



# *Agents of Change: Making the Vision a Reality*

Urban Environmental Initiative  
EPA New England  
Five Year Report



# Executive Summary

In urban areas throughout New England, residents are exposed to significant environmental and public health hazards every day, including lead poisoning, rat-infested vacant lots, contaminated urban rivers, and asthma exacerbated by poor indoor and ambient air quality. These conditions create cumulative, disproportionate, and inequitable health risks to urban residents, especially high risk populations such as children and the elderly, and degrade the quality of the air, water, and land in urban neighborhoods. Most United States Environmental Protection Agency (EPA) programs are structured to address environmental media separately as a result of the way Congress created different environmental statutes. While multi-media approaches are gaining acceptance, there is no single EPA program that specifically addresses the magnitude and complexity of urban environmental problems in a holistic way. Millions of urban residents across the country suffer every day from disproportionate environmental health risks, and EPA must respond. EPA New England launched a five-year pilot program called the Urban Environmental Initiative (UEI) to address the challenge of making meaningful improvements in the environment and public health for urban residents in the targeted cities of Boston, MA; Providence, RI; and Hartford, CT.

Some EPA New England programs began to learn about the multitude of urban environmental issues through the Environmental Justice Program launched in 1993. On the heels of a grassroots conference on the Urban Environment co-sponsored by the



*A vacant lot in Providence, RI.*

Massachusetts Institute of Technology's (MIT) Dept. of Urban Studies Program and EPA, community participants challenged EPA staff to "come and see for yourself", and we did. An Environmental Justice tour to the Dudley Street Neighborhood Initiative in Roxbury, MA was the foundation for the development of the UEI. Community participants eloquently explained and demonstrated their plight—vacant lots, hazardous waste sites, insufficient green space, vegetables grown in contaminated soil, and health problems with suspected environmental origins. Residents had never seen EPA New England get involved and welcomed assistance, but their lives

were too impacted to wait for recommendations from a slow bureaucratic decision-making process. They were very clear about their needs: communities needed assistance, not control; partnership, not paternalism; mutual respect, not arrogant presumption; community-based decisions, not government directives; and long term commitments and dedicated resources, not just political photo opportunities. In every city we visited—Boston, Springfield, Lawrence, MA; Providence, RI; and Hartford, New Haven, and Bridgeport, CT—the UEI sat down and listened. We heard similar issues, concerns, and dreams as well as suspicion of the federal government.

The purpose of this report is to document the UEI approach, successes, and lessons learned since its inception in 1995. Even though our federal regulatory system does not sufficiently address the needs of urban communities, the UEI has successfully utilized a community-based approach to build an environmental infrastructure and increase a community's capacity to creatively solve its environment and public health problems. When implemented the UEI Community Development Pyramid, a five stage model, will result in environmental and public health improvements that exhibit effective community based partnerships which leverage public and private resources. It proves that government can be responsive and effective in an effort to reclaim the urban environment lost partially through disinvestment and narrowly defined redevelopment efforts. The majority of the issues that the pilot program targeted were identified through available agency data, direct observation, and community focus groups where urban community stakeholders were asked their greatest concerns and problems. It is hoped that this approach can be expanded to service more urban areas throughout New England and across the country and that this report can serve as a blueprint for government agencies and communities to solve urban environment and public health problems.

There are three broad conclusions drawn from the UEI pilot program that are applicable nationwide:



*Resident volunteer cleaning up a vacant lot in Providence, RI during an Earth Day event.*

- Developing a sustainable environmental infrastructure that redefines roles, responsibilities and measuring success is critical to solve urban environmental and public health problems. At a minimum, government at all levels must: insure that urban residents maintain a prominent role in the decisions and protection of their health and environment; create a level playing field with mutual benefits for urban residents and local business and an understanding that both must work together to achieve results; and measure success by including short term results and the future exponential results of current activities. Programs that do less will underestimate the potential benefit and/or damage that current actions have on the future.
- New regulatory and non-regulatory approaches must be coupled with an annual commitment of dedicated resources to meaningfully redress urban environmental problems. It takes a significant investment of time and resources to halt degradation no less reverse environmental trends in a sustainable manner. These creative approaches must be dynamic and develop an iterative process that involves many stakeholders including academic and health professionals.
- EPA must develop a creative and holistic strategy grounded in the principles of environmental justice and smart growth to create safe and healthy urban communities for future generations across America. Cumulative risk is a result of the panoply of pollution sources that represent vast residual risks uncontrolled by current environmental regulations. Environmental injustice is manifested through cumulative risk, compounded by social and economic inequities and unsustainable growth practices.

There is a certain amount of risk involved in undertaking any new initiative. The UEI minimized risks by seeking out exceptional partners in every city and that critical step immediately enhanced the probability for success. The UEI was aided by unwavering internal leadership, strong academic and health institutions, passionate community and faith-based partners, a modest number of state and local programs, and some private companies. The UEI deliberately sought out organizations that had the capacity to reach residents in urban

communities and were willing to work as partners on environmental issues. The UEI never experienced a lack of energetic, passionate and willing groups and organizations to work with. It is a gross fallacy that inner city residents are overwhelmed with so many serious socio-economic problems that they cannot focus on environmental issues. Quite the contrary, inner city residents are very concerned about their environment but cannot solve these problems alone. Without the ongoing efforts of partners from every sector, many of which predated our

involvement, the UEI would have not achieved such superb results. EPA has only scratched the surface of what needs to be accomplished to provide the quality of environment and public health deserved by urban resident in every city in America. The UEI demonstrates that a community-based approach that builds an environmental infrastructure and increases local capacity to creatively solve problems will cost-effectively produce meaningful and measurable results.



*EPA staff in the Mobile Laboratory locating the next vacant lots for soil sampling.*



# *“Working with urban communities to make measurable improvements in the quality of life and the environment”*

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# UEI History And Overview Of Program Elements

## Urban Communities in New England Before the Urban Environmental Initiative (UEI)

Prior to the implementation of the UEI pilot program, urban residents were not actively engaged or informed of environmental protection decisions made by the agency. The focus of environmental protection efforts largely sought to improve environments and ecosystems outside of urban areas rather than restore and revitalize the environment in urban cities. The traditional foundation of the agency is to implement a series of prescriptive federal regulations that sets and enforces specific air, water, land, and cleanup standards. There was insufficient data

to verify or understand the extent of environmental degradation in urban areas. Since EPA didn't have adequate information about urban cities and did not have or maintain a regular connection with the urban constituencies, it is not surprising that there was also a lack of dedicated resources to address urban environmental and public health issues, nor a coordinated response to public and community concerns. Any progress made in urban areas was primarily a response to a crisis and not part of an ongoing, coordinated effort.

The UEI was created as a response to two prior efforts. Lead was the first issue to result from a risk prioritization effort in EPA New England and

predominantly affected children in urban neighborhoods. This environment and public health crisis in New England compelled management to dedicate time and resources to work in urban areas. In 1993, the region began to address the issue of environmental justice. The link between poor conditions in urban areas and environmental health concerns became evident through input from urban constituents. The need to restore and revitalize urban areas as a part of improving the health and quality of life of residents was clear, and the time was ripe for the UEI to launch. The foundation of UEI's philosophy, mission, and approach to problem solving is grounded in four key program elements.

## Program Element 1: Focused Mission & Objectives

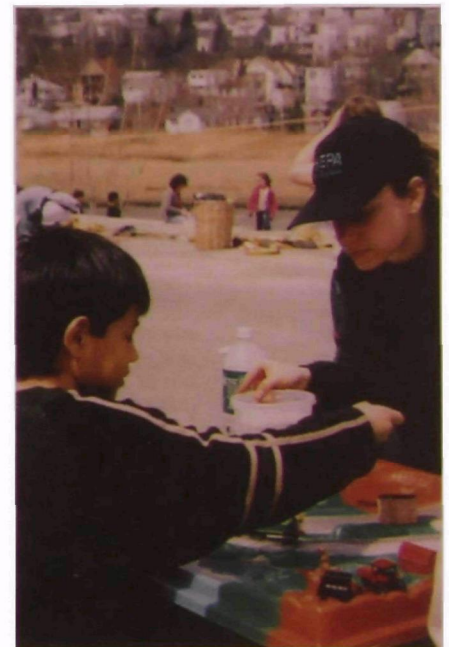
The UEI was the first coordinated effort in EPA New England to respond to these problems and help connect urban residents to resources that improve the environment, public health, and quality of life in the cities of Boston, MA; Providence, RI; and Hartford, CT. The UEI approach and model is a new way of doing business in urban areas at EPA New England, and takes public service and community based environmental protection to a new level that consistently involves, engages and responds to public concerns. The UEI listens to community needs and concerns, identifies projects that meet community priorities, and leverages resources to implement projects in order to fulfill our mission and facilitate measurable results.

The primary objectives to support this broad mission are:

- Restore and revitalize the environment of urban neighborhoods and improve public health.
- Build local capacity to assess, address, and resolve environmental problems.
- Promote sustainable economic development that does not compromise environmental quality and public health.

## Program Element 2: Community-Based Decision Making & Setting Priorities in Urban Neighborhoods

The UEI pilot program focuses on six environment and public health issues identified and prioritized in a series of community focus groups at which urban residents were asked to identify



*Chelsea youth learns firsthand how waste and pollution contaminate urban rivers.*

their greatest concerns and problems. Although public health was a fundamental concern, results from the focus groups demonstrated that the connection between environmental quality and public health was not always apparent and/or clearly understood by urban residents. Therefore, a central goal of the UEI focused on helping both urban residents and EPA New England make the connection between environmental quality and public health and do it in a way that ensured high public accountability for successes and failures. EPA programs have not traditionally helped build public capacity to understand and resolve problems, but the UEI made this a cornerstone of the pilot program.

The primary environmental and public health issues that the UEI pilot program addresses are listed below:



*East Boston and Chelsea youth learn how watersheds work from a UEI team member on Earth Day.*

- Lead Poisoning Prevention:** Reducing and/or eliminating exposure to lead poisoning through education and outreach, sampling, and clean yard initiatives.
- Indoor Air Quality:** Reducing incidence of asthma and asthma triggers including carbon monoxide and tobacco smoke, integrated pest management techniques or systems.
- Ambient Air Quality:** Promoting alternative transportation, reducing particulate levels, greater use of cleaner technologies in urban industrial areas.
- Urban Rivers/Wetlands:** Conducting shoreline cleanups, increasing the number of trees, improving foliage and planting, a river bank restoration, and revitalization.
- Urban Vacant Lots:** Creating urban gardens & agriculture, returning vacant lots to productive use, creating pocket parks, remediating or mitigating contamination, trash clean-ups, and preventing pollution and illegal dumping.
- Openspace/Greenspace:** Returning openspace to productive greenspace in densely paved areas, remediation or mitigation of contamination, trash clean-ups, and preventing pollution and illegal dumping.

These issues have grounding in existing EPA federal regulatory requirements and prioritize public health concerns which are of primary importance to urban residents.

### **Program Element 3: UEI Program Staff**

Critical to the continuing success of the program is a diverse team of staff with varied and complimentary skills. The UEI consisted of five full-time staff (a Regional Team Leader; 3 City Program Managers (CPM); Grant/Youth and Environment Coordinator) and part-time intern level staff that serve as Special Project Coordinators. The UEI staff require skills in addition to science and engineering such as strong oral and written communication, creativity, facilitation, problem-

solving, crisis management, project management, and the ability to work with a minimum of management oversight and as a cohesive and dynamic team. All staff must be able to represent EPA at external functions and community events and serve as internal champions for projects and the UEI pilot program. Staff must also be able to work successfully with a range of diverse stakeholders and build credibility and trust with community partners.

The CPMs serve as primary public and internal contact points for each of the three target cities and act as technical advisors; resource brokers; grant managers; and advocates for urban community stakeholders in their target city. Stakeholders include local

neighbors and residents; state and local government; elected and appointed local officials; industry; non-profit organizations; medical establishments; other federal agencies; environmental groups; and academia. Involving all stakeholders in environmental decision-making is a critical element of the bottom-up approach to community-based environmental protection. The CPM reviews and administers grants across EPA programs (i.e. Environmental Education, Environmental Justice, and UEI); leveraging internal technical resources (i.e. soil sampling, risk assessment analysis, education resource tools); and developing effective partnerships that can lead to sustainable and measurable improvements on target issues. Other responsibilities include:

**Public Awareness & Education:** Providing information, training, and technical assistance to stakeholders on a wide range of urban environmental and public health issues facing the community including, but not limited to: lead poisoning, asthma, urban rivers, indoor and ambient air quality, greenspace and openspace, and urban vacant and contaminated lots.

**Building Community Capacity & Consensus:** Providing communities with tools, information, and training that build local capacity to make sustainable improvements and changes in urban environmental quality and public health.

**Partnerships & Coalition-Building:** Facilitating successful and long-term partnerships and coalitions between stakeholders with common concerns, and leveraging these partnerships into resources to support projects.

**Grant Awards & Management:** Awarding and managing multi-media EPA grants across all agency programs—including UEI Community Grants Program, Livable Communities Grant Program, Environmental Education, Environmental Justice, and others.

**Leveraging Available Resources:** Securing sampling, Pollution Prevention, or other Community-Based Environmental Protection Grants in urban areas, sharing information and materials through public education campaigns, securing translation services, donating outdated agency computers to local organizations, connecting non-profit organizations with available EPA or other federal grant program guidance, providing expert technical assistance to stakeholders.



*Community leaders in Hartford, CT receive funding during press event through the UEI Community Grants Program.*

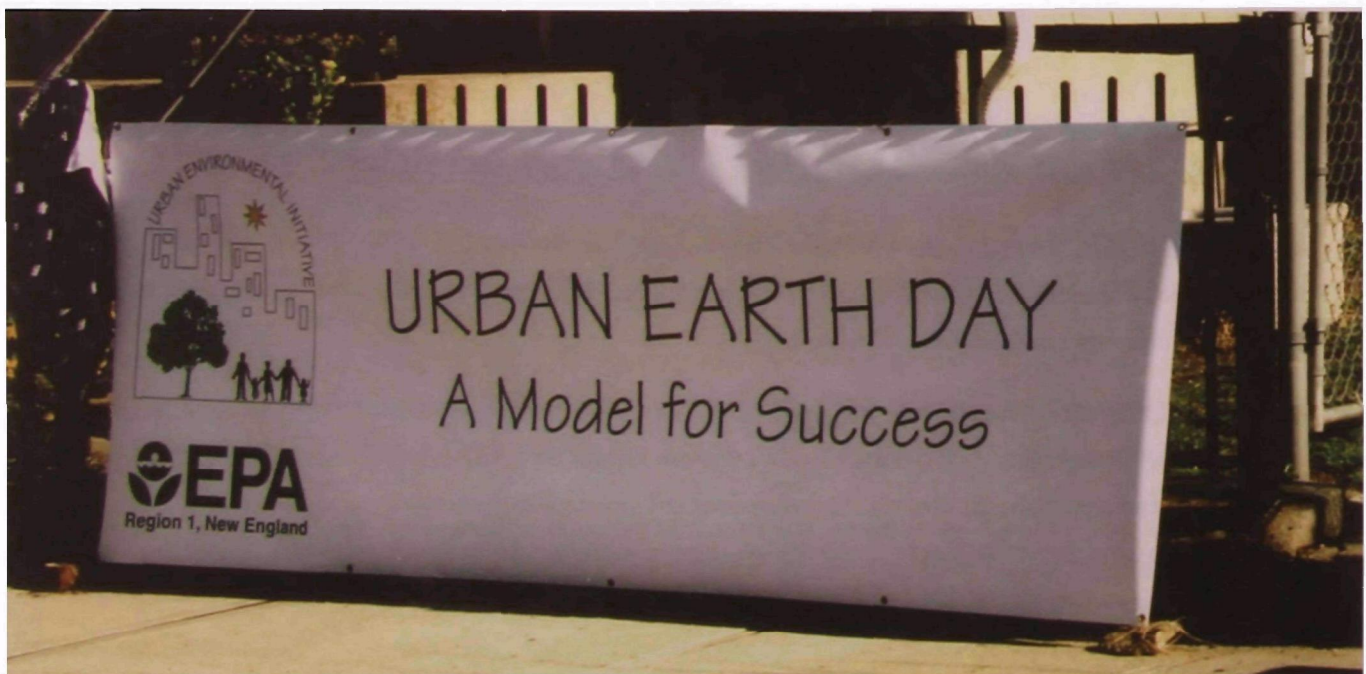
#### **Program Element 4: Dedicated Funding Resources**

A critical component to UEI work is securing and awarding dedicated funding resources to service community partners and support projects in targeted urban cities. In 1996 the UEI initiated a Community Grant Program to direct funding resources to the most critical environment and public health issues facing residents in the three target New England cities. Projects must pertain to the six issues identified as priorities by the UEI and leverage

resources from other sources. Applicants with the strongest proposals incorporate a multi-media approach into the project design.

In 2000, the UEI joined forces with the Livable Communities Program in EPA New England and issued a joint Request for Proposals to encourage leaders from urban, suburban, and rural areas to work in partnership to improve the quality of life for residents throughout New England and help communities develop or redevelop

smartly and sustainably. The Livable Communities program strengthens urban communities, make suburbs more livable, and invest in rural economies. Proposals from urban, suburban, and rural areas or regional proposals that link these areas were urged to apply for approximately \$150,000 in competitive grant funding. This effort was a great success, and marked another step to increase internal integration of programs and better leverage resources to achieve measurable results.



*A banner celebrating EPA and UEI's participation at Urban Earth Day in Providence, RI.*

# UEI Community Development Pyramid

Since its inception, the UEI used a bottom-up approach. The UEI team developed a model to show this approach and how it can produce measurable results and create a sustainable infrastructure to ensure community involvement and continued improvements in the future. The model is called the UEI Community Development Pyramid and was unveiled at EPA's National Community Involvement Conference in Kansas City, MO in May 1999. The model uses a five-phase approach to build local capacity from the ground up beginning with identification of issues and stakeholders, then helps develop partnerships and community awareness through each step of the process. The ultimate goal of this model is a sustainable community infrastructure that can access information and leverage resources to address environmental and public health concerns without permanent EPA financial assistance.

## **Phase 1: Understanding the Problems & Identifying Stakeholders**

This phase is the most critical step in a community-based approach to environmental protection. During this phase, the UEI must establish a strong foundation of community stakeholder relationships and begin engaging groups and listening to community priorities. It is also crucial that the community's greatest environmental and public health concerns and issues are prioritized and an honest commitment will be made to work in partnership to solve these problems equitably. The relationships created in Phase I serve as a foundation for future partnerships, collaborations, and projects. Activities include listening to community stakeholder concerns, facilitating public conferences to gather ideas, building relationships with a broad range of community members, and establishing credibility for the UEI in the community. Funding in this phase should support local community-based organizations that are working with residents on environment and public health issues. EPA technical resources are introduced in this phase.

