Revitalizing

The Venetian Wall, an eighty-foot black stainless steel structure, holds 109 Chihuly glass sculptures.

The Tacoma, Washington Assessment Pilot facilitated the construction of the Museum of Glass International Center of Contemporary Art and the Chihuly Bridge of Glass on a former industrial property. The Venetian Wall, Crystal Towers, and Seaform Pavilion are part of the Chihuly Bridge of Glass connecting the Thea Foss Waterway with downtown Tacoma, Washington.

Communities

Throughout the nation, the impact of EPA's Brownfields Program is seen and felt in hundreds of neighborhoods. The program has helped people transform their communities into healthier, more vibrant places to live. Many communities have attracted new businesses and residents, creating new jobs, increasing tax revenues, and increasing property values. Following are a few of the stories that illustrate the myriad of benefits the program has brought to communities.

Making the Environment Cleaner and Safer

Cleaning up brownfields improves the environment. It eliminates the risk of exposure to harmful contaminants in the places where people work and live, as well as the potential for contaminants to pollute surrounding ecosystems.

Through its Brownfields Assessment Demonstration Pilots, EPA has helped communities understand the risks brownfields pose by enabling communities to assess thousands of potentially hazardous properties. These assessments have given these communities the information they need to begin the cleanup and redevelopment process.

Rising 40 feet above the center of the bridge are two Crystal Towers, each holding 63 polyvitro crystals.

A love of the ocean inspired Dale Chihuly, world famous glass artist, in creating the Seaform Pavilion.

The Seaform Pavilion, a 50 by 20-foot plate glass ceiling, holds 2,364 sculptures suspended midair.

Across the country, 20 loans totaling $5.1 million have been made to clean up brownfields through BCRLF Pilots.

For 11 years, students attending Quark Middle School in one of Hartford, Connecticut's, poorest neighborhoods were forced to pass an unsafe and unsightly dump full of tires, mattresses, oil cans, and other debris. The Chestnut/Edwards Street property had once been home to a paint store before being abandoned. The city of Hartford used pilot funding to perform environmental assessments on the property and discovered high levels of lead contamination, making cleanup a major priority. With funding from several organizations, the city was able to turn the property into recreational greenspace and a garden, thereby removing the risk of lead exposure to children in the community.

A Harley Davidson motorcycle shop was constructed on a former brownfield with the help of the Stamford, Connecticut BCRLF Pilot.

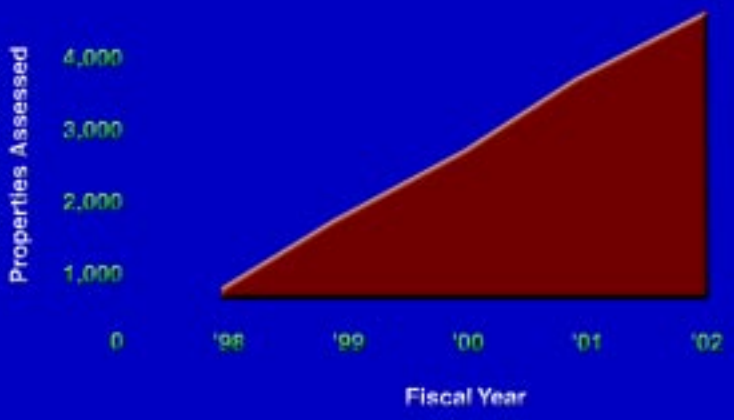
After helping communities understand the risks posed by brownfields, EPA's Brownfields Cleanup Revolving Loan Fund (BCRLF) Pilots helped them clean up many of these properties, protecting people's health and the environment. These pilots provided funding to enable communities to create revolving loan fund programs, which offered loans to pay for cleaning up contamination. For example, a $160,000 loan from the Stamford, Connecticut BCRLF Pilot helped Blues Brothers LLC clean up an abandoned, 75-acre brownfield. The area is now home to a new Harley Davidson dealership and maintenance facility. Environmental cleanup of soils containing polychlorinated biphenyls (PCBs), metals, and other contaminants was completed about a year after the BCRLF loan agreement was signed. In all, nearly 3,500 tons of contaminated soil were removed at a total cost of $395,000. The Harley Davidson shop opened in November 2000, and the loan was repaid, thereby making BCRLF dollars available for future projects.

