the German Marshall Fund of the United States and Environment Canada. The local sponsors of the Workshop were Expo 2000 Sachsen-Anhalt GmbH, INFRALEUNA Infrastruktur und Service GmbH and the City of Leuna.

The Workshop was a first step in the Expo 2000 program "Transparency and Fascination: Chemical Development in Saxony-Anhalt". The aim of this Expo 2000 program is to showcase the evolution and achievements of chemical industrial development in the Saxony-Anhalt region, in an effort to reposition the region in the new millennium. Expo 2000 is currently in an early phase of project development in Leuna and this workshop provided an opportunity to initiate a first brainstorming session.

CONTEXT

Leuna is a city of approximately 8,000 inhabitants situated in the State of Saxony-Anhalt close to the cities of Halle and Leipzig. Leuna is centrally located in the regional network of industrial chemical production sites.

In the last days of the German Democratic Republic the 13km² chemical complex located at the eastern edge of the city had employed approximately 28,000 people. With the reunification of Germany in 1989, the chemical industry in Leuna collapsed because it was unable to compete successfully in world markets, resulting in the loss of nearly 20,000 jobs.

The German federal government and the State of Saxony-Anhalt took the decision to rebuild the Leuna chemical complex, through a process of privatization and an industrial incentives program. At the same time the governments undertook to support the community and to clean up the environmental contamination left by previous industrial activities.

Today, after nine years of effort a new "high tech" chemical complex has been built by ELF and several other investors have located in the Leuna Industrial Complex, employing some 9,000 people. To reach this point, governments have spent some 5.5 billion DM on the transition process and some 8.8 billion DM, largely from the private sector, have been invested in the new chemical facilities.

During this time period more than 20 firms have located in Leuna, ranging from multinational enterprises to major German energy companies and smaller local and regional businesses.

The large chemical site is now fully privatized, and also fully integrated. The companies have collaborated to form the infrastructure company INFRALEUNA which operates and maintains the site, and provides a broad range of services to the occupants, from analysis to waste water treatment and waste disposal.

Leuna, however, was never just another industrial community. Carl Bosch, its founder in 1917, wanted it to be a “model community”, and this vision became the focus of the workshop. Vibrant communities can be seen to have strong relationships between private spaces, industrial enterprise and the public realm. The form this relationship takes in Leuna will have a strong influence on the further job creation efforts still required to complete the social, environmental and economic transformation of the city.

Today the municipality of Leuna is facing many of the same challenges as post-industrial cities all over the world. In the face of rapid local economic and social change, Leuna is struggling to provide adequate municipal services and infrastructure and a good quality of life for its citizens.

WORKSHOP OBJECTIVES

The purpose of this Workshop was to bring together those involved in the revitalization of the City of Leuna with an international delegation for an initial exchange of information and ideas about industrial redevelopment and city building.

There were three main objectives. The workshop provided an opportunity for representatives from communities in North America, the Netherlands and Germany to share experiences and come together in a practical session to contribute to future visions for urban and industrial redevelopment in Leuna. Secondly, the Workshop facilitated an important discussion about the nature of the physical relationship between the industrial site and the surrounding city, and what kind of economic and social evolution this physical relationship could symbolize. Thirdly, for Expo 2000, the Workshop provided an opportunity to foster discussion between the private and public sector in a forum to establish new partnerships in a joint project in Leuna.



Elf Refinery, Leuna

Source: Expo 2000 Sachsen-Anhalt GmbH

DAY ONE SUMMARY

Private Sector Perspectives on Industrial Redevelopment

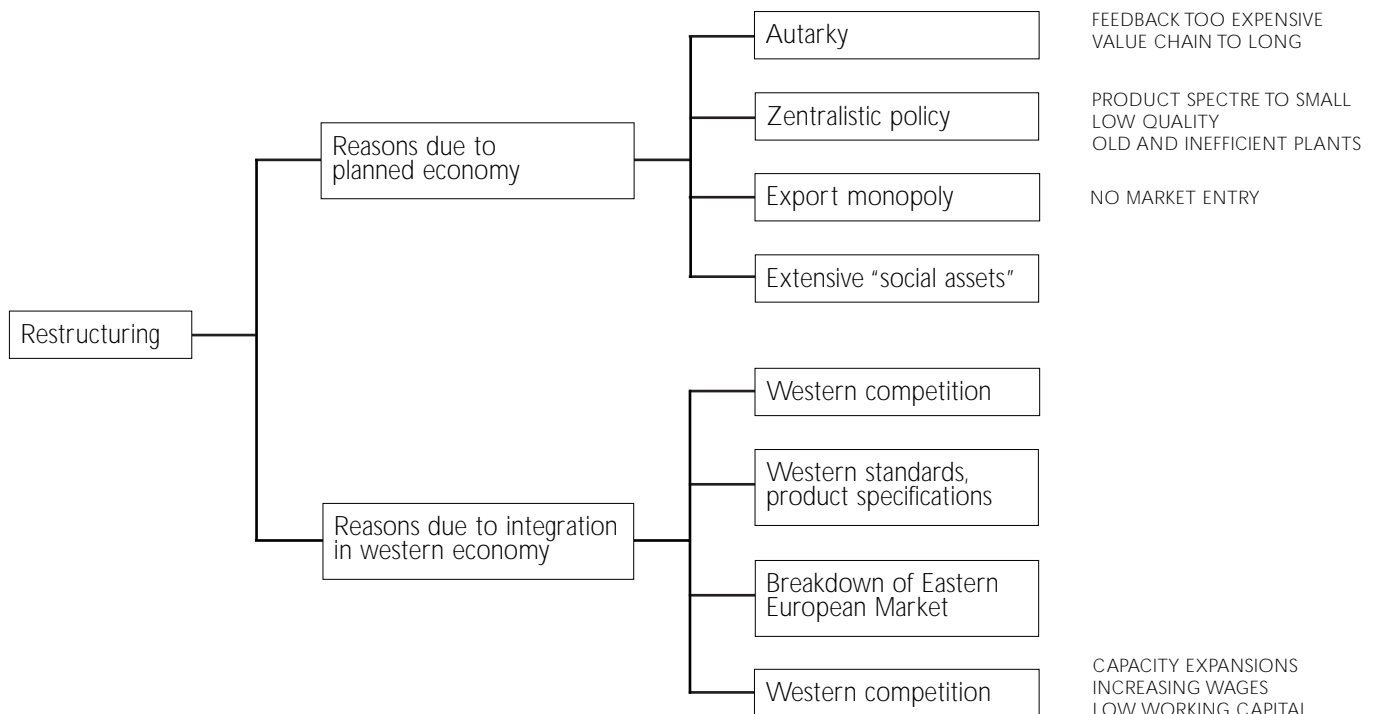
BACKGROUND ON INDUSTRIAL REDEVELOPMENT IN LEUNA

The Workshop began with an overview of the development of the chemical industry in Leuna since 1919, presented by Herr Manfred Steinhausen, Bruckenschlag GmbH. The presentation established the central role that Leuna played in development and the growth of Germany's chemical industry throughout the century, particularly during the First and Second World Wars. In 1945 over 85% of the manufacturing facilities were destroyed in an Allied air attack, which

caused the collapse of the production facilities. Mr. Steinhausen also outlined the important changes that ensued after 1945 under Soviet management of the chemical complex, and the important role played by Leuna as a centre for the processing of oil, gas, brown coal and chemical production for the Greater German Democratic Republic.

Strategies associated with the "Transformation and Restructuring of the Chemical Site" were presented by Dr. Sandro Amann, of INFRALEUNA. Dr. Amann explained in detail the collapse of the industrial complex in 1990 following German reunification and the reasons for the restructuring program undertaken by the Treuhand (Trusteeship) in order to attract new international investors (see Figure 1).

FIGURE 1: THE NEED TO RESTRUCTURE



Dr. Amann then led the group on a tour of the 13 km² site, where participants were able to view both large scale, highly technically redeveloped industrial estates contrasted with the unused area and remnant buildings of the former Leuna-Werke.

THE ROLE OF PUBLIC INVESTMENT

The State Secretary for Saxony-Anhalt, Dr. Behrendt, spoke about the political and economic context of structural change in East Germany in relation to the revitalization of the chemical manufacturing sector in the state of Saxony-Anhalt. Dr. Behrendt explained that the rapid economic growth of the chemical industry in the region resulted directly from a series of political and policy decisions to make significant public investment in the revitalization of these centres of chemical production.

Dr. Behreudt noted that while the challenges are significant, Leuna is not alone and shares with many other cities in this region problems associated with rapid economic change, and high levels of unemployment. He noted that while much has been accomplished, there exist still significant gaps in the ability of the region to compete in the world markets independent of financial subsidies.

THE URBAN PLANNING FRAMEWORK

The current urban planning framework in Leuna was outlined by Herr Marco Hansch, representing CO-PLAN. Current urban planning and site management tasks are carried out through a planning contract for city development which is managed by the City of Leuna and funded by INFRALEUNA and the private sector companies located in the chemical complex (see Figure 2). CO-PLAN is preparing the comprehensive building and development plan for the city of Leuna (see Figure 3). Herr Hansch emphasized the need for the planning process to create new urban qualities in Leuna, and he made note of the challenges being addressed by undertaking a planning process which responds to the needs of community and the City as well as the private sector.

FIGURE 2: LAND-USE, ZONING AND DEVELOPMENT PLAN FOR LEUNA-WERKE

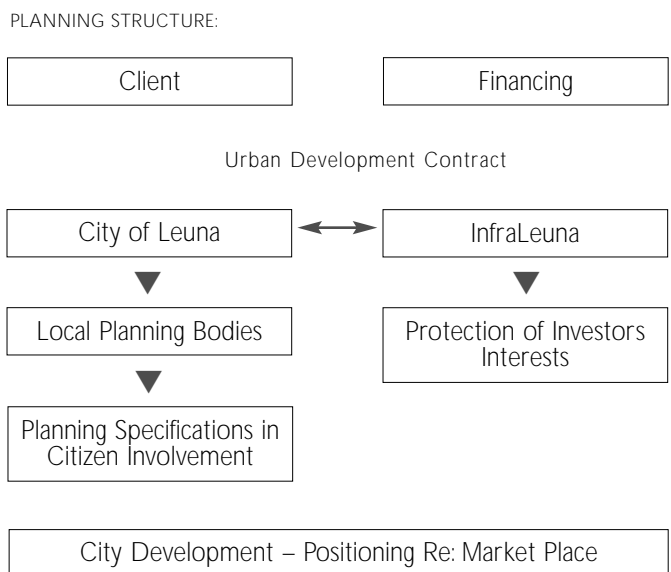
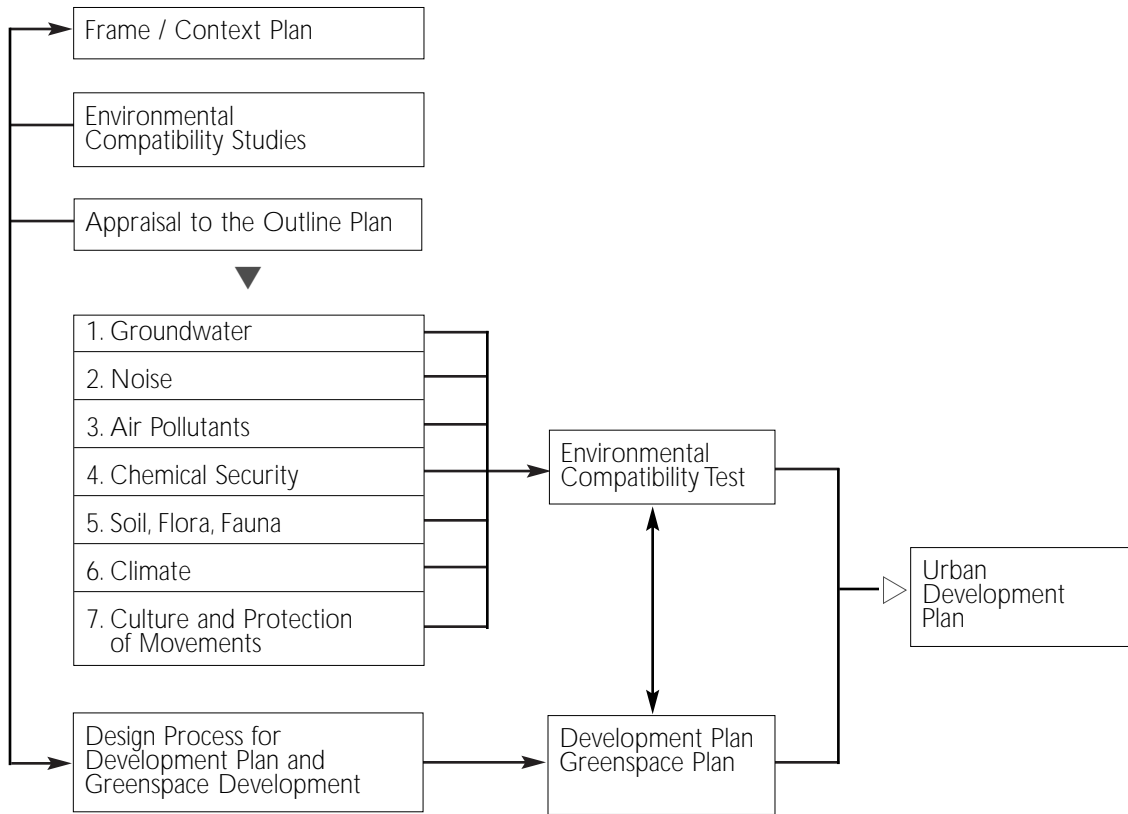


FIGURE 3: URBAN DEVELOPMENT PLAN / ENVIRONMENTAL COMPATIBILITY TESTING



North American Perspectives

Information exchange was an important objective of the Workshop, and presentations were made by American and Canadian colleagues about industrial redevelopment experiences in North America. Dale Medearis, from the International Office of the US EPA, expressed the appreciation of the North American participants for the opportunity to learn from those involved in the revitalization of Leuna.

Kevin Greiner, representing the Buffalo Economic Renaissance Corporation, provided an overview of Buffalo's brownfield redevelopment plan and how industrial redevelopment has provided opportunities for community redevelopment, protection of human health and the environment through projects such as the Main-LaSalle and South Buffalo Redevelopment projects. Mr. Greiner noted that the key objectives for the City in these projects include: assume active and flexible leadership roles in the redevelopment process, identify opportunity through realistic redevelopment

planning, build critical partnerships, relieve uncertainty and manage risk, manage key public investments, and continue institutional reform. Of particular interest to the German participants were the opportunities that were created by upfront public sector investment to lever private investment into a project.

The Canadian approach and experience in industrial redevelopment was described by Beth Benson, Director of Environmental Management of the Waterfront Regeneration Trust. Redevelopment projects are largely private-sector driven and are carried out within a public policy framework which is flexible, applying risk-based environmental criteria and performance standards within a context of established rules of procedure and regulatory certainty. There is also a trend in industrial

redevelopment to undertake remediation efforts at a regional and area wide level where possible, rather than only at the level of individual properties. Companies are taking an increasingly active role in the area of voluntary compliance and programs which engage local communities. The Canadian Chemical Producers' *Responsible Care* Program was noted as an example of an industrial association demonstrating this type of leadership. Redevelopment initiatives on industrial sites often incorporate "green infrastructure" in the site design to physically reconnect the property to surrounding communities. Ms. Benson noted that green infrastructure can perform a variety of other functions in revitalization projects, including improved aesthetic quality, habitat restoration, public amenities such as walkways and trails, and microclimate improvement. An important point was that an integrated site planning and design process can help to improve information exchange and ecological literacy and build a sense of pride and responsibility in the community for maintenance of public spaces. Lastly, the private sector is increasingly working to ensure that companies continue to seek innovative mechanisms to implement common projects (e.g. establish regeneration funds) and maintain ongoing partnerships with stakeholders.



Source: Waterfront Regeneration Trust

Workshop Discussion Groups

Participants joined small workgroup discussion sessions which provided an opportunity to respond to specific workshop questions and discuss further points of common interest.

Theme: Private Sector Perspectives on Industrial Redevelopment

GROUP ONE: INTERNAL CONNECTIONS WITHIN INDUSTRIAL ESTATES

Facilitator: Martin Stein, Expo 2000

Mitarbeiter: Herr Amann, Herr Hansch, Herr Mertens and colleagues from International Brownfields Exchange

Questions:

1. Of what you have heard and seen today what is most interesting, and how does it relate to industrial areas and processes in your region?
2. In your view what are the main challenges for the continued revitalization of Leuna's industrial estates ?
3. What are the future opportunities that can be undertaken in order to attract private investment to Leuna?

GROUP TWO: CONNECTIONS BETWEEN INDUSTRIAL SITES AND LEUNA LANDSCAPE

Facilitator: Peter Grabsdorf, Expo 2000

Mitarbeiter: Herr Steinhausen, Frau Seelemann, Herr Auer, Frau Beuter and colleagues from the International Brownfields Exchange

Questions:

1. Of what you have heard and seen today what is most interesting, and how does it relate to industrial areas and processes in your region?
2. What are the opportunities to enhance the relationship between the industrial sites and the city/landscape? How can this be accomplished? How can urban and landscape design, or other ideas such as lighting, assist in this process?

Issues and Commentary from Workshop Discussion Groups

Emerging from the Workshop was the fundamental notion that there is a need to integrate the strengths of the site to the community and the region in a positive way in the near future. The Workshop identified this process as one which must bring all parties together. It must be a process which is inclusive, communicative, and positive. It must also aim to create jobs, and celebrate the local and unique identity of Leuna. In short the planning and implementation process must be **visionary, practical and inclusive**.

Both groups elaborated on their ideas of the planning challenges faced by Leuna. The nature of the physical and spatial connection between the industrial site and the surrounding city was a central point of discussion for both groups. It was concluded that this zone could be referred to as the “Twilight Zone” or the “Transition Zone”. This Zone was identified as the key area with potential to be designed and redeveloped in a way that serves the interests of both industry and the community.

THE TWILIGHT ZONE

The key question which emerged from the discussion was: How can the twilight or transition zone area be developed in a way that serves both industry and community, and how can conflicts which could slow this development be resolved?

Participants suggested that the key to resolving this question is to define opportunities and concerns which are common to both sectors; this includes deciding what is best suited for the area from both vantage points – this could include services and activities such as medical, office, or cultural amenities, parkspace and other options.

INTEGRATED PLANNING PROCESS

Most importantly it was noted that the process of future development must recognize the changing role of city and of the community. The key to the Leuna’s future was seen to be the ability of parties to engage in a planning process which is:

Visionary — articulates ways to use elements of Leuna’s industrial heritage as part of the “Twilight Zone”, and enhances the psychological link of the industrial estate to the city and its garden heritage

Practical — embarks on a program to clearly define expectations and needs and organizes approaches to community planning priorities such as need for commercial space, buffer space from heavy industry etc.

Inclusive — actively seeks community input on a regular basis and provides opportunities for meaningful involvement.

It was agreed that innovative ideas concerning how future planning in the area can further enhance services and provide jobs to the community should be a subject of further discussion with local stakeholders. Also part of such discussions should be the potential use of art, light, and landscape design in the enhancement of the “Twilight Zone” boundary region.

COMMUNITY INVOLVEMENT

Another main theme of discussion focused on the subject of communication and community engagement in a democratic process. The North American participants were particularly interested to understand the views of the local community on such issues. Participants comments made it clear that while the community has interest in participating in decisions around the site, these are questions that the community is not used to being asked. There was general agreement that while there is will for positive change on the part of the private sector and the community, there exists a general lack of dialogue between these

groups. The recent INFRALEUNA initiatives in 1998 regarding the Open Door event, and the Carmin Burana concert were seen positive first steps in this process on behalf of the private sector in reaching out to the community. An important next stage would be to develop a consensus that the economic, social and environmental transformation process requires the active engagement of the community on an on-going basis and to develop a process that will encourage meaningful participation, and increase community capacity and self-reliance.

“People need to be able to influence decisions about the quality of life in their community. People need jobs that produce a living wage, not just a minimum wage and in Buffalo that means that we need to invest in job training. You need to bring together in coalitions to influence change and you need to elect progressive representatives”.

Ellen Kennedy, Citizen Action for New York



Workshop Participants

Source: Waterfront Regeneration Trust

Day One Conclusions

The discussions of Day One resulted in a general consensus on the following points:

1. There is a strong need to connect communities with private sector investment and projects. Efforts to engage local residents in planning initiatives and practical small scale projects should be continued and enhanced.
2. There exists in different areas “opportunity zones” (including the twilight zone) which need more definition and discussion with all parties
3. Landscape and light design features offer a basis for communication and physical connection
4. Green infrastructure has financial, aesthetic, ecological and connecting functions which can be recognized and realized in local project initiatives
5. Idea of a practical and strategic project in the near future is a key opportunity to bring all parties and all of the above elements together
6. This project must be visionary and must demonstrate how one can translate a visionary idea into action

OPPORTUNITIES

In the concluding discussion, some group members noted that opportunities should be gauged in terms of their potential for social and economic success. In addition, they agreed that new forms of partnerships were needed for Leuna, partnerships that could, in the large sense, help maintain the quality of life in Leuna and bring it recognition (through such activities as scientific or cultural congresses), as well as enhance industrial productivity. A need for further in-depth discussion between these groups in the near future was recommended, and the opportunity to initiate a collaborative “Strategic Project” was suggested.

Most importantly, participants commented that already much revitalization has been accomplished in Leuna (tree planting, residential refurbishment, streetcar access) and that Leuna should find ways to communicate and celebrate this process.

It is important to promote what is special and unique about Leuna. This is what we have found in our redevelopment efforts at home. There is a history to be told, and you need to use different tools to use situations as opportunities to celebrate a place. I'm intrigued with the landscape and light ideas which have emerged from our discussions and I think that from what we have seen there are opportunities for new partnerships, to express what this community can become.

Tom DeSantis, City of Niagara Falls, New York



Main Office Building, InfraLeuna
Source: Waterfront Regeneration Trust

DAY TWO SUMMARY

Community and Urban Planning Issues

SETTING THE GROUNDWORK

The second day of the Workshop began with the Honorable Frau Dr. Dietlind Hagenau, Mayor of Leuna who provided an informative overview of the history of the development of Leuna and an overview of the important planning and development issues for the future of the City. Dr. Hagenau explained that among many important planning priorities, the problem of high noise levels and traffic volume emanating from industrial complex and other sites needed attention and resolution. The Mayor and Herr Hansch brought to the group's attention several draft plans which guide development in the city.

A walk through the City demonstrated the major elements of the "Garden City" approach to urban design, and the view from the top of the church showed the proximity and existing connections between the city and the chemical facility.

North American Perspectives

Relating North American Experiences of Redevelopment, Tom DeSantis, from the Department of Community Development for the City of Niagara Falls, New York, related many of the challenges faced by the community of Niagara Falls owing to the location of 20 sites on the state registry for Hazardous Waste Site Registry. Industrial dis-investment in this area has resulted in high unemployment, poverty and other social, economic and environmental problems. Mr. DeSantis described the process that the City undertook to rediscover both the significance of the industrial heritage and the natural features of the area, and how these features were reinterpreted in the city's efforts to redevelop for the future. Niagara Falls is currently undertaking a variety of pilot projects where underutilized sites are being reused in a program for future economic development and environmental safety.

NEW CONNECTIONS: LIGHT AND LANDSCAPE IN LEUNA

Light provides a medium of communication, and Professor Auer, an architect from the University of Braunschweig, Germany, used a visual slide presentation to show how light can be used with in cities. He showed detailed examples of security light, residential light, work light, advertising light, representing light, festive light and ritual light. Using a diagram Professor Auer demonstrated that the potential for the most effective use of light in the case of Leuna. He pointed out that lighting initiatives should not fact concentrate on the borderline or the twilight zone, but should be used in other parts of the City to highlight the important features of Leuna.

It was noted that the landscape offers a medium for communication and connection in industrial regions. Dr. Seeleman, a landscape architect from Leipzig presented numerous innovative design ideas which have been developed as part of development concept schemes for the Chemical Park in Bitterfeld-Wolfen.

When asked by Professor Auer, University of Braunschweig, to spend an evening thinking about one question the workshop participants provided the following inspirations upon the statement:

LEUNA: CITY OF _____?

Leuna City of Lights: Illuminopolis

Kevin Greiner, New York

Leuna. City of Expectations

Ellen Kennedy, New York

Leuna. City of Opportunity

Leuna. City of Green Possibilities

Charles Bartsch, Washington

Leuna. City of Heritage and Futures

David Reynolds, Chicago

Leuna. City of Health and Chemistry

Dr. Seeleman, Leipzig

Leuna. City of the Green Jewel

Beth Benson, Toronto

Leuna. City of Opportunity

Karl Alvarez, Washington

Leuna. City of Industry and Garden

Dr. Hagenau, Leuna

Leuna. City of Transition

U. Beuter, Oberhausen

Leuna. City of Future Discussion.

Anon.



City of Leuna

Source: Waterfront Regeneration Trust

Workshop Discussion Groups

Theme: Urban Planning and Industrial Redevelopment

GROUP ONE

Facilitator: Martin Stein, Expo 2000

GROUP TWO

Facilitator: Peter Grabsdorf, Expo 2000

Questions:

1. What are the main priorities for successful partnerships between the private and public sector with regards to economic, environmental and social development in the City of Leuna?
2. Are there specific places or points where pilot projects could be initiated or actions taken to address these issues?

DISCUSSION THEMES

The comments from the plenary session discussion echoed many of the themes of Day One. The chance to hear the municipal point of view confirmed for many participants that the private and public sector share similar goals and objectives for the City. Kevin Greiner from Buffalo elaborates on this point:

It seems clear to me that there is a great deal of shared interest here, both between the chemical plant and the city. The twilight zone, I think should be more viewed as an “opportunity zone”.

While your common interests may not exactly match at this time, the interests of each party are closer than one might

think. It is important for the private sector to develop a first rate, prominent and high quality and innovate business park which attracts investment. It is also in the interest of the City to provide a first rate city which provides a first rate quality of life and services for its citizens. It seems to me that what we have discussed today demonstrates that through innovations in lighting and landscaping there are many opportunities to achieve this common interest.

While there was consensus about the opportunity, there were several questions about how further redevelopment and enhancement could be practically and realistically achieved. Several participants suggested that this could be best realized by a collaborative, strategic project that would bring people together. This project could be small-scale or large scale, but it was emphasized that it should be practical and capable of being accomplished as soon as possible.

As in the first day, the impulse of participants was to return again to the theme of light, landscape and how this can be integrated in order to create jobs just as David Carter, Waterfront Regeneration Trust, Canada suggests:

It seems that the two discussion groups share some common thoughts- that amidst the problems that preoccupy Leuna there is an opportunity through which to examine carefully the physical, and psychological relationship between the industrial site, the existing investors and companies, and the City of Leuna. Two of the most important themes which have emerged from this workshop are the concept of the Twilight Zone and the concept of a Green Corridor.

There is an opportunity to work together to ensure that landscape measures are incorporated into a plan. It seems that this also links to a most important point that has been made in this workshop – and that is the need, and central importance of jobs. It seems also that this workshop has pointed to some ideas about how these themes can be tied together and could result in quite a positive outcome for Leuna. Could these ideas and inspirations to do with connection of light and landscape be targeted to creating more jobs? Even the initiation of small scale landscape initiatives have the opportunity to make incremental improvements in the quality of life for people that live, work and play here.

Discussion also touched on the issue of the “center” of the City of Leuna. Some participants raised the questions of where is the city center today, how does it function, and what could it be in the future (traditional, green, alternative)?

While there was agreement that opportunities for joint projects should be seized, there were some differences of opinion about the location(s) zone in which such initiatives should be focused. While many participants pointed to the twilight zone, other participants pointed to the need to draw emphasis away from the boundary to special sites, monuments or features in and around the City which make Leuna unique. It was suggested that this could be achieved by undertaking additional, complementary projects.

CONCLUSIONS and NEXT STEPS

“There is a lot of goodwill on both sides, but what we need is a practical approach. In the past we didn’t have such partnerships, and in what I’ve seen today, I’m more confident”

One must ask the question: if Leuna is not only a place of chemical industrial production then what can it be? It is a unique city in Germany. It is a unique combination of active living qualities, and opportunities for urban design, and innovative planning initiatives that link industrial sites, public spaces, and living areas.

So what should be done? What we can do is open up new perspectives, which can create a new dimension of participation, ensuring that people realize that they can take part. Our point of departure is what this could mean for Leuna.

In closing the workshop Mr. Gerhard Seltmann, Director, Expo 2000 Sachsen-Anhalt, had the following comments:

Our experience is that it is important to excite people, and bring people together in an open dialogue, help them to understand that they have much in common, and that they have much to share. My feeling is that we have succeeded in just that in this workshop. I thank you.