## **Phase 2: Building Community Capacity & Developing Local Partnerships**

During this phase, the UEI begins a focused effort to build a dialogue among stakeholders around a common topic or issue, facilitate working relationships, and start to fill information and data gaps. Effective methods of stakeholder involvement include convening task forces, developing coalitions, establishing networks, and facilitating group meetings. Success in this phase hinges on equal stakeholder involvement, and this goal is oftentimes extremely challenging given inherent disparities in interests, objectives, influences, or resources among different partners. However, these challenges have a much better opportunity for resolution when stakeholders are united by a common goal—such as preventing lead poisoning in children, eliminating urban vacant lots, or restoring a river or wetland to a swimmable, fishable condition. The UEI continues to leverage EPA technical resources through this phase—including supporting sampling efforts to understand the extent of perceived and existing contamination, or starting risk assessment and risk communication. A benefit to community partners is training to share information and provide the tools needed to better understand and resolve problems including GIS mapping, soil sampling techniques, grant management, process management, strategic planning and environmental or public health classes.

## **Phase 3: Leveraging Public Resources To Improve Public Health & The Environment**

Once concerns have been raised, common threads identified, and different stakeholders are starting to work together, leveraging and directing public resources through collaborative projects must focus on achieving measurable results. Typically, this can be achieved through a partnership grant which allows stakeholders to share in a common success, such as turning a vacant lot into a community park in a neighborhood or reaching out to educate teachers in a "Train-the Trainers" program on lead poisoning prevention. In this phase, funding should support multi-stakeholder collaborative projects that are designed to accomplish positive, measurable improvements to public health and the environment.

Projects should also have in-kind or other matching support from a range of organizations. UEI's role in this phase begins by a strong personal investment of the CPM to bring resources to the table to ensure that projects can be completed effectively, and it transitions into other stakeholders at the table supplementing the CPM efforts and position within the process. By the end of Phase 3, the UEI will leverage a broad range of internal EPA resources and assist community partners to ensure that other federal and state resources (technical, human, and fiscal) are identified to pursue together in Phase 4.

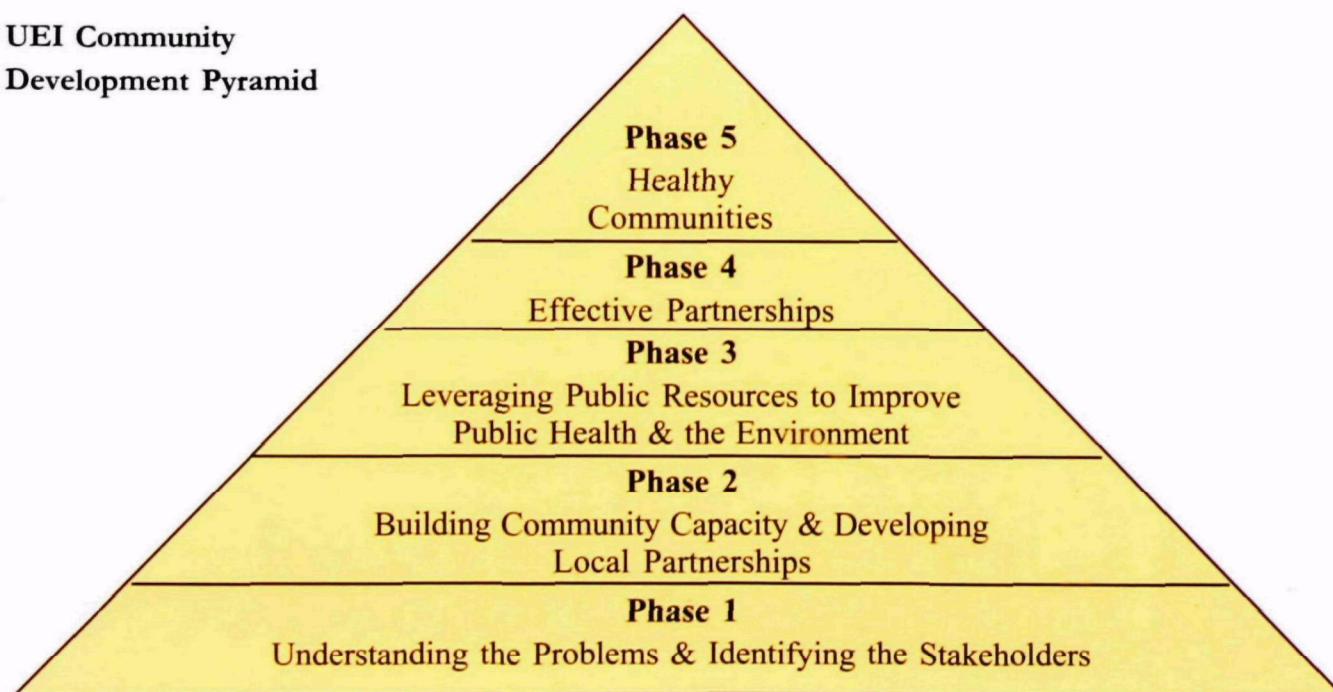
#### **Phase 4: Effective Partnerships**

As projects are completed, partners share in measurable successes and start to see meaningful results from their partnerships and coalitions. At this point, the coalitions that have been supported through direct UEI and other EPA funding and technical resources have measurable environmental or public health results and a solid foundation to secure funding through other federal or non-federal sources to sustain work. These partnerships can take several different forms, including: local government & non-profit; public & private; state government agency & non-profit; inter-governmental; or other combinations of partners. The key to partnerships at this phase of the pyramid is that the organizations can demonstrate sufficient results and successes thus allowing the partnership to secure funding and resources to diversify and expand on the projects that the UEI supported during Phase 3. UEI financial resources are less intensive at this point in the model and continue to leverage internal technical resources as requested by the partnerships.

#### **Phase 5: Healthy Communities**

At this stage in the pyramid, the UEI plays a less visible role at the table in further developing stakeholder partnerships and no longer serves as the lead partner for projects. In fact, the ultimate success of this model is that by Phase 5 the UEI has transitioned out of a prominent and constant role at the table and the work will continue forward with community stakeholders at the lead. This phase indicates that the stakeholders are working together effectively and successfully securing resources to implement the strategy required to resolve their most critical environment and public health problems. This bottom-up model for community infrastructure development and environmental results only remains sustainable when Phase 5 at the top of the pyramid is reached. The UEI Community Development Pyramid demonstrates that this phase by phase approach produces significant, measurable environmental results that require minimal EPA resource investment and yields a maximum return on agency resource investment in urban areas.

**UEI Community  
Development Pyramid**



# Measurable Results

The UEI and its community partners have worked together since 1995 to achieve measurable environmental results with focused investment, effective partnerships, and community involvement. The Tufts University School of Medicine, Dept. of Family Medicine and Community Health has served as a strong liaison to communities in New England and helped guide the creation of the UEI. In 1995, Tufts conducted a key informant survey, asking community leaders from the public and non-profit sectors in the three target cities to help identify the key issues of concern and the ways EPA New England could help urban residents address these issues. The top issues of concern were air pollution (both indoor and outdoor), lead poisoning, vacant lots, jobs/poverty, fish contamination and storm water run-off. When asked the single most significant change needed to address these issues the top answers were enforce the law, the need for broad coalitions of groups working with the communities, jobs and employment, and political leadership. When asked specifically what role EPA should have respondents pointed out that EPA didn't focus on their issues and frankly they were tired of EPA asking what they could do but not actually having resources available to do work. Survey participants wanted EPA to make clear what it had to offer and create mechanisms for communities to access those resources. They wanted EPA to recognize their issues and show leadership to also direct other federal, state and local government attention and resources to these concerns. The UEI resolved to make these concerns a foundation to the program and to direct targeted investment to achieve these results and much more.

Funding patterns always reveal program emphasis. Communities have reported that some government programs designed to assist communities occasionally become diverted in other directions. The following maps, charts and graphs provide evidence that the financial allocations of the UEI consistently support the tenets of the program model. During the first years of the UEI, funding matched Phase 1-2 activities and needs highlighted through the UEI Community Development Pyramid. This early work generally required more targeted use of resources, and built a foundation to eventually reduce reliance on only EPA grant awards. Initial grant resources primarily focused on increasing community capacity and environmental education and supported some targeted issue work. As local capacity increased, funding shifted over time to support projects tackling specific issues with less emphasis on general capacity building and environmental education (See Figure 1). All of these projects were consistently leveraged with additional EPA financial resources includ-

ing Environmental Justice Small Grants and Environmental Education Grants and in-kind technical resources including enforcement, laboratory sampling, and reconnaissance efforts. Over time more EPA New England Programs supported UEI projects with resources to maximize community benefit.

Funding sources for the UEI have been from a variety of sources including the Regional Geographic Initiative

(RGI), Regional Administrator Discretionary, and discretionary funding from Pesticides, Toxics, Office of Radiation and Indoor Air (ORIA), Environmental Justice (EJ) and Community-Based Environmental Protection (CBEP) programs. These dedicated resources have been decreasing and unstable every year due to the discretionary nature of the funding sources. The total amount of UEI investment and resources leveraged from other EPA funding

**Figure 1. Total UEI Funding in Boston by Year**

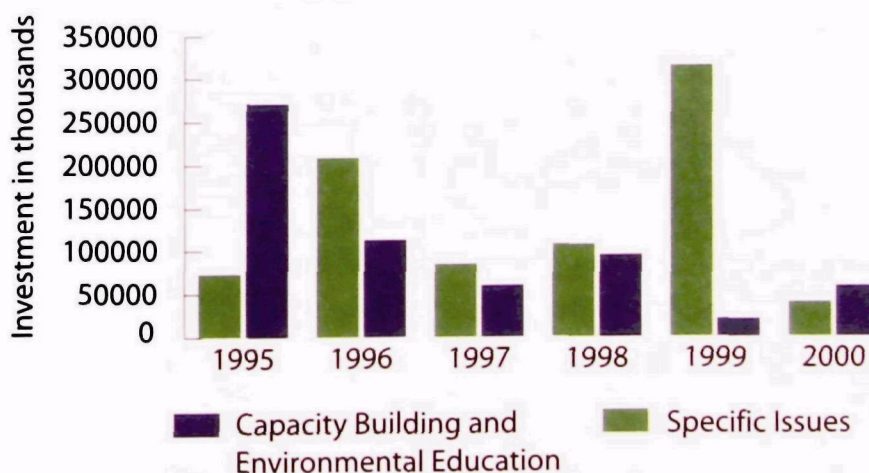


Figure 2. Total Program Investment 1995-2000

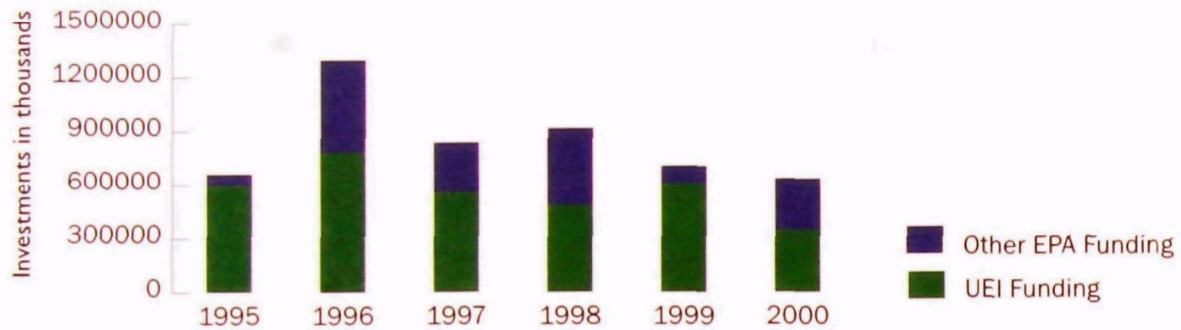


Figure 3. Total UEI Investment



Figure 4. Total Investment from UEI and other Programs



sources is detailed in Figure 2. The breakdown of UEI investment (Figure 3) and total investment leveraged from other government funding sources (Figure 4) shows the pilot program's resources have targeted a range of environment and public health issues. As the graphs illustrate, the UEI has successfully leveraged federal EPA resources from the Clean Water Act, EMPACT, TSCA, Environmental Justice grants, Environmental Education Grants, state lead funding, and other sources.

From 1995-2000 the UEI awarded a total of 111 grants totaling \$3,357,197 targeted in the neighborhoods of Boston, Providence, and Hartford (Figure 5) and leveraged an additional 42 grants totaling \$1,690,609. In sum, UEI was able to secure a total of 153 projects across target cities with a total value of \$5,047,806 in internal financial resources (Figure 6). These resources are invested across the following the UEI target areas:

Figure 5. Total UEI Investment by City

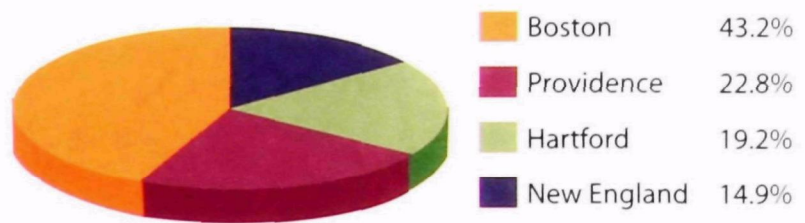
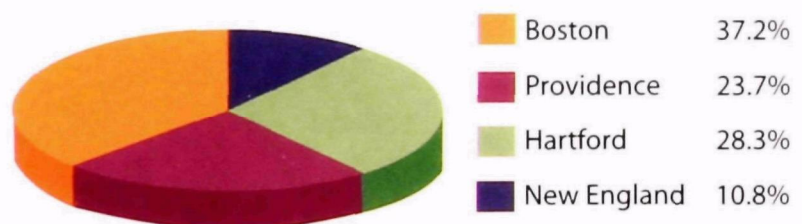
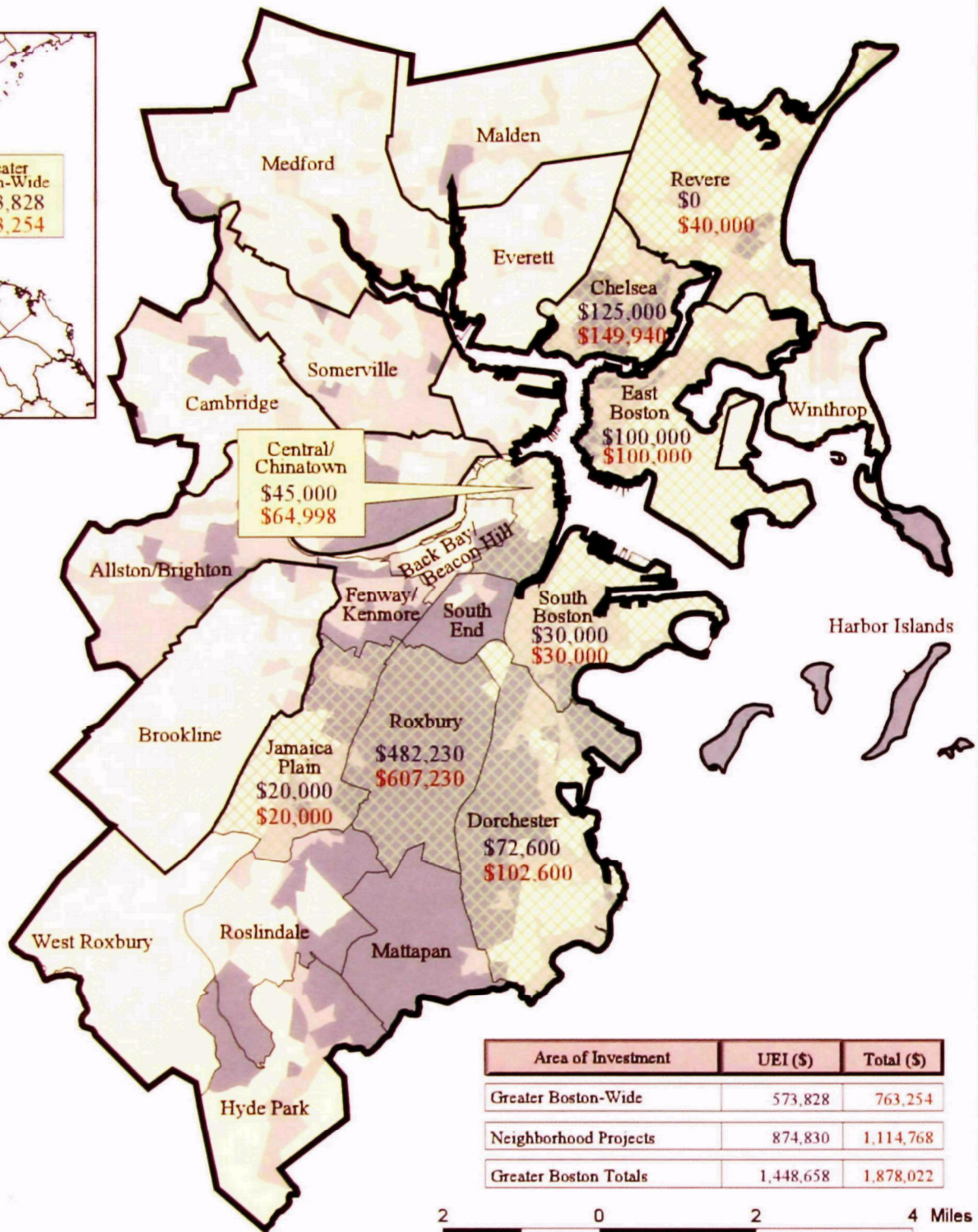
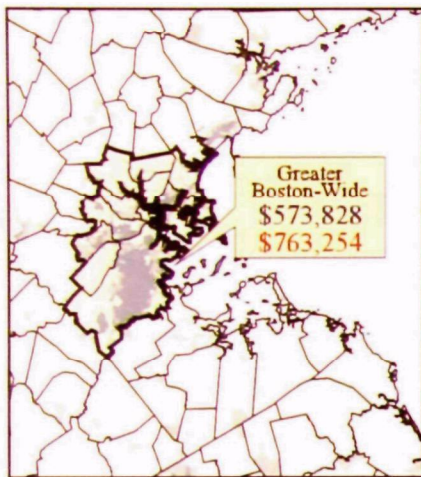


Figure 6. Total Program Investment by City



- In Greater Boston, the UEI funded 41 grants totaling \$1,448,658 in funding, and leveraged an additional \$429,364 in funding through 18 additional projects to benefit residents throughout the Greater Boston metropolitan area. Total Greater Boston investment resulted in 59 projects worth \$1,878,022. (See Greater Boston Map 1 for detailed information on investments, neighborhoods targeted, and low income/minority populations serviced)
- In Providence, the UEI funded 39 grants totaling \$764,504 in funding and leveraged an additional \$429,328 in funding through 12 grant projects. Total Providence investment resulted in 51 projects worth \$1,193,832. (See Providence Map 2 for detailed information on investments, neighborhoods targeted, and low income/minority populations serviced)
- In Hartford, the UEI funded 21 grants totaling \$643,086 in funding and leveraged an additional \$696,961 in funding through 9 grant projects. Total Hartford investment resulted in 30 projects worth \$1,340,047. (See Hartford Map 3 for detailed information on investments, neighborhoods targeted, and low income/minority populations serviced)
- In addition to these target cities, the UEI funded 10 regional grants which totaled \$500,949 and leveraged an additional 3 grants totaling \$44,956. These regional grants supported projects that benefitted the communities of Greater Boston, Providence, and Hartford.

