

Brownfields Redevelopment in Port Areas



International maritime trade is expected to double by 2020, and this boom will exert more pressure on highly developed coastal areas. Many port authorities are redeveloping brownfields in port areas to meet the demands of increased marine transportation and to provide benefits to surrounding communities and regions. This report looks at the issues and obstacles, as well as the benefits and sources of assistance for redeveloping port properties as studied by ICMA researchers with the Brownfields Showcase Communities.



Founded in 1914, the International City/County Management Association (ICMA) is the professional and educational organization for appointed managers and administrators serving cities, town, counties, regional entities, and other local governments throughout the world.

ICMA represents nearly 8,000 members and more than 5,000 local jurisdictions and creates excellence in local government by developing and fostering professional local government management worldwide. The association provides an information clearinghouse, technical assistance, publications, online services, training, and professional development to local government managers and administrators to help them improve their skills and increase their knowledge of key issues.

ICMA's Domestic Research and Development Team seeks to enhance the quality of local government management through information sharing, technical assistance, research, and partnership building among concerned stakeholders. The Research and Development Team has been studying the role that local government can play in a variety of brownfields issues.

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Port Redevelopment



International maritime trade is expected to double by 2020, and this boom will exert even more development pressure on already highly developed coastal areas. To accommodate increased development and trade, many ports will need to improve aging infrastructure and, because of their strategic significance as gateways into the country, enhance their security systems. Because available land is limited in port areas, instituting these upgrades and measures is extremely complicated. As a result, many port authorities are redeveloping brownfields in port areas in order to meet the demands of increased marine transportation and to provide environmental, economic, security, and social benefits to surrounding communities and regions.

PORT REDEVELOPMENT ISSUES

Port redevelopment has its own unique combination of issues that distinguish it from traditional brownfields redevelopment. These issues are related to port management, the environment, development, transport/commerce, homeland security, and stakeholder coordination. Linking and balancing competing interests within a single port can be tricky for port authorities and other redevelopment stakeholders. For example, many port authorities and managers are eager to expand port

facilities; at the same time, however, they want to minimize any adverse impact of development on the environment. A port's ability to balance these and other concerns can determine the success of its revitalization efforts and affect the relationships among the stakeholders involved.

Port Management

With projections for increased port commerce in the coming years, ports must plan for expansion of commercial port areas. Many ports support a wide variety of uses, such as freight, fishing, cruise ship docking, industry, public access, and non-water-dependent activities. Therefore, port managers must find ways to integrate and accommodate multiple uses. Promoting brownfields redevelopment can help to ensure that unproductive properties are used first, before wetlands, neighborhoods, or other existing uses are affected by port enhancement in areas that currently are not part of the port. In addition to managing multiple uses, ports are dealing with aging infrastructure that must be repaired or replaced. For example, some ports have found that replacing old, rotting, wooden piers with fill has helped to reduce oil spills, fires, and rodent problems. Redevelopment projects present port managers with an opportunity to make some of these improvements in the context of the project, but old, working areas of the port must be maintained and upgraded as well.

Environmental

Years of heavy industrial usage and the transport of hazardous materials have caused environmental contamination at many ports. There is often an abundance of contaminated sites along the waterfront, as well as contaminated sediments in the channels. Redevelopment of these ports has led to numerous environmental benefits, such as remediation of sludge pits, removal of Polychlorinated Biphenyls (PCBs) and underground storage tanks, and dredging of contaminated sediments. Historic wetland loss, ecosystem disturbance, and stormwater runoff are other problems, as many ports are located on filled wetlands. Because of the heavy industry traditionally found in port areas and emissions from idling ships, numerous ports are in ozone nonattainment areas (areas with high amounts of ground level ozone). Some ports are in the process of developing and implementing environmental management systems to address existing problems and prevent new ones from occurring.