Leuna

Transformations in Industrial Redevelopment

This backgrounder is an overview of the evolution of the chemical industrial production in Leuna and was prepared by Sarah Campbell, Waterfront Regeneration Trust, Toronto, Canada, during her work with Expo 2000 Sachsen-Anhalt Ltd. in the fall of 1998.

LEUNA WORKSHOP BACKGROUNDER

OCTOBER 30th, NOVEMBER 1st 1998
Waterfront Regeneration Trust, Expo 2000
Sachsen-Anhalt Ltd. and Partners

The development of the chemical industry began in 1915 in Leuna. Today in 1998 Leuna is an important player in the world market of chemical production, and is home to a wide variety of international companies and their subsidiaries. In the last ten years over 9 billion DeutscheMarks of private investment has flowed to Leuna, and the chemical sector presently employs over 10,000 workers.

The transformative events which unfolded in the years between 1916-1998 have much to do with Leuna's present stature as a world leader in chemical research, development and industrial production. The enormous economic, social and political change which occurred

over these eight decades dramatically shaped both the city of Leuna and the nature of today's chemical industries

BEGINNINGS

In the early part of this century a virulent famine spread across Europe, affecting Germany significantly. It was thought that technological development and science could usher in a new era- where dependence on the landscape and 'hardships such as famines could be avoided and abundance could be found'. The discovery of synthetic ammonia in 1909 by Carl Bosch and Fritz Haber (both workers from the BASF plant in Ludwigshafen) was seen as an exciting breakthrough. Following this discovery a small factory was erected in Oppau, in the Rhine/Main region, for the production of synthetic ammonia. This newly discovered product was important because it provided a replacement for nitrogen as fertilizer for crops, and was also essential for other strategic purposes.

Nitrogen and ammonia were essential components for the manufacture of explosives and were of tremendous strategic significance for Germany in the first World War. Owing to concern that Oppau factory location was vulnerable to enemy attack, it was decided that a new site for chemical production should be chosen. Located in the heart of Germany, Leuna was thought to be an ideal location: it was far from enemy fire, located in a strategic transportation corridor, and in a region rich with essential raw materials necessary for chemical manufacture (brown coal, gypsum, potassium etc.).

In 1916 the 'Ammonia Werkes Merseberg' was erected in Leuna. In 1925 the works were expanded to include IG FarbeIndustrie AG to undertake the manufacture of synthetic dyes and colors. In 1926 a hydrogen plant was erected and 'Leuna Gas' soon became available on the market. Over the next decade in Leuna new chemical production facilities were established, and existing ones were expanded. As Germany entered the First World War, Leuna became largest producer of synthetic fuels in the country, and together with the Oppau factory was responsible for 30% of synthetic fuels and 60% of aviation fuels. At this time 'MittelDeutschland' and the regional area surrounding Leuna was considered the 'Biggest building site in the world'.

This status would not last for long, however, as in 1943 over 80% of the manufacturing facilities were destroyed by a massive air attack by the Allied Forces.

SETTLEMENT IN LEUNA: GROWTH OF A GARDEN CITY: 1916-1998

The ongoing growth of the chemical industry at the beginning of this century initiated the early intensive settlement Leuna and by 1918 almost eight thousand workers lived in barracks on the outskirts of the factory. Slowly, a small unplanned settlement emerged which included a post office, kitchen, hospital station, and several small businesses. Overcrowding and political tensions caused this barracks area to be closed in 1921.

Shortly thereafter work began to establish a new Garden City called 'Neu-Rossen' (now part of the City of Leuna). The formal planning process undertaken for this new community was led by the architect Karl Barth who believed good living conditions could be provided for Leuna workers using the English Garden City model. A network of small and large dwellings, of various sizes and prices was established with pathways, parks and gardens being the connecting feature of the basic plan. Over 314 buildings were erected with over 84 different architectural patterns; each building having a second door leading to the garden. Barth's vision was one of a society where people could live in a 'healthy, socially equitable environment for common use'. His aim was to create a city where workers could walk from home to work through nature and open spaces. Today, Leuna is considered one of the largest preserved Garden Cities in Germany, and its municipal slogan remains 'Leuna: Industrial and Garden Town'.

THE WAR AND POST-WAR CHANGE IN LEUNA

Leuna's industrial lands were temporarily occupied at the end of the Second World War in 1945 by American forces. It is believed that important manufacturing information and patents fell into American hands at this time. Soon after in 1946, the area came under Soviet control. Over the next several years a number of skilled laborers would leave Leuna and emigrate to the West.

Despite this initial loss of skilled manpower, the Soviet state management of the chemical facilities in Leuna signaled a new era of reconstruction, and profitable redevelopment. In 1951 a new administrative name was given to the chemical facilities : 'Leuna Werke, Walter Ubricht'* , and work was undertaken to repair and upgrade the damaged facilities.

In 1958 the Soviets hosted a 'Chemiekonferenz' which introduced a new slogan and anew era of chemical production: 'Chemicals give bread, prosperity and beauty'. Resulting from this conference was a new chemical program and plans to construct a new facility called 'Leuna II'. Between 1959 and 1963 Leuna II was constructed as one of the most modern refineries in the entire Eastern Block. With the new refinery, Leuna soon became a central processing centre for Soviet oil, which was piped to Leuna from Russia through the newly constructed 'Drushba' pipeline (this pipeline, now called the 'Friendship Pipeline' remains an important source of crude oil for Leuna' s industries

today). The mass production of chemicals and the processing of brown coal and crude oil continued in Leuna for almost three decades, and it soon became one of the most important and strategic industrial assets in the DDR Republic.

EVOLUTION OF ENVIRONMENTAL ISSUES IN LEUNA

Discussion upon environmental matters began as early as the 1920's and 30's beginning with complaints from workers about odors, and from farmers about the condition of their fields and trees. Debate and discussions continued over many decades on a variety of different issues ranging from waste disposal, to sewage effluent and dust emissions. The urgency of environmental politics however reached a height between 1960-1980.

In the late 1960's Leuna-Werke was charged by the DDR Administration for over 1 million Marks in reparations for the environmental damages caused in the surrounding landscape. Later in the 1970's following the crash of the world oil market, environmental problems. Owing to the exorbitant prices for oil, the Leuna-Werke facilities began to once again process brown coal. Significant environmental impacts resulted from the fact that during this difficult economic time the administration did not make any investments in filtration or other environmental technologies. In the early 1970's the Leuna-Halle-Bitterfeld triangle, was deemed to have 'the highest sulfur dioxide emission rate per citizen and area in all

* an important political leader in DDR Republic

of Europe'. Concern over environmental conditions continued for several decades until German reunification, when new and stringent environmental regulations guided redevelopment and production in the 1990's.

PRIVATE SECTOR INVESTMENT IN LEUNA: 1990-1998

The reunification of East and West Germany in 1990 signaled significant economic and political change for Leuna. The assets of Leuna-Werke were put into the hands of a German Trusteeship. The mandate of the Trusteeship was to restructure the economic organization of the chemical facilities through the use of market forces and a program of privatization. The Trusteeship had the task to: decide how the enterprises would be privatized, at what price, and ensure that the area was redeveloped in such a way that competitive industrial enterprises would result.

This was not an easy task. At the time of unification there were few capital resources left in Leuna Werke. The production facilities had become run-down and outdated, and it was difficult to see how successful reinvestment could be realized. The first action of the Trusteeship was to liquidate the existing facilities at a cost of 5.2 million DM. In addition to this the Trusteeship guided 4.3 million DM worth of investment into new infrastructure and improvements in site servicing. Over several years the Trusteeship sought investors who could not only bring capital to Leuna, but also advanced management and marketing skills.

From 1990-1995 the Trusteeship reviewed investment plans, and entered into agreements with a number of international companies seeking to establish new facilities in Leuna. In 1991, Linde AG was one of the first private sector investors to arrive in Leuna and establish their world headquarters for their gas processing facilities. A successful cooperative partnership between Linde and STEAG, facilitated STEAG's establishment in Leuna as an environmentally friendly and efficient energy provider for many new investors over the next several years.

In 1992 the 'TED Vortrags' were signed and these agreements provided the framework and the official symbol for the start of the formal privatization process in Leuna. In 1993 the Belgian firm UCB announced its intention to establish an Amine/Dimethyl processing centre in Leuna, with an initial investment of 30 million DM. One of the largest investors in Leuna today, the Elf Aquitaine Groupe (France), committed in August 1993 to an investment of 4900 million DM for the construction of one of the world's largest and most modern oil refineries (MIDER), and a glue production centre (Elf Atochem). In 1994 the Belgian-based firm DOMO, established a Caprolactam production facility with an investment of 650 DM. Rhone-Poulenc also came to Leuna in 1994, with a 10 million DM investment into a facility for the production of Salicylic Acid. In 1995 Buna Sow Leuna, a subsidiary of Dow Chemical, came to Leuna with investments of 40 million DM for the production of LD-Polyethylene (please see information in appendix for further investors, and investment information).

There were many reasons which made investment in Leuna attractive during this time. The German economy and workforce was seen to be generally stable and secure, the condition of the East German economy at this time made 'good investment sense', and the state administrative and financial authorities were highly supportive of the investment process. Also attractive to these companies was the fact that Leuna was soon to be a highly modernized site poised to provide efficient and convenient access to raw materials, transportation routes, and excellent internal site services and infrastructure.

With the privatization process well underway, the Trusteeship of Leuna-Werke was dissolved March 1996. In 1996 the company Infra Leuna was established as the organizational framework for the delivery and management of services and infrastructure to individual industrial estates. A private enterprise itself, Infra Leuna plays an important role in managing the development of the internal infrastructure network, and service provision to Leuna's chemical sites and facilities in an efficient and integrated manner. The well managed and highly organized access to infrastructure, raw materials and internal networks makes Leuna an attractive site for investment.

CURRENT ISSUES IN LEUNA

As investment increases and the growth of the chemical industry continues, the City of Leuna is working to manage growth and ensure a good quality of life for its citizens. The development of the public realm began early in the century as the chemical industry grew: in 1924 Leuna's industrial facility was one of the first to provide free hospital treatment for all staff, in 1926 the facility established the first industrial kindergarten in central Germany, and in 1928 it also established a community house for its workers with the largest theatre room in central Germany. Considering its present size (population of 8,000), Leuna continues to have a well developed public realm. Today in Leuna there are four churches, a youth centre, a swimming centre, a number of sports fields and facilities, a city hall and a large cultural hall.

Like many other cities in East Germany since reunification, significant planning and investment of public funds has gone into the upgrading and modernization of public and residential buildings. In 1994 a special committee was established to promote refurbishment and renewal of Leuna's Garden City realm. Planning is underway to revitalize and improve connections within City parks and several other small scale revitalization projects are being considered. Leuna planning staff are currently engaged in the Local Agenda 21 process. The nature of the physical boundary and connection between the 'chemical industry and the city' and 'working and living' is a question of ongoing discussion.

In preparation for the World Exposition in Hannover in the year 2000, Expo 2000 Saxony Anhalt GmbH is developing a program entitled: 'Transparency and Fascination: Chemical development in Saxony-Anhalt'. The aim of this program will be to showcase the evolution and achievements of chemical industrial development in Saxony-Anhalt through initiatives and projects, in the hopes of repositioning the region for the next millennium. Expo 2000 is currently in an early phase of project development with a private sector partner Infra Leuna. It is hoped that the Workshop with the Waterfront Trust and its partners in October 1998 will facilitate a more detailed examination of ideas and issues currently under discussion such as:

- With the large number of private enterprises and facilities in Leuna – How can the internal networks of supply, demand, transportation, and waste disposal etc. be most effectively organized through the design and redevelopment process to maximize cooperation and efficiency?
- What can be done to enhance the physical landscape boundary between 'industry and city' and 'work and home'? How can architecture and design help to address this issue?
- What is the role of Leuna's natural landscape and cultural history in the redevelopment process?
- What is the role of the private and public sector in this process?
- What opportunities are there for increasing private sector profiles inside and outside of Leuna? What are the marketing opportunities?
- What are short term and long term initiatives that can be undertaken as cooperative projects between the private and public sector?

Over time Leuna has undergone many transformations. This is most clearly evident when one considers the constant changes in the names given to this industrial center. Since its inception Leuna's chemical manufacturing area has been known as: Merseberg Ammoniakwerke, EG Farben Inc. PG, Soviet PLC Leuna (DDR), VEV Leuna-Werke (DDR), Kombinat Leuna-Werke (DDR), Leuna-Werke PLC, and Leuna-Werke GmbH.

The political and economic evolution of this site is what makes Leuna a unique case in the study of modern industrial redevelopment. Over time Leuna has been a place of technological discovery and innovation. It is a place where ideologies have been tested about the role of capital, the workplace, social and environmental values and the common good. In the 1990's it continues to be an important place of discussion and exchange of ideas about strategies and best practices for industrial redevelopment in the new global political economy.

Sources:

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Infra Leuna, 'Dynamik in Chemie', and 'Investments in the Future'.

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City of Buffalo

New York, USA

FEBRUARY 1 & 2, 1999
WORKSHOP SUMMARY

Reclaiming Our City and Region: **RETHINKING BROWNFIELDS**

Local Partners

Buffalo Economic Renaissance
Corporation

Louis P. Ciminelli
Construction Companies

Community Foundation for
Greater Buffalo*

Parsons Transportation
Group/DeLeuw Cather &
Company

Jamestown Development LLC

Lippes, Silverstein, Mathaias &
Wexler LLP

Malcolm Pirnie Inc.

Phillips, Lytle, Hitchcock,
Blaine & Huber LLP

University at Buffalo, Institute
for Local Governance and
Regional Growth



* with support from the Great Lakes Community Foundation Environmental Collaborative supported by the Great Lakes Protection Fund, the Joyce Foundation and the Charles Stewart Mott Foundation

The Waterfront Regeneration Trust extends its thanks
to Kevin Greiner, Gail Johnstone
and David Hahn-Baker for their assistance in the
preparation of this Workshop Summary.

RECLAIMING OUR CITY AND REGION: Rethinking Brownfields

Synopsis

In February, 1999, over 200 people gathered in Buffalo for a 2-day Workshop on brownfield redevelopment.

The Workshop was an opportunity for the community in Buffalo and Western New York to learn about successful brownfield projects in Europe and in North America, and to bring together a diverse group of people to discuss local issues in brownfield redevelopment.

The main objective of the Buffalo Workshop was to create an action plan to restore and reuse brownfields. Workshop participants were asked to identify obstacles and opportunities for brownfield investment in Buffalo and to identify priority actions that should be taken by the government, community and private sector.

This synopsis provides an overview of successful approaches to brownfield redevelopment used in European countries such as Germany and Spain, as well as in North American cities such as Portland and Chicago. Recommendations that resulted from Workshop discussions including principles to guide brownfield redevelopment in Buffalo and a 5-point Action Plan are also noted.

THE INTERNATIONAL BROWNFIELD EXCHANGE

The International Brownfield Exchange brings together community development and other practitioners from North America to share knowledge and experience with European counterparts. In addition to the Buffalo Workshop, the Exchange included meetings in Leuna, Amsterdam, Chicago and Toronto. The Workshops were designed to exchange information, establish new working relationships, and to develop, test and communicate a statement of best practices for sustainable brownfield restoration and redevelopment.

The Buffalo Workshop was part of a series of local activities designed to foster new approaches to Western New York's efforts to revitalize its communities.

Planning for the Buffalo Workshop began with a small meeting of representatives from the Waterfront Regeneration Trust (WRT) and the City of Buffalo, and including those individuals who participated in the European Workshops. Results from the European Workshops were presented which resonated strongly with the group. A larger meeting was then scheduled to present a plan for sharing the European experience with a broader community. About fifty representatives of environmental, business, government, citizen and other groups gathered in December, 1998, at the Tri-Main building (a redeveloped factory) to help shape the Buffalo Workshop program.

The Workshop began on January 31, 1999 with Exchange participants and local community group leaders hosting the European guests on a bus tour of Buffalo. The tour featured established brownfields redevelopment projects such as the Village Farms Hydroponic Tomato facility which is built on former Republic Steel lands. It also included undeveloped sites such as the former GE facility at Fillmore and Ferry, as well as general interest sites which define the character of the community such as the downtown Theatre District, City Hall, the Olmsted Park system and a variety of architectural features.



Buffalo's Industrial Heritage
Source: Waterfront Regeneration Trust

The Workshop was funded in part by the Community Foundation for Greater Buffalo as part of its efforts in the Great Lakes Environmental Collaborative of community foundations. Since the Workshop, the Foundation has also funded a follow-up design charette to generate guidance and tangible ideas for the City's South Buffalo Redevelopment plan. This charette once again featured the participation of our European partners who returned to North America to take part in additional events of the Exchange Program. The results of the design charette are found on pages 76 – 83.

Lessons from International Initiatives

Several lessons emerged throughout the 2-day Workshop from brownfield experts that practice in both Europe and North America, as well as from local community leaders.

The European experience has important lessons for Buffalo and other U.S. cities. They include the following:

- A. Economic decline and environmental degradation in urban centers is an international concern. High unemployment, and a history of non-capitalist governmental and social structure are key issues in the new German State of Saxony-Anhalt. In response to these challenges, the region is transforming its economic base and implementing a five-year program to help create new jobs and set new standards for sustainable development. 35 projects are underway involving 100 different sites, 4,000 jobs and DM 1.6 billion leveraged by a focus on connecting people to places, preserving heritage structures, and creating attractive landscapes.**
- B. Successful redevelopment models emphasize:**
 - 1. Preservation of natural and cultural heritage**
 - 2. Ecological and aesthetic improvement to the landscape**

-
3. Ongoing public events and outreach, and
 4. Communication and education.

Placing emphasis on improving the surrounding landscape and nurturing community pride to help blighted areas to compete more equally to attract business was viewed as a contrast to the typical situation where scarce resources are used for tax abatements to attract individual businesses that can create islands within blighted areas.

C. New partnerships are a critical element in addition to job creation. The City of Leuna in the former East Germany has many demographic similarities to Buffalo and shares many of the same brownfield issues. Leuna has embarked on a transformation which has centred on the development of partnerships to foster not only economic improvements, but also improved living conditions for workers, cultural centres and activities, and improved traffic.

D. Strategic planning can be critical. The City of Bilbao in Spain was once the number one industrial centre in the country until the collapse of its steel and shipping industry in the 1970s. In response, the City recognized it needed to “change or die”, and invested in the development of a strategic plan to transform the City from a heavy industrial to a mixed-use service centre. The plan involves six elements:

- communication
- transportation
- environment
- education
- social aspects, and
- culture.

It was also indicated that the U.S. approach tends to emphasize private risk heavily so government must balance this by emphasizing public and community benefit as an important part of the equation. Small targeted investments by local governments at an early point in the redevelopment process and larger significant investments to enhance the quality of life and green infrastructure of blighted areas, are critical to creating a climate for private investment.

Within the City of Buffalo, the Green Gold Strategy is being developed and it provides an opportunity to use innovative technology for brownfield redevelopment and creates a new culture of rebirth and renewal for redevelopment.

Buffalonians who travelled to Europe noted several critical distinctions between European and American brownfields redevelopment strategies. These include:

1. European projects demonstrate a more holistic view of brownfields redevelopment as an integral part of land use planning;
2. Environmental law is supportive of redevelopment and emphasizes a focus on benefits and a risk-based approach;
3. Large public funding commitments to leverage private dollars;
4. Regional planning provides context;
5. Creative reuse of old structures rather than demolition;
6. Regional cultural transformation provides a basis for a new and meaningful image;
7. Celebration of the industrial heritage builds local confidence and sparks reinvestment;
8. Innovative technology is applied to reach site restoration goals;
9. Green infrastructure is developed and utilized as part of brownfields redevelopment;
10. Engaging the public is essential.

Workshop Themes

As part of the Workshop, participants were organized in small groups to discuss possibilities for brownfield redevelopment in Buffalo. A number of consistent themes were identified including:

- Build on the work that the City has already done.
- A comprehensive vision is essential if the City is going to transform itself in the eyes of the market and in its own eyes.
- There is a need for a streamlined transparent regulatory process from Albany and within City Hall.
- There is a need to demonstrate success quickly.
- There is a need for a symbol of the region's transformation.
- Opportunities must be taken and created for celebrating the City's resources, its heritage, and its successes.
- Cooperation between elected officials and community leaders must increase.

The main lessons from the Buffalo Workshop can be summarized as follows:

- CHOICE
In the U.S. context, customer choice is a critical element of success whether the customer is a private developer or an individual citizen choosing where to live. Brownfields redevelopment must resonate as a reasonable and competitive choice for development dollars and public use. Investments by local governments which improve the context within which these choices are made are more cost-effective than attempts to attract individuals to blighted areas through subsidies. Creating a level playing field between brownfields and greenfields through limiting subsidies for new roads, sewers and other development can also be useful.

➤ CLARITY

Potential developers and citizens expect a transparent process through which development decisions are made. A clear vision and set of goals should be developed amongst stakeholders and should be clearly articulated by local elected officials and other partners.

➤ CONSISTENCY

Consistency is needed with respect to environmental standards and the processes for development decisions. It should be about what you want to do which serves the needs of City residents and the marketplace rather than who you know.

➤ COMMUNICATION

Public involvement at the earliest stages and at all points of the process is critical to developing projects which satisfy the needs of the community and maintain the momentum necessary to reach completion. The creation of a culture of redevelopment, renewal, and rebirth is what turns a project into a strategy.

➤ COMMON SENSE

The public is willing to make pragmatic choices about compromises necessary in some clean ups when they understand that the process is transparent, fair, and is likely to result in improvement even if it doesn't create perfection. Basic fundamentals of business development must be met on any project to make it work. If no one wants the product produced, then it will not succeed as a business.

► COST-EFFECTIVENESS:

Scarcity of government resources demands that investments be targeted and made early to produce a large benefit in the end product. Government investments to improve public spaces, raise the quality of life in the community overall, and create a culture of rebirth and renewal are good investments.

► CHAMPIONS:

One of the critical missing elements is a distilled shared articulated vision of the City and the region. A shared vision is a necessary element for the region to be successful. The region need not take on a lengthy visioning process to produce this shared vision. Elected officials including the Mayor, Common Council President, County Executive, City Comptroller, and the Governor all have articulated broader visions either built around or within which environmental protection plays a critical role. In order to spark brownfield redevelopment, these champions must identify the common opportunities within these visions and develop a shared strategy.

Action Plan

Local Buffalo officials declared the International Brownfields Exchange an important initiative in helping the City achieve its goal of sustainable long-term reuse of old industrial sites. They called for increased inter-municipal cooperation and interagency partnerships. The Action Plan identifies priorities for Buffalo to help spark reinvestment. It includes the following:

- Develop a regional planning mechanism.
- Monitor programs and communicate successes even if they are very small in the beginning in order to create momentum for a broader transformation.
- Increase public education, participation, input and decision-making on brownfields projects to build support and to enhance transformation of the community.
- Advocate for a comprehensive New York State law which supports brownfields redevelopment and voluntary clean-up.
- The City should develop a central office to coordinate and streamline brownfield redevelopment.

Rethinking Brownfields

Context

The restoration and reuse of former industrial areas is essential in implementing sustainable development practices for Western New York. Strategies for reclaiming these “brownfields” are closely tied to issues of economic development, regional planning, public transportation to get workers to jobs, parks and public spaces, and Smart Growth initiatives.

The City of Buffalo and the Buffalo-Niagara region historically evolved as a major transshipment and industrial production center. By 1920, Buffalo was the fifth largest industrial region in North America, and through the 1950’s was a leading manufacturing centre. However, despite its successful economic past, Buffalo has undergone an unprecedented period of economic decline during which the City lost a significant amount of jobs and experienced population decline. Between 1953 and 1960, the number of Buffalonians employed in manufacturing jobs dropped from 217,000 to 165,000. The city’s population fell with job loss dropping from 462,768 in 1970 to 312,000 in 1998.



Buffalo River
Source: Lynda Schneekloth

Brownfield redevelopment provides many opportunities for the City and plays a critical role in shaping its future. Nearly 40% of the City’s land area has been used for industrial uses. The City has identified 33 sites totaling over 236 hectares (582 acres) which could be redeveloped for housing, commercial or industrial uses.

Buffalo’s brownfield redevelopment agenda is an ambitious one, emerging in the context of new economic and political opportunities, but also limited by obstacles including a sluggish local economy, slow real estate market, aging industrial facilities and limited local public financial and technical resources. Environmental contamination compounds the situation at some sites. Only 12 acres (4.8 hectares) are presently available for industrial redevelopment.

REDEVELOPING BROWNFIELDS IN BUFFALO

Buffalo’s brownfields include large waterfront properties (such as the South Buffalo Project) and numerous inner city sites. The corner of Fillmore and Ferry Ave. in Buffalo, NY tells you a great deal about the City, its industrial heritage and its current challenges. Maps from the 1899 show the corner as virtually vacant land with two dwellings and a couple of small outbuildings. The turn of the century brought a new day and a new era to Buffalo as it hosted the Pan American Exposition. The Exposition attracted visitors from around the world and U.S. dignitaries such as President McKinley. It brought industrialists to the area who saw the opportunities presented by Buffalo’s many natural resources and strategic location for transporting goods. Visitors discovered that the City may have taken its name not from the hearty Bison, but from French settlers who referred to the Niagara River area as “Beau Fleuve”, or beautiful river.

The Pan-American Exposition (held in Buffalo in 1901) celebrated the development of new technologies such as electric lighting. Buffalo would have a central role in the coming industrial innovation. By 1922, maps of the Fillmore/Ferry area show rapid industrial development on the site of the Buffalo Miniature Lamp Division of General Electric. Over the course of the next fifty years, new industrial buildings, offices, cafeterias and housing for workers were added to the site. The entire City grew by leaps and bounds. By the early 1950's, Buffalo was the third largest producer of steel in the U.S.A. It had the country's largest inland water port, was the country's second largest rail center, and was recognized as the first city in the world for flour milling.

The Fillmore/Ferry neighborhood enjoyed the boon, but it also suffered when things went bust. By 1975, aerial photos already show overgrown vegetation at a shut down plant. In the intervening twenty years, the City's population dropped by a third. The St. Lawrence Seaway provided other transportation options which led to the closure of many mills. Foreign competition led plants such as the Trico Windshield Wipers to close its Buffalo plants and open new factories in Mexico. The 1973 oil crisis led many companies to close their older plants. Tax benefits for plant modernization encouraged companies to build new plants, but even when they were rebuilt in Buffalo, these more efficient plants hired fewer workers.

Amidst controversy over environmental issues including unmarked barrels, cracked transformers, underground storage tanks, and lead and asbestos contamination, the plant was finally demolished in the mid-1990s. The square block area sits today as a vacant lot in the centre of a predominantly African-American community of 75,000. These people are not served by any supermarkets and must travel long distances for quality food or make their purchases from neighborhood stores with limited selection and high prices; a simple handmade painted sign adorns the chain link fence around the Fillmore/Ferry site

which reads, "Future Home of Our Supermarket". It is merely a remnant of an unrealized proposal to build a community-owned co-op on the site. It is unclear what the future holds for the site and the community.

Meanwhile, a quarter of the world away there is preparation for another world Exposition which is scheduled for the year 2000 in Hannover Germany. Communities in the Saxony-Anhalt region of Germany have endured pollution problems as bad or worse than any in Buffalo. The region, part of the former East Germany, has suffered not only from environmental problems, but the closure of large segments of its industries after the unification of the more efficient capitalist West Germany with the East. Manufacturing businesses are also challenged by heavier tax loads within this social-welfare state and environmental regulations inspired by the German Green Party which require lifetime disposal responsibility for manufactured products.

Despite these challenges, the Europeans have many success stories to share of efforts which not only are succeeding in cleaning up contaminated sites, but are also inspiring revitalization of entire communities. Through their use of regional planning, a focus on community benefits in addition to private risks, a commitment to high artistic and architectural standards, and other approaches, the Europeans have a story to tell which Americans may learn from. In addition, though impressive, the European experience is not a panacea and they also have much to learn from American technologies, standards, and approaches to community engagement and public-private partnerships.

Buffalo and Saxony-Anhalt are thousands of miles apart, but they share a common problem. Both communities and thousands like them are confronted by the modern challenges of fostering sustainable development. How can we meet the needs of current generations without sacrificing the well-being of our children and future generations? How do we address

the impacts of past development decisions which have left us with decaying underutilized factories, pollution and contamination? Exchanges and interactions between residents of the United States, Canada, and Europe through the International Brownfields Exchange provide us with ample evidence that there are lessons to be learned from each other about how to revitalize former industrial sites and how to foster sustainable community development.