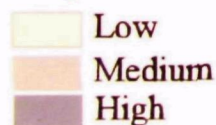
*refer to maps on pgs. 14-16*



## Urban Environmental Initiative Investments and Total Investments In the Greater Boston Area



Low-Income/Minority Population



Neighborhood Projects

Town Boundary

Neighborhood Boundary

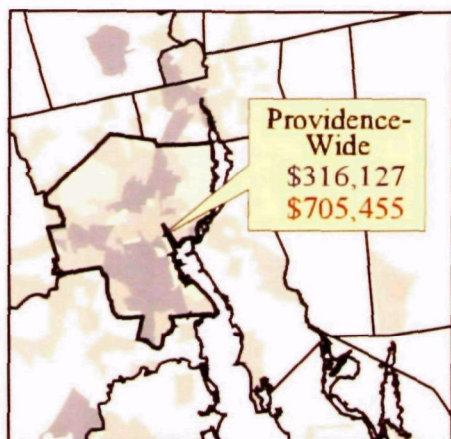
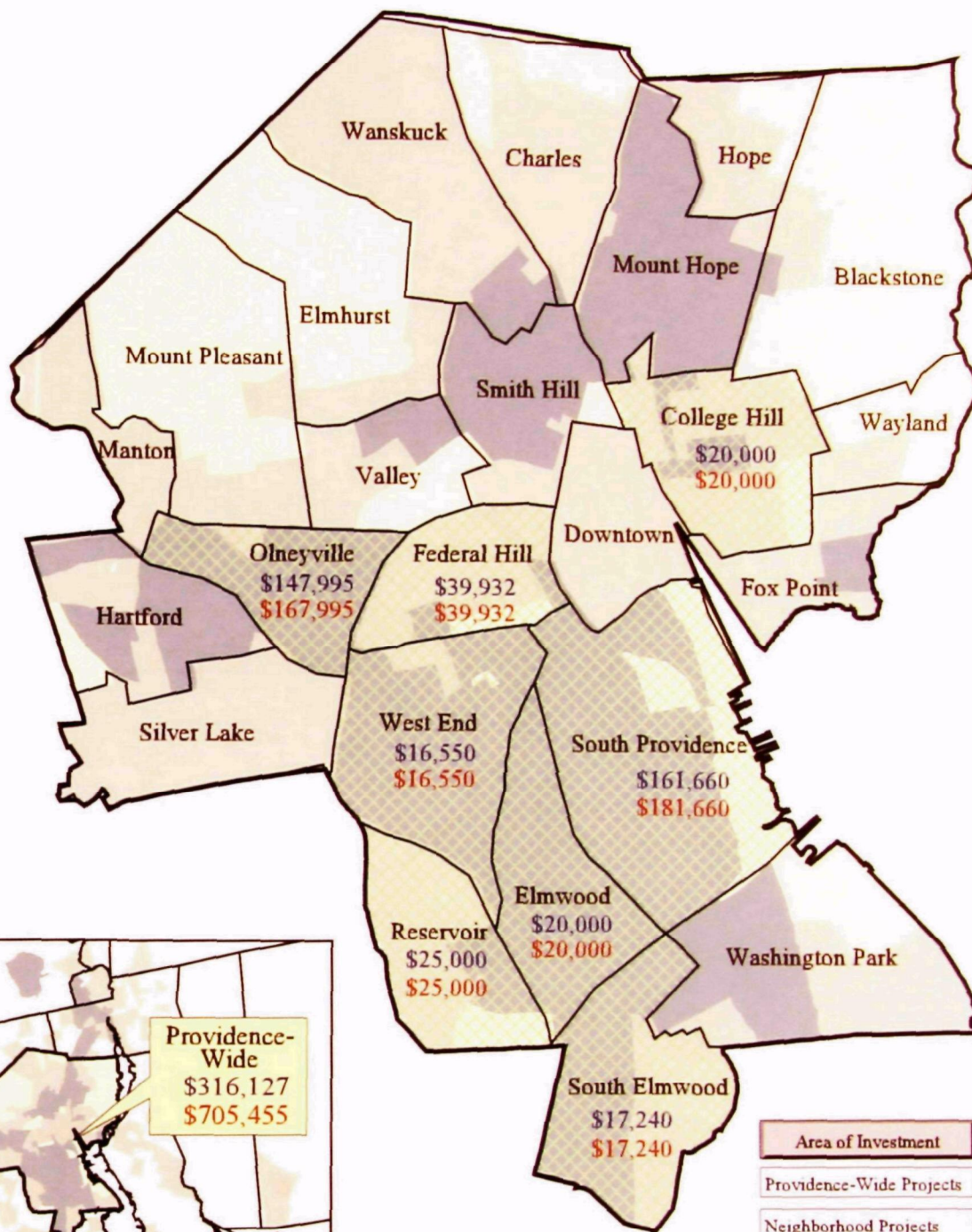
UEI Investment

Total Investment\*



Data Sources: Town Boundaries from MassGIS at 1:24,000. Investment data from EPA-New England. Map Updated: February 21, 2001, EPA-New England GIS Center. I: projects uei investment invest.apr

\* Total Investment includes funding from the UEI in addition to other EPA sources such as the Clean Water Act, EMPCAT, TSCA, State funding, and Environmental Justice grants.



Area of Investment	UEI (\$)	Total (\$)
Providence-Wide Projects	316,127	705,455
Neighborhood Projects	448,377	488,377
Providence Total	764,504	1,193,832

0.8 0 0.8 1.6 Miles



## Urban Environmental Initiative Investments and Total Investments In Providence, RI

Low-Income/Minority Population

Low  
Medium  
High

Neighborhood Projects

Town Boundary

Neighborhood Boundary

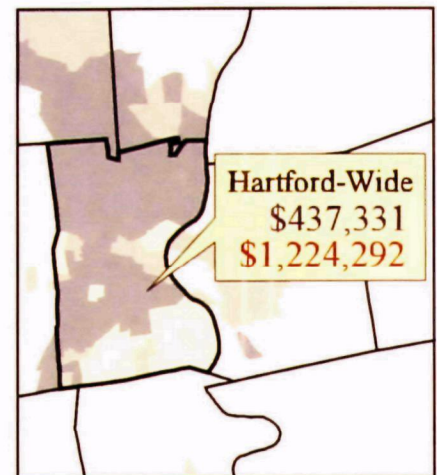
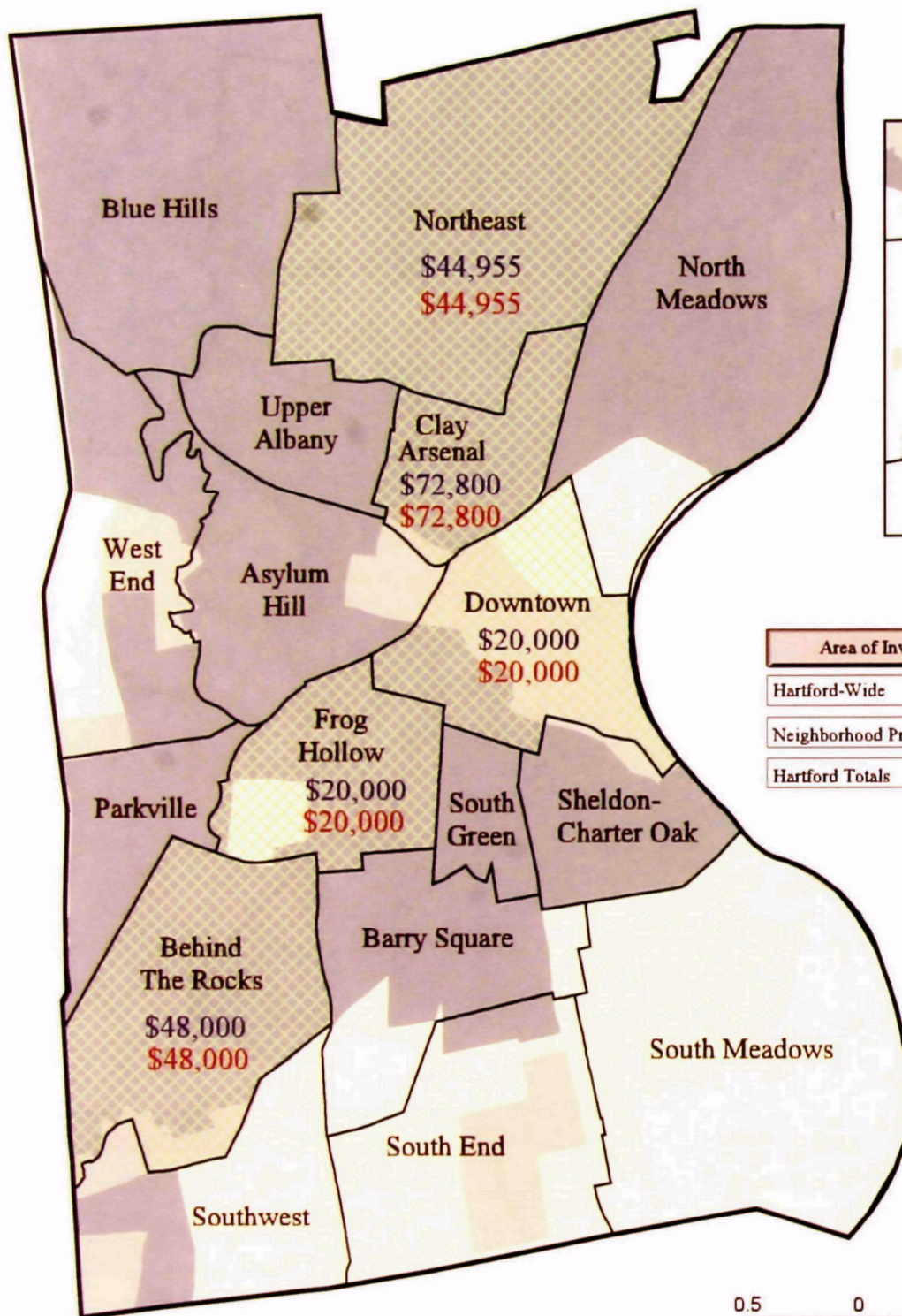
UEI Investment

Total Investment\*



Data Sources: Town Boundaries from RIGIS at 1:24,000. Investment data from EPA-New England.  
Map Created: February 21, 2001;  
EPA-New England GIS Center  
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\* Total Investment includes funding from the UEI in addition to other EPA sources such as the Clean Water Act, EMPACT, TSCA, State funding, and Environmental Justice grants.



Area of Investment	UEI (\$)	Total (\$)
Hartford-Wide	437,331	1,224,292
Neighborhood Projects	205,755	205,755
Hartford Totals	643,086	1,430,047



0.5 0 0.5 1 1.5 Miles



## Urban Environmental Initiative Investments and Total Investments In Hartford, CT

Low-Income/Minority Population

Low  
Medium  
High

Neighborhood Projects

Town Boundary

Neighborhood Boundary

UEI Investment

Total Investment\*



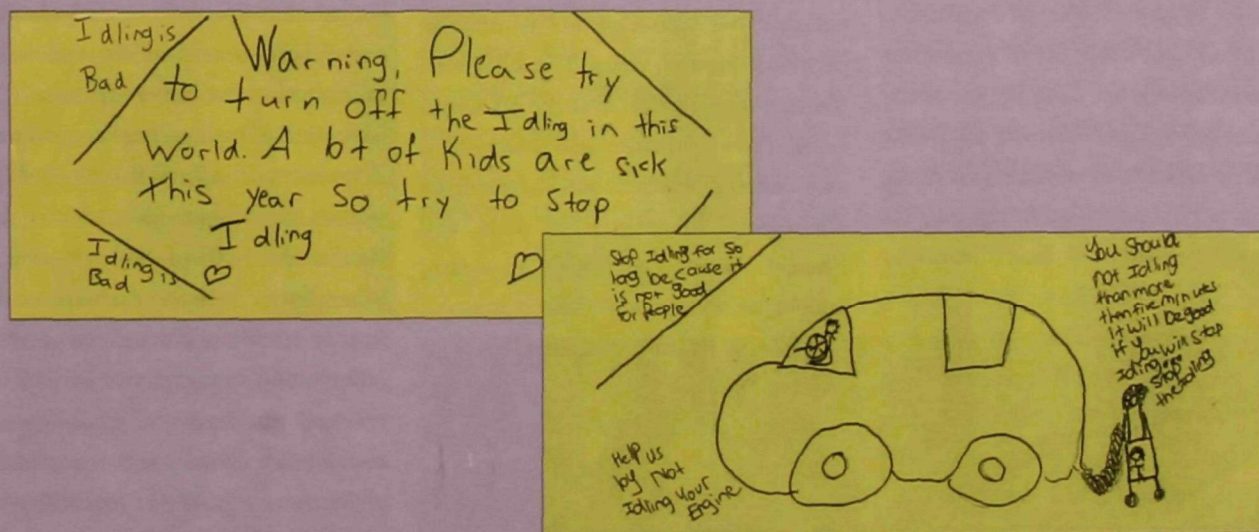
Data Sources: Town Boundaries from ConnDEPAT  
1:24,000. Investment data from EPA-New England.  
Map Created: February 21, 2001. EPA-New England GIS Center  
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\* Total Investment includes funding from the UEI in addition to other EPA sources such as the Clean Water Act, EMPACT, TSCA, State funding, and Environmental Justice grants.

## Anti-Idling Day in Roxbury, MA

Community residents and Alternatives for Community and Environment (ACE) noticed that buses garaged at the Massachusetts Bay Transit Authority's (MBTA) Bartlett Street Garage often idle for up to 30 minutes at a time. This is especially problematic because of the large number of diesel vehicles housed in the area. There are more than 15 bus and truck depots within 1.75 miles of Dudley Square in Roxbury, housing over 1,150 diesel vehicles including 500 MBTA buses, 230 school buses, and 70 private buses. Asthma hospitalization rates in Roxbury are five times higher than the state average, and over twice the rate in Boston. ACE discovered that these long periods of idling directly violated Massachusetts Anti-Idling Law which limits idling time to 5 minutes. Outraged that this law was not being enforced in Roxbury, local residents and elementary school children joined youth in the UEI-funded Roxbury Environmental Empowerment Program (REEP) and organized an anti-idling march and press conference.

The students designed a "ticket" to educate drivers about the Anti-Idling Law and in October 1997, 75 youth from three different schools marched from Egleston Square to Dudley Square in Roxbury distributing these tickets and chanting slogans. They also organized a press conference in Dudley Station where high-level environmental officials from state and federal government spoke, resulting in significant television and newspaper media coverage. Following the march, students from Greater Egleston Community High School wrote letters to the editors of local newspapers calling for clean, alternative fuel MBTA buses. Through their actions, these REEP youth and local school children brought the idling issue to the public and media. This has caused significant changes in MBTA policy and idling practices, and the use of more cleaner-fuel buses in the community.



UEI and community partners have produced results, meeting both quantitative and qualitative goals and objectives. Since 1998, the UEI has developed annual integrated work plans for each target city that are linked with Government Results Performance Act (GPRA) goals, objectives, and sub-objectives. The agency goal that best

reflects the UEI's work is Goal 4 (Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces, and Ecosystems). These standards are a focal point for measuring progress and ensuring that resources are dedicated to achieving environmental results. A full report of annual accomplishments and measurable results for

each UEI target city is available upon request, as such detail could not fully be captured in this five year report. Below is a small selection of many UEI short term highlights and measurable results since its start in 1995:

**Vacant Lots in Providence:** UEI's work with Direct Action for Rights and



*Volunteers clean up trash from illegal dumping on vacant lots in Providence, RI.*

Equality (DARE), Brown University and the Mayor's Office in Providence identified over 4,000 urban vacant lots within Providence City limits, many with significant environment and public health problems from illegal dumping and rats. UEI provided funding to the City of Providence's Environmental Strike Team (PEST) to clean debris, trash and waste from over 600 lots throughout the city. The UEI leveraged EPA laboratory resources to sample 170 city-owned vacant lots for lead poisoning as an indicator of contamination from illegal dumping and demolished homes. Forty of the lots sampled contained dangerously high lead levels and the City of Providence's Department of Planning contracted a local company to mitigate the contamination. The UEI also helped community and local government partners create and implement a Special Vacant Lot for \$1 Program that allows qualified residents to purchase some of the vacant lots for a single dollar. In exchange for the low cost,

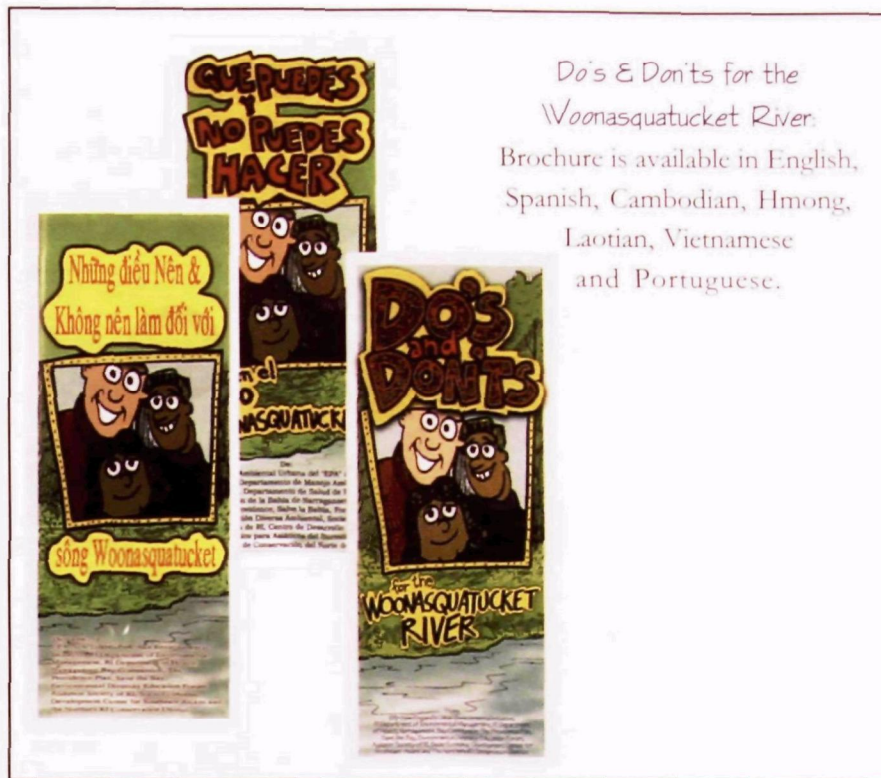
residents promise to put the lots into productive use and maintain the property for five years. The UEI also worked with DARE and the RI Dept. of Health to produce and distribute a multi-lingual brochure to local residents about lead in residential soils, the Special Vacant Lot for \$1 Program, and what they can do to limit childhood exposure to lead in soil. DARE, City of Providence Dept. of Planning, and UEI worked together to create the Alice Hicks Mini-Grants Program which provides up to \$5,000 to qualified new owners of vacant lots to rehabilitate the lot. These resources can be used for landscaping, creating urban garden, elevated flower beds or other creative and safe re-use of the property.

