Shipping, marine transportation and maritime businesses make the city’s economic engine hum smoothly and provide hundreds of thousands of jobs. But the working waterfront is threatened by economic, real estate and environmental challenges:

- Shoreline tracts usurped by non water-dependent businesses
- Lack of coordinated planning
- Dredging hurdles
- Difficulty accessing government funding opportunities

Solutions? Turn the page...
WORKING WATERFRONT

A working waterfront is critically important for our region as a generator of good jobs and as a driver of our economy. This was true when the Dutch sailed into New York Harbor in 1609 and it is still true in the 21st century. Today, maritime businesses generate more jobs in our region than the financial industry, and have a base employment roughly equal to the education, healthcare or tourism sectors. More important, the working harbor has tremendous potential for economic growth. With added maritime jobs comes better public health, because as more goods and people are moved by water, fewer trucks are on the roads. That can mean much cleaner air for all of us.

Working Waterfront: A Short History

The naturally deep harbor (with its network of waterways and protected embayments, prevailing offshore winds and favorable currents) is the reason that the colony that grew into New York became a key outpost for Europe centuries ago. In the early 19th century, when the opening of the Erie Canal allowed goods to be more easily transported between the Midwest and New York Harbor, the city's position in global commerce was assured.

Innovations in technology that defined the industrial era and ushered in the “modern” age were often linked to our port and waterways. The steam engine, for example, which led to the development of railroads crisscrossing the continent, was pioneered on boats and allowed reliable ferry transit to link New York to Brooklyn, Staten Island, Queens, Hoboken and Jersey City.

By the early 20th century, sail-, steam- and diesel-powered vessels all plied the waters. By 1943, New York Harbor was the world’s busiest port, with nearly 1,000 ships docked or at anchor offshore, 575 working tugboats and 39 active shipyards. Shoreline manufacturing complemented the shipping industry, and the waterfront was lined with factories and warehouses.

Illustration showing stevedores unloading a ship in 1820.
Working Waterfront Today

The Port of New York and New Jersey is still the largest port complex on the east coast, handling much of the country's imports of oil, automobiles, and consumer goods. International container ships deliver the latest in fashion, imported foods, electronics and other goods to terminals in Newark, Elizabeth, Staten Island, Jersey City, and Brooklyn.

According to the Port Authority of New York and New Jersey (PANYNJ) a record $166 billion in cargo flowed into the port in 2007. Port commerce generates more than $20 billion in economic activity in the region every year and provides more than 230,000 jobs, according to a 2006 report from the New York Shipping Association.

Growth at the Port of NY and NJ outpaced other major U.S. ports in 2007, and is expected to continue at record rates, leading the PANYNJ to build new cargo container space, continue deepening the harbor's channels and expand the rail system that handles the containers (which take 610,000 trucks annually off the road).

Stand at the waterfront on any day of the week and you'll see some of the specialized vessels and skilled workers who make this possible: powerful tugs pull or push barges laden with oil and cement; giant container ships lumber into port to unload cargo; security boats keep watch; pollution response vessels clear floating debris. According to 2004 statistics from the Army Corps of Engineers, there were 1,018 barges, 222 towboats and 237 self-propelled craft (ranging from container ships and bulk carriers to ferries and excursion boats) registered locally. These vessels are serviced at dry docks; oil, bulk, container and auto terminals; passenger terminals; lay berths and anchorages.

Behind all this water-related activity are the people who make it happen – captains and crews; longshoremen and stevedores; shipyard workers and trade craftsmen; Coast Guard and police marine units; merchants, agents, inspectors, pilots,
scientists, fishermen and more. In many ways, this maritime labor force makes possible the quality of life that millions of resident in the metropolitan area enjoy.