The North Americans were not only impressed at the successes of their European peers, but were struck by the fact that in many cases these programs were realized under remarkably adverse conditions. Not only do the Europeans struggle with the same technical issues impacting environmental clean-up, but in many cases, such as in the former East Germany, these programs must be realized under far worse economic conditions, under environmental regulations which require far more lifetime responsibility for manufactured products, and under heavily taxed social-welfare structured governments.

Workshop Objectives

The Buffalo Workshop was an opportunity for the community in Buffalo and Western New York, to learn about successful approaches to brownfield investment that have taken place in Europe and in North American cities such as Portland and Chicago, and to bring together a diverse group of people to discuss local issues in brownfield redevelopment.

The main objective of the Buffalo Workshop was to create an action plan to keep, reclaim and reuse brownfields. Workshop participants were asked to identify barriers and opportunities for brownfield investment in Buffalo and to identify priority actions that should be taken by the government, community and private sector.

DAY ONE

Opening Remarks and Welcome

A welcome and opening remarks were given by Buffalo Mayor Anthony Masiello, and Maureen O'Neill, Urban Advisor at the US EPA, Region 2.

Mayor Masiello described the changing face of Buffalo — from a thriving industrial centre to one that faces many challenges to seize opportunities in changing economic and social conditions. He outlined steps the City has taken in brownfield redevelopment including Village Farms, the South Buffalo Redevelopment Plan, and the New York State Environmental Restoration Grant, and encouraged the continued development of partnerships and relationships needed for brownfield investment. The Mayor emphasized the importance of inter-municipal partnerships to foster a regional approach to these issues, and interagency partnerships to ensure achievement of a goal of sustainable long-term reuse of old industrial sites.

EPA representative Maureen O'Neill emphasized the importance of sharing ideas with both domestic and international partners. She provided a brief overview of brownfields in the country, including how brownfields are perceived — once they were thought of as an eyesore, now they are viewed as opportunities to protect the environment, to provide economic development and to revitalize communities. Ms. O'Neill described EPA's role in brownfields including developing the *Brownfields Action Agenda* that involves providing funding for 227 national demonstration projects, helping to clarify issues and eliminate undue liability concerns, and outreach and partnerships. Since the *Brownfields Action Agenda* has been established, support for brownfield projects, especially

congressional support, has grown, and so has funding. In 1999, demonstration pilot communities are eligible to apply for \$500,000 Brownfield Clean-up Revolving Loan Fund Pilots. Ms. O'Neill concluded by indicating that the Brownfields Initiative has allowed EPA to play a stronger role to foster partnerships in revitalizing cities. She noted EPA's willingness to act as a technical resource for Buffalo and other municipalities working to revitalize brownfields.

The European Experience: Sustainable Regional Economic Development Strategies

Experts from Europe spoke about their brownfield projects and described their experiences in creating successful brownfield investments. A summary of their presentations follow.

Regional Green Space Planning in Emscher Landscape Park

Michael Schwarze-Rodrian, Planning Director at the Kommunalverband Ruhrgebiet in Germany's Ruhr Region, described the vision and the implementation process for creating the Emscher Landscape Park and outlined key lessons learned from this experience.

Like many cities in the Great Lakes Basin, the Ruhr district is a region in transition. It is well known for its old industrial sites, coal mines, gas holders and steel mills. It is also known for its green space, and cultural amenities. With an aim to revitalize the region, 17 Emscher towns from Duisburg to Bergkamen came together with the Kommunalverband Ruhrgebiet

(Association of Ruhr District Local Authorities) in 1989 to work within the framework of the IBA Emscher Park on a 10 year ambitious project — the creation of the Emscher Landscape Park.

Creation of the regional Landscape Park is the main unifying theme of the Emscher Park Building Exhibition and is intended to provide the organizing framework for a new infrastructure for the region.

Revitalization of the region hinges on integrating ecological, economic and community issues and solutions. About 300 square kilometres (116 square miles) of land will be protected, regenerated and linked together by the creation of new recreational greenways and destinations.

The process is as important as the individual projects. Mr. Schwarze-Rodrian explained that 7 working groups were formed with representatives of the cities and urban districts in the region, each with its own projects, and working towards the following shared goals:

1. Protect — keep the landscape that remains
2. Combine — link together isolated greenspaces within a larger regional network
3. Develop industrial landscapes to the park level — a high level of design quality can be achieved
4. Act regionally — work together to implement a regional plan and develop a shared timetable
5. Take responsibility — build local capacity to maintain public spaces and create meaningful employment.

Now nearing the conclusion of the 10 year IBA, it can be seen that a revitalization strategy based on connecting isolated open spaces, restoring the landscape, and upgrading the ecological and aesthetic quality, is able to demonstrate improvement of the living and working environment for the inhabitants of the Ruhr region.

The Government of North-Rhine/Wesphalia created the necessary financial basis for implementation of this plan over the period 1989-99. The range of projects in the Emscher Landscape Park stretches from the connection and development of large areas of derelict land to smaller-scale local activities such as tree-planting, art exhibits and outdoor theatre.

Access, connection, education and celebration are common elements of the projects. The Duisburg-Nord Landscape Park is a project that preserves existing heritage structures in a new landscape at Mierderich. The heart of the park is a former steel plant which is now a place of commemoration and of leisure activity including a signed industrial trail, near restaurants, meeting rooms, performance space and rock climbing.

A second park project described by Mr. Schwarze-Rodrian is the Ecological Tree Garden near the banks of the Rhein-Herne Kanal, an arboretum which connects the landscape between two communities and improves the landscape quality. A new regional information center is also under construction. The State Ministry of Environment also provided funding for a pedestrian bridge that is an attractive addition to



Art in the Emscher Park Landscape
Source: Kommunalverband Ruhrgebiet

the arboretum and links communities on both sides of the Emscher River.

The landscape has also been enhanced by large artworks and special attractions. Stone sculptures and murals are integral components of the landscape. Special features such as the steel tetrahedron in Bottrop not only add interest to the park, but also provide users with a way of viewing the entire Emscher landscape.

Mr. Schwarze-Rodrian further explained how a successful project also relies on public support and participation. Organized events at different locations have helped to explain the park vision to people in a meaningful way and to gain their support. Events include outdoor concerts and garden shows that attract thousands of visitors and receive a lot of media coverage.

Fairs and exhibitions are opportunities to communicate with the public and are useful in attracting a diversity of people and educating them about the landscape. For example, a barge was transformed for an exhibit that travelled from harbour to harbour in the Ruhr district. This type of unique event proved to be popular and successful in reaching out to the public.

Finally, Mr. Schwarze-Rodrian spoke of using existing infrastructure such as a heritage train, to not only bring various heritage groups together to work on a project, but to connect places in new ways. A bike trail system and foot path made of natural materials has been developed within the park to connect open spaces and provide recreational opportunities for park users.

Sustainable Strategies for Regional Economic and Environmental Transformation in the Former East Germany

Mr. Gerhard Seltsmann, Director, Expo 2000 Ltd., presented the approaches being advocated by this public corporation and its partners. Hannover's Expo 2000 is being used as a lever to accelerate the lasting ecological and economic renewal of the European industrial triangle of Bitterfeld-Dessau-Wittenberg (located in Germany's new state of Saxony-Anhalt, approximately 100 kilometres/62 miles east of Berlin).

Like Buffalo, the state of Saxony-Anhalt has a rich industrial heritage. It is also undergoing a dramatic process of economic, social and environmental change. With the closing down of mines and steel companies, plants were abandoned and employment decreased tremendously. The Sachsen-Anhalt area is part of the Halle-Leipzig industrial region that, from 1900 to 1938, developed into one of the most developed industrial centres in Europe. The chemical industry thrived in this region thanks to plentiful supplies of coal, water and salt (on which the industry is based). The availability of vast quantities of "brown coal" also led to the development of power plants, many of which can still be seen today. The area also had the first aluminum plant, the first chlorine plant, and produced some of the world's first colour-movie film. This, coupled with the fact that the area was also home to the Bauhaus architectural movement, translates into a distinguished industrial heritage.

Unlike Buffalo, the latest phase of the transformation came quite dramatically creating even greater challenges for redevelopment. With the reunification of the two Germanys, and virtually overnight, traditional industrial markets and manufacturing processes broke down. The transformation from a planned economy, coupled with the privatization of large-scale public enterprises, led to high unemployment — from 0% unemployment in 1989 to 40% in the next year. The speed of transformation was unparalleled in Western Europe, and it left a totally obsolete industrial structure that operated under the standards and practices of the 1930's. Reunification also brought new laws, administration policies, planning and management structures that were to be addressed.

To help remedy this decline, the state government established a special organization called Expo 2000 Sachsen-Anhalt Ltd. Corresponding Region. Its task is to use the opportunity of Expo 2000 Hannover as an impetus to accelerate the economic and ecological renewal of this former industrial region.

In 1995, Expo 2000 Sachsen-Anhalt Ltd. initiated a 5 year program linking the cities within the industrial triangle area of Dessau, Bitterfeld and Wittenberg. About 35 projects are underway involving 100 different construction sites, 4000 people, and valued at about DM 1.6 billion. The projects are split into four categories:

- economically oriented projects;
- urban planning projects;
- environmental and landscape development; and
- cultural projects.

Each Expo 2000 project is defined by three guiding principles:

1. To create projects with a meaningful and long-term perspective, not just done for the sake of the world's fair. Demonstration of environmental and "aesthetic quality" is fundamental and will ensure the projects' longevity.
2. The development and realization of these projects are to be applicable to Saxony-Anhalt and other regions.
3. The projects should be informed by the experiences of other places. This ensures that the projects have the necessary scope and vision.

Mr. Seltmann emphasized the importance of creating physical and psychological bridges — of linking people and places. He described how the projects coordinated by Expo 2000 are linked together through a core group with representatives of all participating organizations and citizens interested in reshaping their region — government officials, planners, farmers, priests, children, businesses.

Mr. Seltmann also emphasized the value of linking the present with the past and connecting people to their



Landscaping at a Chemical Park, Bitterfeld
Source: Expo 2000 Sachsen-Anhalt GmbH

cultural and natural heritage. For example, it is recognized that the Bauhaus buildings in Dessau should be maintained and a concept for their contemporary use created. The buildings were formerly a school of the arts that was closed down by the Nazis in 1933. Architects belonging to the school were forced to move away, with many moving to schools in North America.

Other examples of projects linking people to their heritage include: a Church Trail, linking different types of churches, and offering people places to visit and to discuss similar interests with one another; the "Expo Pfad", an urban bicycle and footpath in the City of Dessau that links old and new elements — historical buildings, parks and downtown destinations; and Ferropolis, a place for events and a walk-in museum illustrating the development of technology in the brown coal-mining industry.

Another of these initiatives is the development and marketing of a river boat; the boat is being built in a new production hall on the Elbe River. It is hoped that a prototype will soon be ready for distribution throughout Europe.

Ferropolis, the "city of steel", is a dramatic artistic monument and landmark in North Golpa that includes three excavators and two conveyors. The project aims to bring to life a disused mining landscape in a desolate peninsula. The result is a powerful symbol of the central German coal mining and energy district where residents a visitors will experience a new destination point and events of international interest. The network of rail tracks, cables and machines will remain as remnants of an operation which meant the depletion of resources and loss of habitat, but on the other hand

provided work and money for generations of miners. The terrain of the depleted North Golpa mines gives the impression of mountain ranges formed by time. The quarry is to be flooded, creating a lake which will be designated as a nature reserve. The quarry slopes, island and peninsula will be covered with grass and forests.

Mr. Seltmann continued by explaining how to work with the landscape to create and open views and to make them attractive. The Goitsche project for example, in the former open-cast mining area of Bitterfeld, is being transformed into a waterfront community. Slopes that resulted from the open pre-coal mining are being stabilized and a lake created with river water. Art will be integrated into the landscape to create a special area, with a character different than any other brownfield in the country. Another example of design innovation can be seen at the Martin Luther Grammar School in Wittenberg where teachers and students have worked with Viennese artist Friedensreich Hundertwasser to develop an idea to renovate their aging school to better suit their needs and to stir their imagination.

In closing, Mr. Seltmann encouraged the City of Buffalo to design projects that preserve the past, that connect people and places, and that create attractive landscapes.

Community Perspectives in Regional Transformation

Lord Mayor, Dr. Frau Dietlind Hagenau, described the transformation of the City of Leuna, Germany. She began her presentation by comparing similarities between Leuna and Buffalo.



Elf Refinery at Leuna

Source: Expo 2000 Sachsen-Anhalt GmbH

Leuna, which is situated about 100 km north of Wittenberg, in the middle of Europe was once a thriving industrial city. With the reunification of Germany in 1989, the chemical industry in Leuna collapsed because it was unable to compete successfully in world markets. As a result, Leuna was suddenly faced with a loss of nearly 20,000 jobs.

The main challenge Leuna faces is to attract new investments/industries and to create new jobs. Other challenges included dealing with environmental pollution (including dust, ammonia, noise) and heavy traffic.

The vision for Leuna's future includes not only economic improvements, but also good and clean living conditions for workers, cultural centres and activities, and improved traffic.

Mayor Hagenau encouraged the City of Buffalo to develop partnerships with various groups to assist in the revitalization of the City and explained how this is working in Leuna. A network of partners, including the national and state governments, and chemical industries, has been developed and new investors were actively sought.

The results to date include a new chemical refining complex employing 9,000 people and 20 new firms relocated in Leuna. In addition, a new town for industrial workers has been designed in the east part of the city that includes unique architecture (384 types of houses for workers) a beautiful landscape, and a sportsplex.

The Mayor further explained that in order to mitigate some of the noise pollution experienced by residences close to industries, noise barriers were created, as well as a noise monitoring and grading system. This diminishes noise levels closer to homes.

In closing, Mayor Hagenau encouraged the people of Buffalo to continue working together and to develop partnerships with a variety of groups in order to development practical implementation strategies.

Bilbao's Waterfront Redevelopment Strategy

Situated in the Basque region of Spain, Bilbao was once the number one industrial centre of the country until the collapse of the steel industry and decline of shipping which occurred between 1970 and 1980. Mr. Pablo Ubieta Otaola, Director General, Bilbao Ria 2000, spoke of the decline of Bilbao and the challenges faced not only in rebuilding its economy, but also in enhancing the environmental, cultural and aesthetic quality of the community.

Mr. Otaola noted the challenges Bilbao faced in the 1980's, many are similar to those present in Buffalo — decline of heavy industries, a high unemployment rate (27 - 30%), a flood that destroyed the historic part of Bilbao, along with other environmental concerns such as severe water pollution and limited green space. The

forces were such that Bilbao was compelled to either “change or die”.

Given the size of the challenges Bilbao had to overcome, Bilbao Ria 2000 was established in 1992. Bilbao Ria coordinates the city's renaissance, and is funded fifty-fifty by the central Spanish and Basque regional authorities, with support from the European Union. The organization has no jurisdictional power but is powerful because its Board of Trustees includes local politicians committed to the implementation plan.

Key messages conveyed by Mr. Otaola to the City of Buffalo were that “brownfields mean opportunity” and that it is important to seize that opportunity with a new type of leadership to get things done.

Bilbao Ria's focus has been on design quality and infrastructure requirements needed for city building. Bilbao's revitalization process began at the end of the 1980's with a strategic plan that gained strong local and national support. The plan has 6 elements and recognizes opportunities, with a general concept to transform the city from an industrial to a service centre. It involves participation of the private and public sectors to work on six elements of the plan: communication, transportation, environment, education, social aspects, and culture.

Demonstration projects are viewed as a key part of the strategic plan. Mr. Otaola noted the importance of demonstration projects in illustrating the vision and goals of the strategic plan and to begin generating support and pride within the city. He described some of these projects, one of them being the new Metro which opened in November 1995, designed by Norman Foster. The Metro has substantially improved public transportation and provides a direct link between Bilbao and the towns and outlying residential areas on



A new bridge links Bilbao waterfront
Source: Waterfront Regeneration Trust

the right bank of the river. The architectural design quality was an important goal of the project.

Several other infrastructure projects are underway. A major priority is design and construction of bridges. Historically, there were few bridges in the city because industries used ships and the river for transport; people couldn't cross the river. New bridges such as the Euskalduna bridge, have vastly reduced traffic congestion and attracted waterfront commercial and residential development.

A new airport and new port are also under construction that will increase docking and warehouse facilities.

But most impressive, was Mr. Otaola's explanation of the success of the Guggenheim Museum. In an effort to make the city a centre for the arts, Bilbao undertook two major initiatives — a new performing arts centre and the world renowned Guggenheim Museum. A conference and performing arts centre was built as well as the Guggenheim Museum. In its first year of operation 1.5 million people visited the Museum, a record for Spain. It generated \$200 million — well in excess of the Museum's capital cost of \$150 million.

The once small industrial town of Bilbao is now transforming into a prosperous tourist destination and commercial centre.

With a strong and positive conviction, Mr. Otaola concluded with the remark that "if Bilbao was able to change, Buffalo can do the same."

KEYNOTE ADDRESS CONGRESSMAN JACK QUINN

Buffalo Congressman Jack Quinn of the 30th Congressional District, linked efforts on the ground in Buffalo to action occurring on the Federal level.

In his view, brownfield redevelopment is an important issue for local officials and community leaders. Congressman Quinn has witnessed the brownfields problem and their impact on long-established communities. He has recognized the need to redevelop brownfields to maintain business activity and retain jobs, to attract new revenues, investment and people in our cities, to bring life to old sites, and to contribute to sustainable cities and livable communities.

Congressman Quinn reinforced the message given by the European speakers at the Workshop, that brownfields, although often viewed as problems, can actually be opportunities for investment. He noted that many brownfield sites have the potential to house emerging technologies, and new and clean industries.

He also described some obstacles in brownfield redevelopment including thorough environmental assessments required by lenders and clean-up as a condition of loan approval. While these steps may often be necessary they can also be time consuming and expensive.

In an effort to positively change the brownfields problem, Congressman Quinn is planning to reintroduce legislation to encourage the remediation of old industrial sites/brownfields. The Bill has four major components:

1. It will give states the authority to clean-up brownfield sites based on their future use.
2. After meeting state provisions, the owner and site operator are released from federal liability. In addition, lenders and developers, prospective purchasers, and local governments will also be released from liability.
3. If the certified state program includes a waiver from state permitting requirements, the federal permit requirements may also be waived.
4. The Bill creates a "Brownfields IRA" which will allow up to \$5 million to be reserved for future costs associated with brownfield site clean-up.

Congressman Quinn accentuated the need to work together. Efforts of both the public and private sectors are needed to bring prosperity back to old industrial sites. For example, federal financing through HUD, the EPA and various tax incentives provides a basis for brownfield redevelopment. New York State as well, offers its own incentives. These however, are only part of the solution.

He continued by stating that the solution for Buffalo rests with all the people at this Workshop who must engage the stakeholders and move forward. A great opportunity for the city lies in South Buffalo. The area represents Buffalo's industrial heritage and is an ideal location for redevelopment, job creation and recreational uses. The site also allows for partnerships to develop among the City, County, ECIDA, state and federal government agencies and the citizens of Buffalo.

The Congressman concluded by stating that successful brownfield redevelopment can be achieved, it's not easy, but the benefits are worth the effort.

A View from the Inside: The Spirit of Buffalo

David Hahn-Baker, a Board Member of the City of Buffalo's Environmental Management Commission, provided insight into the City — what the city is really like, the good and bad times it has experienced, challenges it has faced and future opportunities.

Mr. Hahn-Baker views the city as a great place, a city of good neighbours and welcoming individuals, offering a variety of culinary experiences, and sports and entertainment activities ranging from theatre to ecotourism.

At the heart of the community is the Buffalo River. Its name, many believe, originated from the words "beau fleuve" or beautiful river, which provides some insight into the original attractiveness of the area. Through the years however, Buffalo underwent some considerable change.

Around 1951, Buffalo, often referred to as "City on the Lake", was a large centre for steel production, milling and shipping. By 1954, large industries such as Dupont, Bethlehem Steel and Ford, began to lay off workers, close down or move out for several reasons: pressures from foreign markets, the opening of the St. Lawrence Seaway and alternate trade routes, the oil crises and other factors. Abandoned lands, polluted sites, and dumps were part of the legacy they left behind. The time period from 1953 to 1960 saw a marked decline in manufacturing jobs in the area.

The current economic conditions in the city and region are generally favourable. Buffalo has good fundamental economic and environmental qualities (e.g. Lake Erie, Niagara River, Olmsted Parks), infrastructure (such as affordable housing, trade routes), and an underutilized work force. However, the area does lag behind the rest of New York State economically.



Buffalo's "Cathedrals of Industry"
Source: Waterfront Regeneration Trust

Many redevelopment projects are underway in the City. These include the Village Farm project, the Smith St. site which has been redeveloped into a parkland with benches, and the Tri-Main building, a former industrial site redeveloped into an office building for businesses and non-profit organizations.

Unfortunately, there are also sites that cry out for some form of redevelopment such as the Martin Luther King wading pool, the former GE site, and the Auditorium which is abandoned with no plans for reuse. More could be done if the community adopted approaches taken by the Europeans and with an attitudinal shift which considered brownfields not only in terms of potential liabilities and risks, but also considered them in terms of potential benefits. Particularly when spending scarce governmental dollars, the emphasis must be on creating improvements and benefits like the "Bridges" of Saxony-Anhalt, the Guggenheim Museum in Bilbao or symbols like the Tetrahedron in the Emscher landscape Park. If the community and culture are improved, businesses are less likely to ignore the natural infrastructure benefits of the city

due to blight. Mr. Hann-Baker was particularly taken by the examples of many businesses originally opposing the building of the Tetrahedron when unemployment was so high only to have many of them later use it on their annual reports as the symbol of the revitalized community.

Mr. Hahn-Baker concluded by posing the question, "How do we measure our success?" He suggested that success for Buffalo can be measured with tangible results. For example, with the opening of the Martin Luther King wading pool, a completed greenway through Buffalo along the river, with the return to urban agriculture (community gardens, farmers' markets) and with an accessible waterfront. ***"It can be done, and will be done if we all work together."***

A View from the Outside: Panel Discussion

This panel discussion, moderated by Beverly Sanford, Associate Director, Institute for Local Governance and Regional Growth, University at Buffalo, allowed guest speakers to relay their own thoughts on Buffalo, and to offer some expert advice.

Panel participants included German guests Michael Schwarze-Rodrian, Gerhard Seltmann, Dr. Frau Dietlind Hagenau, and Pablo Otaola from Bilbao, Spain, Buffalo's David Hahn-Baker, and Doug MacCourt from Portland, Oregon.

Pablo Otaola expressed what he thought to be key elements in regenerating Buffalo. First, Buffalo must have a plan or vision of what it would like to achieve. The city currently has many projects underway, but it should articulate its vision and prioritize its projects, maybe start at the city centre. Secondly, the city, its partners and its investors must learn to be flexible and

not to give up. Thirdly, some form of leadership should emerge to develop the processes and oversee the implementation to revitalize the city. And, lastly, consensus should be reached with citizens and politicians on the revitalizing process. Mr. Otaola also suggested working with Niagara Falls in attracting investment, because of its international recognition and reputation as a large tourist destination.

Gerhard Seltmann suggested that Buffalo begin by inviting many ideas for future projects to help revitalize the city. Expo 2000 Saschen Anhalt for example, held a contest for ideas regarding structural changes, then selected 15 ideas to begin with and made those ideas reality. He agreed with Mr. Otaola that strong leadership is essential. A strong organization is required to be responsible for a vision and to bring together and coordinate all parties working on various projects. Mr. Seltmann urged the city to not think of brownfields in isolation, but to work with them as they relate to other objectives and strategies for the city such as greening, job creation or agricultural strategies.

Michael Schwarze-Rodrian was impressed with the “spirit of Buffalo” which he saw through the city’s heritage — its buildings, streets, greenspaces — and encouraged Buffalo to transfer this spirit onto its brownfields initiatives. Buffalo’s brownfields may take some time to redevelop, but the city should focus on this. He agreed with Mr. Otaola that Buffalo should emphasize the need for a vibrant city centre.

Part of the plan should include the preservation of heritage structures, such as grain elevators and the Central Station, even if presently there is no long-term use for the buildings. He particularly emphasized the importance of taking a long-term view. Buffalo should develop a three decade long plan to reverse problems which took three decades to create. Mr. Schwarze-

Rodrian’s final message was that the landscape quality should become important again. Green links should be established throughout the city that extend to the waterfront.

Doug MacCourt, Director, Brownfield Program, City of Portland, Oregon had three suggestions as to where the city should begin. He too thought that focus should be placed on the city centre, the heart of the city. Secondly, he recommended that a strong clear vision be developed supported by a plan that provides a balance between risks and redevelopment, and that provides all stakeholders with access to decision making. Finally, all redevelopment plans should support the overall vision for the City.

Discussion and Questions

QUESTION #1:

The panel was asked to comment on consensus building given three specific projects currently underway in Buffalo: a new convention centre (which has consensus among stakeholders); the relocation of the Zoo from Delaware Park (which is split on consensus); and the Peace Bridge expansion (no consensus on whether the expansion should be with a twin bridge or single span signature bridge). Is it more important to implement new visioning rather than to try to implement old ideas burdened with long standing controversy?

Gerhard Seltmann suggested that the problem may lie in the consensus building process. In his experience, it was important to identify one organization to be responsible for key projects. This organization would work with the stakeholders to develop consensus on which projects should be implemented and also to coordinate projects. Once a general vision and goals are set out and agreed upon, there may not be a need to get consensus on every step for each project.

QUESTION #2

One of the questions from Workshop participants focused on the need for jobs in Buffalo. How can designing signature pieces for Buffalo's landscape help with the city's unemployment?

Gerhard Seltmann explained how every decision that is made should have economic considerations, which in turn will influence jobs. Jobs are necessary to think about, but so too is the quality of urban development since this will mean securing a future for the City with a diversity of uses and a diversity of economic opportunity.

Doug MacCourt added that it's not just the tallying up of jobs that is important, but also their diversity and their contribution to sustainable employment. It's important to understand what you can control. National economic policies have 10 times the effect on local job creation as local policies and state policies, have 5 times the effect of local policies. What localities can do is maintain the highest quality of life possible in their town so that regardless of the broader policies, they can make people want to remain or come to the area.

Mayor Hagenau suggested that each place must find their own ways of succeeding. It's important to find the people who will work in partnership with you.

Pablo Otaola thought that industry and jobs are necessary, but this should be balanced with environmental and community considerations. Who will invest in a community if it is not clean and attractive?

QUESTION #3

A representative of the state transportation department remarked that the I 190 is a barrier to the city's waterfront. It has been built though, and the community must live with it. The state transportation department is often asked how the highway system is used to encourage economic development, and how it can compliment light rail to improve traffic? What are the panel's thought on this?

Doug MacCourt noted that in Portland, transit development has worked to attract investment. Higher levels of investment have been made along transit routes partly because residents are tired of automobile dominated neighbourhoods. The City demanded that transportation options be built into the City's structure.

QUESTION #4

Michael Schwarze-Rodrian was asked about liability for the tetrahedron, a structure in the Emscher Park landscape that is accessible to all people to climb.

Mr. Schwarze-Rodrian indicated that responsibility for the tetrahedron is shared among the town, businesses and climbing associations. The State Mining Law formed the legislative basis for the approval process. Extensive discussion was needed from the time the large structure was designed until it was constructed in order to resolve issues of safety and liability. Climbers are aware that they are responsible for their own safety. He added that funding for park maintenance is provided by federal, regional and local sources.

QUESTION #5

It was noted that many European projects described by the speakers had been funded with public dollars. In the US, public money is less accessible, especially in an area that is in decline. Panel members were asked their thoughts on how projects in Buffalo could be funded.

Gerhard Seltmann explained how some projects in which Expo 2000 is involved have been based entirely on private financing, while others have been shared between the public and private sector with the public sector financing green infrastructure and the private sector financing (60%) hard infrastructure.

Michael Schwarze-Rodrian added that everything must be done in public/private partnerships. It may take some time in Buffalo, but eventually, everyone will want to be a part of its change.

Doug MacCourt indicated that far more clean-ups are done with private money than with public funds.

DAY TWO

Opening Remarks and Welcome

Opening remarks on the second day of the Workshop were made by Council President James Pitts of the City of Buffalo and Alan DeLisle, President, Buffalo Economic Renaissance Corporation (BERC).

Council President Pitts remarked on the value of the International Exchange Program to Buffalo, especially since Buffalo is at a crossroads.

He views jobs as key to improving the region. To ensure the creation of interesting and fulfilling jobs, Buffalo requires a strategy and a vision. He spoke of the "Green Gold" strategy as a key part of the vision for Western New York.