**Do's & Don'ts for the Woonasquatucket River:** The Woonasquatucket River, which flows 18 miles from North Smithfield to the Upper Narragansett Bay in Providence, is a centerpiece of Providence's urban re-

talization efforts where the river is the focal point for the nationally-acclaimed Waterfire shows. In 1996, the UEI learned from community groups that urban residents were subsistence fishing and eel trapping in urban parts of the river. Subsequent sampling efforts revealed significant and extensive dioxin and PCB contamination in fish tissue, soil and sediment in and along the Woonasquatucket. The UEI helped engage the Superfund program that now works at an ongoing site at Centredale Manor to identify the best opportunities to clean up the contamination. The UEI worked with nearly 40 community and local government partners including the Northern Rhode Island Conservation District and The Providence Plan to create and implement the "Do's and Don'ts for the Woonasquatucket River" multi-lingual education and outreach campaign to help children, families, and visitors safely enjoy the urban resource. The education campaign has reached urban elementary schools with classroom presentations to over 400 children in the third and fourth grade, trained youth River Rangers at the Providence Plan to give 10 presentations reaching over 100 children through the Parks Dept., reached hundreds of adults through community centers and town council presentations, and has reached 10,000 local residents with multi-lingual brochures through door-to-door campaigns and community events.

#### **Landfill Improvements in Hartford:**

Hartford is home to more regional waste disposal facilities than any other Connecticut town. It receives waste from 77 Connecticut towns, Vermont, Massachusetts, Rhode Island, and New York City. The Connecticut Resources Recovery Authority operates the Hartford landfill, consisting of an 86



*Do's & Don'ts for the Woonasquatucket River. Brochure is available in English, Spanish, Cambodian, Hmong, Laotian, Vietnamese and Portuguese.*

Farmers Market in the Dudley Street Neighborhood. Staffed by stipended youth program participants, the market provides low-cost, healthy and fresh food to neighborhood residents. Since its inception, The Food Project has reclaimed and transformed two acres of urban land for food production and increased farmed land from four to twenty-one acres; brought together over 3,100 youth from Greater Boston to remediate and cultivate farm land in Roxbury and Lincoln; employed over 250 youth from Greater Boston through summer and Academic Year Programs; harvested and distributed nearly 300,000 pounds of locally-produced organic produce; supplied fresh organic produce to fifteen local soup kitchens, urban and suburban families, an urban business, the Urban Farmers Market, and a Community Supported Agriculture Program; and facilitated nearly 7,000 volunteer hours at Greater Boston soup kitchens.

acre unlined area for municipal solid and special waste and an 17 acre double lined area that receives municipal solid waste combustion ash residue. Working in partnership with community groups including ONE/CHANE, the UEI helped secure technical resources to extensively sample and test the sight. Unified community efforts stimulated nearly \$13 million in anti-pollution improvements and over \$500,000 for community health studies.

barren brownfields properties and empowers local youth with leadership skills. Starting in 1995, the UEI partnered with The Food Project to expand its farming base to include redevelopment of vacant land in Roxbury and help sell its freshly-harvested organic produce at an Urban

**Turning Vacant Lots & Brownfields Into Sustainable Urban Agriculture:** Founded in 1991, The Food Project addresses environmental issues by remediating land, modeling sustainable agriculture practices, developing local capacity, training and employing youth leaders, and raising fresh produce to feed hungry and low-income residents in Greater Boston. Urban agriculture provides a holistic answer to many problems found in many low-income communities and makes positive assets out of problems from vacant land and



*A vacant lot in Providence, RI.*

In January 2001 Tufts University again surveyed UEI grant recipients from 1995 to the present. The survey found that 84% of grantees felt that as a result of their involvement with UEI they are better able to participate in the public processes that effect the environmental quality of their community. Across the six priority UEI issues, 75% of the grantees work on at least three issues, if you include groups working on at least two issues it climbs to 91%. This demonstrates a remarkable ability on the part of UEI grantees to use the multi-media approach that is the hallmark of UEI. The UEI has also been extremely effective in getting EPA resources to these grantees. The UEI directly responded to the information from community groups in 1995 to let the community know what it had to offer and now it is possible to see that groups know what EPA has to offer and that they are making use of

## Building trust and credibility

these resources. The survey identified 12 specific resources: Tools for Schools; Brownfields; River Preservation; Radon; Water Quality Testing; EPA Training; Integrated Pest Management; Asthma; Lead Poisoning Prevention; Targeted Enforcement; Soil Testing and other EPA Grant programs. On average groups accessed 6 of these tools from EPA New England through the UEI. The results from this survey verify that the UEI achieved the measurable program goal of building capacity at the local level and linking communities to other EPA programs and resources.

The previous discussion centered on

tangible short term results, but only time will afford a retrospective look that can truly calculate the results and success of the UEI. These long-term results include today's unknowns such as the number of poor environmental decisions that will be avoided because of a fully aware infrastructure of concerned and dedicated people now participating in decision-making. How many pieces of thoughtful legislation will be passed or creative solutions to today's problems will come forth simply as a result of an educated citizenry? Though their genesis may be a result of current actions, it is not possible to measure all the future progress that will be made due to UEI efforts.



*UEI staff receive a community tour of many urban vacant lots in Providence, RI.*

## Low-income seen at most exposure

By Beth Fisher

Based on Boston's Chinatown and other areas of the city, a new study by the Massachusetts Department of Public Health shows that low-income residents are exposed to the highest levels of lead in the city.

It was long thought that low-income people — including a disproportionate number of minorities — have tended to live in areas with high levels of lead. But a new study by the Massachusetts Department of Public Health shows that low-income residents are exposed to the highest levels of lead in the city.

However, the Chinatown is one of the most heavily exposed areas to that geographical zone. "It's sort of a new dimension to environmental health in the city," said Martha Tse, coordinator of the Campaign to Protect Chinatown. "We've been focusing on environmental health, but we are not aware of all these other hazards that we aren't really aware of. It really opens our eyes."

## Most overburdened

Massachusetts communities with most lead

Community	Relative lead exposure index
1. Boston	274.8
2. Chelsea	134.2
3. Cambridge	127.4
4. South Boston	126.2
5. East Boston	123.2
6. Cambridge	120.6
7. Cambridge	104.7
8. Boston	98.3
9. Boston	98.0

Source: Massachusetts Department of Public Health

A Northeastern University study found that lead exposure is highest in communities with high poverty rates. The study also found that lead exposure is highest in communities with high poverty rates.

Massachusetts Department of Food and Agriculture

## plan on trash in in Roxbury

By Cindy Rodriguez

Along Hampden Street in Roxbury, thousands of people have gathered to protest against the plan to build a new incinerator in the city.

The plan to build a new incinerator in the city has been met with strong opposition from the community.

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## Study Says Natural Gas Buses Have No Edge in Cleanliness

By Randy Kennedy

When powered by compressed natural gas — long viewed as the cleaner alternative to diesel fuel — city buses are no better for the environment than those powered by a combination of diesel and electricity, according to a study that could have broad implications for vehicle fleet decisions.

The study, by the Massachusetts Department of Transportation, found that natural gas buses are no better for the environment than those powered by a combination of diesel and electricity.

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## Lead poisoning in children too high in Dorchester

By Megan Scott

Two decades after the federal government's ban on lead paint in homes and other buildings, the problem of lead poisoning in children remains a major public health concern in Dorchester.

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**Sustainable Boston**  
Thomas M. Morris, Mayor  
Andrea D'Amico, Chief of Environmental Services  
Gene Proffitt, Director



## Case Studies

## Case Study I

## Urban Environmental Infrastructure in Boston, MA

# Case Studies

The UEI Community Development Pyramid was applied to a range of urban environment and public health issues and created a sustainable urban infrastructure that increased local capacity to solve problems. This section highlights three case studies to illustrate the model in action. The case studies include: Urban Environmental Infrastructure in Boston, MA; Evolution of

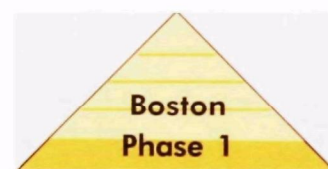
the Environmental Justice Movement in Hartford, CT; and Lead Poisoning Prevention in Providence, RI. These case studies are a small slice of UEI's successful deployment of the UEI Community Development Pyramid. Each case study had its genesis in different environmental problems and community response, and every one resulted in a consistent progression up

the pyramid to create a stable infrastructure that will last beyond the length of the pilot program. The uniqueness of the case studies illustrates the diversity and flexibility of the UEI Community Development Pyramid in bringing people, groups, and resources together to produce measurable environmental and public health results.

## **Case Study I: Urban Environmental Infrastructure in Boston, MA**

Boston is a tightly packed city with sixteen neighborhoods. In 1990, Boston's multi-racial population totaled 574,283 comprised of 24.3% African-American; 10.8% Hispanic; and 5.2% Asian/Pacific Islander. Children under 10 and people over 65 comprised 22.4% of the population. 18.7% of Boston residents and 50.8% of Roxbury residents are living at or below the poverty level. Chinatown is the most densely populated neighborhood with over 111 residents per acre, and 9.6 persons per acre of open space. This is nine times higher than any other neighborhood. Chinatown is also surrounded by major expressways (Mass Pike & I-93) and local residents live with more traffic than in any other neighborhood. 90% of Boston children under six have been tested for lead poisoning, and the greatest number and most severe cases of lead poisonings occur in minority neighborhoods. Asthma and bronchitis are the leading cause of childhood hospitalization, and the rate is 178% higher in Roxbury.

Boston has always been a city full of neighborhood activism, so it was not difficult to find groups, issues or communities to work with. Many Boston neighborhoods launched community-based efforts to protect the urban environment, but were faced with many daunting obstacles. Federal, state and municipal environmental laws were numerous, confusing, and often not designed to meet resident needs. The legal and technical resources required to solve urban problems were nonexistent because mainstream environmental groups generally ignored inner city environmental issues and focused on wildlife habitat and ecosystem preservation. There was also little public education on the connections between the urban economy, environment and public health. This case study documents the UEI's efforts to service community needs by developing a sustainable infrastructure so local stakeholders and residents have a forum to get information, raise their concerns, and access resources to improve the health and environmental quality in Boston neighborhoods.



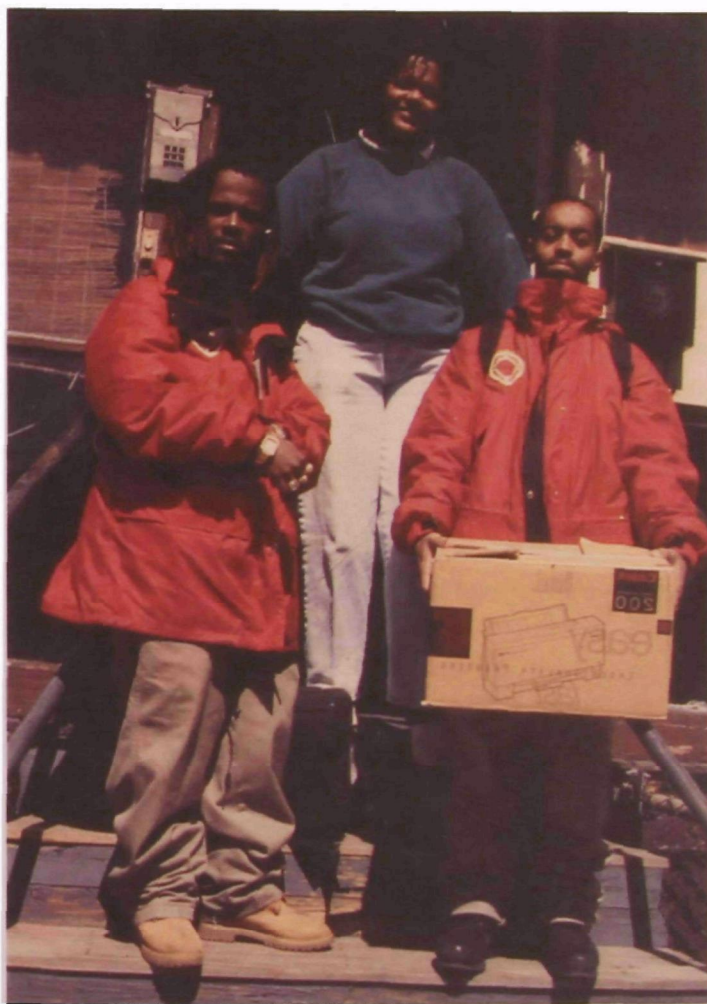
## **Phase 1: Understanding the Problems & Identifying Stakeholders**

EPA New England responded to the public's request by requiring staff to focus more program efforts on urban neighborhoods in Boston and created the UEI as a dedicated resource. The UEI and community groups organized a number of environmental justice tours in Roxbury and Chelsea to increase agency awareness of the issues and concerns in the most disadvantaged Boston neighborhoods. These tours highlighted the disproportionate risks for residents including diesel and bus traffic and transport, vacant lots, lead poisoning, air pollution, asthma, and lack of green and open space along urban rivers.

The UEI continued working with Boston neighborhoods and listened to community concerns. Focus groups were held in partnership with Tufts University and the Boston University School of Public Health to engage local residents and environmental leaders about their issues and ideas. The UEI expanded historical EPA New England partnership efforts with the National Center for Lead Safe Housing, local public health agencies and community organizations in the Codman Square neighborhood to develop strategies to reduce lead poisoning in high-risk neighborhoods for lead poisoning. A key product was the Massachusetts Lead Law workshop with a curriculum for community stakeholders to understand the history and components of the law and confirmed the value of involving neighborhood based organizations to prevent childhood lead poisoning. The workshop empowered local residents with information so they could effectively advocate for needed change and reform in local laws, which ultimately helped to reduce exposure to lead for children.

The UEI also identified more local environmental groups to improve Boston neighborhoods. The UEI joined forces with City Year's urban youth corps to tap the energy of the volunteers to work in urban neighbor-

hoods in Roxbury and Dorchester. The UEI also helped to support newly emerging environmental groups including Alternatives for Community and Environment (ACE), Environmental Diversity Forum (EDF), and the Dudley Street Neighborhood Initiative (DSNI) and worked with health organizations including the Bowdoin Street and Dimmock Community



*City Year youth workers in Roxbury, MA.*

Health Centers to better understand the problems facing Boston residents.

The most critical project success that laid a foundation for future work in Boston was a project called Green Spaces Healthy Places. UEI, City Year, AmeriCorps, DSNI and other community groups worked to reduce community environmental hazards in the

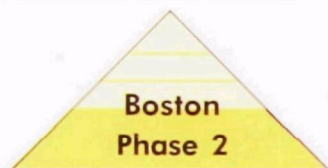
Dudley Street area in Roxbury. The project emphasized open space revitalization, resource conservation, and indoor air quality. The project marked the first UEI-coordinated effort to focus training and funding with neighborhoods, the private sector, and public health professionals to revitalize an urban neighborhood. The diverse project team promoted environmen-

tal understanding, skill building, neighborhood environmental audits, environmental sampling to detect lead and radon levels, GIS mapping of vacant lots, and delivered training to 20 City Year Corps members. These efforts helped the youth understand available data on environment and public health issues in Roxbury and share this information to local residents. Green Spaces Healthy Places produced visible and measurable results and helped residents better understand their local environment and their role in solving environmental problems.

During this first phase, the UEI worked to understand community concerns and supported stakeholders

that were already serving as champions for urban environment and public health concerns in Boston neighborhoods. UEI focused technical and financial resources to help build trust with the community partners. The majority of financial resources supported staff time in non-profit organizations and directed academic resources to start gathering

information and data to understand the extent and depth of contamination in Boston neighborhoods.



## **Phase 2: Building Local Capacity & Developing Local Partnerships**

Building off the early project successes in Boston, the UEI started developing slightly larger scale projects to encourage community groups to jointly address common problems facing residents. A critical project was Neighborhoods Against Urban Pollution (NAUP), launched in partnership with UEI, ACE, DSNI, Massachusetts Campaign to Clean Up Hazardous Waste, Environmental Diversity Forum, Bowdoin Street Health Center, and the Tellus Institute. The NAUP team developed a blueprint for community-based ecosystem protection that started with resident awareness and mobilization and then leveraged technical resources (i.e. GIS mapping) to help the community identify and catalogue the sources of environmental hazards and environmental assets. The information was used to help prioritize problems and develop coordinated plans of action by creating Neighborhood Core Groups to organize and facilitate citizen involvement and input. This effort produced model campaigns for addressing some of the most common urban environmental problems including illegal dumping of waste on vacant lots, hazardous waste, pollution



*A multi-ton salt pile located along the Chelsea Creek in Chelsea, MA.*

from auto repair and paint shops, and contaminated Brownfields sites.

One of the ongoing results of the Green Spaces Healthy Places project included the introduction of urban farming in the DSNI area through The Food Project. With a budget of \$100,000, three staff, eighteen youth (many from the inner city) and 2.5 acres of land at Drumlin Farm in Lincoln, MA the Food Project launched its first growing season in 1992. That summer, they grew and donated 4,000 pounds of food. This project was transitioned to engage local youth in the DSNI area for the first on-site urban farm. Collaboration between the UEI, Green Spaces Healthy Places groups and The Food Project helped identify and transform vacant land in the DSNI area into a working urban farm.

In 1997-98, the UEI worked with Boston University School of Public Health (BUSPH), Tufts University School of Medicine (TUSM), and South Boston Community Health Center staff to conduct surveys of public housing apartments with West Broadway residents. These surveys assessed indoor air contaminants, safety

hazards, health, and the role of residents in maintaining housing quality. Participants were trained by BUSPH and TUSM on indoor air quality issues and the surveys helped document apartment and building conditions, maintenance history, and resident health. The survey revealed that there is a critical link between building and apartment quality (i.e. water leaks, moisture, mold, uncontrolled heating, poor ventilation, etc.) and resident health. The partners also determined that this complex problem could only be solved by a combination of building improvements, change in maintenance policy, and community health education programs.

The UEI also continued to expand the number and diversity of stakeholders involved. New community partners included Roxbury Community College, Coalition to Protect Chinatown, and the Chelsea Creek Action Group. UEI funded Tufts University to diversify the New England Lead Coordinating Committee by including more community based partners in addressing lead poisoning, and helped focus attention

on urban air issues through collaborating with the Northeast States for Coordinated Air Use Management (NESCAUM) on conferences and outreach. The UEI also provided community trainings to our partners including GIS mapping, how to apply for funding, facilitation and conflict resolution, and general management skills. The UEI focused resources on projects to map environmental hazards in Boston communities and shared this information at community forums and events. ACE was a pivotal partner engaging local residents and youth and worked with other community partners to organize “EJ in the Hood” which brought together hundreds of residents, youth and local groups on a Saturday to learn about the quality of their environment and what they could do to improve it. All of these projects addressed common issues of concern identified in Phase I, and encouraged local stakeholders to work together and share success.



