

BUILDING HEALTHY COMMUNITIES BY INCREASING ACCESS TO HEALTHCARE SERVICES

Cleaning up and redeveloping brownfields helps create safer, healthier communities in many ways. When redevelopment includes siting new medical offices, community health centers, or other healthcare facilities on former brownfields, increased access to healthcare services benefits public health and improves the quality of life and economic well-being of a community. Furthermore, healthcare facilities can act as economic engines that attract new businesses and employers.

No one knows exactly how many health care facilities are built on brownfields. Most expect the number to grow. *The New York Times* reports that with enactment of the Affordable Care Act, the number of Americans who will use community health centers could double to 40 million by 2015. While brownfields sometimes are overlooked, they can be attractive sites to redevelop for healthcare facilities because they often are located in areas with unmet healthcare needs.

NEW ENVIRONMENTAL SOLUTIONS

EPA's land revitalization initiatives are producing significant environmental benefits and helping to transform communities into more sustainable and livable places. The strategy of encouraging market-driven redevelopment of brownfields and other contaminated sites for economic reuse is proving to be a successful approach at many sites. However, challenging real estate markets and economic realities can leave some formerly contaminated properties unused, possibly for a long time. New approaches are needed to revitalize these sites and protect human health and the environment.

EPA's Land Revitalization Team is working with communities, states, other federal agencies, academic institutions, nonprofit organizations, and the private sector to develop and test new approaches that recognize valuable reuse alternatives for formerly contaminated properties. Building green infrastructure to help manage stormwater runoff and floods, promoting safe soil management to support urban agriculture, and siting renewable energy on contaminated sites can bring environmental, ecological, and social benefits to communities. Unlocking the potential value of these underused properties often requires creativity and close collaboration with many public and private partners. These projects can help stabilize communities and spur economic development.

In addition, the sites often are in areas that already have highways, rail, sewer, gas, water, and electrical supplies. This means that developers can save time

and money because they will not have to build new infrastructure.

HEALTH CLINIC ON BROWNFIELD KEY TO MEETING PUBLIC HEALTH NEEDS OF DISASTER VICTIMS

In Graniteville, South Carolina, a new health clinic in an unused shopping center is being used for monitoring and assessing the long-term health of residents following the largest chlorine spill in U.S. history. The spill occurred in 2005, when a freight train collided with a parked train near the Avondale mill in the small, unincorporated city of Graniteville. Four tank cars carrying hazardous materials derailed. Three of the cars contained chlorine, and one of them breached. About 40 tons of chlorine vapor and liquid were released. Nine people were killed, and hundreds suffered respiratory distress.

In addition to causing a public health crisis, the accident led to the immediate closure of the Avondale

Mill and the loss of about 2,000 jobs. Workers and their families no longer had access to healthcare services at the mill—the only healthcare in town.

When the National Institute of Environmental Health Services funded a five-year, \$2.9 million study examining the lung health of community members and workers exposed to the chlorine gas, Graniteville lacked a conveniently located clinic that participants could visit regularly for health monitoring. For its first year, the Graniteville Recovery and Chlorine Epidemiology (GRACE) Study Center was located in Augusta, Georgia. The study center offers free lung testing for any resident as part of a program to identify and document any long-term lung problems that occurred since the accident.

EPA's Office of Brownfields and Land Revitalization assisted with community meetings to share how brownfields could be reused for a variety of community services, including a local clinic. A brownfield site was selected in the Masonic Lodge Shopping Center at 50 Canal Street. The clinic site is centrally



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located in the community, making access easy for chlorine monitoring and other non-emergency health services. The GRACE Study Center's laboratories and administrative offices are housed at the clinic, where there is also room for community meetings and the center's annual health fair. The new facility allowed the study center to move from Augusta to Graniteville in July 2012 to better serve the affected community.

The Graniteville community is grappling with economic fallout from the accident, including the need to clean up contamination at several mill sites. EPA brownfields grants provided funds for environmental assessment and cleanup of mills in the community. The community also would like to address the need for a permanent community health center. EPA helped the community identify additional sources of federal funding for revitalization projects, such as the \$11 billion

available through the Department of Health and Human Services' Health Resources and Services Administration for the construction and renovation of community health centers. (<http://www.hrsa.gov/about/organization/bureaus/bphc/bphc.pdf>). EPA also helped put Graniteville in touch with the Agency for Toxic Substances and Disease Registry to produce a video that enables Graniteville to share its story so others can learn from its experience.

IOWA TOWN ANCHORS DOWNTOWN REVITALIZATION WITH NEW WELLNESS CENTER BUILT ON FORMER BROWNFIELD

In spring 2013, the City of Ogden, Iowa, plans to begin construction of the new Boone County family medicine center. The wellness center will be built on three centrally located brownfield properties in the downtown commercial district. The new building will be the cornerstone of Ogden's Main Street revitalization.

Construction of the new family medicine center is the first step toward realizing Ogden's downtown revitalization plan. The plan was developed with the help of EPA Region 7 in partnership with the Iowa Department of Natural Resources (IDNR).

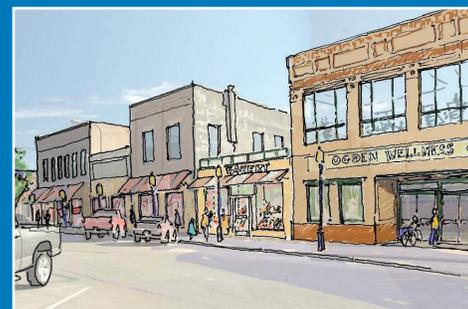
The 3,100 square-foot building will have space for two doctors and an extra room for medical equipment or another doctor. The building is designed to meet the needs of Boone County Hospital, which will lease and eventually purchase the building. Part of the building lot will be beautified during construction and will be used for the center's second phase of construction, which will include medical facilities available for lease.

The project began several years ago under EPA Region 7's Historic Highways Initiative. EPA identified abandoned gas stations along the

historic Lincoln Highway in Iowa and Nebraska and along the former Route 66 in Missouri and Kansas, and worked with communities to help clean up and reuse petroleum-contaminated brownfields and nearby brownfield properties. EPA Region 7 worked with Ogden to identify reuse strategies for an abandoned gas station and other brownfields within the city's downtown area. The former gas station site will be developed as a way station on central Iowa's rapidly expanding bike trail system.

Funding from EPA's Office of Brownfields and Land Revitalization supported a market analysis and needs study, a project web portal, and a design charrette to engage the community in reuse planning. EPA also provided training on the brownfields assessment and cleanup process and on partnering with other state and federal agencies, particularly the U.S. Department of Agriculture's Rural Development program. The process identified revitalization priorities that include a new medical clinic and retail space, and design options for a new, improved gateway to downtown Ogden.

City officials used these products to market new business opportunities and promote downtown revitalization. The



city purchased vacant properties, which gave the city greater control over redevelopment planning. Ownership also enabled the city to receive additional support from IDNR for assessment and cleanup work. Once the properties were assessed and cleaned up, the city demolished the vacant buildings and graded the sites for redevelopment.

The city also created Ogden Legacy, a nonprofit economic development corporation, and initiated a downtown redevelopment plan. The wellness center project got a big boost when Ogden secured a USDA Rural Economic Development Loan Grant for up to \$300,000 and received a \$500,000 grant from the local Leonard A. Good Trust. The grant from the trust, which will be paid over four years, is a major step towards meeting the project's \$850,000 price tag.

MORE INFORMATION:

EPA Land Revitalization Program: <http://www.epa.gov/landrevitalization/>

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