A bird-watching promenade was constructed on the site of a green-building Eco-Industrial Park in Cape Charles, Virginia.

Other brownfields pilots incorporate "green" building practices to ensure the sustainable use of natural resources. "Green" building practices include sustainable site design as well as energy, water, and raw material conservation. Capes Charles, Virginia, made "green" design a priority in its plans to redevelop a 25-acre town dump at the heart of the town's 200-acre Sustainable Technology Park. Assessment and cleanup of the dump paved the way for construction of a 31,000-square-foot facility that includes a solar electric roof system capable of generating 42 kilowatts of power for the building's tenants. Wetlands were created around the building as a natural landscaping enhancement, and the facility features indoor air quality monitoring, skylights for natural lighting, and porous storm water runoff chutes.

Cumulative Properties Assessed by U.S. EPA Assessment Demonstration Pilots*

Assessment data from FY 1993–1997 is included in FY 1998.



Since 1995, Brownfields Assessment Pilots have assessed over 4,300 properties.*

Preserving Pristine Areas

Brownfields projects also allow communities to reuse land, often located in community centers, reducing the pressure to develop pristine or unused land in outlying areas. "Smart growth" benefits of brownfields reuse include reduction of vehicle miles traveled and associated improvements in air quality, as well as protection of ecosystems, watersheds, and farmland. A study conducted by George Washington University found that redeveloping one acre of brownfields preserves 4.5 acres of greenfields from development.[6] Pointing to the value of brownfields reuse, former Denver Mayor Wellington E. Webb said, "Brownfields sites are eyesores that blight neighborhoods and negatively impact our economic vitality, and in turn the economic vitality of the nation. By redeveloping these brownfields sites, we are also able to utilize our existing infrastructure, including our roads and sewer systems, while easing the pressure to develop open spaces and farmland."

Like many businesses, Consumers Energy considered relocating on urban greenspace when the lease on its Jackson County, Michigan, headquarters ended. With a combination of assessments and local incentives, the city of Jackson convinced Consumers Energy to locate its new $113 million headquarters on several brownfields in a three-block area of downtown. Jackson County's Assessment Pilot funded assessments of six properties, which included a former gas station and auto repair shop, a machine shop, and an iron scrap yard. The city is investing $43 million in infrastructure improvements, including roads, a sewer, and a parking garage to serve the new headquarters, which was dedicated in July 2003.

The relocation of the Consumers Energy headquarters on six adjacent brownfields retained 1,400 local jobs in Jackson, Michigan.

Cleanup and Restoration

Trenton, New Jersey, with the help of EPA, cleaned up several brownfields along the edge of Assunpink Creek to restore the creek's natural floodplain. Severe rainstorms had often caused the Assunpink to overflow, flooding homes and businesses along its banks. Historical efforts to control the flooding problems had been unsuccessful, and industries encroaching on the waterway had contributed to the burden of environmental contamination. Trenton, an EPA Showcase Community, worked collaboratively with city, state, and federal agencies. In addition to addressing contamination concerns, the Assunpink Creek area redevelopment will provide greenspace and improve access to historical sites.

Completion of the Waterfront Park, home to the Trenton Thunder baseball team, was facilitated by the Trenton, New Jersey Assessment Pilot.

The borough of Central City, Pennsylvania, used Assessment Pilot funding to begin restoration of the Dark Shade Creek Watershed. Shutdown of large coal mining operations after World War II had left this Appalachian area with abandoned mines that fouled the environment and devastated the economy. As a result of acid mine drainage, the Dark Shade Creek Watershed was unable to sustain aquatic life. Central City used its pilot to inventory and conduct environmental assessments of brownfields. The U.S. Office of Surface Mining and other federal agencies in the Brownfields Federal Partnership provided resources for the cleanup and redevelopment of properties in the watershed project area. Sharon Harkcom, Project Manager for the Pilot, said, "With the assistance of many federal, state, and local organizations, the refuse piles are diminishing and the acid mine drainage impacted streams are starting to improve, creating a more pleasant living environment."