### **Phase 3: Leveraging Public Resources To Improve Public Health & The Environment**

Years of collaboration with a diverse set of local partners set the stage for the UEI to identify more public resources to support urban project work throughout Greater Boston communities. The UEI provided funding to the Massachusetts Riverways Urban Rivers Program, within the Massachusetts Dept. of Fisheries, Wildlife, and Environmental

Law Enforcement, to restore the ecological integrity of urban rivers. EPA New England’s Office of Environmental Stewardship conducted a River Reconnaissance on the Mystic River including the Chelsea Creek, a neglected urban riverway lined with petroleum tank farms, a multi-ton salt pile, 21E hazardous waste sites, and much more. The UEI also worked with Roxbury Community College to create a certification program for lead abatement that used adult education programs to build a network of trained minority contractors that can safely do lead abatement work to reduce lead poisoning in children and create jobs. The program collaborated to increase or target the work of numerous departments and programs in city government such as Parks and Recreation, Neighborhood Development, Inspectional Services, Environment, Boston Redevelopment Authority, and the Boston Environmental Strike Team (BEST).

As a pilot program, the UEI could not effectively service all the needs of the sixteen communities in the area and was open to alternative mechanisms for

securing direct technical and fiscal government resources to conduct project work. When the United States Dept. of Agriculture (USDA) issued a request for proposals for a new program to create Urban Resource Partnerships across the country. The UEI, Sustainable Boston, the Dept. of Environmental Management and a broad coalition of community, government, academic and local business partners joined forces to successfully receive a total of \$1.3 million dollars to invest over five years in communities through the Greater Boston Urban Resources Partnership (GB-URP). The stage was set to build off the successes of the past and set new visions for the future.



### **Phase 4: Effective Partnerships**

Once the USDA support was secured, the challenge was to take the partnership beyond the grant funding and



*Participants in the Roxbury Community College adult education program.*

make it effective. GB-URP grew to become a coalition of over forty members representing community organizations, local business, academic partners, and federal, state and local government. Its mission was to help local communities conduct projects that link social, economic, and environmental concerns with available resources to produce results. GB-URP members work together on projects and coordinate technical, financial, and in-kind resources to community based organizations and neighborhoods throughout Greater Boston. GB-URP operated with funding and support primarily from the USDA, with

additional investment and involvement from the Dept. of Housing and Urban Development, the UEI, the City of Boston, BSC Group, Mystic River Watershed Association, Eagle Eye Institute, and Chelsea Human Services Collaborative. GB-URP annually awards approximately \$250,000 in grants to neighborhood groups to support the mission. The UEI is a member of the Executive Committee and jointly participates in decision-making. GB-URP has gone beyond providing funding to coordinate a series of "Piecemeal to Cohesion" meetings that link grant-making foundations with community groups around specific

environment and public health topics to help ensure that these projects receive consideration for funding.

UEI's work to assist small organizations in Greater Boston with skills and knowledge has empowered them to form better partnerships to secure financial resources for more complex projects. For example, ACE was able to expand its collaboration with local groups and received over \$1 million from EMPACT to conduct a multi-year AirBeat Program that provides real-time ambient air quality data to residents and corresponds with a public outreach campaign that lets asthma

### **New England Lead Coordinating Committee**

The New England Lead Coordinating Committee (NELCC) is a highly successful regional collaborative with diverse community and government representation. NELCC has successfully reduced barriers to end lead poisoning by developing partnerships with state, federal, and community stakeholders to revise and address conflicting regulations and policy that prohibited implementing lead poisoning remediation and prevention strategies throughout New England. NELCC worked with UEI to have EPA New England release a memo stating that soil contaminated with lead from house paint could be disposed of under the household hazardous waste exemption, removing it from a quagmire of conflicting regulations and policies. NELCC facilitated the development of low-cost landscape measures to manage soil on site. These plans have been shared and adopted across the county. NELCC also ensures efficient and effective use of resources. New England States have successfully competed for a wide range of government funding for lead poisoning prevention and remediation work. NELCC was awarded additional funds from state legislatures and used the resources more efficiently by minimizing start-up costs and sharing basic information (i.e. specifications and programmatic development) to quickly service delivery. States in the region shared bid specification software and jointly developed a standard reporting format for blood lead data from private laboratories.

NELCC also started and continues a Keep It Clean Campaign, partnering with over 50 local hardware stores in New England to deliver messages about lead safe renovation. The NELCC designed brochures, posters, and press releases. States paid for printing and coordinated local partnerships, and members worked together to translate the brochure into Spanish to reach a broader audience. Community-based organizations and parent run non-profits have been critical to support changes that reflect the needs of those who face the dangers of lead poisoning and developed some of the most creative community level solutions. NELCC illustrates the value and effectiveness of strong, inclusive, collaborative approaches to resolving a critical urban environmental and public health issue. It has demonstrated the need for a more unified, holistic approach to health issues, and it offers a model for engaging stakeholders to develop a lasting infrastructure to build regional capacity to solve problems.



sufferers know the air quality and be able to adjust their outdoor activities accordingly. The Boston Foundation, The City of Boston Sustainable Boston Program, many community stakeholders, and the UEI worked together to initiate the “Boston Indicators of Progress, Change and Sustainability” project to measure and track detailed information on environment, public health, and social issues facing urban residents in Boston. The project is an ambitious information-gathering effort that released “The Wisdom Of Our Choices,” which identified Education and Health Care, Civic Health and Cultural Life, and other issues to be tracked in the future.



### **Phase 5: Healthy Communities**

The UEI and our community partners have successfully created many sustainable and effective partnerships that will continue to make measurable improvements in the quality of the environment and public throughout Greater Boston in the future. In 2000 the GB-URP was recognized by EPA as a Federal Interagency Environmental Justice Demonstration Project which highlights an effective inter-agency partnership to address the needs and concerns of environmental justice communities in Greater Boston. The GB-URP serves as a stable liaison between community-defined needs and available federal and private resources in order to respond to problems and concerns. There is a full time staff person that serves as the Executive Director of the partnership that coor-

dinates and leads the day to day communication, management, and oversight of the organization including creation of an annual work plan to track efforts.

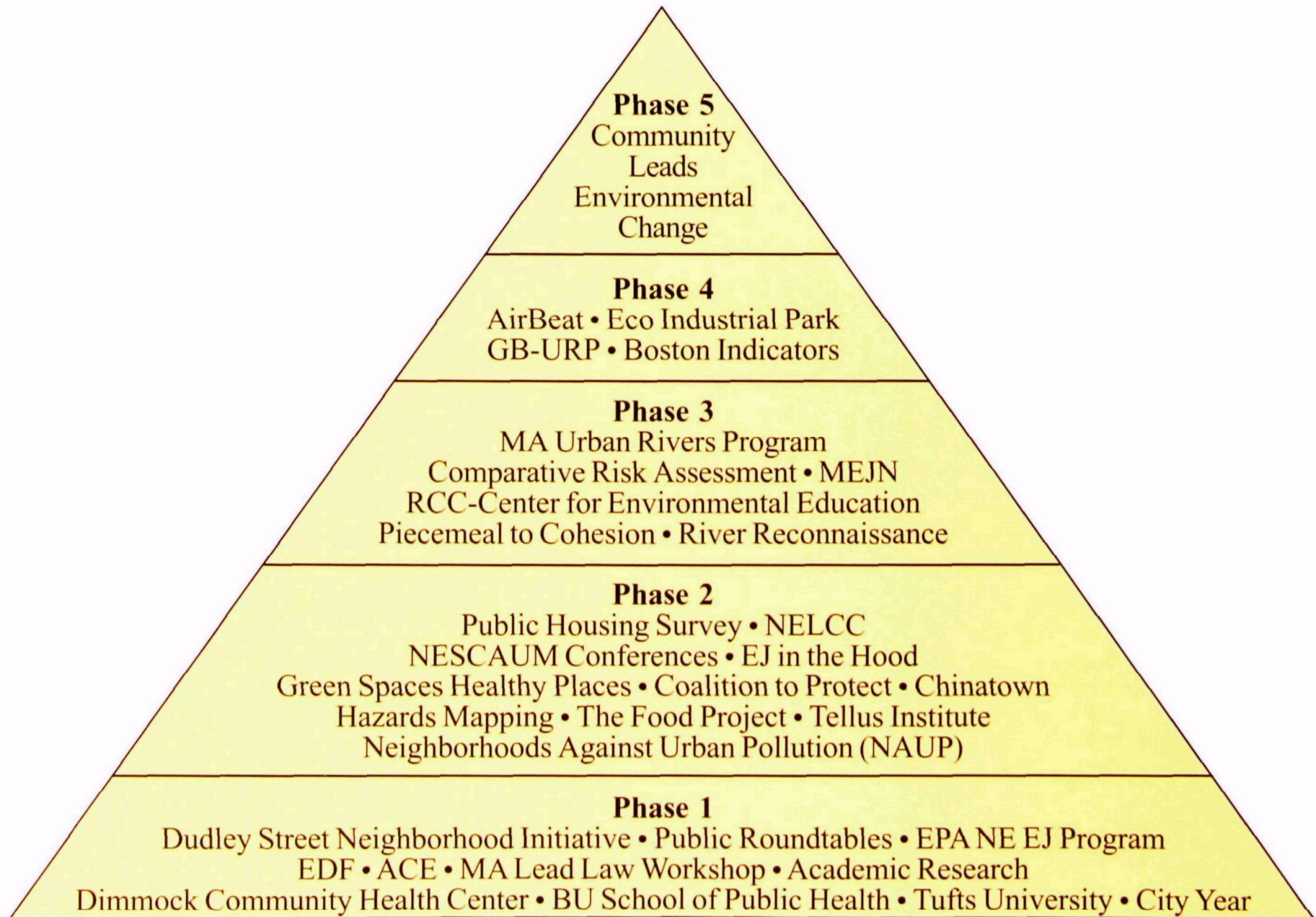
Other partnerships that were once supported substantially by the UEI have expanded their role and gone well beyond their original local scope to service the entire city or state. ACE coordinates a citywide effort through the Greater Boston Environmental Justice Network which joins numerous community based environmental efforts in sharing information, political support and strategic planning. The Massachusetts Riverways Program now has a permanent Urban Rivers focus and funding source, and the indoor air efforts of the BUSPH has grown into a major collaborative effort between the three schools of public health in Boston (Tufts, Boston University and Harvard), the City of Boston and a community group (The Committee for Boston Public Housing). This cutting edge partnership will assess and implement system-wide changes in retrofitting and maintenance of Boston public housing.

The Food Project now has its own 21-acre farm in Lincoln, 2.5 acres of land in Boston on two sites in the DSNI area, works with 100 young people, 14 staff and an annual budget of \$1.4 million. The Food Project grows and distributes 150,000 pounds of organic produce each year, and is a true leader in urban agriculture and local, safe food production in urban areas. The Boston Indicators Project continues on track. Seminars will be held at Boston College every two years through the year 2030, Boston's 400th anniversary, to report progress to the public. The report provides a new and sustainable tool to measure Boston's strengths, assets as well as its challenges.

Boston has always been fortunate to have strong activists and passionate professionals willing to work for change. UEI's efforts provided federal resources to support these community efforts and created effective projects, long-term partnerships, and measurement tools that will ensure better, cleaner, and safer neighborhoods for future generations.



# Environmental Infrastructure in Boston, MA





Case Studies

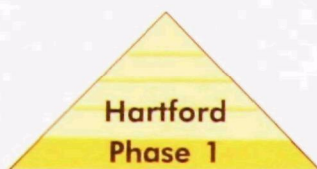
Case Study 2

Evolution of the Environmental  
Justice Movement in Hartford, CT

## Case Study 2: Evolution of the Environmental Justice Movement in Hartford, CT

During the 1960's and 1970's Hartford lost much of its manufacturing base, and the middle class fled to the suburbs. In 1990, Hartford's population was approximately 130,000 people, with 70% minority including 36% Black and 34% Latino. Residents live in an area of 18.4 square miles with 17 neighborhoods. Hartford is the 8<sup>th</sup> poorest city in the country and hosts a regional landfill, sewage treatment plant, sewage sludge incinerator, trash-to-energy incinerator, and four small electrical generation plants. The trash-to-energy incinerator contributes 56% of the non-traffic air pollution. Two major interstate highways (I-84 and I-91) border Hartford and four state highways traverse the city producing 70% of the mobile source carbon monoxide. Childhood lead poisoning rates are twice the state average. The Connecticut River, an American Heritage River, has a fish consumption alert due to high levels of mercury in the watershed. The Park River and Piper Brook have high bacteria levels and metals contamination from combined sewer overflows, point source and non-point source runoff. Sprawl and lack of investment created 339 acres of vacant land and nearly 1,000 abandoned buildings. Hartford is a city where money is made, but not locally invested.

This case study will examine the role of the UEI and community partners to create a new climate in Hartford where the community's voice influences decisions that are reversing years of environmental injustice and are changing the quality of the environment where they live, work and play.



### Phase 1: Understanding the Problem & Identifying Stakeholders

UEI's initial efforts in Hartford were met with mistrust by the community. The UEI participated in local community meetings and sponsored focus groups to start building credibility and begin understanding the range of issues facing residents. These meetings were a catalyst to bring stakeholders together and marked the first time local residents saw government listening and not dictating. The key community concerns included chronic respiratory illnesses, lack of environmental health data available to the public, lack of political



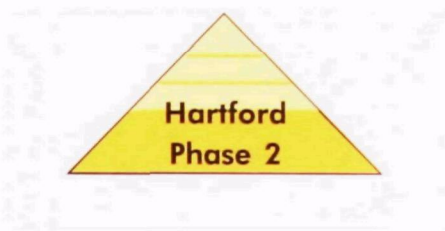
*Community member in Hartford, CT calls for action against toxic pollution.*

representation, and no support for community needs. Community stakeholders also expressed concern over the local landfill and possible adverse health effects. Residents were also worried that local air pollution caused by neighboring waste facilities and heavy highway traffic could be keeping their children sick.

UEI's key partners were ONE/CHANE, Inc. and the Hartford Health Dept. (HHD). ONE/CHANE is a nonprofit organization working to rebuild North Hartford to meet resident driven priorities and resolve environmental problems. The UEI helped these partners sponsor a conference titled "Redefining the Urban Environment" to bring together a broad range of stakeholders for a dialogue and greater awareness of local environmental justice issues and community concerns. UEI's work with the HHD expanded the Environmental Health Division to improve access to accurate and timely information of concern to the public and enabled the HHD to work more effectively with local constituents.

UEI's efforts were enhanced by environmental justice site tours to raise awareness of the realities of the environmental problems in Hartford. Securing participation and support from EPA New England staff was viewed by residents as critical to the success of the UEI pilot program and included the Regional Administrator, EPA's senior management team, and program managers. Congressional representatives, the Mayor, heads of state agencies, local political leadership, grassroots groups and the media were also engaged and informed. These early efforts and partnerships with community stakeholders laid a strong

foundation for identifying projects that would start to address the greatest concerns of Hartford residents.



## Phase 2: Building Capacity & Developing Local Partnerships

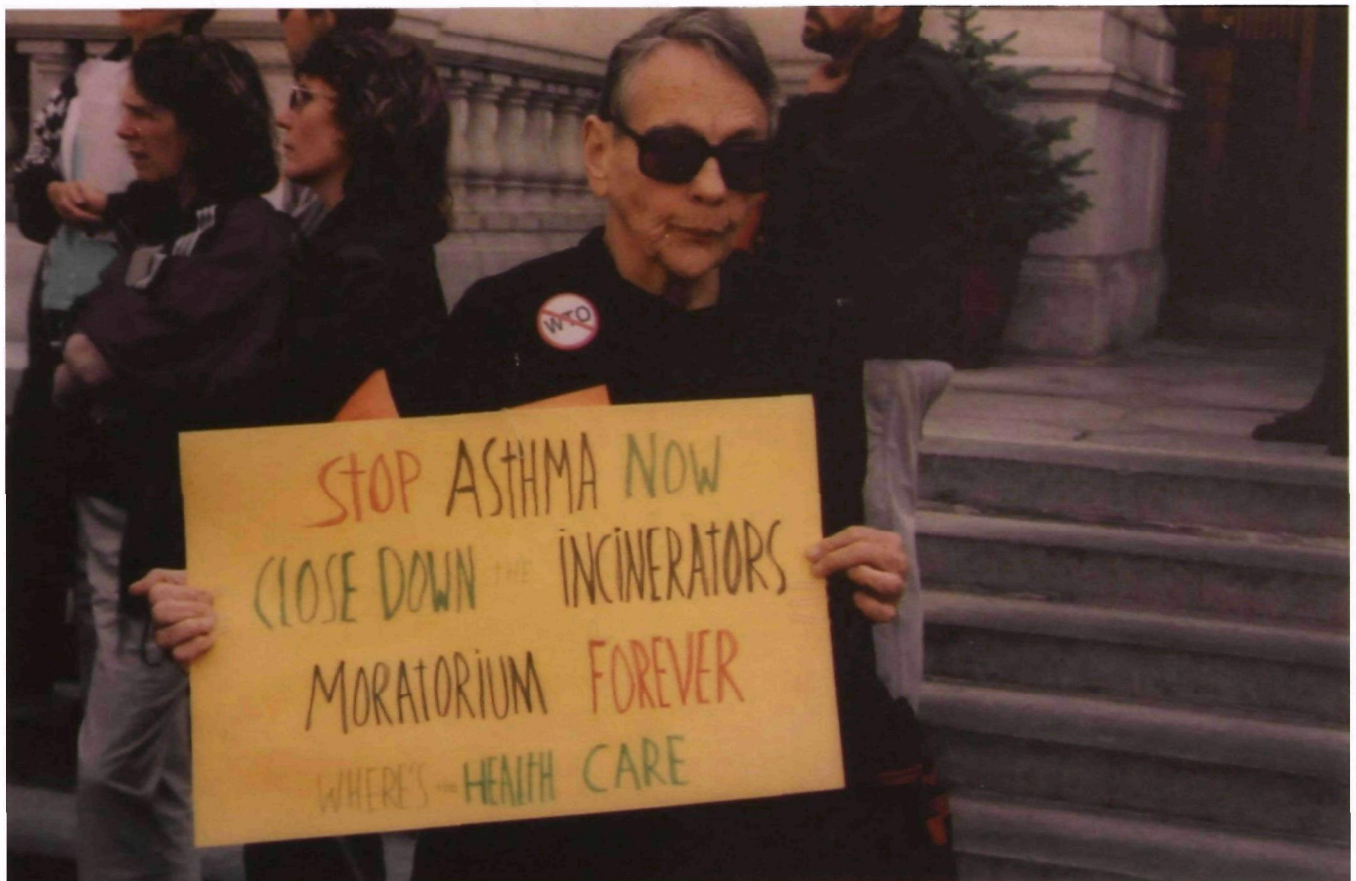
Once the UEI started to build relationships with a few partners and learned community concerns, the next step was to engage more stakeholders and work together to understand the scope of the environment and public health problems in the city. UEI's funding and technical assistance helped community partners develop the skills

and knowledge needed to be informed and involved in local decision making. Funding also supported our flagship partners and projects with new partners including Building Parent Power (BPP), Hartford Areas Rally Together (HART), and Knox Parks. Representatives from these groups, residents, and local block captains received a series of UEI sponsored trainings on environmental education, data gathering and evaluation, and GIS. The UEI also worked with ONE/CHANE to educate residents and youth in the Northeast and Clay Arsenal neighborhoods and conduct hundreds of door to door community surveys to involve more residents.