Another important component of our waterfront economy is the rapidly expanding water recreation and tourism industry, involving excursion boats, cruise ships and marinas. Showing a 5% increase over 2007, 2.8 million people traveled by ferry to the Statue of Liberty and Ellis Island between January and September of 2008. Add to this the millions of other trips taken aboard Circle Line, NY Waterway Tours, NY Water Taxi and other companies every year. Customized boat tours have been developed in the last few years by the the National Parks of New York Harbor Conservancy, the Working Harbor Committee, the AIA NY chapter and NYC Audubon.

The cruise industry has rebounded in the last decade, with two new cruise ship terminals opened in the last five years – Cape Liberty in 2004 in Bayonne and the Brooklyn Cruise Terminal in 2006 in Red Hook. Keeping pace, Manhattan’s Passenger Ship Terminal began a multi-year overhaul in 2005. With these new facilities, passenger volumes are growing; more than one million visitors...
coming through the City’s cruise facilities in 2006, according to an economic impact study released last year by the Cruise Lines International Association. The study found that the NYC cruise industry generated more than $1 billion in 2006 and was responsible for 13,420 jobs. And the cruise industry’s wider impact is significant: people who arrive for or from a cruise also attend theatre, visit museums, dine at restaurants and stay at hotels during their visits to our area.

Significant improvement in water quality over the last 30 years is one of the main reasons that recreational boating is surging. Dozens of marinas operate in the metropolitan region, many on public land and sometimes by public agencies. Recent infusions of investments to expand capacity and improve services at some marinas demonstrates a growing confidence in the future of recreational boating in the metropolitan region. Public agencies such as the Palisades Interstate Park Commission, the NYC Parks and Recreation Department, and Hudson River Park Trust have been making major investments. Facilities in Alpine, Flushing Bay, the 79th Street Boat Basin, Hudson River Park and Sheepshead Bay are all being improved or expanded. Private marina operators such as Lincoln Harbor in Weehawken, Gateway Marina in Brooklyn, and Liberty Landing in Jersey City have all improved or expanded their facilities. Many more such investments are planned.

CALL TO ACTION

To maintain, expand and diversify jobs in our working harbor, we must devise creative solutions to serious economic and environmental challenges. The Metropolitan Waterfront Alliance brought together some of the leading practitioners, academics and government officials in the field to form the Waterfront Works Task Force. They explored the diverse issues and developed practical and comprehensive approaches to stabilizing and strengthening the working waterfront.
MARITIME BUSINESS IS THREATENED BY RISING COSTS AND REAL ESTATE PRESSURES

The maritime industry is a vital component of our economy, yet maritime businesses are being crowded out by land owners and developers taking advantage of rising waterfront property values. Shoreline tracts vital to maritime industry are being lost to non-marine uses. Once these waterfront land parcels become housing sites, they are less available for any future port-related development. They also create conversion pressures on adjacent sites. Without enough tugs, barges, repair facilities and other support businesses, the growing shipping industry will not be able to function – an economic and ecological calamity, as more trucks would be forced onto our congested highways.

Looking ahead, more industrial and transportation space will be needed at the waterfront, not less. Case in point: waste reprocessing. As the region’s amount of recycled trash grows, landbound companies that rely on recycled metal and wood will eventually require access to water because most raw material will be delivered by barge.

SOLUTION  LAND-USE DECISIONS MUST STRENGTHEN THE MARITIME INDUSTRY

Generally underappreciated by the public, the working waterfront needs pro-active government attention as it faces strong competition from non-water-dependent businesses for shoreline space. Policy makers need to base land use decisions not just on the highest property values, but on strategies that strengthen the maritime industry and benefit all New Yorkers, particularly in the realm of new jobs.

• Subject rezoning of maritime industrial districts to a higher lever of scrutiny by local and state Coastal Zone Management authorities.

• Enforce requirement of water-dependent functions promised as part of any rezoning by revoking Certificates of Occupancy, if need be, and/or by substantial monetary penalty.

• Provide residential deed restrictions so that occupants of new waterfront developments understand that nearby industrial and maritime users have a right to do business within the guidelines of applicable laws and regulations. Many of these maritime activities are not just necessary but are historic or preexisting uses of these sites.