Bringing New Hope to Communities and Improving Lives

EPA's Brownfields Program improves people's lives and protects the environment. Through assessments and other activities supported by EPA Pilots, communities proceeded to produce new housing, improve access to services, create more greenspace, and enhance cultural and recreational resources. These achievements gave communities across the nation hope and a fresh outlook on the future. The program yielded positive results in minority, low-income, and disadvantaged communities that had been disproportionately impacted by the adverse effects of brownfields. A 1999 Council for Urban Economic Development study confirmed that the median income of residents living in areas affected by brownfields is 30 percent below the national average.[7] The Brownfields Program mirrors EPA's agency-wide focus on the impact of environmental justice, defined as "the fair treatment of people of all races, cultures, and incomes regarding the development of environmental laws, regulations, and policies."

The emphasis on partnerships and Environmental Justice in EPA's Brownfields Program created opportunities for minority and low-income residents of brownfields communities to collaborate with developers and local governments. This ensured that health and safety conditions improved and local jobs were generated from assessment, cleanup, and redevelopment activities. Disadvantaged communities also participated in reuse planning to ensure that their voices were heard in redevelopment decisions. For example, the Fort Belknap Tribes, whose reservation sits between the Milk River and the Little Rocky Mountains in north-central Montana, focused their energy on ensuring that their brownfields redevelopment plan addressed tribal members' concerns. The Tribes used brownfields funds to identify two primary properties for assessment and revitalization. One of the properties, Snake Butte, is a sacred area used by tribal members for religious ceremonies. Snake Butte was quarried in the 1930s to provide material for construction of the Fort Peck Dam; remnants of both the mining and rail hauling activities were of concern to the Tribes. The Tribal Brownfields Program worked closely with two cultural societies, the White Clay Society and Buffalo Chasers Society, the Tribal Community Council and community members to ensure that environmental investigations and plans for the property were sensitive to cultural needs. Environmental assessments indicate that the property is clean, paving the way for a return to traditional uses in the area.

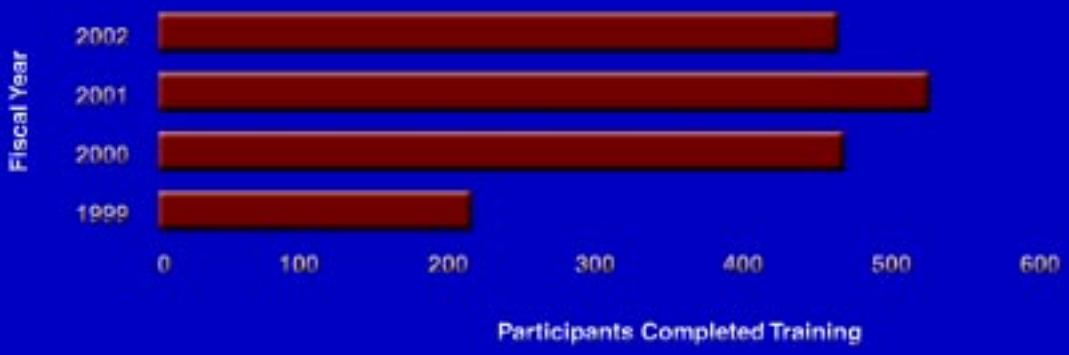
Assessments and cleanup sparked the creation of new jobs for residents in a disadvantaged area of Lowell, Massachusetts. Lowell's Brownfields Assessment Pilot brought stakeholders together to develop a comprehensive plan to restore the Acre neighborhood, one of the city's poorest. Located within a federal Enterprise Community, 42 percent of its residents live below the poverty line. Assessment and cleanup of three former textile mills and an ash dump led to creation of a new ballpark and a sports arena that together created more than 450 full- and part-time jobs. Lowell was selected as a Brownfields Showcase Community due in part to its significant accomplishments in the brownfields arena. The designation as a Showcase Community made a broader array of federal financial and technical assistance available.