The Green Gold strategy builds on the success of local companies whose products and services address environmental concerns. Its goal is to establish the Buffalo area as a recognized leader in solving environmental problems and creating opportunities for jobs.

The Green Gold Economic Development Corporation is the office that will implement the strategy. It is a non-profit corporation, whose board is currently being assembled (from public, private, university and citizens' groups). Its mission is to develop, attract and sustain forward looking businesses that offer solutions to current and future environmental problems.

Mr. Pitts explained that the Green Gold strategy is well suited for Buffalo for a variety of reasons. The city has a forward looking government that understands the need for environmental solutions and is supportive of industry; local companies are already leaders in the

environmental field; Buffalo is also located near important markets such as New York and Toronto; it has cheap hydropower, a skilled and committed labour force, inexpensive housing, a good school system and attitudes that support the environment. The Green Gold office has been established and is developing plans for holding a national conference on this approach potentially as early as this fall. In addition, the office is working with city officials on the creation of an ecological industrial park.

Mr. Pitts believes that the Green Gold strategy offers Buffalo a way to establish a lasting economic base. It requires that the city make the local environment a priority to attract and keep those businesses that contribute to a clean and diverse community. It can only offer benefits to all of us.

Alan DeLisle described Buffalo's assets in relation to the global economy, and the work of the Buffalo Economic Renaissance Corporation (BERC) in improving living conditions within the city.

The BERC works to promote an environment that is conducive to business and investment. It does this by being aware of assets and strengths that would influence site selection by a business (e.g. proximity to large markets, available work force). Buffalo's assets include its entertainment facilities and tourist attractions such as the Niagara Falls casino, Shea's Theatre and the Convention Centre, medical sector facilities (such as hospitals, labs, medical research facilities) and information technology (e.g. fiber optics). The City is near trade and distribution centres, is close to the Peace Bridge and to Canada, and is the gateway to the midwest.

These assets provide great opportunity for joint ventures, especially with European markets. But, we need to make sites readily available for people and businesses to locate. This is especially important because site selection decisions are done very quickly by investors, usually within 3 - 4 months.

Mr. DeLisle described some projects that BERC is currently working on, including the William Gaiter Parkway, Worthington Access Rd., the Inner Harbour Redevelopment, the Medical Corridor and most recently, the South Buffalo redevelopment project.



Context for South Buffalo Project

Source: Buffalo Economic Renaissance Corporation

In working on these and other projects, the BERC relies on 8 basic guiding principles:

1. Promote sustainable development and develop high quality and lasting jobs so people can live and spend time in the city;
2. Work up front and cooperatively with Federal and State agencies;
3. Form partnerships with other regional economic development organizations;
4. Follow quality legal advice;
5. Establish partnerships with private developers;
6. Make the land disposition process easy for businesses;
7. Promote recreational aspects of development e.g. greenway and riverwalk, golf course; and
8. Follow design guidelines and standards.

Lessons from the European Tour

As participants of the Brownfields International Exchange, Kevin Greiner, Executive Vice President for Development at the Buffalo Economic Renaissance Corporation, and Ellen Thomson Kennedy, President of Citizen Action of New York State, were able to tour some of the Brownfields projects in Europe.

Mr. Greiner noted that many European regions share the same challenges faced by Buffalo. Some areas have even greater challenges to face. His experience convinced Mr. Greiner that Brownfields are the key to Buffalo's future.

Lessons learned and observations made while visiting brownfields projects in Europe were described by the following 10 points:

1. Europeans have a more holistic approach to brownfields redevelopment, in that brownfields are viewed as an integral part of the land use planning, development and approval process.
2. Environmental law is supportive of brownfield redevelopment. It takes a risk-based approach.
3. There is generally large public funding commitment which also helps to leverage private dollars.
4. Brownfield redevelopment (strategies and development) takes place within the context of regional planning.
5. Old structures are retained but with entirely new and creative reuses (e.g. roundhouse project in London is now used as a performance centre and centre for graphic arts training).
6. Brownfields are central to regional structural transformations. They contribute to economic development and job creation, and are the key to creating an image of the region that involves high quality designs.
7. The industrial past is important to the identification of local cultural assets. The past is celebrated and utilized in the landscape, and regionally unique architecture is created for landscapes.
8. Innovative technology is applied to brownfields (i.e. design and architectural technology).
9. Green infrastructure is developed and utilized as part of brownfield redevelopment. Emscher Park for example, connects sites and allows the public to access sites along the landscape. The strategy for the park has been to lead with green which helps to raise real estate values.
10. Engaging the public (community and neighbourhoods) in projects is necessary for successful brownfield redevelopment.

Ellen Thomson Kennedy, a community organizer and citizen activist, summarized her experience in Europe with the words “awe”, “excitement” and “inspiring”. She shared some of her reflections on each of the projects visited.

Ms. Kennedy noted that places that were once heavy industrial facilities and waste dumps are now important and attractive areas. The docklands in England for example were once a dumping ground for waste. Now they have been cleaned up with new housing. This project was successful as well because it involved members of the community, including school children, in its planning and design.

She continued by describing Westergasfabriek in Amsterdam, a “cathedral of industry”, which has taught people the importance of old structures and the potential in their reuse.

In Gelsenkirchen, Ms. Kennedy was introduced to the redevelopment of the Ruhr region, clean-up of the Emscher River, and Germany’s approach in turning problems into potentials — a plan was developed to honour industrial heritage and to develop pride in local history.

In Leuna, the restructuring of an industrial town and the challenges of improving economic conditions while enhancing quality of life were presented, while in Dessau, Ms. Kennedy noted the integration of landscape planning with art, public participation, and job creation.

She also described how world class facilities have been created such as Bilbao’s Guggenheim and how high quality design is incorporated in new projects such as the new pedestrian bridge in Bilbao.

In concluding, Ms. Kennedy articulated an overall lesson learned — “there is a strong belief that if you create something imaginative and useful, while preserving the past, people will come, and the area will be rejuvenated”. Buffalo needs to develop a vision based on its industrial heritage, the River and Lake, architecture, and its history. Key to developing this vision is citizen involvement and political support.

Brownfields: Rethinking Buffalo’s Priorities for Action

Panel moderator for this session, Alice Kryzan of the law firm Buchanan Ingersoll, P.C., provided an overview of the legal structure governing brownfields in New York State, and described the liability scheme that Buffalo must work under in redeveloping brownfields.

She began by providing some history and an explanation of the Federal Superfund Statute. This law, also called CERCLA, provides for strict, joint and several liability for persons responsible for releases of hazardous substances to the environment. Liability is also retroactive so that even if the disposal was legal at the time it was done, a responsible party could be held responsible for cleaning up the property today. The statute requires that the property is cleaned up to its pre-disposal condition.

Ms. Kryzan described some of the difficulties with the statute including that land owners are responsible and liable for their property even if they were not responsible for the disposal. This condition has made it hard to sell real estate since it dissuades potential buyers. Another difficulty faced, is that banks are more reluctant to loan money to companies wanting to develop on historically industrial land because of the liability scheme.

How can this be ameliorated? Ms. Kryzan suggested that brownfield redevelopment be supported on a state level by a statutory program ameliorating some of the harsher components of the Superfund program (e.g. Minnesota has adopted a voluntary clean-up program). She indicated that assistance in various forms has been proposed at the federal level such as the *Better American Bond Act* that would allow \$9.5 billion in bonding authority for states, some of which can be used for brownfields.

In concluding, Ms. Kryzan encouraged clean-up to the quality that is acceptable for the intended new use as well as offering protection from liability to future investors.

The Buffalo City Region: Planning & Governance Issues

Professor Bob Berger of the School of Law at the University at Buffalo, provided insight into current opportunities for what he termed “municipally sponsored brownfield projects.”

In Professor Berger’s view, liability has often been used as a “convenient excuse” for why some land is not redeveloped. There is no law that prohibits redevelopment of brownfields. He suggested that the Federal Superfund law is not a central issue in discouraging brownfield redevelopment. Many states have their own brownfields voluntary programs which may be effective, but there is only anecdotal evidence to suggest this which often just assumes a “cause and effect” relationship.

Professor Berger explained that in making decisions for brownfields, case studies throughout the U.S. are important to review; however, we must recognize that laws may vary in different states. We also need to understand why a project is successful (what was the crucial aspect that made the project occur) and how it applies to our particular situation.

Brownfield redevelopment in Buffalo needs coordination within the City because of the opportunities available for municipally sponsored brownfields projects through the Bond Act. Professor Berger described a report he co-authored in 1997 titled *Development and Financing of Municipally Sponsored Brownfield Projects in Erie County* [<http://www.buffalo.edu/esi/brownfld.html>] which describes the Environmental Bond Act of 1996. Properties owned by municipalities are eligible to receive Bond funds (at a minimum, some municipality must be sponsoring the redevelopment project) for investigation and remediation costs. The Act also increases the protections from liability under state law for a municipality, and in many circumstances, these protections can be passed on to a new private purchaser of the property. The Act therefore, creates value to municipal sponsorship of a brownfield project.

The *Bond Act* however, may also present some challenges to municipalities. Implementing municipally sponsored brownfield redevelopment, especially using Bond Act money, may not be simple. Expertise, time and effort is necessary in selecting and managing environmental consultants, evaluating funding opportunities, complying with regulatory requirements and performing numerous other tasks. Partnerships with local or regional agencies, development corporations, or a specifically created not-for-profit

corporation with existing expertise may be useful in some cases.

Professor Berger concluded by stating that the passage of the *Bond Act* has created a unique opportunity, and that approaches to municipal sponsorship of brownfield projects in western New York should be viewed as a strategic opportunity for regional cooperation which could lead to real progress.

Lessons from the Field: What is a Real Success?

Charles Bartsch, Senior Policy Analyst at the Northeast Midwest Institute has tracked state voluntary clean-up and financial assistance programs, and has documented about 40 case studies that have looked at ways to overcome the legal financial and regulatory barriers to brownfield reuse. He spoke about lessons learned through these cases.

Mr. Bartsch outlined 4 general lessons learned in brownfield redevelopment:

1. Brownfield reuse is important in building a foundation for sustainability.
2. Key issues surrounding brownfield reuse are:
 - Financing — resources are needed to make any project happen and in some cases lender concerns (e.g. collateral value, borrower credit worthiness) are not overcome.
 - Certainty and finality — fears of never-ending remedial procedures, time delays and associated costs are not attractive to prospective developers.

3. Brownfield reuse concepts are being translated into public policy approaches slowly but steadily and incrementally (42 states now have some form of voluntary clean-up programs, and the EPA is working with about 15 agencies to ensure that federal assistance contributes to sustainability).
4. Brownfield reuse can be done in a way that makes economic and social sense.

He continued by explaining how innovative, proactive local governments can give the reuse process a critical jump-start. Brownfield projects do not work without some kind of involvement by the public sector, especially local government. In some cases, this has meant being creative by paying for site assessments and clean-up, or site assembly and by offering tax incentive or technical assistance.

A further lesson learned by Mr. Bartsch is that strong public/private partnerships enhance project viability and results. Communities that have brought together business interest and public-sector objectives have seen significant results. This is true for example in Minnesota where the city of St. Paul and the Port Authority teamed up with Texaco to turn an old petroleum tank farm into a new light industry centre.

Benefits can also be realized through inter-agency coordination. Many projects are drawn-out by agency reviews and their time frames; this is intensified when multiple government agencies are involved. Streamlining inter-agency coordination can be useful in resolving overlap in administrative jurisdictions. Lawrence, Massachusetts for example, established an inter-agency task force with broad sign-off authority to iron out key issues, streamline decision making, and coordinate multiple regulatory issues associated with the Lawrence Gateway Project.

Another type of assistance often needed for successful brownfield redevelopment is public-sector funding. The most common and most needed (usually not available from private lenders) is funding to help cover costs of site assessment and clean-up at the early stages of a project. Sometimes this cost is minimal. For example the Scott Peterson meats project in Chicago, only cost the city a few thousand dollars to bring a site back to active use.

In many cases however, private-sector funding can also be found. Most of the success stories Mr. Bartsch has witnessed have involved some form of private-sector financial participation, including those organizations/individuals responsible for the brownfield site.

Mr. Bartsch continued by speaking of the importance of the creative integration of brownfield projects with existing community development strategies and of strong community involvement. Residents should be given credible information about contamination and clean-up, so that they can understand what is going on and so that economic development and environmental responsibility can be successfully linked. In Minneapolis for example, community participation was central to the redevelopment of the Johnson St. Quarry into a shopping centre.

Also of importance is understanding the economics of well-located brownfield projects. Capitalizing on existing road and rail access, historical buildings and other facilities with unique values, helps ensure economic viability and attract public and private investment.

And finally, state voluntary clean-up programs and state liability relief can help attract new users to brownfield sites. About 42 states have programs in place to encourage voluntary clean-up of contaminated sites. These programs aim at making brownfield reuse more attractive by establishing a process to determine how clean is clean and how to achieve it. They also offer liability relief which is attractive to lenders and developers and gives them the assurance they need to take on brownfield sites. Some two dozen states also offer some type of financial incentives to both private and public site owners for site assessment and clean-up.

Chicago's Approach to Urban Redevelopment: Tools and Methods that Work

James Van der Kloot, EPA Regional Brownfields Coordinator, US Environmental Protection Agency, Region 5, described Chicago's approach in brownfield redevelopment.

Mr. Van der Kloot began by stating that there are many similarities between Chicago and Buffalo (for example, in some locations, property values are so low that real estate transactions cannot support the costs of clean-up), and that the brownfields problem is too big to solve solely with government funding. Chicago had thousand of sites to redevelop and needed to attract private investment in order to be successful.

Mr. Van der Kloot explained how Chicago's first step was to identify the concerns of private developers, investors, and lenders. These included fear of environmental liability, uncertainty of costs, and uncertainty of the time frame for governmental approvals.

In addressing these concerns, the City used 5 demonstration sites to illustrate a proactive model of redevelopment. These were sites for which legal issues and level of contamination were manageable. Once the sites were selected, a Chicago Brownfields Forum was organized to develop comprehensive solutions.

As a result, Chicago has made some improvements which have lead to more sites being cleaned up. For example, Illinois has developed a State voluntary Clean-up Program; Region 5 has entered into an MOU to clarify clean-up standards; and a Risk Based Corrective Action (RBCA) approach has been established using different tiers of analysis to determine the extent of clean-up required.

Mr. Van der Kloot noted that Chicago's five demonstration sites were all tested and cleaned up for \$1 million and that hundreds of jobs have been created. In the past year and a half, 120 sites have been redeveloped mainly for industrial/commercial uses.

The City of Chicago is currently facing demands for industrial and commercial space. With little to no sites available for new development, the City has turned to focusing on former industrial areas for redevelopment opportunities, in particular, on the Lake Calumet and West Pullman regions. These are areas in transition that include ecological features such as wetlands and marshes, as well as decaying infrastructure and environmental remediation sites. But, with their prime location, access to rail, and availability of developable land, they offer a great deal of potential for revitalizing the industry in the area. Challenges that lie ahead for the City include assembling lands and preparing them for industrial redevelopment, effectively marketing those lands, and designing creative ways of integrating existing communities with new industry.

For the Public Good: Portland's Waterfront Redevelopment

Doug MacCourt, Director of the Brownfield Program for the City of Portland, Oregon presented the recipe for Portland's success in redevelopment. He described the context for brownfield redevelopment in Portland, 3 brownfields projects, the challenges faced with these projects and initiatives created in response to the challenges.

He noted that brownfields work in Portland is part of a statewide program for land use planning which is based on a set of goals. The number 1 goal, and the reason why they have been successful in Portland, is Citizen Involvement — Oregon's land use planning system is citizen-created and citizen-guided.

The land use planning system incorporates regional centres focused on transit, and urban boundaries designed to curb urban sprawl.

There are 3 main brownfield areas in Portland:

- South Waterfront;
- North Macadam and;
- The River District.

The South Waterfront was previously used for electrical generation, a scarp yard and sawmill. It was not a surprise therefore when contaminants were discovered on site. The City established a set of development goals for the land which included housing, retail, hotel, and office facilities. To facilitate the development of these new uses while also providing for clean-up, an agreement with the regulatory agency was established and the removal of hot spots and capping and sealing

of building sites and roadways were undertaken. The site is currently a popular waterfront area that supports marine uses, pedestrian amenities, and commercial units.

The North Macadam area was formerly used by a scrap yard, barge manufacturer and steel factory. These landowners left behind organic pesticides, DDT, lead and PCBs. The City's development goal for this site was to create an entirely new community with new housing, retail, hotel and office facilities. To prepare for these new uses, soils were removed to a 1.2 metre (4 foot) depth, sites stripped, and ground water monitored.

The third brownfield site described by Mr. MacCourt was the River District, a site previously used by a rail marshaling yard, coal gasification plant and light industry. Contaminants found on this site included coal tar, petroleum diesel, lead and arsenic. Since it was intended that this land be reused for housing, commercial and office uses, some of the ground water and contaminants were removed, while some areas were capped and sealed.

Mr. MacCourt described some steps in facilitating redevelopment. He indicated that developers' needs should be met. Potential investors want to know that low up front costs are associated with a development site, that liability is minimized, and there is little or no stigma associated with a site. Furthermore, development issues should be addressed, regulations should be followed to achieve the best possible clean-up required and lenders should offer better loan ratios.

He concluded by outlining some initiatives in Portland including a citywide soil reuse policy, an Interagency Brownfields Workgroup, base level training for city workers, hazardous materials tariff for utilities, and coordinated public resource delivery.

Questions and Discussion

Doug MacCourt was asked how Portland established the Urban Growth boundary. He answered that it is a requirement from the State of all incorporated cities.

When asked what the bottom line was in being able to close a deal with a private investor on a brownfield, Jim Van der Kloot replied that the deal has to be financially economical, and a process, including time and costs should be clearly articulated. This is the only way that the overall risks and most benefits of the project can be evaluated.

Developing Priority Actions for Brownfield Redevelopment: Break Out Groups

This session was moderated by Gail Johnstone, Executive Director, Community Foundation for Greater Buffalo. Workshop participants were assigned to one of eight groups. There were two groups focusing on each of the following categories associated with brownfield redevelopment:

1. Governance and Planning
2. Legislation and Voluntary Programs
3. Investment in Public and Private Initiatives
4. The Role of Community.

The Break Out sessions provided an opportunity for participants to make recommendations which can help Buffalo realize Mayor Masiello's stated goal of long-term sustainable reuse of brownfields sites. The points that emerged demonstrate common connections which

create a pragmatic Action Plan for Buffalo. This action plan is summarized below. The raw material which composed this plan can be found in Appendix A.

This action plan represents a building block for transforming Buffalo and the WNY region back into a vibrant area of community excitement, valued and preserved environmental resources, and economic development. The action plan recognizes that there are issues under direct community control such as how City government operates and public investments into public properties which enhance quality of life which can be implemented immediately. Further, there are also issues which the community can influence but must work with others to craft outcomes such as development of an improved state regulatory framework that must be a part of a longer term strategy for redevelopment.

The breakout groups identified the key opportunities that existed for reinvestment in Buffalo's Brownfields. These included:

1. A good education base and strong environmental community (e.g. institutions such as the UB Institute for Local Governance, the Centre for Economic Cooperative Growth).
2. Availability of low real estate prices and financing tools (e.g. public financing, Tax Increment Financing, new technologies).
3. An abundance of local assets and resources including infrastructure, affordable housing, an undeveloped waterfront, cultural amenities, research and development capabilities, available land, and a large labor force.
4. Prime location that is accessible to the Great Lakes, close to large markets and tourist destinations (Niagara Falls, Toronto) and that experiences four unique seasons.



Delaware Park, Buffalo

Source: Waterfront Regeneration Trust

The groups also identified the most important barriers to investment in Buffalo's Brownfields. These barriers included:

1. High costs (e.g. taxes, clean-up and site specific infrastructure).
2. Current land use planning methods which subsidize greenfield development, and contribute to sprawl; in addition, there are many land use planning studies completed but not much implementation.
3. Lack of cooperation between local, regional and state stakeholders in developing a common vision and approach to land use planning, clean-up, and financing.
4. An ineffective and undefined regulatory process that involves lengthy reviews, does not define remediation required, nor offer consistent standards, or statewide brownfield legislation.
5. Lack of citizen education regarding contamination and involvement in brownfields projects, and a stigmatized public perception that brownfields are dirty, dangerous and difficult.

From these beginnings, an action plan was developed which includes logical steps which can be taken and is the beginning of consensus building. Ideas and recommendations presented by the groups included:

- A. Develop a regional planning mechanism.
- All levels of government should work together to implement a regional approach to planning. This would involve identifying a regional planning entity to facilitate the process. The time frame for this priority action should be between 2 to 3 years, and should be regionally funded with private investment in specific initiatives, as well as contributions from the regional chamber of commerce.
 - This planning entity should bring all approving and funding agencies together, similar to the organizations established in Bilbao and Germany.
 - A regional land use plan should be initiated as soon as possible. An appropriate organization at the University of Buffalo should be identified to undertake this work. Partners in developing the plan should include volunteers, the university, and government offices.
 - Enacting legislation is required to establish the planning entity and to set out a mission statement, define a region, and identify a neutral arbitrator. This should be implemented within the next 6 months by local governments in partnership with the region and state.

- B. Monitor progress and communicate successes even if they are very small in the beginning in order to create momentum for a broader transformation.

Public comment and market research should be used as the basis for a regional plan and to implement an achievable short-term project to build consensus and momentum. This should be completed within one year and should involve the private sector. Regional players and a group of local leaders should be organized (similar to the Greater Buffalo & Niagara Region Transportation Council) to participate in this action.

Promotion of both big and small successes can be done through the community to build momentum. This would involve neighbourhood groups, churches, and schools and would be ongoing. This could be supported by volunteers, city staff, public and private sources.

A demonstration site/project that represents a consensus and is easily marketable should be identified and completed. This should be completed by summer 2000, and could be funded through non-traditional sources such as ISTE, HUD, NY Canal Corp.

Long and short-term master plans should be developed that are regionally based and foster better coordination among key players in redevelopment. The short-term plan could be undertaken by Erie County and completed within 6 months. The long-term plan should be implemented within 2 years by the local, county and state governments with public input.

C. Increase public education, participation, input and decision-making on brownfields projects to build support and to enhance transformation of the community.

- The Erie County Education Institute should begin a public education program and encourage public involvement with the assistance of public and private funding. This would involve public events and/or forums associated with a specific project.
- Public education should be improved through the use of multi-media, religious organizations and school boards. This should be implemented by a Regional Planning Authority as soon as possible with funding from public and private sources including grants.
- The City should begin an education campaign to educate the general public and improve public perceptions on brownfields. This task could be undertaken by a central brownfields office.

D. Advocate for a comprehensive New York State law which supports brownfields redevelopment and voluntary clean-up.

- An effective comprehensive New York State brownfield law should be defined and adopted. The legislature should be petitioned for action through use of the media, lobbyists, elected leaders and other organizations. This should be done immediately. A coordinated streamlined state voluntary program should be defined that would be implemented by the Governor and New York State legislature. This should be received with support and as a priority item for the Governor. New York State Department of Environmental Conservation (DEC) should be assigned authority to coordinate among the agencies and local municipalities

- A group should be organized to draft the legislation which should be completed and finalized by 2001. Legislation should protect innocent purchasers. This could be established by lobbying, coordinating with others and educating local officials. All political players should take responsibility for this and implement changes as soon as possible. Guidelines for site specific clean-up are also needed.

E. The City should develop a central office for brownfields redevelopment.

- A workable development process should be created, including inventories, a “one-stop shop” for permits and approvals at City Hall, and a clear streamlined approval process. A “SWAT” team should be created as soon as possible to implement this development process. This should be accomplished within a year.
- The central brownfields office should be readily accessible and able to engage with the public and other players. The office should be a not-for-profit agency, including a board, that would oversee the reuse of land in the region. Funding should be provided by the EPA, *Bond Act*, municipal governments. The central brownfields office should also, in partnership with government agencies, developers and businesses, develop mechanisms to involve the public in a full planning process.

Finally, all the groups identified key ways to measure progress of redevelopment.

A number of consistent themes were identified from the conversations in the breakout groups:

1. Build on the work that the City has already done.
2. A comprehensive vision is essential if the City is going to transform itself in the eyes of the market and in its own eyes.
3. There is a need for a streamlined transparent regulatory process from Albany and within City Hall.
4. There is a need for a symbol of the region's transformation.
5. Opportunities must be taken and created for celebrating the City's resources, its heritage, and its successes.
6. There is a need to demonstrate success quickly.
7. Cooperation between elected officials and community leaders must increase.

There are ample opportunities to make this action plan a reality. The strong commitment to "smart growth" strategies by the current County Executive Dennis Gorski, the strong commitment of the current Mayor Anthony Masiello to the four "E's" of employment, education, environment, and empowerment as the keys to the City's future, and the strong commitment of Common Council President James Pitts to the Green Gold strategy for environmental economic development, comprises a highly compatible framework for a regional vision and approach to planning and brownfields redevelopment.

These three tenets have not been linked together because of past political rivalries and other factors.

These three leaders must overcome these barriers and lead a broader public discussion on how to link their separate initiatives. The strong commitment of New York State Governor George Pataki to environmental issues as evidenced by his development of the 1996 *Environmental Bond Act*, the outspoken commitment of Joel Giambra to regionalism, and the leadership of John Sheffer, head of UB's Institute for Local Growth and Regional Governance, demonstrates that there is broad support for an environment based regional initiative.

Participants concluded that projects must be discussed, promoted and implemented to make it clear that redevelopment of South Buffalo is in the interest of the entire City. Momentum can be built by implementing a comprehensive strategy that views South Buffalo as a project able to:

- build awareness of the heritage opportunities of the region,
- restore environmental quality and improve access to the River,
- provide a range of programs available to all residents, and
- establish a model process for other redevelopment efforts in the City.



View of Buffalo's waterfront and downtown skyline
Source: *Waterfront Regeneration Trust*

The South Buffalo project must be understood in a broader framework to make it a viable initiative. For example, the design charette held as a follow-up to the Buffalo Workshop suggested contextualizing the South Buffalo Project within a focus on preservation, interpretation, and illumination of Buffalo's historic grain elevators. (see page 76 for further details). This ongoing work is a tangible sign that the Buffalo Workshop was far more than just another conference.

Appendix A

Developing Priority Actions for Brownfield Redevelopment: Break Out Groups, Questions and Answers

Each of the eight groups was asked to answer a set of three questions. The questions and summary answers are noted below.

QUESTION ONE

What do you consider the most important barriers to investment in Buffalo's Brownfields? What do you consider the most important opportunities for investment in Buffalo?

The key barriers noted by Workshop participants include:

- High costs (e.g. taxes, clean-up and site specific infrastructure).
- Current land use planning methods which subsidize greenfield development, and contribute to sprawl; in addition, there are many land use planning studies completed but not much implementation.
- Lack of cooperation between local, regional and state stakeholders in developing a common vision and approach to land use planning, clean-up, and financing.
- An ineffective and undefined regulatory process that involves lengthy reviews, does not define remediation required, nor offer consistent standards, or statewide brownfield legislation.
- Lack of citizen education regarding contamination and involvement in brownfields projects, and a stigmatized public perception that brownfields are dirty, dangerous and difficult.

Opportunities defined by Workshop participants include:

- A city that is committed to brownfields, proud of its industrial heritage, and open to discussion.
- A good education base and strong environmental community (e.g. institutions such as the UB Institute for Local Governance, the Centre for Economic Cooperative Growth).
- Availability of low real estate prices and financing tools (e.g. public financing, Tax Increment Financing, new technologies).
- An abundance of local assets and resources including infrastructure, affordable housing, an undeveloped waterfront, cultural amenities, research and development capabilities, available land, and a large labour force.
- Prime location that is accessible to the Great Lakes, close to large markets and tourist destinations (Niagara Falls, Toronto) and that experiences four unique seasons.

QUESTION TWO

(Posed to the Governance and Planning Groups)

Name priority actions to establish a governance and planning framework to foster sustainable redevelopment of Buffalo's brownfields.

1. All levels of government should work together to implement a regional approach to planning. This would involve identifying a regional planning entity to facilitate the process. The time frame for this priority action should be between 2 to 3 years, and should be regionally funded with private investment in specific initiatives.

-
- 2. Define and adopt an effective comprehensive New York State brownfield law. The legislature should be petitioned for action through use of the media, lobbyists, elected leaders and other organizations. This should be done immediately.
 - 3. As part of item 2, define a coordinated streamlined state voluntary program that would be implemented by the Governor and New York State legislature. This should be received with support and as a priority item for the Governor. New York State Department of Environmental Conservation (DEC) should be assigned authority to coordinate among the agencies and local municipalities.
 - 4. Use public comment and market research as the basis for a regional plan and implement an achievable short term project to build consensus and momentum. This should be completed within one year and should involve the private sector. Regional players and a group of local leaders should be organized (similar to GBNRTC) to participate in this action.