Development

Port redevelopment is not easily accomplished. For portfields projects like other brownfields projects, it is often difficult to find sufficient funding to cover the assessment and cleanup required to ready sites for development. At ports nationwide, port officials must take care that new redevelopment projects brought in will be sustainable in the long term to avoid creating new brownfields in the future. Often a major employer in waterfront communities, ports must also try to provide quality jobs for local citizens.

Transport/Commerce

With projections of increased demands on maritime trade, ports are exploring ways to handle higher volumes of cargo. One of

these strategies is the development on brownfields of multimodal facilities that speed the transfer of cargo between ship, rail, truck, and air transport. Many ports are also dredging their channels to provide access to larger vessels with deeper drafts. Others are redesigning roadways and overpasses along the waterfront to facilitate access to the seaports. Many port officials have found that brownfields are ideal locations for expanding port facilities to accommodate more cargo traffic.

Homeland Security

Since September 11, 2001, homeland security has become a higher priority in the United States. As strategic gateways into the country, ports are revamping and strengthening their security systems in accord with new federal regulations. Many are taking advantage of port redevelopment projects to implement new security measures. Ports are attempting to become more secure in a variety of ways. For example, they are using better lighting, implementing new surveillance measures, conducting random checks on cargo, utilizing x-ray scanners, and tightening access to port facilities. Some ports are also requiring clearance and background checks for those who enter secure areas of the port.

Stakeholder Coordination

Port authorities, local government officials, community residents, state and federal agencies, members of nonprofit and nongovernmental organizations, developers, lenders, and port users are among the many stakeholders in the redevelopment of portfields. Ports across the country are discovering the challenge of bringing stakeholders to the table, sorting out their priorities and assumptions, and coordinating their efforts. Ports that have had successful redevelopment projects have often had ex-

tensive upfront planning involving all stakeholders. As a result, participation and buy-in from the community have been greater, and there has been less skepticism and resistance to plans.

BENEFITS OF REDEVELOPING PORT AREAS

Redevelopment of port brownfields produces numerous environmental, social, and economic benefits. Many vacant and abandoned industrial sites in port areas are contaminated. By cleaning up and returning these lands to use, communities can remove dangerous structures and stop or stabilize contamination in or near waterways. Such redevelopment measures can also help restore health and natural functions to watersheds by improving sediment, surface-water, and groundwater quality; remediating and restoring wetlands, woodlands, and other habitats; and improving stormwater management systems. Redevelopment of ports presents valuable opportunities for waterfront revitalization, and it may serve as a catalyst for revitalization in the broader community. Cleanup can reduce health risks for nearby communities and waterway users, remove eyesores, and even help to improve air quality.

Reuse of port brownfields sites can provide jobs, goods, and services and help increase the community's access to, and pride in, its waterfront. Redeveloping brownfields in port areas allows for expanded port facilities, increases commercial port activity, and provides economic development opportunities. Essentially, brownfields redevelopment frees space for various uses and creates more available property for sale or lease, providing ports with a source of revenue. In addition, redevelopment of previously used sites can

help to alleviate pressure on undeveloped wetland and coastal areas, thus protecting important coastal habitats.

THE "PORTFIELDS" INITIATIVE

The Portfields Initiative is a federal inter-agency effort led by the National Oceanic and Atmospheric Administration (NOAA). It focuses on the redevelopment of brownfields in and around ports, harbors, and marine transportation hubs ("portfields"), with an emphasis on the development of environmentally sound port facilities. Through the Portfields Initiative, NOAA and its federal partners will assist ports in revitalizing waterfront areas, improving marine transportation, and protecting and restoring coastal habitat. Federal Portfields partners include the Environmental Protection Agency, the Economic Development Administration, the U.S. Maritime Administration, the Army Corps of Engineers, and the Departments of Labor, Interior, Housing and Urban Development, and Justice. Each partner brings its own specialized expertise to contribute to the revitalization of port communities.