Providing Training for Environmental Jobs

EPA's Brownfields Job Training and Development Demonstration Pilots have helped people in brownfields communities train for and find jobs in the environmental field including fields that emphasize innovative and alternative treatment technologies. For example, the St. Nicholas Neighborhood Preservation Corporation helped fulfill a demand for skilled environmental workers in the New York City area. The Pilot trained residents in the Williamsburg community of Brooklyn, where the population is predominantly minority, and more than 25 percent of the residents live in poverty. This training enabled participants to meet the demand for environmental skills in innovative technologies, such as air sparging, bioremediation, solvent extraction, and treatment walls. Through other funding sources, the St. Nicholas program offered life skills training, including budgeting, planning, and workplace habits. To supplement classes, all participants were invited to join in evening activities that enhanced their academic and computer skills.

Brownfields Job Training Pilot—Participants Completing Training (1999 to 2002)*

Nationally, 1,740 participants have completed training, and two out of three graduates have found employment.



Participants of the Hawkeye Community College Job Training Pilot in Waterloo, Iowa, train at the local Martin Luther King Jr. Center.

According to Shawn Grindstaff, former Director of the Rural Brownfields Center, Mineral Area College, Missouri: "The College's Brownfields Job Training Pilot is about dramatic human impact — redeveloping families. It isn't just about redeveloping contaminated land." The Mineral Area College Brownfields Job Training Pilot was EPA's first rural Job Training Pilot. Park Hills, Missouri, where the college is located, is in the Old Lead Belt part of the state, an area with an almost 300-year history of lead mining. This mining legacy left behind more than 3,000 acres of exposed mine tailing and hundreds of acres of brownfields, making the area undesirable to new businesses. The Job Training Pilot faced this challenge head-on, training students with hands-on experience in mine waste assessment and cleanup, with an emphasis on innovative technologies. This practical experience has enabled 85% of program graduates to gain employment.

EPA's Brownfields Job Training Pilots have ensured that local communities share in the short- and long-term economic benefits of brownfields cleanup and redevelopment efforts by enabling under- or unemployed residents to find sustainable employment in the environmental field. The pilots have also helped communities address brownfields issues by providing trained workers to clean up contaminated properties.

Graduates of the Mineral Area College Job Training Pilot in Park Hills, Missouri.

Brownfields Job Training Pilots trained 1,740 people. Two out of three graduates of Brownfields Job Training Pilot programs attained jobs using their new skills at an average hourly rate of $12.80.*

Making Places for People To Live

For some communities, EPA's Brownfields Pilots led to the creation of places for people to live. In Minnesota, the Twin Cities Metropolitan Council Brownfields Pilot partnered with the Minnesota Environmental Initiative and Twin Cities Habitat for Humanity to perform environmental assessments in Minneapolis and St. Paul. Together they identified 3,000 acres of brownfields in the area. The assessments helped the Pilot verify that five properties owned by Habitat for Humanity were free of contamination and suitable for residential reuse. These properties were ready for Habitat houses. By 2003, Habitat had built 26 single-family homes, several by Habitat's WomenBuild project, which uses all-female volunteer crews.

Senior citizens in the small city of Virginia, Minnesota, have better access to housing thanks, in part, to an EPA Brownfields Assessment Pilot. Once the region's leading producer of iron ore and taconite, the city of Virginia and the surrounding area underwent a severe economic downturn during the 1980s. The city's unemployment and poverty rates remain among the highest in Minnesota. A task force found that focusing on brownfields adjacent to open mine pits for redevelopment would provide opportunities for low- to moderate-income housing. Initial assessments of one of these properties found no need for cleanup, opening the door for quick sale and construction of a new senior citizen housing facility. The $7.2 million redevelopment project includes a 24-bed facility for persons with Alzheimer's, an 89-unit assisted living facility, and 20 apartments.

In Minneapolis, Minnesota, several Habitat for Humanity homes were constructed on former brownfields that were found to have no contamination.

The partnership developed for the Twin Cities Metropolitan Area Assessment Pilot laid the foundation for similar projects in other parts of the country. Under a Memorandum of Agreement signed in 2002, EPA and Habitat for Humanity International pledged to cooperate to build energy-efficient homes on former brownfields throughout the nation.

A senior citizens' housing facility constructed on former open mine pits in Virginia, Minnesota. The open mine pits were determined to contain minimal contamination by the Virginia, Minnesota Assessment Pilot.