(Legislation and Voluntary Programs Groups)

Name priority actions for working within the existing environmental legislation in the short-term to enable redevelopment of Buffalo's brownfields.

- 1. Create an entity, within a 3 to 6 month period, to bring all approving and funding agencies together, similar to the organizations established in Bilbao, the Ruhr Area and in Saxony-Anhalt, Germany. Implementation should be done by the regional government with funding from private and public organizations.

- 2. Identify and successfully complete a demonstration site/project that represents consensus and is easily marketable. This should be completed by summer 2000, and could be funded through non-traditional sources such as New ISTEAs, HUD, NY Canal Corp.
- 3. The Erie County Education Commission should begin a public education program and encourage public involvement with the assistance of public and private funding. This would involve public events and/or forum associated with a specific project.
- 4. Develop long and short-term master plans that are regionally based and foster better coordination among key players in redevelopment. The short-term plan could be undertaken by Erie County and completed within 6 months. The long-term plan should be implemented within 2 years by the local, county and state governments with public input.
- 5. NFTA staff should modify the Transportation Improvement Program. This should be requested by the City or County.
- 6. Make better use of existing funds. Target funds to specific projects, provide incentives for investments, pool resources. The BEREC should be the lead and should involve the County, State, University.

(Investment in Public and Private Initiatives Groups)

Name priority actions that can create investment in Buffalo's brownfields through public and private initiatives.

1. Establish a regional planning authority. This would involve enacting legislation, establishing a mission statement, defining a region, and identifying a neutral arbitrator. This should be implemented within the next 6 months by local governments in partnership with the region and state. Funding should be provided by public and private sources and regional chamber of commerce.
2. Create a workable development process including inventories, a "one-stop shop" for permits and approvals at City Hall, and a clear streamlined approval process. A "SWAT" team should be created as soon as possible to implement this development processes. This should be accomplished within a year.
3. Improve public education through the use of multi-media, religious organizations and school boards. This should be implemented by a Regional Planning Authority as soon as possible with funding from public and private sources including grants.
4. Create New York State legislation for brownfields and guidelines for site specific clean-up. A group should be organized to draft the legislation which should be completed and finalized by 2001. Legislation should protect innocent purchasers. This could be established by lobbying, coordinating with others and educating local officials. All political players should take responsibility for this and implement changes as soon as possible.

(The Role of Community Groups)

Name priority actions for ensuring a meaningful role for the community in the redevelopment of Buffalo's brownfields.

1. Develop a regional land use plan within 9 to 12 months, that could be facilitated by the Institute for Regional Governance and that is based on a community vision and involves all stakeholders. Partners in developing the plan include volunteers, the university, and government offices.
2. Promote big and small successes through the community to build momentum. This would involve neighbourhood groups, parishes, and schools and would be ongoing. This could be supported by volunteers, city staff, public and private sources.
3. Bring people to the waterfront through events and other activities. This could be encourage by the BEREC, volunteers, and the arts community.
4. Create a central brownfields office that is readily accessible and able to engage with the public and other players. The office should be a not-for-profit agency, including a board, that would oversee the reuse of land in the region. Funding Should be provided by the EPA, Bond Act, municipal governments.
5. Begin an education campaign to educate the general public and improve public perceptions on brownfields. This task could be undertaken by the central brownfields office.
6. The central brownfields office should also, in partnership with government agencies, developers and businesses, develop mechanisms to involve the public in a full planning process.

QUESTION THREE

(Posed to all groups)

Identify key ways to measure progress of redevelopment.

Indicators should evaluate progress and determine if a project is a good, cost effective investment for the city and region. They include:

- calculate the number of acres approved for development and amount of reduction in the acres of brownfields
- determine change in property tax revenue
- determine the leverage ratio between public and private investments
- calculate number of indirect and direct jobs created by brownfield projects
- calculate number of clean-ups
- calculate number of municipalities applying for state Bond Act
- determine population change as brownfield projects are implemented
- calculate number of grants, awards, designations
- determine rate of decline of suburban farmlands, wetlands etc.
- record number of building permits
- evaluate increase in property values.

Appendix B

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MARCH 29, 1999
CHARETTE SUMMARY

Regeneration Strategies for the Buffalo River and South Buffalo: A DESIGN CHARETTE

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Community Foundation for
Greater Buffalo*

International Brownfield
Exchange



* with support from the Great Lakes Community Foundation Environmental Collaborative supported by the Great Lakes Protection Fund, the Joyce Foundation and the Charles Stewart Mott Foundation

REGENERATION STRATEGIES FOR THE BUFFALO RIVER AND SOUTH BUFFALO: A Design Charette

The idea for this charette emerged from the International Brownfield Workshop held in Buffalo on February 1 and 2, 1999. Results of that Workshop (see pages 35 to 71) emphasized the importance of articulating a comprehensive vision and practical action plan for the South Buffalo project, including the historic Buffalo River, that would integrate environmental restoration and economic development objectives.

The objective of this charette was to gather together technical experts and stakeholders working on various initiatives in order to articulate a comprehensive redevelopment vision and action agenda for the Buffalo River and its associated urban area.



Heritage Buildings on the Buffalo River

Source: Lynda Schneekloth

Context

The Buffalo River has always held an important place in the life of the City of Buffalo. Indeed, it was the birthplace of the modern City and Buffalo may take its name from the French expression Beau Fleuve, or beautiful river.

For some, the River was the transportation corridor for international trade and shipments of grain, coal and steel. For others a recreational area best known for canoeing, fishing, good swimming and cycling. Until the 1850's the River was the home of a large Native American settlement.

Over the last 100 years, the Buffalo River watershed, like many in the Great Lakes Basin, has undergone major changes, from a natural river system, to a highly industrialized corridor, and over the last 20 years, to an underutilized, largely inaccessible and abandoned river.

But the decline of industrial activity along the river has created an opportunity for the people of Buffalo to reconsider the importance of the waterway as a truly important landmark and a defining natural feature of Buffalo and the surrounding region. There are several initiatives underway and in the detailed design stage at various parts of the River. These include:

- South Buffalo Redevelopment Project
- Industrial Heritage Trail
- Friends of Buffalo River Development Plan and Design Guidelines
- Council Greenway Plan

- Buffalo Downtown Waterfront/Inner Harbor Redevelopment Project
- Urban Canoe Trail Guide
- Erie County Buffalo River Habitat Restoration Project
- Friends of Olmsted Greenway Master Plan

While some elements of these plans and strategies have been implemented, a comprehensive, integrated vision and regeneration strategy for the River and the surrounding area has not yet emerged. In some cases, this has held back the consensus needed to make a strong case to change and to attract the investment needed to move ideas into reality.

New Opportunities

Kevin Greiner, Project Manager for the South Buffalo Project, welcomed participants from Buffalo, the Niagara Region, Toronto and the team from the initiatives associated with Expo 2000 Ltd Sachsen-Anhalt, Germany. He noted that the South Buffalo Redevelopment Project presents the City with an historic opportunity to make real progress in regeneration of the Buffalo River as well as its associated urban areas. The largest tracts of available Buffalo land for redevelopment are found along the shores of the River. The Concrete Central grain elevator site alone comprises over 60 acres of land.

With redevelopment of the South Buffalo Project expected to occur in the near future, it is important to take steps to guide that reinvestment in ways that also protect and restore the River and improve access to the shoreline and the water. “The time is right to organize the many important initiatives underway and proposals for revitalization of the River and the

surrounding area and to test the possibility of establishing a comprehensive vision to guide economic redevelopment and ecological restoration.”

European Perspectives on Urban Regeneration

Gerhard Seltmann, Director Expo 2000 Sachsen-Anhalt Ltd.

Kevin Greiner introduced Mr. Seltmann and noted that Gerhard and his team are engaged in projects in the former East Germany that have both similarities and differences when compared to the challenges and opportunities in Buffalo.

Mr. Seltmann began his remarks by introducing his colleagues from Germany — Dr. Peter Schwarz (Director of the Zeitz Industrial Park) , Mr. Karl Groger (Chief Building Official, City of Dessau), Mr. Uwe Rheinholz (Director of the Wolfen-Nord Housing Agency), Mr. Jugen Fink and Ms. Ilke Bauman from Expo 2000.

Expo 2000 Sachsen Anhalt Ltd. is a company owned by the federal state of Saxony-Anhalt with the mandate to undertake programs of structural change that demonstrate the integration of environmental, economic and cultural initiatives. In the triangle formed by the cities of Dessau, Bitterfeld/Wolfen and Wittenberg, some 35 projects are being implemented which showcase the ecological and design elements of the radical structural changes taking place within this region of traditional industry.

Mr. Seltmann provided an insightful overview of the key common elements and the unique features of the structural change and redevelopment work underway in Germany as well as in European cities.

It is evident that Buffalo and the Niagara Region share many of the challenges faced by other cities around the world — loss of industrial and manufacturing jobs, environmental degradation, aging infrastructure, as well as abandoned and underutilized buildings and land. The underlying economic and social reasons for the conditions that we see today can also be seen to have some common features, including changing market conditions, technological changes and over-consumption of natural resources.

Mr. Seltmann's presentation highlighted several common elements that can be drawn from the international experience in structural change and redevelopment:

- Regeneration begins with a comprehensive vision that integrates ecological, economic and social objectives
- A transparent, inclusive, rigorous planning approach is needed to translate the vision into reality
- Design competitions can assist in producing landscape and building designs that have a quality consistent with the vision
- Design should be sensitive to historic qualities, existing natural features and the time and cost of implementation.
- Local conditions and objectives determine the design quality and redevelopment strategies that transform spaces to places — in some cases reusing structures is possible; in others, new buildings and landscape features can result.



Sources: Expo 2000 Sachsen Anhalt GmbH and Waterfront Regeneration Trust

- Regeneration is an on-going process of change and development. It is never finished but we must organize and articulate the steps and provide early evidence of the results of our efforts to protect, restore and enhance the quality of life in our communities for ourselves and for future generations.
- Projects should provide the opportunity for discovery — in situations that offer common experiences, such as events that spark celebration of local heritage, integration of art into landscape design
- Information, community engagement, and relevant educational experiences must go hand in hand with the regeneration process
- Symbols can assist in bringing attention to a project, improving the image of a region undergoing change

Charette Process

Participants were asked to consider 14 zones that have been defined for the River and its associated urban area in the context of three questions:

What are the important features in the development zones?

What are the land uses and design elements that should be considered?

Is there an overarching concept or goal that can provide the vision of the redevelopment?

Results: Toward a Vision for Revitalization

If the watershed of the Buffalo River is known as the place where yesterday's industry flourished, what are the principles that should guide redevelopment and restoration of this watershed? Workshop participants developed a model for revitalization that has 5 main elements, as described below:

Establish Principles to Guide Decisions

Participants agreed that the vision for the redevelopment of South Buffalo is to enhance quality of life for all citizens and that the following principles should guide ecological restoration and redevelopment:

- Redevelopment should be organized for the whole area using a framework that is green and connected
- The River should be clean and accessible
- Future development should contribute to improving the health of the river by controlling storm water flows, reducing energy consumption, incorporating connected green space, minimizing car use and reducing water consumption
- Diverse landscapes, habitats, land uses and programs are needed
- The water's edge should be connected and accessible
- The area should support a mix of public and private uses that celebrate Buffalo's natural features and industrial heritage, and provide

for year-round use

- Views to the River and the cityscape should be protected and enhanced
- Design of landscape and buildings should protect vistas, provide a sense of continuity with the past, and consider relationships among buildings, open spaces and the water

Prepare a Comprehensive Area-Wide Plan

- Achieve a balance between public benefits and private uses
- A unifying and connecting system of infrastructure is crucial
- Infrastructure should include multi-functional, connected green space and a trail system that provides access to the water's edge wherever possible
- Development should recall and celebrate industrial heritage
- Implementation plans should be phased according to market conditions to achieve the overall vision

Identify Proactive Strategies

Apply principles to attract investment and assess proposals, including:

- attract an anchor business to South Buffalo
- encourage small scale entrepreneurs based on existing strengths (urban agriculture, arts, green industry, water-based activities)
- streamline the development approval process
- support adaptive reuse of heritage buildings
- communicate success to a broad audience

- engage the community in ongoing initiatives
- develop marketing strategy based on real potential and incremental change

Assemble Financing

- provide incentives where needed

Monitor Progress

- disseminate results
- Modify redevelopment strategy and implementation plan as needed on the basis of results.



Design Concept

The concept that emerged for the South Buffalo Redevelopment project has 6 main features:

- **Connected system of green space and trail system.**
The “green infrastructure” should be designed to carry out a variety of ecological, recreational and aesthetic functions
- **New connections to the edge of the water, view points, and bridges to link both sides of the River;**

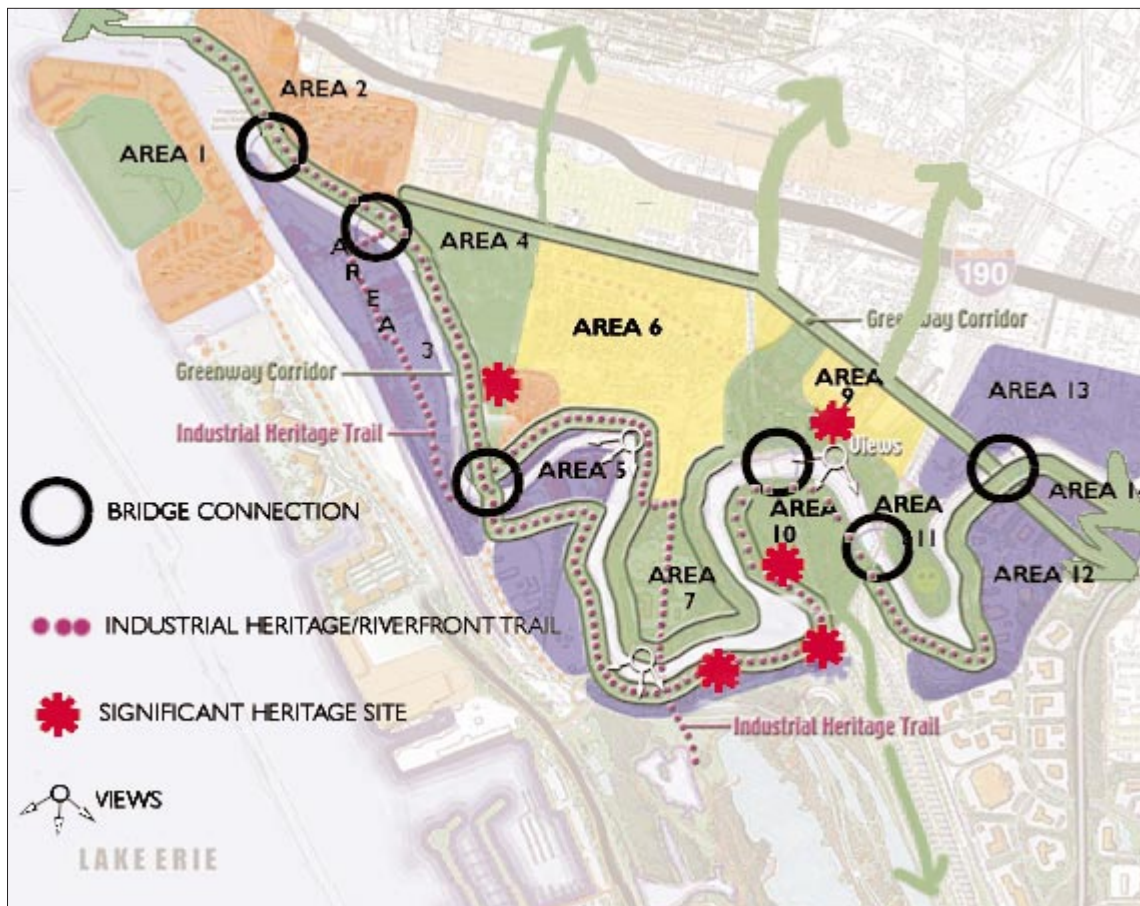
- Development nodes that build on and connect existing investment and businesses, residential areas and amenities as well as proposed developments;
- Year-round use of the waterfront, including boating, cross-country skiing, skating, trails, etc.
- Recall industrial heritage - reuse of one or more grain elevators for mixed uses such as the arts, an environmental center, office space and/or residential uses
- Lighting features and an industrial heritage trail loop should be considered in the landscape design.

Land Uses

Participants identified the following features and land uses for the different zones

Area 1: Outer Harbor – includes the Coast Guard Station (now largely inaccessible), Chinaman’s Light House and Times Beach. The natural features, vistas and historic buildings in this area should be preserved and enhanced as the gateway to the Buffalo River. Access should be improved, wildlife habitats restored and protected and consideration given to active docking areas and an environmental center.

Area 2: Inner Harbor - a critical mass exists here - Inner Harbor is the hub of the regional trail system and is a



logical location for incremental commercial development consistent with its historic Cobblestone district. Improve public access to the water, consider a bridge to connect both sides of the harbor and Improve links to public transit system.

Area 3 is dominated by the Pillsbury and General Mills complexes. Landscaping should enhance the area over time as an industrial park in a campus-like setting and improve links to Area 5. The industrial heritage trail should traverse this area and a green edge should be developed wherever possible.

Area 4 is in reasonably good shape from an ecological perspective and was proposed for the relocation of the zoo. Active recreational use should be considered and natural areas should be protected. Access to shoreline is important here. A good location for public art in the landscape.

Areas 5 and Area 3 should continue as industrial with new green industries being placed here. Industrial heritage trail should continue through these areas. Innovative lighting design for grain elevators should be considered.

Area 6 has potential for mixed commercial/residential uses. Safety and security issues should be addressed and adopting community-based strategies, such as park and river rangers, should be reviewed. Encourage community participation in park maintenance and programming.

Area 7 has opportunities for good connections to greenway trail, shoreline protection and habitat restoration. Other ideas include new docking facilities and constructing a canal to make an island.

Area 8 should highlight historical importance of rail connection from Albany to Cleveland. Maintain industrial uses (also link to area 10) and improve pedestrian access to the shoreline.

Area 9 has potential to green South Street and make it a new River access point. Links to greenway trail are important here; residential uses should be enhanced. Valley Community Center is an important asset and could be linked with Elementary School #32 for river-related programming.

“The only constant in a living thing is change and evolution – adaptation. So build for the future based on continuity with the past.”

Tim Tielman

Participants suggested a range of land uses and programs that would be appropriate for South Buffalo including:

- Green Industry
- Community-based Business
- Heritage Trail with Interpretation
- Canoe Trail
- A Connected Bike Path
- Community Gardens
- Farmer's Market
- Improved Public Access to the Waterfront
- Improved Public Transit to Strategic Sites Along the River
- Strategic Parking Facilities

Area 10 should demonstrate links between landscape design and industrial heritage and connect to Tift Nature Preserve. Highlight grain elevators and consider adaptive reuses such as rock climbing and exhibit space. Lighting design could help reconnect area to surrounding spaces and bring attention to industrial heritage.

Bridges and “eyes on the river”: new bridges to link both sides of the River should be considered in Areas 6, 7 and 11. Points where views to the River would be advantageous include areas 4, 7 and 9.

Area 11 - Buffalo Color Peninsula - contaminated areas should be restored over time as natural habitat areas and passive recreation activities. An observation post should be considered as well as improved public access to the shoreline.

Area 12 should continue as industrial but landscape quality should be improved. Green South Park Avenue and link area to the greenway trail.

Areas 13 and 14 should continue as industrial with landscape improvements to improve aesthetics and provide links to shoreline and greenway trail. A new green streetscape for South Park Avenue should be a priority.

When asked to suggest an overarching theme or name for the South Buffalo Redevelopment Project, participants suggested:

- Improve Buffalo's Image
- Our Place by the Water
- A Place for Everyone
- Elevating Buffalo
- Building Bridges
- Connecting Humans, Technology and Nature
- Buffalo on the Move
- Bring Back the River
- Our Legacy Trail
- Concrete Atlantis
- Greening the River
- A River Reborn
- Our Renaissance River
- Project Beauty
- A Come Back River for a Come Back Town



Buffalo River
Source: Lynda Schneekloth

City of Chicago

Illinois, USA

FEBRUARY 3 & 4, 1999
WORKSHOP SUMMARY

Advancing Sustainable Industrial and Ecological Revitalization of the LAKE CALUMET AND WEST PULLMAN REGIONS

Local Partners

City of Chicago,
Richard M. Daley — Mayor
Department of Environment
Department of Planning and
Development
Illinois — Indiana Sea Grant
Chicago State University



The Waterfront Regeneration Trust extends its thanks
to the City of Chicago's Department of Environment
and Department of Planning and Development
for their assistance in the preparation of this
Workshop Summary.

Advancing Sustainable Industrial and Ecological Revitalization of the Lake Calumet and West Pullman Regions

Synopsis

Over the past several years, the City of Chicago has made significant progress in transforming derelict industrial sites into vibrant economic generators for the city. In the past 18 months, 120 sites have been redeveloped for industrial/commercial uses. Well-known brownfield projects include: the Roosevelt and Kostner Business Park that included illegally dumped rubble that has been cleared; 445 N. Sacramento that contains construction and demolition debris which is being crushed to produce concrete for infrastructure projects; and the Brownfield to Brightfields solar energy and brownfield redevelopment program that will bring clean and renewable power to brownfield sites.



Sacramento Crushing Site
Source: City of Chicago

As the City continues to grow and prosper, it seeks new land for development. With limited available land left in the city, the reuse of former industrial lands has been identified as a priority. Two regions to the south and east sides of Chicago, the Lake Calumet and West Pullman regions, are strategically located for re-investment. They offer opportunities for new business, natural regeneration, recreation, and neighbourhood improvements

The City hopes to assemble land for new businesses, improve local infrastructure and access and greenway linkages, enhance the aesthetic quality of residential areas, while preserving the natural assets of the areas which include wetlands and wildlife habitats. An Environmental Centre is also planned that would educate people on the natural and cultural heritage of Lake Calumet and West Pullman areas, and promote activities such as birding, hiking, biking and other opportunities.

This Workshop brought together a diverse group involved in regeneration initiatives, to focus on creating plans to redevelop the Lake Calumet and West Pullman regions. Day One provided an overview of the planning framework and objectives for the Lake Calumet and West Pullman areas as well as an excursion in both regions.

On Day Two of the Workshop, experts from Europe exchanged success stories and lessons they have learned in redeveloping brownfield sites. Michael Schwarze-Rodrian, Director of Planning at Kommunalverband Ruhrgebiet in Germany, described regional green space planning for the Emscher Landscape Park in the Ruhr Region, while Pablo Otaola, Director General, Bilbao Ria 2000 articulated strategies for the redevelopment of the waterfront in Bilbao, Spain. Sustainable strategies for regional economic and environmental transformation in the former East Germany were presented by Gerhard Seltmann, Director of Expo 2000 Sachsen-Anhalt GmbH in the State of Saxony-Anhalt. In addition, Evert Verhagen of Amsterdam summarized the history and successful strategies in transforming the Westergasfabriek, a former gas factory, into a new park and cultural centre.



Source: Kommunalverband Ruhrgebiet

Action Plan

A set of recommendations resulted from the Workshop that will be the basis of an action plan the City will develop for the Lake Calumet and West Pullman regions. The details are found In Appendix A (pages 112 to 116). They include suggestions for the following:

- designs that would improve the aesthetic quality of the areas and that incorporate and promote their natural and cultural heritage (e.g. thematic signs, industrial relics incorporated into the landscape);
- improving access and establishing links with neighbourhood parks and open spaces, schools, businesses and churches;
- a public education and outreach program (e.g. festivals and events); and
- an environmental centre whose design is integrated into the landscape and that interprets the local geography, as well as themes that relate to the natural environment, including the river.

Advancing Sustainable Industrial and Ecological Revitalization of the Lake Calumet and West Pullman Regions

Introduction

The restoration and reuse of former industrial areas is an important part of Chicago's planning and economic development strategy. Success depends on building on the cultural, natural and industrial heritage of the region, and on integrating issues related to economic development, land use and regional planning, public transportation, environmental restoration and park and open space planning.

In February, 1999, over 125 people gathered in Chicago to participate in a Workshop designed to exchange information among international leaders and to examine urban regeneration needs and opportunities in the city.

Workshop Objectives

The purpose of the Chicago Workshop was to gather together stakeholders of the Lake Calumet and West Pullman regions, and to create an implementation plan that would advance sustainable industrial and ecological revitalization of the region. It had been established that implementation would begin with 3 specific initiatives:

- Brownfields industrial revitalization in the West Pullman Region
- An environmental centre in the Lake Calumet Region — opportunities for ecological revitalization, and

- Greenway linkages in the Lake Calumet Region — open space connections that advance recreational opportunities.

The Workshop agenda included presentations from local project leaders, as well as from European guests who shared their experience in projects that have transformed former industrial sites into areas of business enterprise, cultural activity, open space and residential communities.

DAY ONE

Welcome

Opening remarks and welcome were given by William F. Abolt, Acting Commissioner of the Department of Environment, Joseph Zehnder, Deputy Commissioner for Chicago's Department of Planning and Development and William Muno, Director of Wastes, Pesticides and Toxics, Region 5, US EPA.

On behalf of Chicago Mayor Richard Daley, William Abolt extended a warm welcome to all participants, in particular to the European guests and Workshop sponsors.

In addressing Workshop participants, Mr. Abolt took the opportunity to emphasize that economic and environmental revitalization work hand in hand. Businesses come to the City of Chicago and stay

because of the economic opportunities that are available. This in turn, influences improvements to both the community and environment in and around the city.

He explained that the Workshop program for Day One would enable participants to learn about the opportunities in Chicago. In Day Two, participants will be asked to think about the redevelopment of brownfields in the area, specifically about the West Pullman district, the proposed environmental centre, and the Lake Calumet area.

After welcoming Workshop participants, Mr. Zehnder explained how the Planning Department's involvement in the Brownfields Exchange Program began with David Reynolds (Deputy Commissioner, Chicago Department of Environment) and his participation in the European tour of the International Exchange program and subsequent presentations and discussions with colleagues in the Planning Department.

Mr. Zehnder indicated that the Planning Department has a variety of major initiatives in the West Pullman and Lake Calumet areas to attract and retain industry and jobs, including demolition of obsolete buildings and new infrastructure and environmental remediation. He introduced other initiatives such as area redevelopment plans which are used to support retail and residential developments, and an open space planning program that will involve a strategy for environmental areas and greenways in the Lake Calumet areas.

On behalf of the US EPA, William Muno welcomed all participants to Chicago and thanked organizers for the opportunity to participate in the Workshop. He described how environmental contamination offers opportunities for reuse, how Superfund is a Federal

program to clean-up hazardous waste sites, and the role of the federal EPA. The EPA approach to brownfield redevelopment aims to foster collaboration among participants on the local level, build partnerships, leverage resources from other Federal agencies and provide seed money for the start-up of local programs. In addition, it acts as an information clearinghouse, sponsors national meetings and conferences and facilitates the exchange of success stories among more than 200 local pilots projects. EPA also tries to minimize the inadvertencies of subsidies that allow Brownfields to occur.

Carrie Austin, Alderman of the West Pullman ward and a Workshop participant, welcomed guests to the area and to the Chicago Celebrations Banquet Hall, which she explained is part of a former industrial district.

The Lake Calumet and West Pullman: Regions in Transition

David Reynolds, Deputy Commissioner, Chicago Department of Environment outlined the purpose of the Workshop and intended focus on the Lake Calumet and West Pullman regions. He explained how the south and east sides of Chicago are unique in that they include wetlands, industries and waste facilities and that they are areas in transition. The objective of the Chicago Workshop was to talk about how to guide the future of these areas in a sustainable manner that will provide new opportunities.

Brownfields Industrial Revitalization in the West Pullman Region

Mary Culler, Assistant Commissioner, Chicago Department of Planning and Development, stated that one of the primary goals of the Planning Department is to find sites for new businesses to locate. This is difficult at the moment because land has not been assembled. Fortunately, West Pullman, offers 65 hectares (160 acres) of developable land and many other opportunities such as attractive homes, and a convenient access to the highway. She continued by providing insight into the West Pullman Region, an area that has been vacant for years.

In the 1850's, West Pullman was the hub of activity, providing many jobs. But as the rail lines shifted, some industries moved away leaving vacant and contaminated properties.

The City's vision for the West Pullman Region includes creating a model urban business park. The park would be gated and secured with about 120,900 square metres (1.3 million square feet) of new space, and 3800 to 4800 new jobs. Investment in the area will bring various types of development and uses such as retail, restaurants, commercial with appropriate buffers between residential neighbourhoods. The area will be served by good transportation facilities and will incorporate creative green space designs.