UEI's partnership with BPP, a parent led advocacy organization, convened environmental justice education and awareness sessions for residents in

English and Spanish. The sessions increased awareness and understanding of the connections between the quality of the environment and public health. Each session identified local resources and offered practical tools for parents to address asthma, lead poisoning, integrated pest management, and the city's rat crisis. This project directly involved parents and promoted accountability and safer indoor environments in public schools.

The UEI also worked with HART, Knox Parks and ONE/CHANE to address illegal dumping on vacant and abandoned land, urban blight, and economic development in low income and minority neighborhoods. Creating community gardens helped partners transform abandoned, trash strewn lots into productive gardens one lot at a time. The gardens gave residents



*Community resident advocates for cleaner air and a response to asthma prevalence in Hartford, CT.*

### Knox Parks Chestnut Hill Reclamation Project

When Knox Parks Foundation considered reclaiming a series of vacant lots in Hartford and turning them into a large urban green space with multiple uses, lead contamination was the last thing on their mind. The community-based organization was working in partnership with members of the Clay Hill neighborhood and developed a detailed plan to turn this two acre vacant lot into a passive park and an urban garden with a teaching area for used by students of the local Quirk Middle School. Full implementation of this plan was stalled after soil sampling revealed lead levels on the majority of the site that were over the residential threshold established by the Hartford Dept. of Health. In 1998, the UEI helped Knox Parks Foundation successfully obtain resources through the RCRA Enforcement Division by using resources from a Supplemental Environmental Project (SEP) in Hartford to



remediate the lead from the soil by using phytoremediation. Phytoremediation uses certain types of plants as crops to absorb the lead through their leaves and stems and significantly reduces lead levels from soil over time. The Chestnut Street Reclamation Project sponsored an Earth Day celebration and work day to begin the first phase of transforming the lot into a passive park and urban garden. Students from the Quirk Middle School, along with volunteers from local community groups, EPA's CT State Unit and the UEI worked side by side removing trash, debris and planting trees and shrubs. Subsequent events engaged an additional 20 students from Trinity College, local community groups and EPA staff to transform this open space into a community garden by constructing fencing, raised beds, and planting vegetables and flowers. The result of this combined effort has turned a vacant lot into a productive, enjoyable and safe urban greenspace for the public.

ownership and pride in the neighborhood. UEI funding and technical assistance established an effective, working partnership between formerly competing community groups to produce environmental results.

The Hartford Neighborhood Environmental Project (HNEP) was launched in 1995 by the CT-DEP's Pollution Prevention Office to work with residents and businesses to promote pollution prevention, quality of life improvements, and enhance economic development in two neighborhoods. The UEI provided multi-year funding to expand the original project to service seven Hartford neighborhoods. Over four years, HNEP used voluntary and traditional enforcement techniques to produce results. HNEP initiated a series of efforts including: train-the-trainer seminars for neighborhood leaders on environmental issues; reclaiming hundreds of pounds of Mercury through community thermometer exchanges and household hazardous waste collection days; cleaning over 100 illegal neighborhood dump sites; introducing recycling in a 90 unit cooperative housing project; developing a plan to turn a one acre illegal dumping site into a garden and recreational area; and hosting Poster & Poem Contests for Hartford schools. The UEI joined CT-DEP and community partners to host Earth Day Conferences with forums on household pollution prevention, managing construction and demolition waste, asthma awareness, reducing lead paint poisoning, air and water pollution, deterring illegal dumping, sustainable development, and creating community gardens. These small project successes continued to build trust between community partners and demonstrated that working together can achieve results.



### **Phase 3: Leveraging Resources to Improve Public Health & the Environment**

Improving public health and the environment in Hartford required coordination among stakeholders and dedicated resources. The HNEP's program continued to grow and expand and their education and outreach activities to empower thousands of Hartford residents to be aware of their actions and the impact on the environment. HNEP has fostered environmental stewardship, partnership development, and collaborative environmental problem solving.

The Capitol Region Roundtable was created by community partners and supported by the UEI to enhance previous community collaborations and unify major stakeholders across Hartford neighborhoods. The UEI was a partner in the Roundtable and helped host forums on environmental and public health issues which impact residents within the Capitol Region. The Roundtable and community partners hosted an Environmental Justice Community Forum and Environmental Justice Tour for EPA's National Environmental Justice Director.

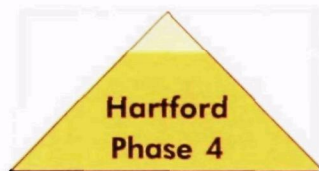
The strength of the foundation built by the UEI and our community partners through a few years of small scale project work was soon tested by a public health crisis. An article in the Hartford Courant reported that the asthma rate in Hartford is more than five times the national average. The

UEI, HEJN, Capitol Region Roundtable, and community partners responded quickly by launching an asthma education campaign through public forums, a media campaign and an Asthma Policy Forum. Targeted education and outreach for local officials resulted in the City Council declaring an "Asthma Emergency". The partners also held an Asthma Legislative Briefing to promote greater awareness among legislators about the severity of the asthma epidemic and provided recommendations for policy development. The UEI leveraged EPA New England Indoor Air Quality technical experts and sponsored community trainings on asthma prevention, triggers and EPA's Tools for Schools Program with ConnectiCOSH. Local parents created demand to start implementing EPA's Tools for Schools and Integrated Pest Management strategies in Hartford schools.

The UEI also worked with the HHD, University of Connecticut Environmental Research Institute, and the John Snow Institute to develop a website to share Hartford specific information with the public. Staff time, materials, and information were dedicated from nearly two dozen state, local, and community sources to work together to produce a quality website. Environmental health issues covered in the web site include lead poisoning prevention, asthma, indoor air quality, outdoor air quality, open/green space, brownfields and environmental justice.

Another example of how the UEI links agency resources with community needs is the collaboration that addressed public concerns about contamination on Pliny Street in Hartford. The abandoned site once hosted a plating company and the soil

contained high levels of hexavalent chromium and other dangerous toxic substances. Resources were leveraged from local, state, and federal sources to safely secure the site, conduct sampling and community outreach, hold public information meetings, and plan for future site reuse. Partners included the UEI, EPA New England Emergency Response, Brownfields Pilot Program, CT Dept. of Public Health, CT-DEP, City of Hartford, HHD, Pliny Street Block Association, Clay Arsenal Neighborhood Revitalization Zone, and My Sister's Place shelter for women and children. These project successes set the stage for a more effective and diverse partnership to develop which would transition UEI's role from one of leadership to participating as one of many voices working together to solve problems in Hartford.



#### **Phase 4: Effective Partnerships**

The Hartford Environmental Justice Network (HEJN) was formed in response to community concerns about the siting of another fossil-fueled power generator in South Hartford, and has served as a foundation to unify many community groups and stakeholders around common issues and events. Residents were concerned that this new project would be the tenth power generator located next to a predominantly Black and Latino community already overburdened with many air pollution sources. The HEJN soon developed a reputation for holding major local polluters accountable for

activities that endanger public health. The HEJN has grown to include over 30 neighborhood and community groups including UEI with over 1,000 members. What the HEJN has accomplished as an effective partnership is unprecedented in Hartford's history. HEJN members researched the issues related to hosting a new fossil-fueled power generator, raised public awareness about the relationship between air pollution and respiratory health, requested a public hearing, and arranged the first environmental public information session by neighborhood groups. This was a highly successful strategy that led to an agreement where Northeast Utilities actually removed the new power generator.

The environmental enlightenment in Hartford initiated by the UEI, ONE/CHANE, HEJN and our other community partners led to the foundation

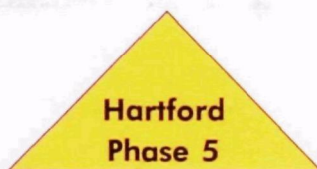


*Dr. Mark Mitchell addresses residents and activists at a public awareness event in Hartford, CT.*



*Local activists and residents in Hartford, CT protest pollution from industry.*

of the Connecticut Coalition for Environmental Justice. This state-wide coalition expands and enhances the efforts of the HEJN through its mission to “protect urban environments” in the State of Connecticut.



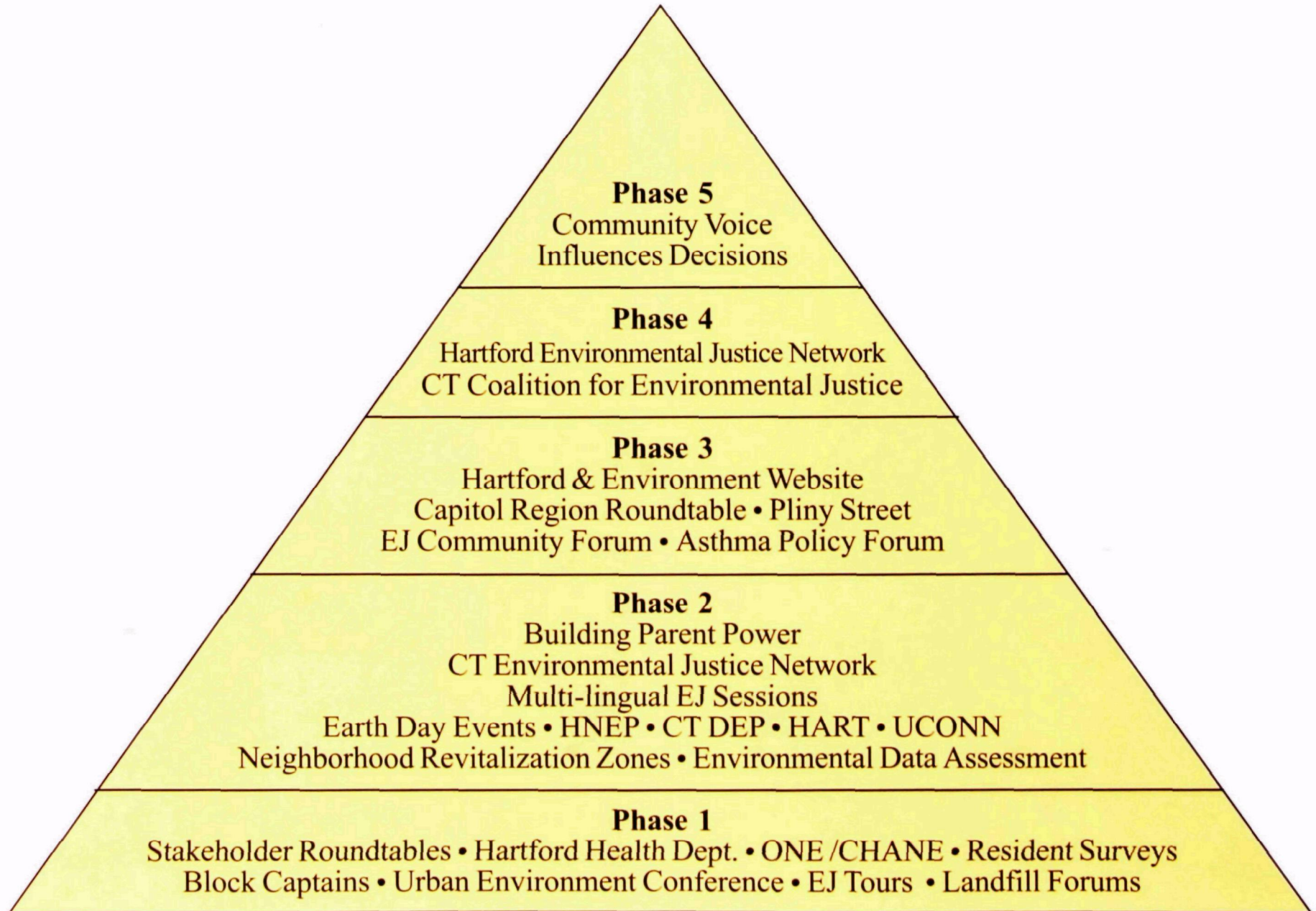
### **Phase 5: Healthy Communities**

Today in Hartford there are organized community residents, with a common purpose, and effective and lasting partnerships that work together to slowly reverse a history of environmental injustice, guard against environmental vandals, air polluters, and hazardous waste dumpers. Residents of Hartford

are now empowered with knowledge and awareness of environmental laws, regulations and policies that exist to protect them. When enforced, those laws, regulations and processes champion their cause for environmental justice. It has taken several years, but the environmental results from capacity building and focusing resources are evident. Hartford residents participate in greater numbers in local and regional efforts to safeguard and improve the quality of the environment and public health. Environmental justice partnerships have successfully blocked the siting of any medical waste storage and disposal in the City of Hartford, and defeated a proposal to site the largest truck stop in New England. Local, state and federal governments are partnering with organized neighborhood groups to promote healthy communities.

The residents of Hartford have fought long and hard for their cries of injustice to be heard. Finally, their perseverance is beginning to pay off. The first African-American to be elected on the Green Party ticket ran on an environmental justice platform. Connecticut now requires industry to actively engage and solicit input from the community whenever applying or reapplying for permits. Developers now solicit input from the HEJN and the Connecticut Coalition for Environmental Justice prior to designing redevelopment plans. There is a new level of respect for the voice and needs of the community and a willingness to find common ground to respond to community concerns whenever making environmental decisions.

# Environmental Justice in Hartford, CT





in news

ALONG THE WOODSQUATUCKET

New warnings to target S.E. Asians

DARE Direct Action for...

Youths clear the Moshassuck River banks of the Japanese knotweed. Late in the day, they feed the plant to elephants at Roger Williams Park Zoo.

W. WILSON SMITH

NORTHWEST

River pollution: Careful but don't panic

Dioxins

\$1 land sale offers lots of lead for little money

YOUTH UNION

Believe... METRO

lowers DARE's lead

The Providence Journal

POSITIVE POWER OF YOUTH

PROV

Case Studies

Case Study 3

Lead Poisoning Prevention in Providence, RI



*UEI staff and community volunteers disseminate educational materials door to door in Providence, RI.*

### **Case Study 3: Lead Poisoning Prevention in Providence, RI**

Lead poisoning is a preventable disease, which makes the health effects on children from lead exposure especially tragic. Childhood lead poisoning is one of the most serious environmental health problems in the state of Rhode Island. The prevalence of children with elevated blood lead levels in the state of Rhode Island is more than double the U.S. rate. For Hispanic children, the rate in Rhode

Island is nearly six times the national rate. In 1995, one out of every three children tested in the City of Providence under the age of six had elevated blood lead levels.

Lead poisoning is linked to housing conditions and the burden of lead poisoning is disproportionately borne by low-income families, especially those who live in Providence's absentee-owned rental properties. These deteriorating structures and the hazards they create affect the quality

of life of entire neighborhoods. Rhode Island has the fourth oldest housing stock in the nation, with 43% of the stock built before 1940 and over 75% built before 1970. Nearly 300,000 housing units in Rhode Island have potential lead paint hazards and associated lead-contaminated yards. Of these units, over 90,000 are low income households. Low income households account for nearly 30% of the homeowners in Rhode Island. Overall, 31% of the low-income owners have housing problems and the rate rises to 41% for minority owner households. Hispanic owner households have the highest percentage with 43.8% experiencing housing problems. In addition to poor housing quality, Providence also has nearly 4,000 city-owned urban residential vacant lots which are host to illegal dumping and a home for rats.

This case study illustrates the value and success of the UEI's multi-stakeholder, community-based approach to focus federal resources to support community priorities and create safer environments to reduce the number of children with lead poisoning in Providence.



### **Phase 1: Understanding the Problems and Identifying Stakeholders**

The UEI started its work in Providence by hosting community focus groups and meetings to understand the most important problems facing residents. These meetings and discussions with

local leaders identified lead poisoning and rats as top priorities. In 1995, The Childhood Lead Action Project (The Project) was the only community group in Providence exclusively dedicated to lead poisoning prevention. The Project was formed in response to the alarmingly high incidence of lead poisoning in the city and developed and staffed a community-based Get the Lead Out Coalition to raise public awareness about the need for action. It became clear that The Project was a critical partner and that they needed financial and technical assistance to continue tackling this complex issue. The UEI started working with The Project and provided funding to stabilize the organization and support outreach and advocacy efforts representing low-income and minority families with lead poisoned children.

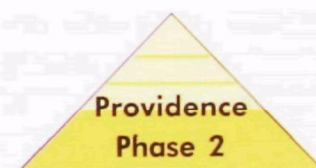
The UEI identified other local stakeholders that could help understand the depth and extent of lead poisoning sources and contamination throughout Providence. The UEI engaged EPA New England's Lead Program staff and held a day-long "Lead-in-Soils

Charrette" with a diverse set of community stakeholder participants to examine the problem of lead in soils, especially in older residential homes. This charrette created landscape contractor specifications to reduce lead in soils and created a community manual and poster for homeowners to keep families safe from lead in their yards.

The UEI also started to work with the Environmental Studies Program at Brown University to research and analyze housing stock conditions and investigate possible correlations with lead poisoning rates. The research project identified Providence neighborhoods with elevated blood lead levels in children and used GIS technology to map this data across the city along with housing code data from the City of Providence. The research project verified that clusters of children with elevated blood lead levels were primarily located in deteriorating, low income neighborhoods with old housing.

The UEI also worked with the Olneyville Housing Corporation (OHC) to survey housing quality in

Olneyville and South Providence and identify lead exposure pathways for children. These neighborhoods represent two of the most under served, minority and low-income sections of Providence. OHC compiled the survey information and organized a door-to-door outreach campaign with local youth organizers to educate families about lead poisoning prevention. UEI's initial work with these community partners started to build the pilot program's credibility and develop a trusting relationship with our partners. These successful small-scale projects helped define the lead poisoning problem in the city and set the stage for identifying more comprehensive projects that would allow these stakeholders to work in partnership to reduce lead poisoning rates.



## Phase 2: Building Community Capacity & Developing Local Partnerships

UEI continued to support The Project's efforts to inform and empower urban families to keep their children safe from lead poisoning through prevention. The Project spearheaded "Train the Trainers" education programs to train local leaders to share prevention strategies and techniques with parents. The Project organized three successful lead conferences designed for environmental and public health leaders, parents, and families to learn about lead poisoning sources, methods for abatement and prevention, and treatment options for children. The UEI worked



*Childhood Lead Action Project staff teach children and families how to eliminate incidence of lead poisoning.*

with The Project to provide support to engage parent participation and help involve Brown University, Rhode Island Department of Health (RIDOH), local Congressional leaders, and the Mayor's Office in the events.