In Fort Wayne, Indiana, an EPA Assessment Pilot cleared the way for a project that is constructing 34 new homes and a 50-unit apartment building for seniors. After assessment of a former oil pump manufacturing and warehouse property, city and state funds provided for cleanup and restoration of the properties, including demolition of the property's charred and unsafe buildings and removal of tires from a tire storage area. Plans for building the homes and apartments were assured when the city financed installation of essential public infrastructure with a grant from the U.S. Department of Housing and Urban Development's (HUD) Brownfields Economic Development Initiative, along with state and local funds.

Creating Parks and Recreational Areas

Many communities work to transform brownfields into parks and open space. By building pedestrian walkways, riverfront parks, bike trails, and soccer fields, communities create the recreational opportunities that urban areas often lack. Providence, Rhode Island, a Brownfields Showcase Community, worked with federal, state, and local partners on the Woonasquatucket River Greenway Project. The city created a 6.6-mile bike loop that connects the Providence Place Mall, once an abandoned rail yard brownfield, with the Button Hole Golf Course, another former brownfield. As part of the project, EPA Assessment Pilot funds were used for the initial assessments of two former mills as well as cleanup planning. One of the properties is being redeveloped into a park, which will offer greenspace, a stage, and a canoe dock.

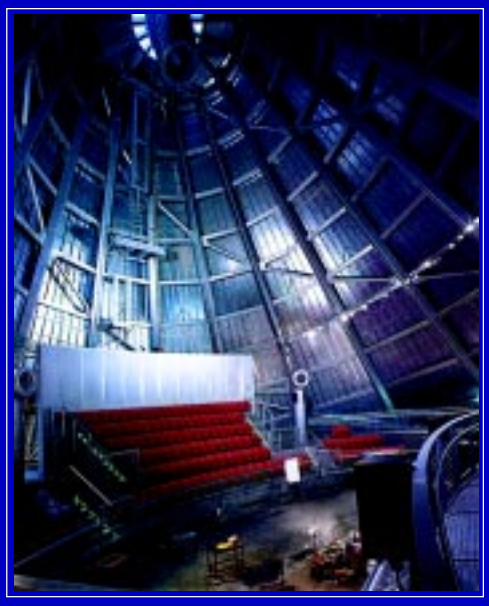
The Dallas, Texas Assessment Pilot and Showcase Community worked in cooperation to facilitate the construction of the Larry Johnson Recreation Center. The center was built on a former vacant lot that was found to have no contamination.

In Dallas, Texas, a brownfields redevelopment boom led to more recreational opportunities for low-income residents. Dallas, a Brownfields Showcase Community, leveraged more than $887 million in public and private funding for cleanup and redevelopment of the city's blighted areas. One of these properties, a two-and-a-half acre vacant lot located in a low-income residential community, was transformed into a recreation center. Professional basketball player Larry Johnson, who grew up in the neighborhood, donated $1 million to the city for the recreation center construction. With additional funding from a HUD Block Grant, the Larry Johnson Recreation Center was built and offers local residents a full-size basketball court, meeting rooms, locker rooms, a kitchen, offices, and room for expansion of a second full-size gymnasium.

Building on Historical and Cultural Heritage

Recognizing unique historical and cultural aspects of a community in cleaning up and redeveloping brownfields can enhance community character and be a source of pride for residents. More communities are using brownfields redevelopment as a way to preserve their history and culture. Several of EPA's Brownfields Pilot communities have constructed new buildings or renovated old ones and created new museums and cultural and educational community centers; some also have contributed to efforts to restore and preserve historic districts.

One of the most striking examples of success in transforming a brownfield into a cultural gem is the Museum of Glass in Tacoma, Washington. The museum, which spotlights internationally-acclaimed glass artist Dale Chihuly and glass artists from around the world, opened in 2002. The redevelopment continued with the city of Tacoma providing $8 million for construction of a parking garage, a rooftop public plaza, and esplanade. The city, Washington State, and the Federal Highway Administration also provided $4.8 million for a pedestrian walkway—the "Chihuly Bridge of Glass"—that links the area to downtown Tacoma. The walkway complements the Museum of Glass with large exhibits and displays of unique glass artwork donated by Dale Chihuly and the Museum. The EPA Assessment Pilot played a critical role in the creation of this $58 million, privately-funded museum. The Pilot was used to create the Thea Foss Waterway Development Authority. The Authority's purpose is to facilitate redevelopment of the city's waterfront while eliminating



Tacoma, Washington's Museum of Glass International Center of Contemporary Art included a Hot Shop Amphitheater to allow patrons to observe artists at work.

contamination, providing public access, and preventing future blight. To that end, the Authority created a Master Redevelopment Plan. In addition, the Pilot helped the city leverage the money needed to build the bridge and museum.