Initiative Vision and Goals

The goals of the Portfields Initiative include improving the delivery of partner agencies' financial and technical resources; improving coordination among federal, state, and local partners; establishing a process for redeveloping portfields properties as productive port facilities, while enhancing environmental, social, and economic conditions; identifying tools, techniques, and information needs to improve decision making at portfields sites; and communicating lessons learned from the initiative to other port communities. The Portfields Initiative builds upon ongoing comprehensive planning efforts in

the pilot ports and will allow projects identified through those planning efforts to come to fruition.

Initiative Accomplishments and Next Steps

The Portfields Initiative is organized into three phases. In the first phase, members of the working group interviewed port authorities and other stakeholders at ports that have redeveloped brownfields for port activities. The purpose of the interviews was to identify successful practices and strategies, and the findings were published in the report *Portfields Interagency Initiative: Phase I*. In the second phase, interviews were conducted at ports that would like to redevelop portfields. This information will be used to determine what assistance port communities need and want in their redevelopment efforts so that the federal agencies may better serve them. For the third phase, the Portfields federal partner agencies have chosen three ports (New Bedford, Massachusetts; Tampa, Florida; and Bellingham, Washington) for pilot programs that were kicked off in April 2004. Federal partners will work with port authorities and other stakeholders during this phase to plan and implement cleanup and reuse of portfields. The pilot programs will provide port communities, federal agencies, and other partners useful information and strategies that can be used as models for other communities with similar issues.

PORT REDEVELOPMENT INITIATIVES

The following sections provide a few examples of redevelopment activities at various ports. The examples illustrate the different types of projects and programs that the ports are currently involved in.

New Bedford, Massachusetts

New Bedford, Massachusetts, was a center for whaling and later for commercial fishing. Its active fishing fleet and large seafood processing industry have earned New Bedford the title “Seafood Capital of the Northeast.” To maintain its maritime character, the port is placing a strong emphasis on developing maritime and seafood industries and related businesses. The city has also used nautical, fishing, and whaling themes in the restoration and reuse of historic areas and to promote tourism. An excellent example of this commitment to preserve local history is the New Bedford Whaling National Historical Park, created in 1996. The park, which includes historic buildings and ships, museum collections, a visitors’ center, and archives, commemorates the whaling port heritage of New Bedford. A few examples of brownfields redevelopment projects planned for the near future include a bilge recycling facility, an oceanarium, and an industrial park dedicated to seafood processing.

In addition, through the Massachusetts Coastal Zone Management Program, New Bedford has established Designated Port Areas (DPA) as well as a mechanism called the “Supporting DPA Use Eligibility Credit Program,” which is designed to function like a transfer of development rights program. To develop non-water-dependent uses within the DPA, property owners must purchase “eligibility credits.” The revenue from these credits is distributed to owners of properties devoted to water-dependent industrial uses. In this way a substantial amount of assistance for the port economy is raised.

Baltimore, Maryland

Compared with other major ports in the mid-Atlantic region, the Port of Baltimore, located on the Chesapeake Bay, is closer to many major cities in the East, South, and

Midwest. More than 30 million tons of cargo moves through the port of Baltimore annually. It is the largest port in the nation for roll-on/roll-off cargo and the fourth largest port for containers. It also has facilities for a wide range of bulk, break-bulk, and various other types of cargo. Cargo handling is the predominant activity at the port, but there is also recreational boating and cruise ship activity. The port of Baltimore is a significant economic engine for the entire region, generating \$1.4 billion in revenue annually and employing 126,700 Marylanders in maritime-related jobs. These direct impacts on the local economy have extensive multiplier effects on the economy of the entire state.