West Pullman
Source: City of Chicago

West Pullman therefore, is being marketed to businesses through various initiatives. For example, as a Tax Increment Financing (TIF) district, West Pullman is assessed at a relatively low value. Once development begins, the City can capture revenue from taxes. Moreover, a federal loan of \$20 million from HUD is being used to clean the land, create roads and make other improvements.

Greenway Linkages — Open Space Connections that Advance Recreational Opportunities in the Lake Calumet Region

Patti Gallagher, Assistant Commissioner at Chicago's Department of Planning and Development, spoke of open space opportunities in the Lake Calumet region.

She explained how Chicago's open space development programs are guided by the Cityspace Plan which provides a framework for creating and preserving thousands of acres of open space throughout the city.

Lake Calumet with its large expanses of open space, offers a unique opportunity to create a modern industrial park that brings together the ecological character and natural assets of the area with an economic and development strategy. This area includes treasures such as Lake Calumet, Wolf Lake, Big Marsh, the Calumet River system, and numerous marshes, forests, and a variety of wildlife. It includes about the same amount of high quality wetlands and natural areas as it does land for industrial uses — over 1,214 hectares (3,000 acres) of land are zoned for manufacturing.

The City will prepare and implement a plan to balance the needs of both industry and nature. This will be done by:

- establishing design guidelines for industrial development
- determining the cost of implementing the guidelines
- developing a program of incentives for owners of industrial lands and facilities
- preparing a redevelopment plan along with a wetlands and natural areas land management strategy for non-industrial sites, and
- implementing three demonstration projects (private and public).

Ms. Gallagher introduced Ders Anderson, Greenway Planner for Openlands Project, who described the assets of Lake Calumet. Mr. Anderson listed receding beaches, dunes, sand ridges, large wetlands, and over 175 bird species as natural assets of the area. He also noted recreational opportunities such as potential greenway links, wind surfing opportunities and emphasized the need for immediate acquisition and development.

Environmental Centre – Opportunities for Ecological Revitalization in the Lake Calumet Region

Suzanne Malec, Deputy Commissioner, Chicago Department of Environment described some of the Department's environmental programs including: the Blue Bag recycling program; a public housing recycling program where recyclable goods are traded for grocery coupons; a clean air program that looks at alternate fuels; a shoreline reconstruction project to provide recreational access; and a Brownfields program that looks at creative ways for the clean-up and reuse of former industrial lands.

She provided some examples of Brownfield projects in Chicago. The Sacramento crushing site for example, is 7.3 hectares (18 acres) of land with a lot of construction debris. The City has recycled the debris and generated revenue (i.e. gravel was sold to construction projects that needed it). A second example is Verson Steel, an abandoned and derelict foundry. A third project described by Ms. Malec is one that is being undertaken with a local school to transform a vacant lot into a community garden and learning area.



Source: Waterfront Regeneration Trust

The Environmental Centre will provide a variety of educational programs to promote environmental stewardship. The City's Department of Environment is currently looking for a location for the Centre. Some options being investigated include a site on the Indian Ridge Marsh, a parcel of land set in an area appropriate to tell the story of the region (not only its natural heritage but also its industrial heritage). A second potential location is Hegewisch Marsh which offers opportunities for a canoe launch, kayaking, hiking and interpretation. An environmental fund has been established to help raise money for this project.

Questions and Discussion

Speakers were asked to describe the planning approach to the Lake Calumet area. Suzanne Malec indicated that the Lake Calumet Working Group has been established that will develop an overall plan for the area. She added that many analysis and studies of the region have already been completed.

Mary Culler was asked to describe how aggressive the City's efforts were in land assembly. She indicated that the Planning Department is using many tools, such as the tax reactivation program, which allows the City to acquire tax delinquent properties.

Ms. Culler was also asked if a guide was developed to help make decisions on which industries were better suited for the area. She replied that each development should be assessed on an individual basis, but that the overall goal was to have mixed development. She also explained how industrial areas would be integrated with surrounding neighbourhoods and that creative and attractive buffers would be designed and placed as appropriate.

The speakers were also asked to comment on developing consensus among all stakeholders. Mary Culler noted that the community has been excited and supportive of the ideas generated to date. But as development begins to occur the community may have more questions or concerns and may want to focus more on how developments will benefit them personally. Suzanne Malec added that with the Lake Calumet partnership, it has been agreed that consensus would be sought for larger planning issues only.

David Reynolds was asked how liability was being handled for polluted industrial lands. He indicated that if a viable owner exists, the City will send them notice to clean up their land. Should there be no viable landowner, the City will undertake clean-up.

Mary Culler was asked to describe tools for Tax Increment Financing (TIF) negotiation. She explained that TIF funding cannot be used for new construction, but can be used for site preparation and infrastructure improvements. When a new company proposes development, the City may have already completed some of the work that could be eligible for TIF expenses. TIF funding rarely exceeds 25% of a project's total cost. However, an array of loans are available for new construction.

The discussion was followed by lunch and a bus tour of the Lake Calumet and West Pullman areas.

DAY TWO

Welcome

Jennifer Muss, Project Manager for Brownfields in Mayor Daley's Office welcomed participants on behalf of the Mayor. She spoke about the importance of economic development to the City and how Brownfields redevelopment is important in revitalizing some city neighbourhoods.

Ms. Muss described how the Mayor has committed an extraordinary amount of resources toward removing impediments to brownfields and identifying sustainable brownfield development opportunities. This has resulted in 500 new jobs over the past six years, over 12,000 jobs that have been retained, and \$1.5 annually in tax revenues.

In concluding, Ms. Muss noted the opportunities presented by this Workshop to share and exchange ideas, and to develop creative plans for Lake Calumet and West Pullman for industrial and ecological revitalization which are important for sustainable development.

The European Experience: Sustainable Regional Economic Development Strategies

Experts from Europe spoke of projects that have contributed to sustainable development and described lessons learned from their experiences.

Regional Green Space Planning in Emscher Landscape Park

Michael Schwarze-Rodrian, Planning Director at the Kommunalverband Ruhrgebiet in the Ruhr Region of Germany, described the vision and the implementation process for creating the Emscher Landscape Park and outlined key lessons learned from this experience.

Like many cities in the Great Lakes Basin, the Ruhr district is a region in transition. It is well known for its old industrial sites, coal mines, gas holders and steel mills. It is also known for its green space, and cultural amenities. With an aim to beautify the Emscher region, 17 Emscher towns from Duisburg to Bergkamen came together with the Kommunalverband Ruhrgebiet



Emscher Landscape Park: A Regional Plan

Source: Kommunalverband Ruhrgebiet

(Association of Ruhr District Local Authorities) to work within the framework of the IBA Emscher Park on an ambitious project — the creation of an Emscher Landscape Park.

Creation of the Landscape Park is the main unifying theme of the Emscher Park Building Exhibition (for which planning began 10 years ago) and is intended to provide the central core of a new infrastructure for the region.

Revitalization of the region hinges on integrating ecological, economic and community issues and solutions. About 300 square kilometres (116 square miles) of land will be protected, regenerated and linked together by the creation of new recreational greenways and destinations. Mr. Schwarze-Rodrian explained that 7 working groups were formed with representatives of the cities and urban districts in the region, each with its own projects, and working towards the following shared goals:

1. Protect – keep the landscape that remains
2. Combine – link together isolated greenspaces within a larger regional network
3. Develop industrial landscapes to the park level – a high level of design quality can be achieved
4. Act regionally – work together to implement a regional plan and develop a shared timetable
5. Take responsibility – build local capacity to maintain public spaces and create meaningful employment.

By connecting isolated open spaces, restoring the landscape, and upgrading the ecological and aesthetic quality of the countryside, it is hoped that a lasting improvement of the living and working environment is achieved for the inhabitants of the region.

The Government of North-Rhine/Wesphalia has created the necessary financial basis for implementation of this plan over the next few years.



Steel Tetrahedron, Emscher Park

Source: Kommunalverband Ruhrgebiet

The new landscape of Emscher Park is being enhanced by artwork and special attractions. Stone sculptures and murals are integral components of the landscape. Special features such as the steel tetrahedron, not only add interest to the park, but also provide users with a new way of viewing the entire Emscher landscape.

The range of projects in the Emscher Landscape Park stretches from the development of large areas of derelict land right down to small-scale activities such as the planting of trees. Several park projects were highlighted.

The Duisburg-Nord Landscape Park is a project that preserves existing industrial heritage structures. The heart of the park is a former steel plant which is now a place of commemoration and of leisure activity including a signed industrial trail.

A second park project described by Mr. Schwarze-Rodrian is the Ecological Tree Garden, an arboretum which connects the landscape between two communities and improves the landscape quality. The State Ministry of Environment also provided funding for a pedestrian bridge that is an attractive addition to the arboretum that links communities on both sides of the Emscher River.

Mr. Schwarze-Rodrian further explained how a successful project also relies on public support and participation. Events organized on site have helped to explain the park vision to people and gain their support. These include events such as garden shows that attract hundreds of people and receives a lot of media coverage.

Events such as fairs and exhibitions are opportunities to communicate with the public and are useful in attracting a diversity of people and educating them about the landscape. For example, a barge was transformed for an exhibit that travelled from harbour to harbour in the Ruhr district. This type of unique event proved to be quite popular and successful in reaching out to the public.

And finally, Mr. Schwarze-Rodrian spoke of using existing infrastructure such as a heritage train, to not only bring various heritage groups together to work on a project, but also to connect places. A bike trail and foot path made of natural materials have also been developed within the park that connect open spaces and provide recreational opportunities for park users.

Bilbao's Waterfront Redevelopment Strategy

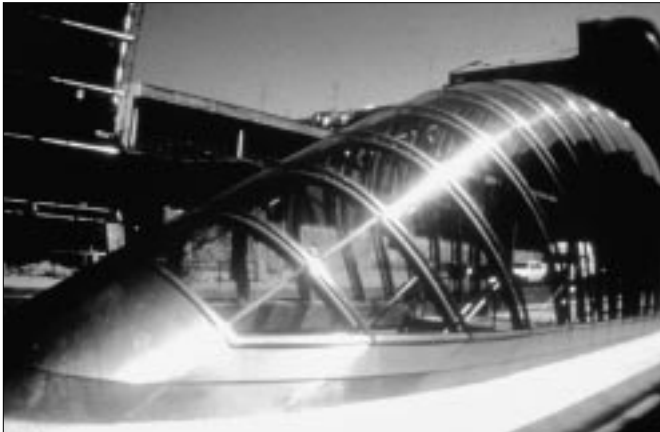
Situated in the Basque region of Spain, Bilbao was once the number one industrial centre of the country until the collapse of the steel industry and decline of shipping which occurred between 1970 and 1980. Mr. Pablo Otaola, Director General, Bilbao Ria 2000, spoke of the decline of Bilbao and the challenges faced not only in rebuilding its economy, but also in enhancing the environmental, cultural and aesthetic quality of the community.

Mr. Otaola began describing some of the challenges Bilbao faced in the 1980's - decline of heavy industries, a high unemployment rate (27 - 30%), a flood that destroyed the historic part of Bilbao, along with other environmental concerns such as water pollution and limited green space. The forces were such that Bilbao was compelled to either "change or die".

Given the size of the challenges Bilbao had to overcome, Bilbao Ria 2000 was established in 1992. Bilbao Ria coordinates the city's renaissance, and is funded fifty-fifty by the central Spanish and Basque regional authorities, with support from the European Union. The organization has no jurisdictional power but is powerful because its Board of Trustees includes local politicians.

Bilbao's revitalization process began at the end of the 1980's with a strategic plan that is currently being implemented. The plan describes challenges and recognizes opportunities, with a general concept to transform the city from an industrial to a service centre. It involves participation of the private and public sectors to work on six elements of the plan: communication, transportation, environment, education, social aspects, and culture.

Demonstration projects are viewed as a key part of the strategic plan. Mr. Otaola noted the importance of demonstration projects in illustrating the vision and goals of the strategic plan and to begin generating support and pride within the city. He described some of these projects, one of them being the new Metro which opened in November 1995, designed by Norman Foster. The Metro has substantially improved public transportation and provides a direct link between Bilbao and the towns and outlying residential areas on the right bank of the river. The architectural design quality was an important goal of the project.



The New Metro, Bilbao
Source: Waterfront Regeneration Trust

Mr. Otaola emphasized that “brownfields mean opportunity” and that it is important to seize that opportunity with specific projects to get things done. Bilbao Ria’s focus has been on design quality and new infrastructure needed for city building.

Several other infrastructure projects are underway. A major initiative of Bilbao Ria’s has been to build bridges. Historically, there were few bridges in the city because industries used ships and the river for transport; people couldn’t cross the river. The building of bridges such as the Euskalduna bridge, has improved traffic congestion, and attracted waterfront commercial and residential development.

A new airport and new port are also underway that will increase docking and warehouse facilities.

But most impressive was Mr. Otaola’s explanation of the success of the Guggenheim museum. In an effort to make the city a centre for the arts, a conference and performing arts centre was built as well as the Guggenheim Museum. During its first year of operation 1.5 million people visited the Museum a record for Spain. It generated \$200 million well in excess of the Museum’s capital cost of \$150 million.

The once small industrial town of Bilbao is now transforming into a prosperous tourist destination and commercial centre.

Sustainable Strategies for Regional Economic and Environmental Transformation in the Former East Germany

Hannover’s Expo 2000 is being used as a catalyst to accelerate the lasting ecological and economic renewal of the European industrial triangle of Bitterfeld-Dessau-Wittenberg (located in the German State of Saxony-Anhalt, approximately 100 km east of Berlin). Mr. Gerhard Seltmann presented the approaches being followed by Expo 2000 Sachsen-Anhalt Limited, a public corporation formed to co-ordinate projects that will draw World’s Fair visitors to this corresponding region. In effect, the Expo 2000 projects are creating “the region as an exhibit”.

The state of Saxony-Anhalt has a rich industrial heritage. The “Corresponding Region” is part of the Halle-Leipzig industrial region that, from 1900 to 1938, developed into one of the most developed industrial centres in Europe. The chemical industry thrived in this region thanks to plentiful supplies of coal, water and salt (on which the industry is based). The availability of vast quantities of “brown coal” also led to the development of power plants, many of which can still be seen today. The area also had the first aluminum plant, the first chlorine plant, and produced some of the world’s first colour film. This, coupled with the fact that the area was also home to the Bauhaus architectural movement, translates into a distinguished industrial heritage.

The region is undergoing a dramatic process of economic, social and environmental change. With the reunification of the two Germanys, virtually overnight traditional industrial markets and manufacturing processes broke down. The transformation from a planned economy, coupled with the privatization of large-scale public enterprises, led to high unemployment — from 0% unemployment in 1989 to 40% in the next year. The speed of transformation was unparalleled in Western Europe, and it left a totally obsolete industrial structure that operated under the standards and practices of the 1930's. Reunification also brought new laws, administration policies, planning and management structures that were to be addressed.

To help remedy this decline, the state government established a special organization called Expo 2000 Sachsen-Anhalt Corresponding Region. Its task is to use the inspiration of Expo 2000 as an impetus to accelerate the economic and ecological renewal of this former industrial region.



Johannbau — Dessau's Historic Palace
Source: Expo 2000 Sachsen-Anhalt GmbH

Expo 2000 Sachsen-Anhalt GmbH is currently implementing a 5 year program aimed at creating new jobs within the industrial triangle area of Sachsen-Anhalt, which includes the cities of Dessau, Bitterfeld and Wittenberg. About 35 projects are underway involving 100 different construction sites, 4000 people, and valued at about 1.6 billion Deutch Marks. The projects are split into four categories:

- economically oriented projects;
- urban planning projects;
- environmental and landscape development; and
- cultural projects.

Each project is defined by three guiding principles:

1. To create projects with a meaningful and long-term perspective, not just done for the sake of the world's fair. An idea of beauty and "aesthetic quality" is fundamental and will ensure the projects' longevity.
2. The development and realization of these projects are to be applicable to Saxony-Anhalt and other regions.
3. The projects should be informed by the experiences of other places. This ensures that the projects have the necessary scope and vision.

Mr. Seltmann emphasized the importance of creating physical and psychological bridges — of linking people and places. He described how the projects coordinated by Expo 2000 Sachsen-Anhalt GmbH are linked together through a core group with representatives of all participating organizations and citizens interested in reshaping their region — government officials, planners, farmers, priests, children, businesses.

Mr. Seltmann also emphasized the value of linking the present with the past and connecting people to their cultural and natural heritage. For example, the Bauhaus Buildings of Dessau should be maintained and a concept for their contemporary use created. The buildings were formerly a school of the arts that was closed down by the Nazis in 1933. Architects belonging to the school were forced to move away, with many moving to schools in North America.

Other examples of projects linking people to their heritage include: a new Church Trail, linking different churches, and offering people places to visit, to meditate and to discuss similar interests with one another; the “Expo Pfad”, an urban bicycle and footpath in the City of Dessau that links old and new elements — historical buildings, green spaces and points of interest in the City; and Ferropolis, a place for events and a walk-in museum illustrating the development of technology in the brown coal-mining industry.



Mining machinery at Ferropolis
Source: Expo 2000 Sachsen-Anhalt GmbH

Ferropolis, the “city of steel”, is an artistic monument and landmark in North Golpa including three excavators and two conveyors that bring to life a disused mining landscape in a desolate peninsula and are symbolic of the central German coal mining and energy district. The network of rail tracks, cables and machines will remain as remnants of an operation which meant the depletion of resources and loss of habitat, but on the other hand provided work and money for generations of miners. The terrain of the depleted North Golpa mines gives the impression of mountain ranges formed by time. The quarry is to be flooded, creating a lake which will be designated as a nature reserve. The quarry slopes, island and peninsula will be covered with grass and forests.

Another initiative is the development and marketing of a river boat; the boat is being built in a new production hall on the Elbe River. It is hoped that a prototype will soon be ready for distribution throughout Europe.

Mr. Seltmann continued by explaining how to work with the landscape to create and open views and to make them attractive. The “Goitsche” Project for example, in the former open-cast mining area of Bitterfeld, is being transformed into a waterfront community. Slopes that resulted from the mining are being stabilized and a lake created with river water. Art will be integrated into the landscape to create a special area, with a character different than any other brownfield in the country. Another example of creativity can be seen at the Martin-Luther Grammar School in Wittenberg where teachers and students have developed an idea to renovate their aging school to better suit their needs with Viennese artist Friedensreich Hundertwasser.

In closing, Mr. Seltmann encouraged the City of Chicago to design projects that preserve the past, that connect people and places, and that create attractive landscapes.

Westergasfabriek: A Park for the Future

The Westergasfabriek, built in 1883 by the British Imperial Continental Gas Association (ICGA) for the production and the sale of coal gas, includes unique buildings that are on the national monuments list. Once coal gas manufacturing ended in 1967, these buildings and associated landscape were abandoned. What remained were a number of difficult to use, but visually charming buildings on extremely polluted soil.

In 1992, the district council of Westerpark assumed ownership of the site and its structures, and made plans for the site.

As a first step, ideas for new uses for the abandoned buildings were developed. Since a permanent use for the buildings seemed difficult to secure, the Council



Techno Party in the Gasholder
Source: Westergasfabriek

thought of temporary uses which they hoped would help create further interest in the site. Mr. Verhagen listed some of these uses including:

- showing of the Holland Festival's new opera "Antigone"
- productions of the Amsterdam Theatrical Society
- theatrical performances by the Amsterdam Theatrical Society, De Trust, and Orkater
- large-scale events such as pop concerts, balls and demonstrations
- television programs
- performances of "Cavalleria Rusticana" and "I Pagliaci"
- West Pacific Café, an American type cafe and restaurant, and
- an annual fun fair.

Mr. Verhagen explained that the strength of the Westergasfabriek project lies in the fact that on going cultural activities take place. These interim activities have not only attracted public attention, but have helped to generate revenue and advance plans for the buildings.

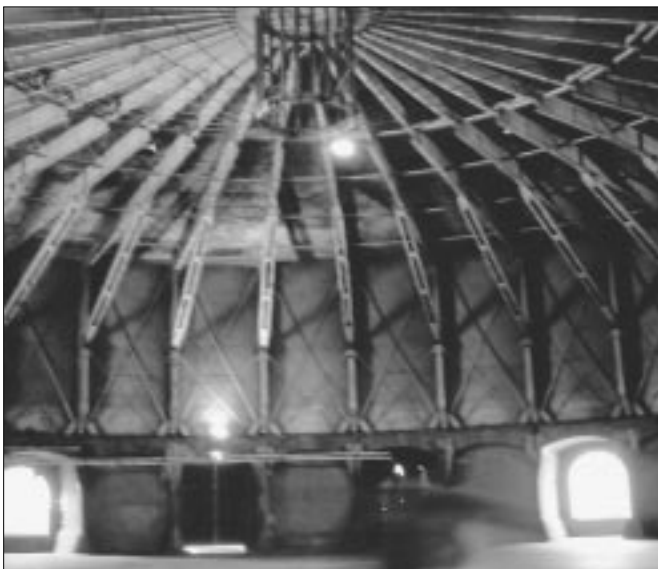
He continued by explaining how Council dealt with soil pollution on site which had seeped through the topsoil and is polluting the groundwater. It would have been impossible and expensive to clean up all the pollution. So, after years of negotiations with the Ministry of the Environment, it was agreed to isolate the contamination.

The Westergasfabriek site is adjacent to Westerpark (about a hundred years old), and is surrounded by residential neighbourhoods. Plans have been designed by American landscape architect Kathryn Gustafson, to link the park elements of the Westergasfabriek to the existing greenspace. It will be a park that recalls

historic and modern times, and will include exhibition grounds, space of live performances, and a variety of other mixed uses. The new park and the buildings with their cultural functions will be integrated with one another and will compliment each other, bringing life to the area.

In concluding, Mr. Verhagen explained how plans to reuse the gas factory will not only give the historic buildings and other structures on the site a new, dynamic use, but also will make it possible to promote and preserve the surrounding landscape, help establish a new park, and bring new infrastructure to ensure that the area is accessible and usable by all.

His final thoughts and messages relayed were that change, innovation, and flexibility are the key words in redeveloping a site. With Westergasfabriek, although certain goals have been set, there is no final target. It is the direction that the project takes that is important, not the final destination. As Mr. Verhagen stated, “The project has all the qualities of a road movie in the best American tradition. The point is not to arrive, but to be on the road, going somewhere”.



Gasholder

Source: Westergasfabriek

Workgroup Sessions

Three workgroups were formed to share ideas and develop implementation plans for the Lake Calumet and West Pullman Regions that will assist with economic and environmental revitalization. These groups are as follows:

1. West Pullman Brownfields Revitalization Workgroup
2. Lake Calumet Greenway Linkages Workgroup
3. Lake Calumet Environmental Centre Workgroup.

(For detailed descriptions of workgroup recommendations see Appendix A).

West Pullman Brownfields Revitalization Workgroup

As part of the City of Chicago’s Brownfields Redevelopment Program, redevelopment objectives for the West Pullman Business Park are to improve the public way infrastructure; acquire and clear obsolete and dilapidated structures; and remediate and prepare land for industrial redevelopment.

The group was asked to think of ways of designing a special environment for the future business park that would compliment the surrounding community and maximize creative and quality design. Specifically they were asked to consider gateway designs and structures, open spaces and linkages. They recommended the following:

- gateway designs that incorporate historic relics and allow for exhibitions that recall the past and link it to the future. For example a Pullman Palace Railroad Car could be incorporated into the landscape;

- open spaces that provide recreational opportunities such as fitness stations, open lunch areas for nearby workers, and an ecological component with wetlands and interpretive features; and
- links with the surrounding community and nearby businesses. Area businesses for example and parents and students of the local school should be involved in the redevelopment process. The surrounding neighbourhood should be linked to open spaces and also have the necessary barriers between homes and new industries.

Lake Calumet Greenway Linkages Workgroup

The Lake Calumet area contains over 1,214 hectares (3,000 acres) of developable land as well as 1,214 hectares (3,000 acres) adjacent wetlands and natural areas. The challenge facing the City is to stimulate development yet preserve the unique cultural and natural resources in the Lake Calumet area (i.e. waterways, trails, wetlands, marshes, prairies and endangered bird species). The focus of this workgroup was on developing greenway linkages and incorporating the local industrial heritage in the area.

This workgroup identified public outreach and accessibility as the two main items to be addressed in planning greenways for Lake Calumet. Many people are

not aware of the natural assets of the area, and there are others who have heard about these assets but barriers such as fences and lack of parking reduce accessibility. Specific recommendations include the following:

- establish links with natural areas and parks in the neighbourhood, local high schools and colleges, cultural and historic sites (e.g. churches, recreational hubs, the Memorial Day Massacre Monument), industrial sites and existing transportation infrastructure.
- integrate greenways into the existing landscape through the use of interpretive signage and thematic maps or brochures as well as industrial relics that can serve as public sculptures.
- implement projects such as murals and lighting, and organize events such as clean-up days and festivals, that will begin to involve the local neighbourhood and general public in revitalizing the Lake Calumet area.

Priority actions identified include integrating existing greenway plans and creating a common vision, undertaking an inventory of amenities, creating a hierarchical green space system, developing partnerships, and recording oral histories of the area.

Lake Calumet Area Environmental Centre Workgroup

An Environmental Centre would provide accessible open space and outdoor educational programming for the south side of Chicago. Landscape rehabilitation is also envisioned for the site which would involve wetland, woodland, prairie and river edge naturalization. The focus of this workgroup was on addressing programming for the centre, the building design as well as ecological features that should be highlighted on site.

The group suggested that programming for the centre should include a range of experiences and should be interactive, with exhibits and classroom space, and inclusive — suited for individuals of various cultures and ages. The centre should be seen as a “destination” in itself, and as a place that the community feels is its own.

Four themes were identified to be interpreted, the first relating to the geography of the land and its topographical features. The second theme relates to wetlands and the river and their importance as recreational and educational resources. The third theme is pollution and its sources, and the last theme is historical changes to the landscape.

Recommendations for the architecture and site design for the centre were also made. Not only should the building reflect the historical character of the area, but also should incorporate recycled, energy efficient and environmentally friendly components and be linked to public transit and bicycle routes. In addition, the new building design should be consistent with the surrounding landscape.



Source: Waterfront Regeneration Trust

Appendix A

Workgroup Sessions Results & Recommendations

West Pullman Workgroup

I. Gateway design for the industrial campus (To be located at both ends of 119th Street; one at I-57 and one at Halsted St.)

- A. Incorporate industrial relics from West Pullman industries.
- B. Obtain a Pullman Palace Railroad Car for the gateway.
- C. Create interpretive exhibits which instill a pride in the past, pride in manufacturing, and pride in living and working in the neighborhood.
- D. Emphasize theme of linking historic past with a promising future.
- E. Incorporate community input into design and maintenance of the gateway.
- F. Design the streetscape along the length of 119th Street with a unified theme.

II. Potential for open space in the redeveloped site

- A. Stormwater retention area with created wetlands and wet/dry prairie.
- B. Outdoor lunch area for workers.
- C. Park space with running track and fitness stations.
- D. Park district field house with showers and bicycle parking.
- E. Dog obedience school and dog path on small parcel of land.
- F. Interpretive ecological area north of the Metra Station on Racine Ave.

III. Other issues

- A. Linking industrial park redevelopment with nearby commercial strip redevelopment:
 - potential for a small business incubator
 - utilizing area businesses for the redevelopment process.
- B. Linking students and parents from White School with the on-going redevelopment:
 - environmental education opportunities
 - history lessons
 - landscape design instruction.
- C. Challenges in integrating the industrial park into the nearby residential neighborhood:
 - desire to keep the open spaces accessible
 - create necessary security barriers for businesses without fencing the entire site
 - segregating heavy trucking routes from residential streets
 - design that instills community pride in the industrial campus (not alienates).
- D. Rework Metra ICG Blue Island Branch schedule to make transit a viable option.
- E. Support Ingersoll and encourage their expansion.
- F. Desire for light industry with living wage jobs rather than warehouses.

Regional Greenways Workgroup

I. Barriers to Successful Greenways

The best locations for birding, fishing, canoeing, biking, and windsurfing in the Lake Calumet area are known only to “insiders”. Most people, including residents of the southeast side of Chicago, are unaware of these possibilities. Others who have heard about these assets might have a hard time finding the exact locations. Interpretive signage is practically non-existent and thematic maps are not widely available. In order to create greenways linkages throughout the Calumet region, greater emphasis must be placed on publicity and accessibility.

Types of Fragmentation:

- road traffic crossing pedestrian paths
- fences blocking access to the Calumet River, Lake Calumet, Deadstick Pond, etc.
- lack of parking and restroom facilities.