There have been impressive transformations of brownfields into cultural resources in other parts of the country as well. In Louisville, Kentucky, environmental assessments completed through a Brownfields Pilot have cleared the way for redevelopment of a former historic streetcar complex, known as the "Trolley Barn." The redevelopment effort, led by the Louisville and Jefferson County African-American Foundation, culminated in a groundbreaking ceremony in February 2003. After environmental cleanup, the old "Trolley Barn" property will become the site of the $23 million Kentucky Center for African-American Heritage. The Center will be situated in the Russell neighborhood, the first Louisville neighborhood in which African-Americans began buying their own homes. The Center plans to be the first institution in the United States to detail the achievements of African-American citizens throughout the history of a state.

In Louisville, Kentucky, the former "Trolley Barn" property will become home to the Kentucky Center of African-American Heritage.

Bolstering the Economy

In addition to environmental and community benefits, EPA's Brownfields Pilots have spurred economic development, creating new opportunities for communities burdened by brownfields. Brownfields projects generate direct investment in communities in the form of cleanup and construction expenditures. Brownfields projects provide temporary jobs during the cleanup and construction phases, and permanent jobs at the new buildings, health care centers, museums, parks, and countless other facilities created. The resulting expansion of the local tax base increases local tax revenues. "Park Enterprises would not [have moved] to the Erie Canal Industrial Park if the Pilot were not working to revitalize the adjacent land."—Mark Gregor, Manager of Rochester, New York's, Division of Environmental Quality. Park Enterprises is a light manufacturing and assembly company that located in the Erie Canal Industrial Park in the spring of 1998 on a 4.6-acre parcel of land adjacent to a Pilot-targeted brownfield.

As these investment dollars, wages, and tax revenues rippled through the economies of Brownfields Pilot communities, they created additional economic benefits as new businesses purchased goods and services, and as employees patronized local businesses.

As part of the Camden Square redevelopment, a former mill building was renovated into the Design Center of the Carolinas. Facilitated by the Charlotte, North Carolina Assessment Pilot, the new design center provides space for studios, meetings, and art displays.

Bringing Jobs Back to Communities

EPA's Brownfields Program supported brownfields redevelopment efforts that brought thousands of new jobs to communities throughout the nation. For example, nearly 500 new jobs resulted from a project that began with environmental assessments through the Houston, Texas Assessment Pilot and Showcase Community. With the Pilot's help, a former 450-acre municipal landfill became two state-of-the-art, 18-hole golf courses, creating 60 new jobs. The transformation of a 38-acre cluster of brownfields into a 42,000-seat baseball stadium and areas for cafes, retail shops, and a theater created about 230 more jobs. These projects led the way for redevelopment of other brownfields into a new performing arts center complex, which created about 200 more jobs. The cleanup and redevelopment touched off by the Pilot stimulated the overall revitalization of downtown Houston, making way for new businesses that generate even more jobs.

The development of the American Can Company building has resulted in 400 jobs for the residents of New Orleans, Louisiana.

New Orleans, Louisiana, is one of the many cities where there are now new jobs on former brownfields. The city has, in addition to brownfields, an abundance of port, rail, and highway systems that transport large volumes of hazardous materials, impacting its primarily African-American population. Supported by the EPA Brownfields Program, New Orleans rehabilitated the historic factory building into retail/commercial space and residential apartments, creating about 40 new cleanup and construction jobs. The new American Can Renewal Project also provided the city with about 420 new factory and light industrial, office, and retail jobs. The project not only attracted new businesses but also made way for expansion of existing ones.