The 30-acre Port Liberty site in Baltimore, which was used for shipbuilding during World War II, had extensive lead contamination. A private developer acquired the site in the 1980s for an industrial park, but the plan never came to fruition and the site sat vacant for the next several years. In 2001, the site was redeveloped to accommodate three businesses: an auto importer, a cable company, and a stone cutting company. Remediation, including soil removal and capping, was required to prevent lead runoff into the harbor. Monitoring for leaks and cap integrity will be ongoing. The Baltimore Development Corporation (BDC) helped with cleanup and assessment financing. Through the efforts of the BDC, the Port Liberty redevelopment project received a \$400,000 grant from the Maryland Department of Business and Economic Development (DBED) Revitalization Program, a \$400,000 loan from the HUD Empowerment Zone Brownfields Incentive Program loan, and other incentives.

Houston, Texas

The port of Houston, Texas, is a 25-mile-long complex of diversified public and

private facilities located just a few hours of sailing time from the Gulf of Mexico. The channel extends 50 miles to Galveston Bay and the Gulf of Mexico, with port facilities all along the channel but primarily clustered inland 25 miles. The port is ranked first in the United States for foreign waterborne commerce and second for total tonnage. Approximately 194 million mean tons of cargo moved through the port of Houston in 2001. A total of 6,613 vessel calls were recorded at the port during that year.

Redfish Island, located in Galveston Bay, was a favorite anchorage for boaters until it subsided. When the ship channel was deepened from 40 to 45 feet, the Port of Houston Authority (PHA) used the dredged material from the channel bottom to rebuild the island. Today it is again a favorite boating destination as well as a bird habitat and rookery. Work on the island also has re-established it as an oyster reef. In this same project, PHA will use dredged material to expand marshland in Galveston Bay by up to 4,250 acres, protecting marine life and providing bird watching and fishing opportunities.

Los Angeles, California

The port of Los Angeles is located in San Pedro Bay, approximately 20 miles south of downtown Los Angeles. The port occupies 7,500 acres of land and water along 43 miles of waterfront. The port of Los Angeles, which handles 3,000 vessels a year, is the busiest container port in the United States and seventh busiest in the world. In 1990, the port of Los Angeles removed 22 acres of contaminated land jutting into the turning basin, which improved the traffic flow of vessels and accommodated larger vessels in the port. Chevron, which had been using the site as a bulk liquid terminal, decided to terminate its lease. Before vacating the site, Chevron

spent \$30 million to remove pipelines and storage tanks and to conduct thermal treatments and bioremediation. Contamination had also entered the groundwater, and a plume traveled off-site, so groundwater was remediated as well. The port is still in litigation with Chevron to recover additional cleanup costs.

At about the same time that the Chevron project was under way, Todd Shipyard, the occupant of an adjacent site, went bankrupt and terminated its lease. Six thousand jobs were lost. The property that the shipyard had occupied was contaminated with asbestos, solvents, metals, and various petroleum hydrocarbons. The port paid a private salvage company to sell off the abandoned shipyard shop and remediated the property with funds from the sale. Federal money was used only for dredging of contaminated sediments. The port has used contained aquatic disposal (CAD) sites for placement of contaminated sediments from these projects and hot spots around the harbor. Between these two projects, 80 acres have been redeveloped to meet the port's container terminal needs and to stimulate economic development in that area. Uncontrolled releases of contaminants have been reduced as well.

OVERCOMING OBSTACLES TO PORT REDEVELOPMENT

While any redevelopment project will have its share of obstacles to face, many of these will fall into three categories: coordinating the various stakeholder groups, dealing with environmental issues, and finding sufficient funding and technical assistance to complete the projects. Strategies to overcome these obstacles are discussed below.

Forming Partnerships

Coordinating the various stakeholder groups involved in port redevelopment can be an obstacle to port redevelopment, but creating partnerships among these various stakeholders can help them to achieve much better results than each could accomplish alone. It is often very challenging to ensure that all stakeholders are coordinated, that their interests are considered, and that they are able to participate fully in the process, but they all have important roles to play in improving ports.