In 1998, the Mayor of Providence responded to the continuing lead poisoning crisis by convening the Providence Safe Housing Lead Task Force (LTF). The Mayor asked the Executive Director of The Project to serve as Vice-Chair of the LTF to ensure that community needs would be heard and met. The UEI worked closely with The Project, the Mayor's Office, RIDOH, and other community partners to create a consensus-based process to holistically identify ways to reduce lead poisoning rates. The LTF had over fifty active participants representing environmental groups, local residents, public health officials, academia, local business, and government. Participants volunteered their time and expertise to identify solutions to the lead poisoning problem over a period of six months. The LTF had three subcommittees: Housing, Health & Education, and Funding and each met on a regular basis for nine months. The UEI recruited EPA New England's Lead Outreach Coordinator to provide federal regulatory guidance expertise to the Health and Education Subcommittee and ensure that the participants were aware of agency outreach tools and resources.

The UEI participated on all three subcommittees and helped find common ground among stakeholders with differing objectives to ensure that the subcommittees continued moving forward to finish the task force report. One key programmatic challenge facing LTF participants was existing

lead regulations and policies. The regulations and policies focused mainly on lead poisoning detection, rather than prevention or abatement. The participants identified that there were inadequate state and local resources to enforce existing city housing codes and a lack of political will to prioritize enforcement efforts. Despite these challenges, the window for advancing a comprehensive lead poisoning prevention policy for Providence was now firmly open.



### **Phase 3: Leveraging Public Resources to Improve Public Health & the Environment**

The UEI continued to work with and support The Project to expand its outreach and education efforts through "Lead Safe Parties" and engaging parents to advocate for change. UEI provided funding, technical expertise, and staff time to work with community partners to develop the LTF final report recommendations and identify next steps for action. The Project, the Mayor's Office, and the UEI worked together to produce the LTF final report. The recommendations were the result of capacity building, partnership development, and community involvement that effective community-based environmental protection requires. The LTF recommended three approaches to focus action. The first strategy provided outreach, information and knowledge to parents and property owners about the

danger and sources of exposure, and practical prevention methods. The second element created a housing investment and maintenance strategy to produce safe, well-maintained housing in an efficient, affordable manner. The third focus directed federal, state, city and private-sector financial resources to support implementation of LTF recommendations. The Mayor of Providence formally adopted all the recommendations in the final report and created a Steering Committee to guide and oversee implementation.

The UEI and community partners began identifying ways to secure additional public resources to implement the LTF final report. The UEI worked with local government, The Project, and other LTF stakeholders to apply for a U.S. Dept. of Housing and Urban Development (HUD) Lead Based Paint Hazard Control Grant. The partners were awarded \$4 million in resources to perform education and outreach, and lead restoration programs in Providence neighborhoods over three years.

It was also clear to community partners and the UEI that lead poisoning was not solely a housing problem, and also included lead contaminated vacant lots and residential yards. The UEI started working on vacant lots in 1995 to support Direct Action for Rights and Equality (DARE). DARE played a leadership role in organizing the community and galvanizing city action to address the vacant lot and rat problem. When DARE and the City of Providence were identifying ways to return the vacant lots to productive re-use, lead contamination became an issue. The UEI worked with DARE and the City of Providence to provide resources from EPA New England's

Laboratory to screen vacant lots for lead. The UEI organized volunteers and EPA New England staff to collect and analyze soil samples from 170 city-owned vacant lots. UEI, DARE, the City of Providence and RIDOH shared this information with the public and created a multi-lingual fact sheet to help residents mitigate contamination and protect children from lead poisoning.

The UEI also continued work with Brown University and the City of Providence to gather information from agencies, organizations, community groups, and residents on a range of environmental issues including lead poisoning. The results were published in a report called "Livable Providence 2000" and was released to the public during a community conference in October 1999. The Livable Providence 2000 section on lead poisoning supported the recommendations of the LTF final report. These shared project successes enabled the UEI pilot program to begin a slow transition from a prominent leadership role to

become part of an effective partnership that would work together to achieve results.



#### **Phase 4: Effective Partnerships**

Effective partnerships join diverse stakeholders who work together to define and meet clear goals and achieve desired results. When the Mayor of Providence adopted the LTF recommendations and formed the Lead Task Force Steering Committee (LTFSC), UEI provided funding for staff to work with community partners to take the final report recommendations and turn them into a coordinated action plan. The committee contained city officials, the Rhode Island Department of Health, UEI, The Project, The Office of Attorney General, and a

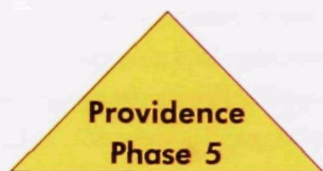
number of other community-based organizations. This steering committee worked for over nine months to turn the LTF final report into a detailed Goals Management Plan (GMP), that outlines specific tasks and timelines for progress. The GMP highlights six areas for lead poisoning prevention work: Health and Education; Prevention; Enforcement; Funding; Monitoring; and Grant Management. Each goal has multiple objectives and tasks that are being coordinated by the LTFSC. The LTFSC is now a working partnership that continues to meet and track GMP progress.

The UEI also helped community partners launch a lead-safe yard program for residential properties statewide in Rhode Island. Working with the Rhode Island Housing (RIH) and Mortgage Finance Corporation through the statewide Lead Hazard Reduction Program, the partners received a \$250,000 grant through EPA's Environmental Monitoring for Public Access and Community Tracking



*Childhood Lead Action Project conducts a "Lead Safe Party" providing in-home education to families in need.*

(EMPACT) program. The project creates lead safe yards at owner-occupied, home-based daycare units in low-income neighborhoods across the state. The project is managed by community groups that collect and interpret real-time soil lead data at daycare units and homes with contaminated yards and help residents make sound choices to mitigate lead poisoning. The LTFSC partnership and successful expansion of joint projects, combined with continued leadership from The Project and the RIDOH, set the stage for some incredible and measurable environmental results.



### Phase 5: Healthy Communities

When the UEI started work in Providence in 1995, one in every three children tested below the age of six had elevated blood lead levels. In 1999, blood sampling from children tested below the age of six had fallen to 1 in 5, compared to 1 in 10 state-wide. This dramatic achievement is the result of years of work of many people, organizations, and thousands of hours of time and our community partners, especially The Project, deserve the credit for always leading the charge. LTFSC is not solely responsible for this dramatic improvement, but its work had a positive impact in focusing federal resources to support education, outreach, and remediation work. Progress made in enforcing lead standards, holding negligent and recalcitrant landlords accountable, years of work by The Project and The Get The

Lead Out Coalition to reach out to urban families about ways to prevent lead poisoning, increasing lead inspections, and securing more funding significantly contributed to reducing elevated blood lead levels in Providence children. To track the implementation of the GMP, the LTFSC is creating a measurement and communications tool to evaluate tasks accomplished and progress made. This tool will release information to the public and will help maintain accountability for results and continue progress to eliminate lead poisoned children in Providence.

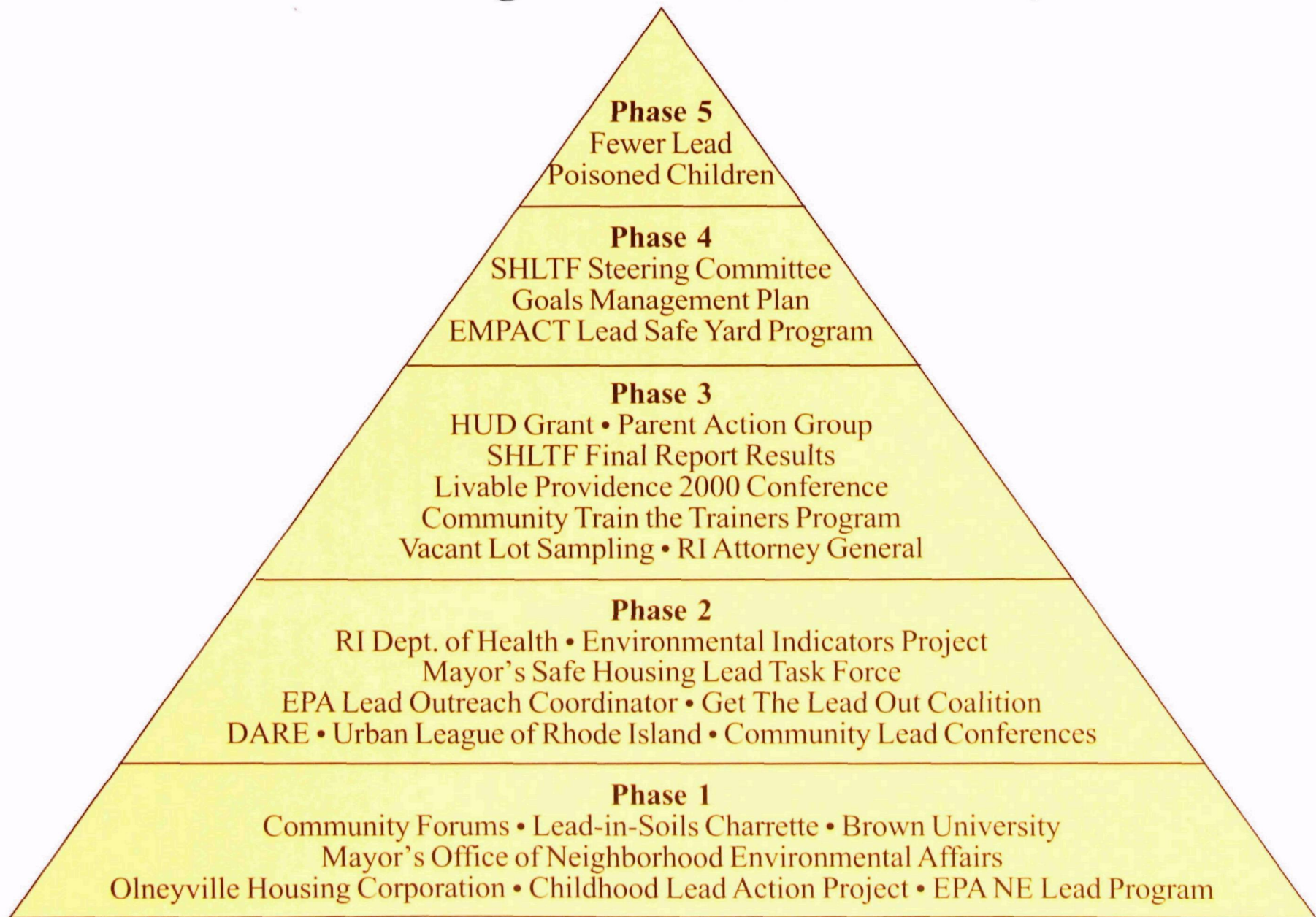
Based on their exemplary work in lead outreach and education, The Project

continues its leadership role to respond to the incidence of lead poisoning in Rhode Island in general and in Providence specifically. The Project is creating a Rhode Island Lead Collaborative for community groups and public entities to service other urban cities in Rhode Island. This will be the first attempt to create a state-wide outreach and education agenda for lead poisoning and will hopefully set the stage to find innovative solutions to ensure that one day there are no more lead poisoned children in Rhode Island.



*UEI and EPA staff work with community volunteers to conduct soil sampling on vacant lots in Providence, RI.*

# Lead Poisoning Prevention in Providence, RI



# Lessons Learned

The UEI team work from 1995-2000 to implement integrated workplans in each target city, log thousands of work hours in the field, and put the UEI Community Development Pyramid model into action resulted in the following eight lessons learned from the UEI pilot program:

## **Lesson 1:**

### **Build Credibility & Redefine Roles and Responsibilities**

In order to implement the UEI Community Development Pyramid, the UEI had to redefine traditional roles and responsibilities for staff. UEI had to serve as a trusted and dependable partner at the table with a wide range of stakeholders. The staff also had to serve as facilitators, capacity-builders, and as visionaries to help find common ground between groups and organizations with no successful history of working together on environment and public health issues. The UEI had to become an effective and efficient team that could become dedicated and effective resources, working together to leverage all available resources at the agency and help to put a face on the agency.

The UEI also facilitated redefining roles and responsibilities within the community and local government. The community had to be broadly defined with a broad list of stakeholders beyond local residents. The community was responsible to become informed decision-makers and critical partners throughout all phases of the pilot program, and must be treated as valuable and critical resources. The role of local government also had to change. Local government had to work in effective partnership with the EPA and the broadly-defined group of stakeholders and jointly share responsibility for developing inclusive and responsive local infrastructure for healthy urban communities in the 21<sup>st</sup> Century.

## **Lesson 2:**

### **All Stakeholders Must Be Engaged & Invested**

The UEI staff learned first hand in the field that no one person speaks for everyone—and it takes more than just one or two people around a table to solve complex environment and public health problems. In order to build a strong base of local partners and stakeholders, UEI made sure that a wide range of stakeholders were engaged throughout the entire process including representatives from local residents, academia, local business, medical community, local government, state government, environmental groups, churches, faith-based groups, and other non-profit entities. Once these stakeholders were identified, the UEI initiated a “Win-Win Approach” to achieve measurable environmental results with our local partners. This approach is locally-driven, meaning that the core of the work responds to local concerns and priorities and focuses on building community capacity to tackle environment and public health problems. This is distinctly different from a traditional agency approach that puts EPA in the lead for determining priorities. The UEI’s successful approach let people define the problems and focused EPA resources to directly respond to those priorities. The approach also developed inclusive partnerships. Everyone with a stake in the future of an urban community must be involved early and constantly throughout the process. These stakeholders must also be accountable for results—sharing

responsibility for making measurable improvements is a tremendous motivator for successful partnerships. Without ownership and sweat equity, stakeholders cannot be personally invested or empowered to serve as long-term environmental stewards and work together to produce meaningful change in their neighborhood.

## **Lesson 3:**

### **Recruit Staff With The Right Skills, Passion & Creativity**

The UEI team has gone through considerable transition since its inception, but one fact has remained unchanged: this program requires a special set of skills, ability, and passion to get the work done efficiently and effectively. UEI staff must have excellent communication, organizational and technical skills, be creative, be willing to learn from mistakes, respond well under pressure, be a mediator, resolve conflict, and have a passion for helping people resolve problems. All staff members must be able to work independently and as a cohesive team. A critical element to supporting each member of the unit is a multi-functional team, with a full-time Team Leader, that meets regularly to share experiences, concerns, and work together to resolve challenges. This combination of skills is critical to ensure that EPA builds and maintains credibility throughout the implementation of each phase of the UEI Community Development Pyramid. If there is a staff transition, a new credibility-building process has

to take place for the new staff member. It is also critical to note that although some of these skills can be learned through training, some things can only be gained through the right aptitude and attitude to embrace change and learn by doing. This is not a job or position for every person that works in the federal government, but is very challenging and can be very rewarding for the right person.

In addition to having the appropriate people representing EPA through this program, the City Program Manager must also be able to identify and secure participation from the multiple levels of stakeholders for each city to ensure results. This requires a considerable but worthwhile investment of time and training to help educate and enable community stakeholders to be involved and informed about their environment and public health. Training might include specific sessions on how to apply for federal grants, facilitation, or an in-depth training on risk assessment or the health effects from lead poisoning. In addition, stakeholders must share some of the characteristics of UEI staff: they must be creative and open to new ideas, communicate well, and be amenable to coalition building and conflict resolution. These are skills that can be learned or improved through training. The critical link is that if you have the right person representing the UEI pilot program and designing and implementing a work plan for a city, the staff member will identify and train the right community stakeholders to participate in the program.

#### **Lesson 4: Funding Must Be Stable, Used Effectively & Leveraged**

Building an infrastructure to solve problems requires stable and targeted funding. When the UEI pilot program first started, grant awards were all sole source funding. This was critical to ensure that funding could be used where it was needed the most—to identify, support and encourage participation by community stakeholders and understand the problems in each target city. This funding helped in part build the pilot program's credibility, enticed early partners to work with the UEI pilot program, and helped secure a position in each target city as a federal program with resources, staff, and initiative to solve problems. Over time, the financial resources were allocated in a different way—through competitive Requests for Proposals that demanded strongly written proposals from prospective applicants. Without stable funding, the UEI would not have been able to secure participation from the wide range of stakeholders necessary to address the problems and would not have been able to continue building up toward effective partnerships and healthy, livable urban communities.

Another lesson learned through funding is that not all organizations can grow and develop into key players in a community. Funding one organization consistently for several years can be an effective strategy, as long as environmental results are consistently achieved and that the projects continue to focus and increase collaboration with other partners. The UEI pilot program demonstrated that efforts to stabilize small non-profit groups for several years through “general

support” funding did not guarantee that every group would continue to grow and develop. It is important to know when to stop funding an organization that does not continue to grow or evolve, but try to continue to have them participate as a member of specific projects. Although funding demands shift and change over time, there must be a stable source of funding for the UEI program to ensure continuity between projects and leverage small grants into greater resources for larger projects. A final funding-related lesson learned is that part of effective funding is for the UEI staff to help identify opportunities to leverage resources from alternative sources. UEI staff must help community partners develop the skills, abilities and expertise to secure funding from other agency organizations, foundations, and other private sector sources.

#### **Lesson 5: Start Small & Leverage Successes**

Building credibility in an urban community takes more than just providing financial resources. It requires the skill of a dedicated staff person (i.e. UEI City Program Manager) to bring stakeholders together to share small, “event-level” successes and then leverage these small successes into larger scale projects. Event-level successes could include an Earth Day trash pick-up event, building a community garden, or hosting a small breakfast discussion group to bring people together around a common issue or concern. Starting small lets participants feel positive about donating their time and effort to attend and participate, and over time encourages other stakeholders to take on larger roles. This approach is also performance based. Local strategies need indicators or benchmarks to insure

### Woonasquatucket River Greenway

Years of neglect, illegal dumping, lack of useable open space, and abandoned industrial sites along the banks of the Woonasquatucket River in Providence, RI seemed a daunting challenge when The Providence Plan began trying to create a bike path in 1993. Trash from illegal dumping and overgrowth made it hard for some residents to even see the river. Residents that did see it witnessed abandoned cars, tires, and shopping carts. In the area along the river, over 36% of children lived in poverty and there was only 2.1 acres of park space per 1000 residents with limited public access to the river. The Providence Plan decided that the community and the Woonasquatucket deserved better. The Greenway project catalyzed urban renewal along the river to create a plan for more usable green spaces, better recreational opportunities and a bicycle path along the river to link parks and neighborhoods. The final product will include a 5.7 mile greenway, paths, and green spaces stretching from the Johnston and Providence line to Waterplace Park in downtown Providence.

The Providence Plan's vision for turning a neglected river into a valuable urban natural resource has included educating local residents about the Greenway project. With the help of UEI funding, the River Rangers Program was created in 1998 to engage youth, build community outreach and education programs, promote community stewardship of existing and new open green spaces, and conduct clean-ups and physical restoration projects along the river. Mobilizing each summer, the River Rangers serve as stewards of public parks in the river corridor, and teach youth how to take care of their environment through park maintenance, community development, and education. The Providence Plan continues to shine as a leader to implement the Greenway's vision and spearhead Providence's revitalization of the Woonasquatucket River as valuable natural resource to benefit the most economically disadvantaged neighborhoods.



accountability and measure progress in meeting community-driven priorities.