Increasing Tax Revenues

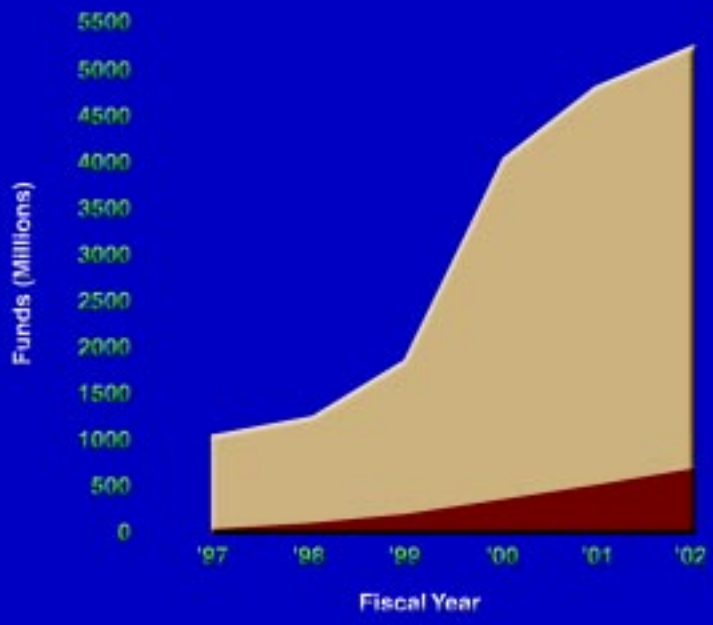
According to the 2003 "Recycling America's Land Report," issued by the U.S. Conference of Mayors, cleanup and redevelopment of brownfields could produce as much as $1.9 billion in new tax revenue each year.[8] The ability to generate new tax revenue is especially important to cities and towns where the demand for resources is increasing as budgets are getting tighter. EPA's Brownfields Pilots have resulted in increased tax revenue for communities all over the country. The Brownfields Assessment Pilot in Emeryville, California, illustrates the impact brownfields redevelopment has on tax revenues. EPA and Emeryville have been working together since 1996, benefitting nearly 20 properties. Much of the city's industry abandoned the area during the 1970s. As a result of the Pilot, the blight left by this exodus, is gradually being replaced by prosperity and cutting-edge research and development facilities. Since 1996, the Emeryville Pilot has leveraged hundred of millions of dollars in public and private investment in brownfields cleanup and redevelopment. Thus far, the redevelopment of brownfield properties formerly used for heavy industrial purposes into office buildings and retail has resulted in $3 million in property tax revenue and $1.5 million in sales tax every year.

As part of the riverfront development plan in Omaha, Nebraska, the new campus for the Gallup Organization was constructed on a former brownfield.

Leveraging Investment in the Community

EPA's Brownfields Pilots have leveraged billions of dollars to support brownfields projects in communities throughout the United States. This includes money invested in cleaning up brownfields as well as money invested in constructing the new facilities. After the completion of environmental assessments under the Omaha, Nebraska, Pilot, the redevelopment of one of its targeted sites into a new campus for the Gallup Organization created about 750 temporary jobs. In addition, the Pilot leveraged $81 million for construction of the new campus facilities. The Omaha Pilot leveraged another $4.8 million in construction dollars for a regional hiking and biking trail; $21.6 million for a pedestrian bridge crossing the Missouri River; and $35 million for a new National Park Service regional headquarters on targeted brownfields.

EPA Funding Leverages Billions in Public and Private Investments*



Since 1995, EPA's total investment of nearly $700 million in the Brownfields Program has leveraged $5.09 billion in public and private funding for Brownfields properties.

Brownfield Pilot Leveraged Funds
U.S. EPA Brownfield Program Investment

Commerce Center at Martin Luther King Business Park.

Sparking More Revitalization

One of the most important contributions of EPA's Brownfields Pilots is that they often sparked cleanup and redevelopment of whole corridors of blighted property. In St. Louis, Missouri for example, the original target area for the Brownfields Pilot was the 26-acre, 16-block Dr. Martin Luther King Business Park. Using the original Brownfields Assessment Pilot funding to kick start the project, over $19 million in private-public investment has been leveraged to construct over 450,000 sq. ft. of new office, warehouse, and distribution space. With additional funding from EPA, St. Louis expanded its brownfields initiative to the North Riverfront Industrial Corridor, located immediately north of downtown St. Louis and stretching four miles along the Mississippi River. The goal of the Pilot is to assist brownfields redevelopment within the Corridor in the creation of two large, campus-style business parks. The business parks will provide expansion opportunities for existing businesses as well as offer companies new to the St. Louis region a place to build and provide jobs all within the urban core. Over $4.0 million in initial land acquisition funding has been leveraged to date as the city begins this visionary 10-year redevelopment initiative.