Successful brownfields redevelopment requires the active participation of stakeholders in every stage of the planning process. By working together, stakeholders can develop the vision for site reuse, prioritize resources, and even contribute to long-term maintenance of redeveloped sites. Through early and active involvement in planning, port authority and local government officials, federal and state government agencies, community groups, developers, lenders, and others in the private sector take ownership of the project and have a vested interest in seeing it through to completion.

Ports with experience implementing redevelopment projects have learned several valuable lessons. The first lesson is to take a holistic rather than project-by-project approach to portfields redevelopment. Another important lesson is to establish clear goals for reuse. The lead agency should educate other groups about these goals and seek joint solutions to difficult issues. An attempt should be made early on to get support from community residents for the redevelopment project and to build trust between the various stakeholders.

Revitalization efforts at most ports involve multiple rather than single sites. Because many of the same stakeholders are involved in each project, good communi-

cation is particularly important. Some communities create advisory councils that meet on a regular basis to discuss current and future projects. Other communities prefer a more informal approach and establish a single point of contact in each stakeholder group as the “go-to” person for that entity. An established and ongoing method of communication between stakeholders facilitates the redevelopment process at each step. It can also reduce questions about who is responsible for what and which approvals are required. If stakeholders are involved in planning from the beginning, unpleasant surprises later on often can be avoided.

Lessons Learned in Los Angeles

From its cleanup efforts, the port of Los Angeles has learned the following important lessons:

- Spend the extra money in monitoring and oversight
- Develop close working relationships with the appropriate federal, state, and local agencies as well as stakeholders in the private and nonprofit sectors
- Create a community advisory committee to build community support for mitigation projects
- Work with regulators to reach an agreement about leaving or containing an acceptable level of contamination on the site rather than create more risk by transporting the contaminated material as state hazardous waste.

Environmental Stewardship

Because of their prior industrial uses, many port brownfields sites are contaminated and will require environmental remediation before they can be reused. Time, expertise, and money should be allotted for the site assessment and cleanup to overcome this important obstacle. In

many cases consultants will need to be hired to address environmental issues. For some properties, a responsible party, such as the company whose factory contaminated the site, will contribute cleanup funds. On other properties, there will not be a responsible party available. Companies that are no longer in business or are in bankruptcy proceedings may hold the title to the brownfields property. In this situation, the responsible party cannot contribute to cleanup costs, so ports have found it beneficial to take action themselves, often entering into a state voluntary cleanup program or seeking other assistance to prepare the site for development. On sites where there is a party responsible for the environmental damage that can be identified, some ports have met resistance, especially if the company’s actions were legal at the time (that is, before current environmental regulations were enacted) or if the contamination occurred in the very distant past. Responsible parties may also be concerned about future liability issues.

Before cleanup of a site begins, it is preferable, although not always possible, to know the end use of the site. Several ports have found it helpful to use multidisciplinary teams for the cleanup (for example, groundwater contamination specialists, remediation and geo-technical experts, and geologists). If an on-staff or contracted team works from the beginning with the architects and engineers designing the new development, the designs for the site can incorporate cleanup, on-site retention/containment, and building. This coordination can result in creative and efficient plans. Completely clearing a site and removing all contamination to prepare it for any kind of development may take longer and cost more than a project where the cleanup plan and the design for the new development are integrated. In many states the level of cleanup required depends on

Involving Port Employees in Houston

While developing its environmental management system (EMS), the Port of Houston Authority asked port employees for suggestions on how to reduce air emissions. One employee suggested using Purinox fuel in port machinery. Upon implementation, use of this cleaner burning fuel has reduced the port's nitrous oxides (NOx) emissions by 25 percent. Getting employees involved in finding creative solutions has boosted morale at the port and has had a beneficial impact on the environment. Due to voluntary EMSs implemented at two facilities, the port of Houston became the first U.S. port to achieve compliance with ISO 14001, an international standard for environmental management.