II. Places to Improve Linkages

A. Natural Areas and Neighborhood Parks

1. Chicago Park District:
 - Calumet Park
 - Mann Park
2. Cook County Forest Preserves:
 - Eggers Woods
 - Powderhorn Lake and Prairie
 - Beaubien Woods
3. Illinois Department of Natural Resources:
 - Wolf Lake Conservation Area

4. Other Natural Areas (privately owned):

- Indian Ridge Marsh
- Big Marsh
- Hegewisch Marsh
- Hyde Lake Wetlands / Indian Creek

B. Institutions

1. Colleges:

- Olive Harvey
- Chicago State University

2. High Schools:

- Washington H.S.
- Carver H.S.
- St. Martin de Porres Academy

3. Churches:

- St. Michael Archangel
- Immanuel Lutheran
- Immaculate Conception
- St. Simeon Mirotocivi Serbian Orthodox
- Agudath Achim Synagogue

C. Recreational Hubs:

- Makeshift fishing spots and canoe launches (where roads dead-end into the river)
- Birdwatching sites
- Golf courses (Harbourside International)

D. Cultural and Historic Sites:

- Pullman Historical District
- Andreas von Zirngibl grave site
- State Line Boundary Marker
- Memorial Day Massacre monument (Local 1033 Union Hall parking lot)

E. Industrial Sites:

- Acme Steel (panoramic views from Big Marsh)
- Ford Motor company
- Relict Grain Silos (i.e. Cargill, Continental Grain, Illinois International Port Authority)

F. Transportation Infrastructure:

- Rail road bridges (i.e. Iroquois Landing, 97th Ave./River, Torrence Ave. / River)
- Acme Steel coal conveyor bridge (111th St. & Calumet River)
- Deep Draft Shipping Terminals (i.e. KCBX)
- Turning Basins

III. Assimilation of Greenways into “Native” Landscape

A. Use industrial theme for trail signs:

- Consistent logo and graphics
- Brochures describing industrial processes

B. Utilize fragments of industrial machinery as public sculpture (example: Finkl Steel Mill landscaping on the North Side of Chicago)

IV. Model Projects:

- A. Murals to capture historical character
- B. Lighting of bridges, silos, and other large structures
- C. Interpretive signage to interpret what’s being seen in industrial areas
- D. Coordinate river clean-up days with Friends of the Chicago River
- E. Connect bicycle paths with Metra and South Shore commuter lines

F. Metropolitan Water Reclamation District tours:

- Sidestream Elevated Pool Aeration facility
- Sewage Treatment/Sludge Drying facilities
- Deep Tunnel project
- Wetland mitigation sites

G. Landfill reuse as a mountain bike course, model airplane range

H. Picnic area on top of an unused barge

I. Large public festivals (i.e. concerts, Wind Surfing competition at Wolf Lake)

VII. Priorities:

- A. Integration/articulation of existing plans and vision
- B. Codify amenities (industrial, ecological, recreational)
- C. Create Hierarchical Green Space System
- D. Partnering/Build Strategic/Alliances
- E. Record oral histories of local residents
- F. Tailor activities to all ages and cultures
- G. Create Riverfront Ordinance for the Calumet River that mandates public access points

VII. Difficulties

- A. How can one incorporate disparate uses (commercial shipping, motorized boating, canoeing) in a single waterway?
- B. How can privately owned lands be made available for recreational activity or green space? Must a site be acquired to gain access?
- C. The Calumet waterways have a long history of exclusive industrial and commercial activity. How can this resource be broadened into other uses?

- D. Riverfront ordinances do not apply until new development occurs. How can we create change on vacant land that has no proposed redevelopment?
- E. How do public agencies deal with liability when creating public access to commercial waterways?
- F. There are no east-west routes connecting the Calumet area from 103rd Street on the north to 130th Street on the south. Can bicycle and pedestrian access be made across the spits that traverse the Lake?

Lake Calumet Area Environmental Centre Workgroup

I. Education/Programming Principles:

- A. Community involvement in the planning and implementation of programming:
 - Programming that suits a multi-cultural, intergenerational constituency
 - Programming that provides a range of environmental experiences
 - Programming that introduces urban residents to issues of sustainability
 - Success requires effective publicity and media outreach
- B. Exhibits and classroom space:
 - Multisensory/Interactive exhibits that appeal to the Arts/ Culture/Emotions
 - Permanent and temporary exhibits
 - Volunteer docent opportunities
- C. Bioremediation:
 - Utilizing ongoing clean-up efforts as an educational tool
 - Utilizing the site as a living laboratory for innovative remediation technologies

D. Cultural Ecology:

- Interactions between human and natural communities
- Historical interpretation of man's interactions with the environment

E. "Destination":

- Designing the building to accommodate accessible, appealing space
- Fostering image of the Environmental Centre as a community owned resource
- Cultivating programming and events which attract new and repeat visitors

F. Environmental Centre as a base for tours of other Calumet area sites

- O'Brien Lock & Dam
- Sidestream Elevated Pool Aeration (SEPA) station
- Blue Bag Recycling facility
- Torrence Avenue Deep Tunnel
- Ford Motor Company, ACME Steel, or any other participating industry

II. Landscape Assets/Themes

A. Geographical Interpretation:

- "What Is Indian Ridge?"
- Highlight remnant natural features (i.e. original Lake Calumet shoreline, Glacial Lake Chicago sand ridges)
- Emphasize regional concepts that connect all of the natural areas

B. Wetlands/River:

- Importance of hydrological connections among scattered wetlands
- Importance as a regional resource for recreation (i.e. canoeing, fishing)
- Importance as a regional resource for education (i.e. birdwatching)

C. Pollution:

- What are the historical sources (i.e. slag, waste disposal, etc.)?
- What are modern day sources?
- What is the fate of pollution?

D. Historical Changes to Landscape

- Continuous alterations to Lake Calumet until reaching its current shape
- Consolidation of smaller streams into a single Calumet River
- Aerial photographs which show the continuous loss of wetlands and growth of landfills

III. Building and Site Design

A. Reflect historical elements in the building architecture:

- Emphasize industrial character by utilizing fragments of old machinery
- Evoke Native American designs

B. Provide excellent viewing areas throughout the site:

- Utilize large windows, skylights, and roof top decks
- Consider elevated platforms for better viewing of wildlife and surrounding region

C. Utilize “Green” architecture:

- Sustainable harvested or recycled building materials
- Energy efficient utilities
- Experimental solar panels, passive heating and cooling, stormwater management

D. Eliminate indoor/outdoor “boundaries”:

- Bring plant life into the building
- Develop roof-top gardening as a model for buildings throughout Chicago
- Allow light and sounds to enter

E. Unobtrusive site design:

- Blend building in with the surrounding nature
- Hidden parking areas
- Disguise utilities (sewer manholes, natural gas pipeline, etc.)
- Naturalize trails, roads and other built features
- Utilize native stone (i.e. limestone)
- Evoke Chicago’s famous landscape architects (e.g. Olmsted, Jensen, etc.)

F. Alternative transportation to site:

- Extend Torrence Avenue bus to the Environmental Centre
- Design bus stop architecture to reflect the Centre
- Integrate planned bicycle trails with the Centre

Appendix B

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Greater Toronto Region

Ontario, Canada

MARCH 30 - 31, 1999
WORKSHOP SUMMARY

Turning Brown into Green and Gold: AN AGENDA FOR ACTION

Local Partners

AIG Environmental
CIBC
Davies Associates
Environment Canada
Urban Development Institute
TEDCO
The BoatHouse Bar &
Grill/Café Deli
Waterfront Regeneration Trust



The Waterfront Regeneration Trust extends its thanks
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TURNING BROWN INTO GREEN AND GOLD: An Agenda for Action

SYNOPSIS

Like many urban areas in the Great Lakes Basin, the Greater Toronto Area is experiencing extraordinary change as human migration, technological innovation, ecological imperatives and new global perspectives are combining to significantly change our lives. New values, different government structures and new boundaries and borders are emerging, as well as a new awareness of international influence and status.

In the midst of this change there is a renewed interest and concern for the heart of our town and cities – in many cases this means turning our attention to former industrial lands strategically located but no longer utilized for the transportation, petroleum, steel and energy related industries that formed our earliest settlements and created opportunities for innovation, prosperity and security.

The agenda for this Workshop emerged out of discussions between the Waterfront Regeneration Trust, developers and landowners, lenders, local municipalities, Environment Canada, and the Ontario Ministry of Municipal Affairs and Housing. Recognizing that about two years have passed since the Ministry of Environment published the *Guideline for Use at Contaminated Sites in Ontario*, and that many municipalities are considering how best to foster redevelopment of former industrial and derelict lands, it was agreed that it would be timely to bring together a diverse group of practitioner to examine what works in Ontario and what specific actions might be needed to spark investment in Ontario's brownfields.

Perspectives from policy experts, senior representatives from the financial services sector, and project leaders from the public and private sectors in Canada, the United States and Europe combined to provide participants with a comprehensive picture of common elements and conditions that help attract investment in brownfields. In addition, the presentations and small group discussions resulted in definition of the main obstacles to reinvestment in brownfields, as well as a short list of actions that need to be taken by governments, the financial services sector, landowners, and investors to further spark investment in Ontario's brownfields.

Obstacles to Brownfield Redevelopment in Ontario

- An unclear, complex planning process
- Uncertain costs and time associated with site assessment, site restoration and approvals
- Inconsistent property taxes across the region making suburban greenfields more attractive than urban brownfields
- Stigma associated with brownfields – due to lack of education and communication
- Lack of expertise at the municipal level creates more uncertainty for developers
- Legislation that restricts municipalities’ ability to offer financial incentives where appropriate
- Legislation that creates a broad and uncertain spectrum of liability
- Weak market conditions for certain uses in specific locations
- Lack of financing



Tanks in the Port Lands

Source: *Royal Commission on the Future of the Toronto Waterfront*

Conditions and Approaches that Work

- A strong vision for land use and site design that is supported by all stakeholders
- Effective community participation and communication at an early stage in the project
- Working partnerships to build consensus, clarify roles and responsibilities, streamline approvals, and secure financing
- Access to information early in the project and on an ongoing basis
- Historical land use inventories to help identify potential brownfield sites
- Use of site specific risk assessment to integrate land use and site design with soil and groundwater management
- Mixed-use developments that include meaningful public benefits (e.g. new multifunctional green space, heritage interpretation, and other amenities connected to the surrounding community)
- Streamlined, “one-window” approach to municipal information and approvals
- Rigorous technical assessment and peer review of remedial work plans
- Insurance products that manage residual liability over time
- Financial incentives in cases where market conditions are weak – e.g. waived fees and development charges, tax forgiveness, etc.
- Administrative agreements (such as memoranda of understanding) to define roles and responsibilities for environmental monitoring and maintenance

An Action Plan to Spark Investment

AMEND LEGISLATION

- The Province should focus its efforts to review and amend the Planning Act and the Environmental Protection Act in order to provide more certainty and clarity. Amendments to the Planning Act should provide municipalities with the necessary powers to foster brownfield redevelopment. Amendments to the Environmental Protection Act should clarify and codify environmental liability and should seek consistency with other jurisdictions in Canada

AN INTEGRATED PLANNING PROCESS

- Consistent with amendments to provincial legislation, Ontario municipalities should continue to collaborate together and with the Ministry of Municipal Affairs and Housing to develop and promulgate a new approach to planning and development approval that integrates environmental concerns, planning requirements, and performance-based outcomes.
- The province should consult with local municipalities, the Regional Planning Commissioners of Ontario, and other relevant associations such as the Urban Development Institute and the Canadian Urban Institute, to determine training needs and make provisions for local training as needed.

COMMUNICATION

- Better communication of case studies is needed, with attention given to lesson learned and reasons for success. Municipalities, the Province, associations, and local groups could all assist with this, although credible assessment of case studies is important.
- Better education about the real and perceived risks, opportunities and design features of projects is needed. Governments at all levels could play a helpful role in this regard.
- Access to credible information concerning available sites is needed. Municipalities were seen by some participants as best placed to carry out this role in the near term.



Outer Harbour Marina

Source: Sarah Kalf, *Royal Commission on the Future of the Toronto Waterfront*

Turning Brown into Green and Gold: An Agenda for Action

Introduction

As the fifth in a series of International Brownfield Exchange Workshops, the Toronto Workshop, *Turning Brown into Green and Gold: An Agenda for Action*, was an opportunity to develop, test and communicate best practices for sustainable brownfield restoration and redevelopment. Case studies from Ontario and Europe provided a context for participants to identify tools and approaches that work as well as specific actions needed to spark brownfield redevelopment

DAY ONE Opening Remarks

Mr. David Crombie, Chair of the Waterfront Regeneration Trust welcomed Workshop participants and recalled the last Toronto brownfields Workshop held April, 1998, which focused on initiating “a different conversation” about brownfield redevelopment that highlighted the need and approaches to better integrate economic, ecological and community issues into decision-making. He noted that this Workshop concentrated on practical next steps needed to spark reinvestment.

Mr. John Mills, Regional Director General, Environment Canada, noted that we have come a long way in one year since the April 1998 Workshop. No longer are we just talking about brownfields but taking action to redevelop them. He noted that the Workshop would provide participants an opportunity to exchange experience on how best to use existing municipal tools to implement brownfield redevelopment, and how to address risk management issues and liability.

Mr. Mills recognized that the perception around brownfield redevelopment is changing. The change in perception reflects a better understanding of the two fundamental principles of the ecosystem approach, that is, that everything is connected to everything else, and that human beings are part of the ecosystem, not separate from it. In closing, Mr. Mills encouraged Workshop participants to act upon opportunities to keep the brownfield redevelopment agenda moving forward, and to take advantage of the network of brownfield practitioners attending the Workshop.

Mr. Michael Fenn, Deputy Minister, Ministry of Municipal Affairs and Housing described brownfields like a game of rugby: “...you don’t want to be the last one with the ball, otherwise your team members will be all over you.” He noted that brownfields are particularly important to municipalities since a number of them have abandoned or underutilized sites, and because redeveloping these lands, which are in most cases close to the core, is a catalyst for other investment. The benefits for brownfield redevelopment are clear, so what is it that’s standing in the way?

Issues such as liability, costs of clean-up, and the approvals process were identified by Mr. Fenn as current barriers to brownfield redevelopment. He shared with Workshop participants his experience in Region of Hamilton-Wentworth where a lot of effort was put into redeveloping a brownfield site which is now known as Pier 4 Park at the entrance of Cootes Paradise, a natural area in Hamilton. The Pier 4 Park project demonstrated the need for a multi-disciplinary approach and strong partnerships.

He concluded by saying that brownfields can have big impacts on the environmental and fiscal health of our communities. The challenge is focusing attention on the right tools to place brownfields on a “level playing field” with greenfields for investment.

International Urban Regeneration Strategies and Local Action

Regional Redevelopment Strategies in Europe

Gerhard Seltmann, Director of Expo 2000, Sachsen-Anhalt Ltd., noted that 7 years ago he was in Toronto for the first time, speaking at a Workshop organized by the Waterfront Regeneration Trust. He observed that since that time, significant progress has been made in brownfield redevelopment and that this progress provides a new platform for debate and evaluation. He presented an overview of European examples of revitalization and highlighted the challenges and approaches that European and North American initiatives have in common.

LESSONS LEARNED

- A comprehensive, inclusive planning process articulates vision and builds consensus,
- Plan and design at the right scale to connect people, places and opportunity
- Reuse of heritage structures should be priority,
- Incorporate art in the landscape,
- Design places for people to meet and rediscover natural and cultural heritage,
- Provide information and involve those who have a stake in the outcome, and
- celebrate success.

Many European cities are faced with a combination of post-industrial and active chemical and manufacturing facilities. Most want new industrial investment as well as new uses, but they need to think of ways to landscape former mining areas, create new jobs, and they need to change the image of brownfields.

Mr. Seltmann continued by describing the European experience in brownfield redevelopment.

To begin, a comprehensive planning process should be initiated and a master plan developed. This was done for example, in Calgary, Italy, for a brownfield site located in the centre of the city. The planning process is important because it assists in making decisions more efficiently and also helps build consensus. Detailed planning should follow the master plan. He also emphasized that the master plan should articulate a vision of shared expectation.

Mr. Seltmann explained that planning and investment takes time as it did in Oberhausen Germany where a former gasholder was transformed into an exhibition hall. He described other brownfield projects within Europe including the former stone coal mine worker settlements of the Ruhr Area that were refurbished to accommodate a new settlement. Bilbao's former railway area has been cleaned-up and a new station of high quality design was built. The Guggenheim Museum, also in Bilbao, has brought significant economic value to a former brownfield site and brought international attention to the City. The museum, which opened in 1998, has brought increased tourism and dollars to Bilbao. Its high quality design (by American architect Frank Gehry) is a component that should be considered for any brownfield project. In Naples, Italy, a former steel production area has been transformed to accommodate the Neapolis Festival.



The Guggenheim Museum
Source: Waterfront Regeneration Trust

Mr. Seltmann noted that the preservation of heritage buildings has played an important role in attracting investment. Heritage structures not only add to the aesthetic quality of former industrial sites, but can help recall a community's cultural heritage. The efforts to refurbish the Bauhaus buildings in Dessau is a good example of linking the design and cultural reputation of a city with new redevelopment strategies.

It is also important to integrate the new with the old. In planning for green corridors for Emscher Park for example, planners have had to incorporate existing fences that were found on some parts of the landscape. New public structures and artwork add interest and new value.

Mr. Seltmann continued by saying that it is also essential to create opportunities for people to discover new qualities and to experience their community in new ways. For example, a former waterholder in Bitterfeld, Germany, has been illuminated to attract visitors and explain the story of water in the region. Another

example is a former ore bunker near Duisburg that has been transformed into a training centre for climbers.

Information should be distributed not only to decision makers, but also to the general public. In Saxony-Anhalt, mobile information centres have been created from former worker carriages, providing information to a wide audience. Another way to educate and engage the public is through the use of symbols. These can be as simple as a stone marker, painted in blue to inform people of where a future lake will be created or as the steel pyramid in the Ruhr Area that has become a regional icon. Another type of structural symbol is one that represents change, such as the elementary school in Wittenberg where the students and teachers worked with the Austrian artist Hundertwasser to redesign the prefabricated school to better reflect their priorities and vision.



The Hundertwasser School, Wittenberg
Source: Expo 2000 Sachsen-Anhalt GmbH

The result is a reflection of the modern pedagogical concept of art, the environment and international education. Over 4,000 limited edition art prints of the new design have been sold. The proceeds will support the school.

To conclude, Mr. Seltmann noted that what we're all engaged in creating sustainable development initiatives that integrate ecological, economic and cultural factors for ourselves and future generations. "Patience, vision and perseverance can be our greatest challenge."

QUESTIONS & DISCUSSION

1. In Ontario, we have problems keeping hospitals open and balancing budgets. How are projects in Europe are funded? Mr. Seltmann indicated that Europe also has the same problems, but the main decision that is needed is where to invest. The Germany investment to date in redevelopment is generally 60% from public sources and 40% from private sources.
2. What is the reason for establishing Expo 2000 Ltd. as a private company owned by the government? Mr. Seltmann indicated that Expo 2000 Ltd. has a specific mandate and will exist for a limited time only – likely until the end of 2000. With a private company at arm's length to government, the structure of the organization allows for the flexibility needed to manage a complex array of projects and to involve the public in decision making.
3. Liability and land ownership were two issues raised by a Workshop participant. Mr. Seltmann noted that in Germany, like other European states, there are brownfield sites owned by the state while others are owned by the private sector. Liability becomes more concrete when it is related to a particular site. That is, it is necessary to know who will be doing what on which part of the area and what type of contamination exists. When there is more demand for developable land, it is easier to have the private sector clean-up brownfield sites because it will not be difficult to re-sell the land. When there are no development pressures, the market conditions are weak and the public sector must step in if there is a demonstrated public interest.

4. Mr. Seltmann was asked to elaborate on how communities were involved in the visioning process and what made the public process successful. His reply was that in Germany, people want to know how they can be involved in the redevelopment of their communities. Former industrial workers and other citizens typically come forth with their ideas for redevelopment, and the question of health and environmental risks is only one question of many they ask.

Local communities made project proposals for recognition as Expo 2000 initiatives. It was the task of Expo 2000 Ltd. to evaluate and select projects that met the specified design and functional criteria.

EPA BROWNFIELDS PROGRAM

Karl Alvarez of the US EPA provided a brief overview of the work of the EPA in supporting brownfield redevelopment. Key to the work of the EPA is partnerships with other government offices and the private sector. Mr. Alvarez noted that \$58 million of public funding has helped leverage \$1 US billion in private investment and about 2,000 jobs over the past 3 years. He indicated that in some cases, the problem with brownfields has been with clean-up costs. To assist with clean-up, tax breaks and revolving loan funds have been made available to municipalities.

To find out more contact the EPA web site at www.epa.gov

From Foundry to New Community: Governor's Road, Dundas, Ontario

Richard Leibtag, President of Urban Horse Developments, described his experience in redeveloping a large industrial plot of land in the heart of Dundas.

This industrial site, formerly known as the Bertram Foundry, was the centre of heavy commerce during the war years. Today, it is surrounded by residences, a vibrant downtown, and natural features such as the Niagara Escarpment and Spencer Creek. Mr. Leibtag's vision was to create mixed residential buildings and hiking trails from the unused track of land and boarded-up buildings. Mr. Leibtag continued by explaining some of the hurdles he encountered in the redevelopment of the Bertram Foundry particularly with funding, planning approvals, clean-up and community support.

Financing is a key issue but not the most important factor involved in redevelopment. The most important aspect is to be able to establish partnerships with the local council, local authorities, and all the decision makers involved in development. Environmental, planning and architectural consultants can help establish these relationships and trust required in the development process.

It was difficult for the project to acquire development charge credits, demolition credits or tax credits. What was needed was new thinking – new approaches – to overcome the obstacles.

Mr. Leibtag suggested that the Province should take a more forward and progressive role in redevelopment, and work with municipalities to establish planning tools that would compliment the existing clean-up guidelines. These tools could include tax increment financing, no-fee zones and grants.

QUESTIONS

1. Did the site have any contamination? The previous owners were good neighbours, but because of poor quality fill, soil pollution did exist.
2. How would you want the Province to assist? The Province should assist with overcoming the financial burdens, especially through tax increment financing.
3. How were the planning approvals handled? An OP Amendment and rezoning were needed. Urban Horse Development also held open houses to answer community questions and concerns and to help avoid an OMB hearing. Also to avoid time delays, construction equipment was on site ready to go and to let people know that Mr. Leibtag was serious.
4. How was liability dealt with? Mr. Leibtag indicated that he carried the full responsibility for environmental costs.
5. What is a demolition credit? A demolition credit is a levy on what is to be built. A developer can build up to the density that was previously on site without any charges because the infrastructure is already there.
6. What community services (e.g. schools) were accommodated? In Dundas, an essential community service is seniors' services. The development site has a seniors' club and other such amenities.
7. Were any of the old buildings maintained? Urban Horse Developments tried to use one of the old buildings, but it proved to be structurally unsound.

8. Where there any regulatory difficulties? The main difficulties were getting things written down on paper. To overcome this, Richard Leibtag worked sensitively and closely with the Planning Department.
9. What is the parklands component of the development? There will be open green spaces that lead to Cootes Paradise. Open and linear space along Spencer Creek will be deeded to the municipality for trail use.

Toronto's New Waterfront

Susan Richardson, Director of Special Projects at the City of Toronto's Parks and Recreation Department, and Tom Albani, Project Manager at Metrus Development Inc., described current redevelopment initiatives on the Toronto waterfront.

Ms. Richardson began by explaining how the City's brownfields projects have been successful with working partnerships, information exchange, and peer review. She noted that environmental concerns are only one of many components in typical redevelopment projects. With the Woodbine Park project, the Parks Department wanted to demonstrate how to deal with brownfield issues, restore the site, and use opportunities to educate people on ecological functions in an urban setting.

The Woodbine Park redevelopment site occupies approximately 90 acres (36.5 hectares) of the former Greenwood Racetrack lands, including 8 acres of former City owned park land. The site originally included a racetrack facility, grandstand, horse barns, utility buildings and asphalt parking lots. In addition to soil bearing capacity problems, parts of the site were contaminated above residential parkland criteria and much of the property was in the flood plain.

The Woodbine redevelopment project includes a park and residential/commercial development Tom Albani provided a detailed description of the Woodbine Park development and site clean-up. Mixed use development will contain 530 detached, semi-detached and townhouse units. There will also be 2, five-storey residential buildings, a teletheatre development and a 6-screen multi-plex cinema development. New condominiums are also planned, as well as a school. The park component of this development will include a bandshell and festival green area for performances, a pond and frog habitat, a children's story place, and four garden gateway entrance features with native plantings. It is scheduled for completion by July 1st., 2000.

Mr. Albani continued by explaining that development has been taking place in three phases – demolition, environmental management, and site filling and grading. Racetrack structures and asphalt parking lots were demolished and their concrete was crushed and recycled and reused on site for new roads and other construction.



Woodbine Park Development Site
Source: City of Toronto

Some of the fill contained ash and cinder with heavy metals and petroleum hydrocarbons. Most of the contaminated soil was treated on site, while some contaminated soil was removed. A full clean-up of the soils and groundwater was performed to meet residential criteria.

Finally, fill was needed to raise the site 12 to 15 feet above the original grade. Engineered fill was brought to the site by trucks and tested to ensure that fill material was not contaminated.

Ms. Richardson briefly noted four other Toronto parks that demonstrate conversion of former industrial lands to new uses. These include: Crombie Park created on a former coal gasification plant; Sorauren Park, formerly occupied by a series of industrial uses including an armaments manufacturing facility and a public transit bus garage and maintenance yard; Harbour Square Park which was built on lakefill and includes bioengineered slopes to provide aquatic habitat;

Spadina Gardens which has transformed a former surface parking lot into a diverse and ecologically stable wetland and pike spawning ground; and the Music Garden, two acres of waterfront parkland scheduled to open in June 1999. This park was designed by Julie Moir Messervy and landscape architects from the City's Parks and Recreation Division in collaboration with Yo-Yo Ma. In each case, park design was top priority so that aesthetic quality could be achieved, multi-functions provided, as well as connections to the surrounding neighbourhoods.



Harbour Square, Toronto
Source: Waterfront Regeneration Trust

Questions and Discussion

1. Was any consideration given to locating the park on the east side of the site so that it would be directly linked to the existing community?

The options for the park location were on the westside of the site, middle or east side. The west end was chosen because of favourable water flow conditions.

2. Was air and noise monitoring conducted during the redevelopment phases, especially because cement crushers were used?

Air monitoring was conducted during the clean-up, and it was found that traffic was more of a problem than development was. The development had zero to low impact on the air. The cement crushers used met the Ministry of Labour's standards. Noise monitoring indicated that ambient noise from traffic was so high that the crushing noise was minimal.

3. What approaches were adopted to protect wildlife health?

The City has always met or exceeded wildlife guidelines and it has been careful when working with contaminated land. For the Spadina Gardens for example, contaminated sediments will be cleaned where pike will be spawning.

4. Was all the land at Greenwood cleaned-up at once, or was it done incrementally?

The City's decision was to clean-up the whole site as soon as possible and as quickly as possible. Clean-up was undertaken between June to September 1996. Clean-up was taking place at the same time of demolition and filling.

5. How does the City address liability?

It does its due diligence, makes its assessments, and then moves ahead.

6. How is Woodbine Park being linked with existing trails, especially given the amount of traffic on Lakeshore Rd.?

The City has implemented measures to reduce traffic such as a median that was installed on Lakeshore, and the Kingston Rd. extension. A trail system will connect through the park.

7. Are there any environmental features of the homes that will be part of the Greenwood development?

Tribute Homes did investigate methods for water efficiency and these are being incorporated into the homes. Solar panels were not explored because this is a market-driven product that was not in demand.

8. Were Official Plan Amendments or rezoning required for the Greenwood redevelopment site?

Rezoning was required as well as an environmental management plan.

A New Approach for a New City

Paul Bedford, Executive Director and Chief Planner for the City of Toronto placed brownfield redevelopment in the larger context of city building, and spoke about the new city and managing its future. He welcomed the opportunity to share ideas and seek help on the New Official Plan which was being launched in April, 1999.

Mr. Bedford recalled the brownfield symposium a year ago where he spoke about brownfields and the municipal role, especially touching upon the following three themes:

- brownfields are a municipal concern
- the city must develop new strategies to capture new investments, and
- it is essential to demystify the development approval process.

He noted his optimism about the opportunities and excitement about the challenges presented at this time. Although he believes that a lot of advances have been made, some breakthroughs are needed.