EPA's Brownfields Program leveraged billions of dollars to support cleanup and redevelopment efforts, and thousands of temporary and permanent jobs at brownfields throughout the country. The total economic impact may not be known, because generation of jobs and investment continues long after federal funding is exhausted. It is clear, however, that funding provided by the Brownfields Program has been critical in helping communities overcome the initial hurdles of assessing and remediating contaminated properties and in leveraging other sources of funding for redevelopment activities.

Putting the Pieces Together

Environmental improvements make neighborhoods safer and healthier. Civic improvements such as increased access to services, increased greenspace, and more cultural and recreational opportunities renew community character, bring hope to neighborhoods, and improve residents' quality of life. In addition, work force training, expenditures on brownfields redevelopment, and the creation of new jobs stimulate local economies. State and local governments benefit from increased income, sales, and property taxes, resulting from new employment and expanded businesses. Many Brownfields Pilot communities experience benefits in more than one of these areas.

Portland, Oregon, is a prime example of brownfields redevelopment that has resulted in environmental improvement, better access to services, revitalized neighborhoods, increased community pride, and leveraged jobs. As Oregon's oldest and largest industrial, shipping, and commercial center, Portland has a high concentration of abandoned and underused properties. Historically, the waterfront provided jobs to low-income and minority citizens in nearby North and Northeast Portland. However, manufacturing jobs in the area have shrunk dramatically, leaving poverty rates greater than 10 percent and unemployment rates up to 35 percent in these federally designated Enterprise Community neighborhoods. Meanwhile, the threat of contamination and liability has limited reuse and redevelopment at these sites, while suburban sprawl continues to put pressure on the urban growth boundaries and test the Metro area's land use plan. The city estimates that 484 properties have confirmed contamination, and contamination is suspected at as many as 600.

Formerly the site of Rose City Plating, this property has been redeveloped into a mixed-use space which includes a public library. A No Further Action letter was issued for the property, and redevelopment was started in January 2000, providing 26 jobs.



Facilitated by the Portland, Oregon Assessment Pilot, the former Wagstaff Battery property was redeveloped into the Port City Development Center.

Since receiving its first Brownfields Assessment grant in 1996 and being designated an EPA Showcase Community in 1998, Portland has made strides in brownfields redevelopment by enthusiastically addressing every stage of the process, from community outreach to reuse planning and redevelopment. The city made community outreach a top priority, keeping citizens from low-income communities involved in brownfields reuse decisions and holding neighborhood meetings and workshops to keep citizens involved. As a Showcase Community, Portland selected five properties in late 2002 for cleanup and redevelopment. The diverse former and planned uses for the properties illustrate Portland's commitment to bringing together all of the benefits of brownfields redevelopment. For example, lead contamination is being cleaned up at a former battery recycling facility where the City and County are helping to redevelop the property into a new location for the Port City Development Center. This nonprofit organization provides training, work placement, arts programs, and residential living skills to developmentally-challenged individuals. Redevelopment activities at former gas station sites have resulted in businesses and services ranging from coffee shops and offices to senior housing and space for retail, community services, and senior daycare. The city is redeveloping another area into a community-funded and maintained recreation area for local residents. Portland's Mayor Vera Katz summed it up: "These projects are what make the Showcase project worthwhile. There are a number of small properties in North and Northeast that have stayed vacant and neglected for too long. But now, we have the opportunity to help redevelop the lots, and hopefully serve as a catalyst that will bring new jobs and new life to the neighborhood."

EPA's Brownfields Program has improved the environment, the economic conditions, and the quality of life for thousands of people living in communities affected by brownfields. The following pages describe how each EPA Region tailored its Brownfields Program to address the unique characteristics and needs of its constituent states.