Mitigation and Stewardship in Baltimore

The Port of Baltimore has been proactive in environmental protection and conservation. The port has been involved in oyster reseeded and tree planting projects, and it is managing the design and construction of tidal wetlands within the Chesapeake Bay. Its commitment to preserve the environment has been demonstrated by protecting wetlands habitat, cleaning up contaminated properties and returning them to productive use, creating a conservation easement, and funding a shipboard demonstration of ballast water treatment technology to manage risk from invasive aquatic species.

the end use of the site. For example, a residential use would require a more extensive cleanup than a commercial or industrial use. Jurisdictions can save significant time and money by having an idea of the sites' new use. Integration of cleanup and redevelopment plans can result in nu-

merous innovations. A parking lot could cap a hot spot, monitoring systems could be incorporated into the redevelopment, materials could be reused on-site, and buildings and other structures could be located to optimize the safety of future users of the site.

Ports today are attempting to not only clean up past contamination when redeveloping brownfields, but to also prevent future environmental problems. By incorporating environmental safeguards into designs for new developments, ports can avoid or minimize stormwater runoff, erosion, and destruction of wetlands. Operating ports must prevent new contamination if possible and, if contamination occurs, respond quickly. One option is to encourage reporting of suspicious activities by port tenants, and another is for port staff to carry out inspections to find and address contamination. It is important to locate new sources of contamination because the longer it continues, the more damage to the environment, and expense and time the cleanup will take. Some ports have found it beneficial to offer cleanup assistance to tenants and work with them to help prevent future contamination.

Contamination is not the only environmental problem that ports need to address. Because of industrial uses, proximity to large metropolitan areas, and exhaust from idling ships, trucks, and port machinery, many ports are in nonattainment areas for ozone under the Clean Air Act. Fuel spills near the port and on land lower water quality. Port development also can cause erosion and loss of wetlands and other habitat for wildlife. In addition, invasive aquatic species have been known to enter waterways through ships' ballast and bilge water. By out-competing native species, they create ecological havoc. Finally, the propulsion systems of ships can disturb bottom sediments and associated organisms

living on or near them. Port managers are responding to these problems with wetland creation, stormwater management, overall watershed management strategies to improve the water and coastal ecosystem functions, and the development of environmental management systems.

SOURCES OF FUNDING AND TECHNICAL ASSISTANCE

Leveraging in-kind and cash resources from stakeholders can greatly alleviate the financial costs for the port authority or local government and foster a greater sense of community collaboration and accomplishment. Even with contributions from stakeholders, however, portfields redevelopment projects usually require outside funding and technical assistance. Obtaining this assistance can become another important obstacle in port redevelopment. A sampling of available tools and programs are offered below.

Local Government Tools

Fortunately, there are a variety of tools that local governments can use to facilitate port redevelopment. Several of these are discussed below.

Development impact fees. Many local governments impose fees on developers of new construction to raise revenue for capital facilities that benefit from the development. These fees are known by various names, including development impact fees, user fees, benefit assessments, and connection charges. The fees are often used to pay for new roads, public transportation, and utility infrastructure or to improve existing facilities to accommodate the new development. Revenues from

impact fees can also be applied toward the creation and maintenance of waterfront parks and trails, the preservation of wetlands or other public uses.

General obligation bonds. General obligation bonds are secured by the issuer (for example, the local government) and are supported by the issuer's taxing power. They generally require the approval of voters or the legislature. The benefit of general obligation bonds is that they provide all of the funds upfront to facilitate the purchase of properties, and the costs are repaid from tax revenues over several years. As their name implies, general obligation bonds are not tied to a specific project. For this reason, taxpayers often frown upon them.

Revenue bonds. Unlike general obligation bonds, revenue bonds are based on taxes levied for a specific project or on revenues anticipated from future user fees. For example, the port of Toledo issues revenue bonds to pay for its brownfields projects. It then maintains ownership and leases the property, with the lease revenues helping to pay off the bond debt.