In early stages of the UEI Community Development Pyramid, staff needed to take on the greatest share of organizational and administrative tasks. As events prospered and more people become involved, the City Program Manager was able to build credibility from these successes and other stakeholders started to assume a stronger leadership role. Building off of these small successes is key to building community capacity to solve problems. UEI staff learned that it is critical to constantly look for oppor-

tunities to continue to move forward and bring people together rather than just being content to stay with small scale projects. Ideas for new and improved projects can come from a variety of sources, including the increasing list of stakeholders involved with each passing event and success. This combined approach to share accountability, measure progress and share successes through the UEI Community Development Pyramid served as building blocks for larger, "structural" change that increased the community's capacity to solve their greatest environment and public health problems.

### Lesson 6: Empower Urban Communities With New Skills & Information

UEI's field experience clearly demonstrated that urban communities do not have adequate information about the quality of their environment on a neighborhood level, and they also do not inherently have all the skills necessary to become an informed and active decision-maker to change local, state, and federal laws and policies to produce a better and safer environment. One of the greatest values that the UEI brought to community stakeholders was through trainings—ranging from

how to write grant proposals, to tips on preventing lead poisoning, reducing asthma triggers through EPA's Tools for Schools, conflict-resolution, general management skills, and much more. Federal, state, and local government has a language and uses terminology that is not reflective of the people that it serves. The UEI helped to inform and train local residents, environmental groups, and community partners to be able to participate more effectively when they interacted with government staff on every level.

### **Lesson 7: Urban Communities Have Environments & People Worth Protecting**

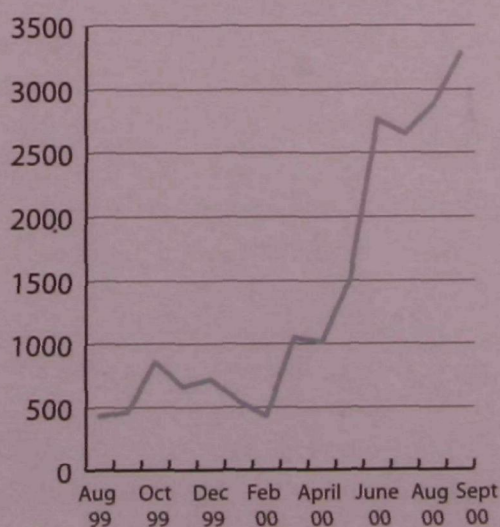
Five years of field experience designing, refining, and implementing this

pilot has lead to new discoveries in building livable urban communities in New England. When UEI staff first started reaching out directly to stakeholders, several misconceptions existed. One fundamental misconception was that communities don't care about the environment, and that the quality of the environment does not matter as much to urban residents as other social issues like poverty and crime. Secondly, there was a strong sentiment from urban stakeholders that EPA does not care about urban communities and that the agency will not make any meaningful or measurable environmental improvements in cities.

The reality is that citizens rally around and respond to environmental and public health problems that impact

their families and their children. Lead poisoning and asthma are passionate environmental issues for parents who want their children to have the best possible experiences in life. Urban vacant lots strewn with illegally dumped trash, drug needles, and rats are critical for a parent wanting to protect their child but also wanting them to have a safe place to play outside. Dangerously high levels of dioxin, PCB, mercury, and bacteria contamination in urban rivers and ponds affect families that rely on fishing to provide a source of food. The thousands of parents and families that the UEI has worked with over the past five years soundly refute the notion that urban residents do not care about environmental quality because they happen to live in a concrete jungle.

**UEI Web Site Hits**  
August 1999 - September 2000



### **UEI Web Page**

In 1999, the UEI team recognized the need to expand public access to information on urban environment and public health problems in the target cities of Boston, Providence, and Hartford. EPA New England initiated an expansion of its regional web page, and the UEI worked with the EPA New England Communications Team to create and launch a detailed site sharing information with the public on priorities, projects, progress, and partners in each target city. The UEI team worked with our community partners to highlight collaborative projects, create links to community organizations and active stakeholders, and create an on-line resource page for urban work in New England. The site was officially launched in July 1999 and public response has exceeded our wildest expectations. The UEI web page is updated regularly to keep information

current, has undergone design improvements to ease navigation, and content has grown over time to meet customer needs. It is consistently one of the most frequently accessed sites on the EPA New England Web site.

## Conclusion

EPA New England accomplishments in urban areas prior to the UEI pilot program were few and far between and mainly focused on low-funded efforts through the environmental justice and lead programs. Having the resources to focus an intensive five-year effort at the local level in three targeted cities has demonstrated that the UEI improved the quality of the environment and public health by establishing sustainable environmental infrastructure at the community level in its target cities. It also demonstrated that EPA can and must work with urban communities to continue to improve the environment and public health. UEI staff learned some of the realities of working for cultural change within an organization and are all the richer for embracing the lessons learned by implementing a process that genuinely sought to empower and enable residents who live in inner cities.

The UEI pilot program benefitted from key internal leadership and achieved considerable success working in true partnership with urban community stakeholders with a comparatively modest investment of financial resources and staff time. From 1995-2000 the UEI pilot program awarded and managed a total of 111 grants valued at \$3,357,197 in the neighborhoods of Greater Boston, Providence, and Hartford. By comparison, the total budget for EPA New England in FY2000 alone was \$54,676,604 with \$7,070,934 dedicated to the regional Brownfields Program. The annual operating budgets in 2001 for UEI target cities are \$1.7 billion for Boston, \$447.33 million for Providence, and \$422.66 million for Hartford. EPA New England's effort to clean up the Boston Harbor in Massachusetts took ten years and cost over \$4 billion.

As we look toward the future, the UEI pilot program will include a greater emphasis on the principles of Smart Growth. Over the past few years it became apparent that the Smart Growth Initiative was working to facilitate more strategic growth patterns in suburban and rural areas. Urban communities and their issues were not a prominent part of their action plan nor was regional planning

efforts a prominent part of the UEI strategy even though both initiatives support sustainability. It was natural for both efforts to work more closely together. Both programs have started to support working in partnership to insure that as solutions for environmental problems are considered, the maximum benefit with the least externalities for everyone will be evaluated before actions are taken. The UEI and Smart Growth are merely at the precipice of what could prove to be a very powerful discussion between unlikely urban, suburban and rural partners. Again, the UEI and Smart Growth are working with like minded academic institutions and private entities as well as community partners. A region with a common vision that provides economic growth and opportunities as well as environmental protection for everyone is definitely a rainbow worth chasing and a risk worth taking.

The UEI's efforts and investment to benefit communities have gone far beyond external accomplishments. In fact, over the past five years there has been a considerable shift in the acceptance and legitimacy of working in urban areas in EPA New England. The combined efforts of the Environmental Justice movement, formalization of the Brownfields Redevelopment

program, and the work of the UEI have made it standard operating procedure to invest and work in urban cities. Today, EPA New England has placed a greater emphasis across departments, programs and offices to dedicate resources to serve urban communities. This is a distinct change in operating procedure and sets the stage for being able to service more urban communities in the future and making sure that the resources dedicated to projects are effective, efficient and service the greatest environmental needs of urban residents. However, the lasting proof of the success of the pilot is the sustainable infrastructure of organizations which will continue to grow and network with an ability to improve their environment and quality of life while maintaining support through a public and private resolve to redistribute resources in a just and inclusive manner. EPA has only scratched the surface of what needs to be accomplished to provide the quality of environment and public health deserved by urban residents in every city in America. The UEI demonstrates that a community-based approach that builds an environmental infrastructure and increases local capacity to creatively solve problems will cost-effectively produce meaningful and measurable results.

There are three broad conclusions drawn from the UEI pilot program that are applicable nationwide:

- Developing a sustainable environmental infrastructure that redefines roles, responsibilities and measuring success is critical to solve urban environmental and public health problems. At a minimum, government at all levels must: insure that urban residents maintain a prominent role in the decisions and protection of their health and environment; create a level playing field with mutual benefits for urban residents and local business and an understanding that both must work together to achieve results; and measure success by including short term results and the future exponential results of current activities. Programs that do less will underestimate the potential benefit and/or damage that current actions have on the future.
- New regulatory and non-regulatory approaches must be coupled with an annual commitment of dedicated resources to meaningfully redress urban environmental problems. It takes a significant investment of time and resources to halt degradation no less reverse environmental trends in a sustainable manner. These creative approaches must be dynamic and develop an iterative process that involves many stakeholders including academic and health professionals.
- EPA must develop a creative and holistic strategy grounded in the principles of environmental justice and smart growth to create safe and healthy urban communities for future generations across America. Cumulative risk is a result of the panoply of pollution sources that represent vast residual risks uncontrolled by current environmental regulations. Environmental injustice is manifested through cumulative risk, compounded by social and economic inequities and unsustainable growth practices.



*UEI staff and community volunteers celebrate after distributing 10,000 copies of the "Do's and Don'ts for the Woonasquatucket River" to urban residents in Rhode Island.*

# Glossary

**Brownfields** Abandoned, idled, or underused industrial or commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

**Capacity Building** Increasing the ability of a community, group, or organization to organize, access resources, and address community problems.

**Community Based Environmental Protection (CBEP)** A holistic and collaborative approach to environmental protection that brings together public and private stakeholders within a place or community to identify environmental and public health concerns, set priorities, and forge comprehensive solutions. Through CBEP, which is often called a place-based or ecosystem approach, stakeholders consider environmental protection along with human social needs, work toward achieving long-term ecosystem health, and foster linkages between economic prosperity and environmental well-being.

**Community Gardens** Vegetable and ornamental gardens established for safe food production, neighborhood beautification, and economic development and to promote neighborhood building and cohesion.

**Environmental Monitoring for Public Access and Community Tracking (EMPACT)** A new approach to working with communities to collect, manage, and present environmental information to the public. It aims to work with communities to make timely, accurate, and understandable environmental information available to millions of people in the largest metropolitan areas across the country so that communities and individuals can make informed, day-to-day decisions about their lives.

**Environmental Justice** The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

**Government Results Performance Act of 1993 (GPRA)** The purposes of this Act are to (1) improve the confidence of the American people in the capability of the Federal Government, by systematically holding Federal agencies accountable for achieving program results; (2) initiate program performance reform with a series of pilot projects in setting program goals, measuring program performance against those goals, and reporting publicly on their progress; (3) improve Federal program effectiveness and public accountability by promoting a new focus on results, service quality, and customer satisfaction; (4) help Federal managers improve service delivery, by requiring that they plan for meeting program objectives and by providing them with information about program results and service quality; (5) improve congressional decision-making by providing more objective information on achieving statutory objectives, and on the relative effectiveness and efficiency of Federal programs and spending; and (6) improve internal management of the Federal Government.

**Geographic Information System (GIS)** Software and hardware systems that relate and display collected data in terms of geographic, or spatial, location.

**Healthy Housing** Part of the EPA New England Children First campaign, aimed at creating healthier environments in the places children spend most of their time—at home, in schools and outdoors. Healthy Housing focuses on issues such as lead poisoning, asthma, tap water, environmental tobacco smoke, radon, and household hazardous waste.

**Indoor Air Quality** Air quality inside buildings including homes, schools, and office buildings. Since 90 percent of our time is spent indoors, indoor space is an important part of environmental health.

**Integrated Pest Management** The coordinated use of pest and environmental information with available pest control methods to prevent unacceptable levels of pest damage by the most economical means and with the least possible hazard to people, property, and the environment.

**Livable Communities** A comprehensive and holistic approach towards healthy neighborhoods that strives to foster green space, good air quality, safe streets, and a strong local economy.

**Open/Green Space** A portion of a development site that is permanently set aside for public or private use and will not be development. Open space may be used as community open space or preserved as green space (in a natural, undisturbed, or revegetated condition).

**Pollution Prevention** An organized, comprehensive effort to systematically reduce or eliminate pollutants or contaminants prior to their generation or their release or discharge into the environment.

**Sprawl or Urban Sprawl** The movement of businesses and industry from urban to suburban areas with the effect of reducing employment and economic opportunities in the urban center and increasing traffic flow and environmental impacts to suburban areas.

**Stakeholders** A variety of individuals, organizations, and agencies interested in a particular place or issue. Stakeholders may include individual residents and landowners, civic and religious organizations, businesses and industry associations, environmental and conservation groups, and governmental agencies at all levels.

**Sustainable Development** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (United Nations World Commission on Environment and Development); a concern for sustainable development counsels long-term time horizons consistent with our responsibilities to others, recognition of the interdependence of the economy and the environment, and more comprehensive, integrated approaches to economic development and environmental protection (EPA, 1993).

**Urban Environmental Initiative (UEI)** A multi-media, place-based pilot program in EPA New England started in 1995 to address urban environment and public health issues in the targeted cities of Boston, MA; Providence, RI; and Hartford, CT.

**Vacant Lots** A neglected parcel of property in a residential area. In many cases, houses were built on these lots, but fell into disrepair and were subsequently demolished, leaving behind a legacy of contamination and a haven for illegal dumping of wastes and rats.

# Credits

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We would like to recognize the continuing support, leadership and vision of Robert W. Varney, Regional Administrator, to serve the needs of all communities in New England.



*UEI and EPA staff celebrate after conducting soil sampling for heavy metals on vacant lots in Providence, RI.*

# UEI Community Partners in Connecticut

Building Parent Power  
Christian Activities Council  
Citizen's Research Education Network  
City of Hartford  
Clay Arsenal Neighborhood Revitalization Zone  
Clay Hill Block Association  
Connecticut Audubon Society  
Connecticut Bicycle Collaborative  
Connecticut Children's Medical Center  
Connecticut Citizen's Research Group  
Connecticut Department of Environmental Protection  
Connecticut Department of Public Health  
Connecticut Environmental Justice Coalition  
Connecticut Indoor Environments Resource Team  
Connecticut River Watershed Council  
Connecticut Voices for Children, Inc.  
Eastern Connecticut Resource and Conservation Development Area  
Hartford Area Rally Together  
Hartford Enterprise Zone Business Association  
Hartford Environmental Justice Network  
Hartford Growth Council  
Hartford Health Department  
Hartford Hospital  
Hispanic Health Council  
Knox Parks Foundation  
North Eastern Block Association  
North End Block Association  
ONE/CHANE  
Pliny Block Association  
Ragin' Cajun  
Riverfront Recapture  
South Arsenal Neighborhood Development Corporation  
Southside Institutional Neighborhood Association  
St. Francis Hospital and Medical Center  
UCONN's Environmental Division  
UCONN Environmental Research Institute  
University of Connecticut Cooperative Extension Services  
Upper Albany Merchants Association  
Upper Albany Neighborhood Collaborative  
USDA CT Office  
US HUD CT Office



*Residents and youth work together planting trees and flowers to increase greenspace in Hartford, CT.*

# UEI Community Partners in Rhode Island

Allen AME Church  
AMEN Inc.  
Americorps  
Audubon Society of Rhode Island  
Brown University, Center for Environmental Studies  
Center for Hispanic Policy and Advocacy  
Childhood Lead Action Project  
Citizens Bank  
City of North Providence, Mayor's Office  
City of Providence, Office of Neighborhood  
Environmental Affairs  
City Year  
Clean Water Action  
Direct Action for Rights and Equality  
Dunkin' Donuts  
Environmental Diversity Education Forum  
Friends of the Moshassuck  
Greater Elmwood Neighborhood Services  
Groundwork Providence  
Grow Smart Rhode Island  
Hasbro Children's Hospital  
HELP Lead Safe Center  
Keep Providence Beautiful  
Northern Rhode Island Conservation  
District  
Olneyville Housing Corporation  
Olneyville Merchants Association  
Paddle Providence  
Progreso Latino  
Providence Dept. of Planning  
Providence Environmental Court  
Providence Environmental Strike Team  
Providence Foundation  
Providence Housing Authority  
Providence Neighborhood Housing  
Corporation  
Rhode Island Department of  
Environmental Management

Rhode Island Department of Health  
Rhode Island Housing and Mortgage Finance  
Corporation  
Rhode Island School of Design  
Roger Williams Park Zoo  
Save the Bay  
Smart Growth  
South Providence Development Corporation  
Southeast Asian Development Corporation  
Southside Community Land Trust  
The Providence Plan  
United Way  
University of Rhode Island  
Urban League of Rhode Island  
VNA of CARE New England  
West End Renewal Fund  
Woonasquatucket River Greenway Project  
Youth in Action



*A resident volunteer distributes information door to door to urban residents in Providence, RI.*

# U|E| Community Partners in Massachusetts

Alliance for Boston Neighborhoods  
Alternatives for Community and Environment  
Appalachian Mountain Club  
Boston College  
Boston Harbor Watershed Team  
Boston University, School of Public Health  
Bowdoin Street Health Centers  
BSC Group  
Chelsea Community Connection Coalition  
Chelsea Creek Action Group  
Chelsea Green Space and Recreation Committee  
Chelsea Human Service Collaborative  
Chinese Progressive Association  
City of Boston, Dept. of Neighborhood Development  
City of Boston, Environmental Services Department  
City of Boston, Office of Sustainable Boston  
City Life/Urban Vida  
City Year  
Coalition to Protect Chinatown  
Codman Square Health Center  
Committee for Boston Public Housing  
Conservation Law Foundation  
Dimock Health Center  
Dudley Street Neighborhood Initiative  
Eagle Eye Institute  
Earthworks Project  
East Boston Ecumenical Community Committee  
East Boston Recreation, Master Planning, Advisory Council  
Environmental Diversity Forum  
Environmental League of Massachusetts  
Executive Office of Environmental Affairs  
Freedom House, Inc.  
Garden Futures  
Greater Boston Environmental Justice Network  
Greater Boston Urban Resources Partnership  
Greenleaf Composting  
Massachusetts Bays Program  
Massachusetts Coalition for Occupational Safety  
Massachusetts Coastal Zone Management Program  
Massachusetts Department of Environmental Management - Forest Service  
Massachusetts Department of Environmental Protection  
Massachusetts Department of Fisheries, Wildlife and Environmental Law Enforcement Riverways Programs  
Massachusetts Department of Food and Agriculture  
Massachusetts Department of Public Health  
Massachusetts Environmental Collaborative

Massachusetts Institute of Technology, Department of Urban Planning  
Massachusetts Public Health Association  
Metropolitan Area Planning Council  
Mystic River Watershed Association  
National Center for Lead Safe Housing  
Neighborhood of Affordable Housing  
Neighborhoods Against Urban Pollution  
New England Lead Coordinating Committee  
Northeast States for Coordinated Air Use Management (NESCAUM)  
Reaching Out to Chelsea Adolescents (ROCA)  
Re-Vision House  
Roxbury Community College, Center for Environmental Education  
Roxbury Environmental Empowerment Program  
Save the Harbor/Save the Bay  
Second Nature  
Smart Growth  
South Boston Health Center  
STRIVE  
Suffolk County Conservation District  
Tellus Institute  
The Food Project  
Toxic Action Center  
Tufts University  
University of Boston, Urban Harbors Institute  
Urban Resource Partnership  
Urban Revival, Inc.  
US Department of Agriculture  
US Department of Health and Human Services  
US Department of Housing and Urban Development  
The Watershed Institute



*A City Year youth collects soil samples in Boston, MA.*