The challenges identified by Mr. Bedford include political, jurisdictional gridlock and lack of perspective. He suggested that Toronto's central waterfront continues to experience "paralysis through analysis". Within the last decade there has been a lot of talk, conferences about regeneration, and ideas galore but not much change on the ground. It's time for action and to ask ourselves tough questions. Toronto is at a cross roads, and it needs a new vision and new approaches that break through attitudinal barriers if we are serious about regeneration. Mr. Bedford reminded Workshop participants of the St. Lawrence and Frankel-Lambert projects, brownfield challenges of the seventies. He encouraged everyone to think boldly and act decisively.

Mr. Bedford noted that Toronto has an advantage over other cities — its downtown has continued to grow and attract investment and diverse land uses despite suburban expansion. The challenge is to maintain and enhance the quality of life in Toronto to avoid complacency. Toronto must recognize that brownfield redevelopment is at the heart of investment



The Toronto Port Lands

Source: Toronto Economic Development Corp. (TEDCO)

opportunity in the city. The City must "catch the wave" of interest in downtown living before it dies or move on. How can this be done?

The City's strategies include taking a different approach to planning. The King-Spadina project is the best example to date. Zoning was abolished and instead focus was placed on urban quality. In just over two years, 92 projects and 4,600 units have been approved and under construction with 1,800 new jobs.

In addition, the new Official Plan will be a reinvestment strategy that will support brownfield redevelopment, and offer different solutions for different parts of the city. Three "lenses" were identified by Mr. Bedford as ways of looking at different areas of the city and their investment potential. These lenses are as follows:

1. stable areas – e.g. residential neighbourhoods, green space network, employment districts;
2. areas with potential for change – e.g. infill, re-use of existing buildings;
3. major change areas – e.g. King-Spadina, Railway Lands, federal Downsview airport lands.

It has been estimated that 2.5 million people will be coming to the GTA over the next 20 years. What will the impact be on the existing form? How can this growth be captured? If growth doesn't go to brownfields, it will go to greenfields in the suburbs and contribute to urban sprawl. There are therefore, irresistible opportunities on the Toronto waterfront, and many people who want to be a part of them. A bold new vision is needed to bring land and buildings into active use, to build new neighbourhoods, create jobs, for greening, and for creating recreational opportunities, and to consolidate the Toronto Port.

Mr. Bedford cited the London Docklands, Vancouver's Granville Island and Barcelona as examples of cities that have successfully regenerated their waterfronts. What does Toronto need to be successful? Toronto needs to break out of the box; it needs new tools, new attitudes, new priorities and an interdepartmental perspective. It needs to recognize that it is different than the U.S. and Europe – there is no Superfund, no federal clean-up programs, no tax incentives. It must rely heavily on planning and municipal tools as well as leadership, cooperation and partnerships. It must view brownfields as the opportunity to focus on enhancing the quality of life of people who live, work in and visit Toronto. Toronto can't afford to miss the opportunities. Innovation is needed that provides visionary leadership, new approaches to planning and development.

Financing Redevelopment: The Municipal Role

This session was moderated by Mitchell Fasken of Jannock Properties and the Urban Development Institute (UDI) was an opportunity to learn how three municipalities – the cities of Windsor, Kitchener and London – are dealing with brownfield redevelopment.

John Fleming, Planner at the City of London, explained how from 1992 to 1997 the city's downtown had received little private investment, how several long-established retail businesses had moved out, and how scarce residential development was in the core. These conditions led to a downtown that was essentially closed after 5:00 pm. Crime and the perception of it also became a problem. What was needed to rejuvenate interest and investment in the area?

After discussions with developers, property owners and banks, the City began to understand what was prohibiting development of the downtown. In short, these included land costs, parking regulations, tax increases with property improvements, and the cost of rehabilitating older buildings to meet Building Code regulations.

Mr. Fleming described how the City began to stimulate demand for office, retail, entertainment and residential space in the downtown through a number of initiatives which include the following:

- a main streets program, i.e. promotion, recruitment, organization, education, design;
- major capital projects, i.e. farmers' market, central library, arena/entertainment centre;
- a performing arts centre;
- new lighting;
- infrastructure improvements;
- provisions for free parking.

The City also:

- eliminated investment-unfriendly regulations for residential development in the downtown;
- eliminated development charges for residential development;
- established a program to give back a portion of improvement-related tax increases back to property owners over a ten-year period;
- increased facade improvement loans; and
- established a loan program for renovation projects.

Several of these initiatives required the creative use of a Community Improvement Plan under section 111(2) of the Municipal Act to allow for grants and bonuses.

London's downtown is currently experiencing a minor boom in residential development – three major projects are currently underway, while a fourth is expected to begin this Fall. Signs of investment are starting to show in the commercial sector of the downtown – vacancy rates have declined, and several older buildings have been renovated for new uses such as restaurants, dance clubs and unique retailers. London's downtown appears to be on the road to substantial improvement.

John Poulson, the Senior Manager of Treasury Services at the City of Windsor, explained how the City of Windsor began to attract investment on lands that were in arrears of taxes and that were suspected to have environmental concerns.

In 1995, the City began a review and inventory of all lands that were in arrears of taxes. These properties were those that were abandoned for at least 3 years, had significant tax arrears, had the potential to be contaminated and that had no previous agreements to cancel tax arrears.

The City wanted to entice potential investors and understood that the worse case scenario would be if a potential investor would have to pay more to acquire and redevelop the land than what the property was worth. As part of the City's policy regarding these lands, it was agreed that a purchaser would never be out-of-pocket after the transfer of land.

Moreover, an agreement between the City and a potential investor included the following:

- an appraised report on the property
- an environmental site audit
- proof of clean-up
- accounting of clean-up costs, and
- payment of taxes by the purchaser/lien holder.

The appraisal and environmental reports enabled the City to determine who would be responsible for costs.

The City also developed a formula for calculating payment of taxes:

- Total costs – appraised value of subject property = uncollectable taxes
- Tax arrears – uncollectable taxes = tax arrears payable.

5 steps were identified by the City as part of a procedure followed with brownfield redevelopment. First, a council report is prepared which requires Council approval. Secondly, an agreement is drafted by the legal department that is to be signed by the City and the purchaser. Once the agreement is signed, the purchaser begins clean-up. As a fourth step, the City audits the clean-up. Finally, if clean-up is approved by the City, taxes in arrears are cancelled.

Terry Boutilier, Senior Planner at the City of Kitchener presented an overview of Kitchener's program to encourage reuse of brownfield sites.

Adaptive Re-Use	Site Information
<p>Former Goudies store and adjacent site</p> <p>Site Identification Address: 22 King Street West</p> <p>Photographs of Site available</p> <p>Assessment Note Numbers/notes</p> <p>Lot and Plan Number: n/a</p> <p>Key Contacts Ownership: City of Kitchener Real Estate Representative: David Corker/Tim Fox</p> <p>Kitchener Planning Rep/David Corker/Tim Fox 741-2307 or 741-2394 Ward Councillor: Kara Doyle/Harrison 741-1795</p>	
	 <p>Site Characteristics & Context Current Use: vacant building and lot</p> <p>Surrounding Land Use: residential/commercial/office</p> <p>Real Estate: none</p> <p>Survey Plan: Property Size & Dimensions Goudies: site area: 23,400sq.ft. Building: 58,000 sq.ft.</p> <p>Date of Construction: 1909</p> <p>Number of Storeys: 4</p>

Former Goudies Store & adjacent site
Source: City of Kitchener

The City's latest communication tool is a CD ROM, produced in 1998 that allows the City to convey a great deal of information to potential customers and investors. About 1,000 copies of the CD have been distributed throughout the investment community, locally and globally.

The challenges faced by the City are a result of past successes. From the mid 1800's to the post war period, the City was a busy manufacturing centre and the home of a variety of facilities that produced goods such as shirts, clocks, and furniture that were labour intensive and that relied heavily on railway access. During the sixties and seventies, technological change reduced the need for labour and new global technologies made it more cost effective to establish off shore production facilities. As a result, Kitchener's production facilities lost their competitive edge and the city was left with abandoned buildings, vacant structures and lands, and gaps in the landscape.

To turn this situation around, the city developed a program called the "Adaptive Re-Use Program" that is built on the following principles:

- the private sector's role is to invest and re-use land for sustainable contemporary uses reflecting market demand. This can be achieved only with a business plan that includes a bonafide end user, a building that can be adapted with reasonable investment, and a viable market rent.
- the public sector's role is to assist the private sector as much as possible with the elements of the business plan listed above.

The City's challenges in redevelopment included adopting a more flexible set of development conditions and attitudes, and providing some financial incentives.

New staff attitudes were adopted towards potential investors which included offering advice and facilitating the required approvals. In addition, Official Plan/Zoning bylaws were revised to permit the widest range of land uses, information on site conditions for development sites were compiled, and open, more responsive attitudes towards public-private partnerships adopted.

Financial incentives provided by the City include: waiving of fees for building or demolition permits and planning approvals; waiving of park dedication fees for any residential re-use of property or structures; reduced parking requirements; elimination of the city and regional development charges; a façade/interior loan program that provides low-interest loans; assistance in the form of an annual grant, as a rebate on taxes; and feasibility study grants.

The City has identified 16 priority sites for development. Development proposals are currently under review on six of these sites.

What are the Tools that Work?

Workshop participants were organized into 6 small groups to list barriers to brownfield redevelopment, discuss strategies and tools currently available to minimize these barriers, to identify approaches and methods for greening brownfields, and to develop priority actions for brownfield redevelopment (see Appendix A for details).

The following themes summarize the ideas that emerged from the group discussion:

- the barriers to brownfield redevelopment in Ontario include: inflexible and inconsistent application of legislation; lack of clarity, education and information, lack of financial incentives; and a negative perception of brownfields. There are however, some tools and approaches that currently exist to minimize these barriers, such as public participation processes, information exchange, insurance products and working partnerships that can assist with redevelopment.
- an integrated development approval process is needed that deals with environmental issues, land use, transportation and design issues. Toronto's efforts with new planning approaches in the "Kings" project was a model to consider.
- provincial and municipal governments should encourage brownfield redevelopment by amending legislation to deal with liability (the Environmental Protection Act) and to empower municipalities to take a leadership role to offer appropriate financial incentives such as Tax Increment Financing. Governments should provide technical expertise and information, and establish a streamlined, integrated planning development approval process.
- education and information exchange is required for successful redevelopment. Better communication of success stories, as well as information on potential redevelopment sites, can help to eliminate confusion and the negative perception and stigma associated with brownfields.

DAY TWO

Keynote Address

City-Regions in the 21st Century

David Crombie, Chair of the Waterfront Regeneration Trust, spoke about the planning context within which decisions about revitalization of cities occur.

He began by noting how things around us change — the economic and technological base, the global movement of people, the change in the demographics of cities, and changes in the roles of men and women. These lead to fundamental changes in the way people organize themselves, and create different expectations, opportunities and fundamentally different context for the way we plan and build cities.

There have also been changes in our attitudes towards nature. Rachel Carson's book, *Silent Spring* (1962) transformed the way people thought about nature. Before her book, people adopted the attitude that "if you find nature, bury it." Another example is the art of the Group of Seven, well-known Canadian landscape painters who reflect our views about nature. The Group of Seven's work portrayed the landscape, wind, water, rocks, trees, but no people. Their work taught us that nature wasn't in the city. Over the past 30 years people's thinking has changed to reflect the notion that cities included nature. Cities must exist in a park — parks don't merely exist in a city.

All these changes, have lead to structural changes. Brownfield redevelopment, brings together all the above changes that have taken place: ecological, economic, and social changes.

Each place will work with brownfields in their own unique way. But, there are 4 basic organizing needs that all city-regions will be looking for in the 21st Century.

1. Economic opportunities — this is the number one item in cities and city-regions. It is the reason why people move to a particular place (i.e. for better prospects and to take care of themselves and their families). This is so essential that cities do whatever they can to contribute to economic opportunities.
2. The integration of ecology, economy and community — all cities are looking at ways to do this with their major projects.
3. A sense of place — all cities will want to understand how they belong, and neighbourhoods will be the places where people live and the “incubators of human life”.
4. Personal security and public safety and order — there are many places today where security and order do not exist. Social justice is central and cities will have to deal with this or their people will not tolerate the place for long.

Mr. Crombie encouraged Workshop participants to apply the above 4 points in the work they do to be successful. He also encouraged developers and lenders to be creative in their work, and for governments to be good role models in the redevelopment process and be stewards of the land.

Questions and Discussion

1. What are the greatest challenges in integrating the 4 needs into real world decision making ?
The greatest problem may be understanding how to link economic development with ecological changes. Economic development, which is basically an attempt to satisfy human wants is important and should not be ignored. The task is to understand the issues and process that link economic, environmental and social concerns — and to learn by doing.

2. How do we merge the sense of place that developers have with the civic sense of place?

Work shapes cities. As work changes with advances in technology and other elements, cities will change. We all have to be aware, learning and willing to change. We must put the emphasis on quality design.

Perspectives from the Private Sector

Panel moderator for this session, Rodney Smith, Q.C., at the firm Blaney, McMurtry, Stapells and Friedman, introduced this session by providing his observations on brownfield redevelopment in Southern Ontario.

In his view, the provincial government role has diminished markedly from the redevelopment scenario over the past 4 years following publication of the *Guideline for Use at Contaminated Sites in Ontario* (1997). There is no policy in place to encourage brownfield redevelopment in situations where market conditions fail to spark investment, such as Tax Increment Financing (TIF) which has been suggested by some municipalities.

Mr. Smith was encouraged by recent actions by the City of Toronto and its initiatives on a new Official Plan, but questioned why the city isn't attracting industry. He noted that urban sprawl and intensification is part of the difficulty, and that the real problem is not the contamination of land, but urban renewal. Toronto's infrastructure is aging, and it has other issues associated with renewal that must be addressed, in addition to greening of industrial areas.

The biggest hurdle according to Mr. Smith is addressing perceived and real risks. There are many kinds and degrees of risk, and there are often persistent problems of mis-information, and lack of vision for reuse strategies that can effectively manage risk over time. Through education, insurance products and financial incentives, we are beginning to see progress.

He concluded by introducing the four panelists in this session: Julian Colman, Associate Vice President, Royal LePage; George Boire, Manager, Environmental Risk, CIBC; Mitchell Fasken of Jannock Properties and the Urban Development Institute; and Guy Paparella, Director of Development at the Region of Hamilton-Wentworth.

Market Signals for Brownfield Redevelopment

Julian Colman of Royal LePage spoke about some of the market signals for brownfield redevelopment. He began by indicating that our real estate markets have recovered which is driving successful brownfield redevelopment. Vendors, purchasers and developers are much more comfortable with the redevelopment process. Mr. Colman explained changes in the market that have influenced redevelopment decisions.

The economy experienced solid growth over the past 6 years which has led to strong employment growth in Toronto and other places throughout the Golden Horseshoe. Specifically, growth within the industrial sector has placed demands on industrial space and has led to low level industrial vacancies, and higher rents and building prices. Mr. Colman explained how tenants and users looking for cost effective solutions therefore, may be motivated to relocate to areas they wouldn't



Skyline from Toronto Island
Source: Waterfront Regeneration Trust

otherwise consider, i.e. brownfield sites.

In addition, there has been a significant recovery in downtown Toronto condominium sales, which has put pressure on downtown land supply and pricing. As a result, residential developers are looking beyond the downtown into older industrial and residential areas.

The popularity of condominium lofts and “novel” office space has also driven demand to certain brownfield areas.

However, to see a more significant change in brownfield redevelopment, the following success factors need to be evident in the marketplace:

- location (i.e. attractive neighbourhoods, conducive surrounding land uses, good access and amenities);
- market feasibility (i.e. the development should be leasable or salable);
- solid financial feasibility (i.e. developer should earn an adequate profit after all costs).

Mr. Coleman described a successful case study in brownfield redevelopment – the redevelopment of the former Chrysler Corporation head office site in Highland Park, Detroit. The site included extensive environmental contamination issues and was adjacent to a troubled residential area. But, it was centrally located, and there was a significant shortage of industrial warehouse space in the city. Royal LePage and its architects developed a concept to transform the site to a warehousing and distribution compound while retaining some of the structures and minimizing remediation costs. The site was then sold to an industrial warehouse developer.

Mr. Coleman noted by indicating the factors leading to lack of success, including:

- the “zone it and they will come” philosophy (i.e. zoning will only influence development if the fundamental real estate principles are in place);
- real tax imbalances (i.e. brownfield sites, located in or adjacent to downtowns have higher real estate taxes than greenfield locations);
- high remediation costs (i.e. remediation often exceeds the value of the land);
- no limits to environmental liability.

To conclude, Mr. Colman indicated that significant strides have been made in brownfield redevelopment; players are more comfortable with the redevelopment processes, consultants have gained significant technological knowledge, markets have recovered and there is an increased interest in living and working in the downtown. But brownfield development cannot work unless it is backed by the necessary locational, economic, market and real estate factors.

How Banks Manage the Risk

George Boire spoke about how the CIBC manages risk. The CIBC has had a risk program since 1991 and a Board policy was established in 1993 to review environmental risk associated with the bank’s client operations and assets.

As a point of clarification, Mr. Boire indicated that banks lend to borrowers not to sites. These are usually people who have a vision and a business plan to realize it. When lending money, the bank quantifies risks in dollar terms (i.e. what costs could be incurred in carrying out the project), and focuses on the viability and profitability of a project.

In some cases, there are uncertainties concerning remediation costs, long-term liability, clean-up standards, as well as a “stigma” associated with the land — all of which have an effect on asset value and future uses. An understanding of the level and extent of contamination, regulatory harmonization and clarity, as well as economic and administrative incentives (e.g. tax incentives, planning changes), can assist with resolving some of these redevelopment challenges.

Mr. Boire listed options for managing risk and noted that approval from regulators is obtained when needed prior to the release of funds; that an “escrow”/closing fund sometimes be set up to deal with any issues that might come up at a later date; and that insurance to cover remediation work is obtained.

Two case studies were described by Mr. Boire that involved brownfield redevelopment. The first case, King West Village, involved two failed real estate loans in the amount of approximately \$32 million for 13 acres of former industrial land slated for redevelopment. If

CIBC were to sell the land “as is” it would receive only \$7-8 million back of its original investment because of the weak real estate market at the time. Instead, the bank choose to enter into a joint venture with a residential developer, remediate the 8 acres as an initial phase of the project to prepare it for residential development. The units are now almost completely sold and CIBC was able to sell the remaining 5 acres to their partner for redevelopment for approximately \$26 million. This project was successful because of the positive change in the real estate market, good understanding of remediation costs, the right team was involved, and because of positive changes in environmental guidelines and planning regulations.

The second case study described by Mr. Boire was the redevelopment of the former Gooderham and Worts property. The CIBC has provided construction financing for the project. Plans for this former distillery are to redevelop a portion of the land into multi-storey residential buildings with commercial/retail at grade. The challenge with this site was dealing with soil and ground water contamination. Following a rigorous assessment of the environmental management plan and the business pro forma, the bank was able to make the loan, and the project is currently under construction. Once again, this project was financeable because of strong market conditions, an environmental management plan that met the requirements of the City, the investors and MOE.



Gooderham & Worts, Toronto
Source: Waterfront Regeneration Trust

Making the Investment Decision

Mitchell Fasken expressed his views on what drives investment. The challenge, and our main objective, should be to make brownfield development more attractive than greenfield development. The additional costs incurred to extend infrastructure into greenfield areas, should make brownfield redevelopment more economically feasible.

Brownfield redevelopment is usually undertaken by the medium to small sized developers who are generally more flexible and more sensitive to risk issues than the larger development companies. These developers choose to remediate and redevelop brownfield sites when market conditions favour actions and cost - effective solutions can be found to address environmental concerns.

The market is the only real driver for investment. If a site is not situated in a viable market, in the absence of public incentives not much can be done with it.

Creating a Level Playing Field

Clarity and communication is needed in the planning and development process. Redevelopment becomes complicated because of lack of certainty of obligation between government and developers, lack of trust among stakeholders, and lack of clarity in the development process.

Liability is an issue affecting redevelopment. There needs to be an understanding that if you've restored a site for the intended use, you're done, instead of having ongoing liability. In addition, who is responsible and when are 2 aspects that need clarification.

Financing is also an issue that needs to be addressed. We need to find ways to make a project economically viable in situations where market answers are not sufficient. Assistance and incentives such as TIFF, DCA credits, tax credits, and support from the federal development bank are useful in attracting adaptive reuse of sites and in transforming old industrial sites.

Flexibility and consistency in the municipal process is essential. Eliminate the red tape; often, redevelopment becomes "tied in a knot" because of delays with planning approvals. Make the process more attractive and efficient, and make the sites more attractive. Changes to the Municipal Act and Planning Act could be of assistance. Consistency in municipal staff and positions would also be helpful to potential investors. Staff should be patient yet persistent, and ready and available to facilitate and expedite planning approvals.

Making it Happen in Hamilton-Wentworth

Guy Paparella spoke of integrating the planning and site remediation process in the Region of Hamilton-Wentworth. He noted that what is needed for successful brownfield redevelopment are: a different culture and attitude at the municipal staff level and trust between the municipality and development proponent; policies to provide incentives for development; and shared, calculated risk.

In Hamilton, the planning and site remediation process has been integrated. In 1997, the Region passed comprehensive policies for potentially contaminated sites. These have been designed to get information on former land uses, screen applications for potential site contamination, determine if a Record of Site Condition (RSC) is required; RSCs are reviewed by the Ministry of the Environment (MOE). These policies help to ensure that development takes place only on sites that have been appropriately remediated.

To ensure that development is permitted while also ensuring that a site is properly remediated, a customized process for each site is required. Various tools exist to assist with this such as community improvement plans, bonusing and Tax Increment Financing (TIF). TIF is a financing tool employed successfully in the U.S. that uses the increase in property taxes that results from redevelopment to finance environmental remediation. Hamilton-Wentworth is currently looking into developing such a program. The region is currently using existing planning tools that permit phased development while ensuring proper remediation of a site. Sites are being redeveloped through Plans of Subdivision. When a draft Plan of Subdivision is approved, development of a site will take place in phases under draft plan approval.

Following approval of the site plan, submission of the RSC and acknowledgment by the MOE takes place. Next, holding zone is lifted and the initial phase of the plan is registered.

This approach allows the developer to proceed in phases and respond to the market through use of the site plan. It also allows the municipality to ensure, through the submission of the RSC, that each phase is properly remediated. While this approach works for large developments in phases, it may not be appropriate for smaller developments where the RSC can be submitted for an entire site at the zoning or draft plan approval stage.

Questions and Discussion

1. Contamination of sites is a serious community issue which seems to get little attention. More attention should be paid to this as well as what type of development is actually required in a community. What is your view of the community's role?

Guy Paparella responded that the community should participate from the early stages of redevelopment projects. The best way to ensure a successful outcome for all stakeholders is to share information and move toward common objectives.

2. Is there a library where one can go to get information on a site?

George Boire indicated that the City of Toronto has a registry of sites. It's important to be careful when using these types of records to ensure that the information is current and correct. Mitchell Fasken added that the whole process of due diligence is important. One must understand exactly what is under a site and make sure that it's safe for the intended use.

3. George Boire was asked what was needed for the site specific risk assessment for the Gooderham site to provide enough comfort for the bank?

He replied that the bank needed to be satisfied with the results of the assessment and the long term management plan. At the same time, it was necessary to satisfy Canada Housing and Mortgage Corp. and the City Health Dept.

A participant commented on the new government guidelines and how they have improved. The Ministry of the Environment is also working with municipalities to identify historical industrial uses, a tool that can be used for phase one assessments. It has also established an MOU for TEDCO lands in Toronto's Port Area to manage the soil and groundwater of this area on a regional basis.

Tour of Gooderham & Worts and Toronto's Port Area

Gooderham & Worts was once the largest distillery in the British Empire. The industry began with a windmill built by James Worts in 1832 to grind flour. Worts and his brother-in-law William Gooderham, recycled his waste into whisky, an activity that became so successful that a limestone distillery was built in 1859. Other buildings were eventually added to the site until the 1920's.

Gooderham & Worts is now a designated historic site and is being transformed into a residential and commercial area with a food market, sports and lifestyle market, and entertainment destination that is minutes away from downtown Toronto.

Some of the challenges faced in developing this site included soil and ground water contamination from a nearby former coal gasification plant, contamination from the production of rum which involved sulfuric acid, as well as airborne pollution from the nearby Gardiner Expressway.

Design principles were created that informed the redevelopment of the Gooderham and Worts site. Residential construction is moving into phase 3 and the commercial spaces are now available for lease.

The Port Area is located east of the downtown core and encompass approximately 1,000 acres (405 ha) of industrial and commercial lands and parkland.

The City of Toronto Economic Development Corporation (TEDCO) owns 412 acres of the Port Area and developed revitalization plans for this area which include new buildings, improved streetscapes and infrastructure, new roads, enhanced waterfront park systems and the remediation of brownfield sites.

Sites seen on the tour included redeveloped properties such as the Toronto Hydro Service Centre, the Irish Rover Pub, entertainment and retail development such as the Docks night club and Knob Hill Farms grocery, and new urban waterfront parks including Polson Quay.

Over the past six years TEDCO has completed five major redevelopment projects. The results of these initiatives demonstrate significant economic, environmental and community benefits, including 61.5 acres of restored and productive land, 710,000 square feet of newly built space, 1377 new jobs on former brownfield sites, 720 jobs specifically related to construction, and C\$60 million worth of new construction. These are merely examples of many such initiatives in various stages of completion in the province.



Irish Rover Pub, Toronto

Source: Waterfront Regeneration Trust

Appendix A

Small Group Discussion Questions and Answers

QUESTION ONE:

What are the most important barriers to brownfield redevelopment in Ontario?

The following were identified as barriers to brownfield redevelopment:

- unclear and complex planning process that has led to confusion on the part of developers
- costs, including up front costs associated with planning appeals, clean-up costs which are some times greater than property value, and time costs/delays in bringing a project to closure
- inconsistent property taxes across the region making suburban greenfields more attractive than brownfields
- lack of education/communication around brownfield sites and issues; this has led to a stigma on brownfields, and fears related to liability and risk
- lack of expertise at the municipal level to provide information and advice to developers
- lack of financing
- inflexible legislation that restricts municipalities in being adaptive to development proposals and to offer incentives as necessary
- market conditions; lack of demand for specific uses.

QUESTION TWO:

What are the strategies and tools now available that can minimize the barriers?

The discussion groups identified the following as strategies and tools:

- community participation/public consultation by the development proponent or municipality
- visioning processes that articulate principles and objectives to guide site design and land uses
- public/private partnerships to assist in project implementation
- agreement on public/private roles
- access to information
- administrative agreements (such as MOUs) to define roles and responsibilities for monitoring and information sharing
- historical land use inventories
- insurance tools that address liability
- waiving fees (i.e. development charges, back taxes, future taxes)
- reduction of time for government review of site specific risk assessment documentation.

QUESTION THREE:

What are the approaches and methods required for greening brownfields?

Approaches and methods that can be used for greening brownfields were identified as being the following:

- promote mixed uses as an integrated part of planning (e.g. multi-functional green space that not only include fish and wildlife but other elements)
- incorporate greening into urban design i.e. make greening part of a larger plan
- creative use of private open spaces to allow for interesting programming and interpretive projects
- communication and community involvement
- balance human and non-human uses (ie : passive and active uses)
- whenever practical, destroy or remove contamination
- ensure soil and groundwater are known and considered in early planning and design
- do nothing
- use of site specific risk assessment to identify safe approaches for human and ecological health
- sediment quality criteria (assessment focuses on biological receptors)
- municipal park dedication requirements.

QUESTION FOUR:

What are the priority actions that are needed to address the issues discussed today?

The following were listed as priority actions to help spark brownfield redevelopment in Ontario:

- provincial leadership to establish a toolbox that provides for “one-stop shopping” (and could include a model process for municipal application of provincial guidelines, protocol for development, a catalogue of redevelopment opportunities, a listing of available tools, and a land use inventory) and to amend specific pieces of legislation (i.e. to allow for financial incentives such as tax increment financing, bonusing and to help clarify and reduce liability)
- establish a clear, streamlined and integrated municipal planning process
- provide dedicated resources within municipalities to develop expertise and coordinate municipal efforts
- encourage dedicated team effort between the regulator, developer, municipality and other players
- educate the public and authorities on brownfield sites and issues; exchange success stories to stimulate action/awareness and help change current mind-sets
- develop a vision for brownfield sites that integrates other planning objectives
- adopt wider use of site specific risk assessment and management use
- satisfy lenders (i.e. provide education on brownfields and risk and insurance guarantees)
- encourage innovative use of insurance products to spread risk (e.g. combine risk management and clean-up; transfer part liability to a residual environmental and financial “trust”).

Appendix B

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