Tax increment financing. Local governments use tax increment financing (TIF) for economic revitalization efforts, usually in distressed areas. Bonds are issued to raise capital to fund redevelopment activities, and the new tax revenues generated from the project are earmarked to redeem the bonds. The revenues from incremental tax increases are used to service the debt and repay cleanup and redevelopment costs. Because repayment of the bonds relies on taxes, the reuse must include taxable uses like a factory, marina, or warehouse.

Special taxing districts. Cities can create special service areas or taxing districts in order to raise funds for services, improvements, or facilities to benefit the designated area. In a special taxing district, property owners agree to a real estate levy or special fee that will provide them with additional services or improvements. For example, a special taxing district might be used to fund the cleanup of a brownfields site and its conversion into a waterfront park.

Special use districts. Local governments can use planning tools such as special use districts and overlays to encourage specific types of development. For example, some communities create waterfront or port overlay districts that offer various incentives to property owners. Through the Massachusetts Coastal Zone Management Program, New Bedford has established designated port areas (DPAs) to preserve and promote maritime industry.

State Resources

Federal funding is often funneled through state governments before grants are allocated to municipalities. Many state governments are also able to offer grants for economic development and revitalization, including environmental assessment, site planning, technical assistance for site remediation, and liability assurances. A multitude of state programs designed to promote brownfields redevelopment and related activities as well as various state agencies play roles in these redevelopment efforts.

State voluntary cleanup program. In many states, voluntary cleanup programs (VCPs) have become instrumental in the redevelopment of contaminated sites. VCPs allow voluntary parties, such as site owners or developers, to approach state

governments and initiate environmental cleanups. These programs provide incentives to voluntary parties to clean up sites rather than rely on enforcement orders to accomplish remediation. Incentives to participate differ from state to state, but most VCPs include conditional exemptions for property owners from future state liability. Other common features are streamlined investigation and cleanup procedures, more expedient and economical cleanup alternatives, and cleanup standards that vary based on the future use of the site.

Coastal zone management program.

Many coastal states have a coastal zone management program (CZMP), which is a federally approved state program administered at the federal level by the National Oceanic and Atmospheric Administration (NOAA). The program offers financial assistance, mediation, technical services and information, and participation in regional, state, and local forums. The CZMP leaves day-to-day management decisions to state-level offices in the 34 states and territories with federally approved coastal management programs. State and federal efforts in coastal zone management are guided by the CZMP's Strategic Framework, which is organized around the major themes: sustain coastal communities and ecosystems and improve government efficiency.

State loan programs. Several states offer loans for such items as assessment and cleanup of brownfields sites and economic development or redevelopment projects. Some loan programs are very specific in their purpose. For example, Massachusetts offers loans for developing or expanding seafood facilities, Ohio offers loans for water-related brownfields activities, and Florida offers loans to help new owners clear title on a property so they can redevelop it.

State grant programs. Though loans seem to be more prevalent, some states offer grants for brownfields assessment, cleanup, and redevelopment. There are also economic development grants and grants for openspace, trails, and farmland preservation, as well as a variety of other items, depending on the priorities of the state.

Technical assistance. States are often willing to provide the expertise of their staff. For example, Florida gives technical assistance for the development of community-based special area management plans, Maryland’s environmental agency offers site assessments for publicly owned brownfields for no cost, and California’s brownfields program will provide a team of experts to work with brownfields projects at the expense of the property owner.

Tax breaks. Available tax breaks vary widely from state to state, but tax credits are widespread and often offered for such things as a voluntary cleanup, property revitalization, or investment in a designated area. Tax deductions can also be taken in some states for items like cleanup expenses. Some programs offer other types of tax relief, such as a Massachusetts program that allows new owners to negotiate away back taxes on a contaminated site and a Florida program that offers tax refunds for job creation in designated brownfields areas.

Federal Resources

Various federal agencies can offer assistance with port redevelopment projects, depending on their mandates. Below are a few examples of agencies that are commonly tapped for assistance with brownfields. This list is by no means exhaustive, and some projects require stakeholders to be more creative in their search for fund-

State Assistance for New Bedford Harbor

Various departments and offices of the commonwealth of Massachusetts provided resources that have been instrumental in the revitalization of New Bedford Harbor:

- *The Massachusetts Seaport Advisory Council* recommended commonwealth of Massachusetts bond funding for many New Bedford projects, including pier improvements, dredging, ferry terminal construction, harbor plan development, geotechnical services and other planning services.
- *The Massachusetts Office of Coastal Zone Management* provided technical assistance during harbor plan development and grants oversight of harbor plan coordinator funding. CZM continues to support the city and HDC in harbor plan implementation.
- *The Massachusetts Department of Environmental Protection* assigned an ombudsman from the Southeast Regional Office to assist New Bedford with brownfields projects.
- *The Massachusetts Department of Housing and Community Development* provided grant funds for demolition and cleanup.
- *The Massachusetts Office of the Attorney General* gave legal and financial support to brownfields projects, negotiated and executed on assessment and cleanup agreement with a responsible party, and provided financial support for assessment activities.

ing and to look outside of federal programs specifically designated for brownfields.

U.S. Department of Commerce. The National Oceanic and Atmospheric Administration (NOAA) in the Department of Commerce is the primary coastal steward-

ship agency and a leader in promoting safe navigation. To revitalize urban estuaries and port areas while improving coastal habitat, NOAA is engaged in brownfields redevelopment from a number of perspectives. Its sister agency in the Department of Commerce, the Economic Development Administration (EDA), generates new jobs, helps retain existing jobs, and stimulates industrial and commercial growth in economically distressed areas. Generally, EDA provides communities with funds to make infrastructure improvements and to begin capitalized revolving loan funds, as well as other forms of support.

U.S. Environmental Protection Agency. The U.S. Environmental Protection Agency (EPA), the federal government leader in brownfields cleanup and redevelopment, has many programs to benefit communities that want to revitalize their ports. It heads the Interagency Working Group on Brownfields and coordinates the multiple federal partners in the Brownfields National Partnership. EPA has a wide variety of brownfields grant and loan programs available, and houses an extensive network of experts who can offer technical assistance.

U.S. Army Corps of Engineers. The Corps offers planning and technical consultation on brownfields, navigation, flood control, and environmental projects to communities and other federal agencies. It provides appraisal, title, and deed restriction services; performs market impact studies and cost-benefit analyses; shares laboratory and field research data; develops environmental and structural frameworks for projects with contractors in pilot communities; and carries out projects to protect, restore, or create aquatic and ecological habitats related to the disposal of dredged materials.

U.S. Department of Transportation. The U.S. Maritime Administration in the Department of Transportation oversees the interests of U.S. domestic and international waterborne commerce, including the maintenance of a safe and environmentally sound maritime transportation system and the promotion of national security and economic growth through maritime endeavors. It also offers economic and technical assistance in the interest of waterborne commerce and shipyard revitalization. Some ports also find it useful to tap land transportation funds to improve access to the port or for intermodal facilities.

U.S. Department of the Treasury. The U.S. Treasury provides the Brownfields Tax Incentive Program, which leverages private-sector investments for brownfields redevelopment projects. Taxpayers can deduct environmental remediation expenditures under certain circumstances. Projects in eligible districts include EZ/EC communities, EPA Brownfields Demonstration Assessment Pilot communities, communities identified as having poverty rates of 20 percent or higher, or those with fewer than 2,000 residents in which more than 75 percent of lands are zoned for commercial or industrial uses.

For more information:

- Port redevelopment and the Portfields Initiative, see www.brownfields.noaa.gov.
- Brownfields, see the BrownfieldSource Web site at www.BrownfieldSource.org.
- ICMA's Brownfields program, see <http://icma.org> and click on "Brownfields" under the Browse by Topic menu.
- American ports, see the American Association of Port Authorities Web site at www.aapa-ports.org.