• Enable the transfer of development rights. Historic buildings such as Grand Central Terminal have been preserved by transferring development rights to adjacent parcels. Likewise, the transfer of waterfront rights to nearby sites can help insulate businesses from escalating land values.

• Allow maritime easements. Any municipal or public land considered for sale or long-term lease to a private entity should have a “water-dependent” easement placed on it before the site leaves government control. In Maine, public monies have been used to buy such easements. This action not only protects waterfront businesses from gentrification but also preserves the low-rise character that many waterfront communities seek to preserve.
LACK OF COORDINATED AND SUSTAINED REGIONAL PLANNING

Ensuring a healthy and vibrant future for our port and transportation system means making strategic investments now. The many agencies and organizations who work to improve waterborne freight and passenger services in the NY/NJ region, however, are not supported by a lead agency that has recognized and accepted standing with all stakeholders. As a result, the region is plagued by a chronic inability to prioritize decisions and cultivate cooperation among all agencies, private businesses, elected officials and the public at large.

SOLUTION

CREATE A DEPARTMENT OF THE WATERFRONT TO PROACTIVELY GUIDE DEVELOPMENT

Create a single government agency (Department of the Waterfront) with the authority to prioritize decisions about land-use strategy at the shoreline combined with investments in water-related transportation, commerce, tourism and recreation. This agency would elevate water-dependent uses to be the primary goal of waterfront property, and would collaborate closely with other agencies and property owners. As more decision makers recognize that mobility via water is critical to the success of the development of shoreline tracts as well as upland neighborhoods (not to mention overall regional health), public/private partnerships will have a greater chance at success.

A lead waterfront agency would balance policy goals of the Clean Water Act (e.g. natural resource protection and conservation) with those of the Coastal Zone Management Act (e.g. human use, public access). This agency would also leverage the Coastal Zone Management Act and other laws to their fullest potential to protect water-dependent businesses and the greater overall public interest in waterfront development.

This historic shipyard in Erie Basin was put out of business with the development of an IKEA store.
OVERLY COMPLEX REGULATORY FRAMEWORK

Although our port and transportation systems function as one network, the region is divided into myriad jurisdictions. Waterfront land uses are controlled by local planning departments and planning boards, and influenced by Coastal Zone Management policies administered by the state. Waterways and shipping channels are regulated by federal agencies such as the U.S. Army Corps of Engineers, U.S. Coast Guard, and the National Oceanic and Atmospheric Administration. The water, including river and bay bottoms as well as the water’s edge, are regulated by all three levels of governments: local planning, zoning, and buildings departments; state departments of environmental conservation, protection or coastal zone management; and federal environmental and harbor management agencies. The result is a complicated matrix of waterfront policies that are at the very least confusing, often overlapping and, in some cases, contradictory.

SOLUTION

EFFICIENT DECISION-MAKING AMONG COORDINATED AGENCIES

With the twin goals of saving time and money, consider creating a “one-stop” system for waterfront permitting. This new approach would not come without initial cost, but the expense would be recouped. How? With the inflation rate in waterfront construction increasing at 10% per year (according to the NYC Economic Development Corporation), a one-year delay in permitting for a $50 million waterfront park will add $5 million to the cost of the project. If this money could be spent to support necessary staff or relevant surveys, testing and studies, then a much larger amount of funds—both public and private—could be freed up for other uses.

- Create a user-friendly online matrix.
- House all waterfront regulatory agencies at one venue, where applicants can have their questions answered efficiently. Conflicting regulations can be discussed, deliberated and resolved, and reliable time frames for decision-making agreed upon.

Getting to “Yes”

Acquiring a permit to do almost anything on the waterfront is very challenging – frustrating to both applicants and regulatory agencies – and leads to longer than necessary waits for approvals, increased project costs and generally less funding at the end of the project for much-needed waterfront improvements.

Throughout the MWA Task Force process in 2007 and 2008, Alliance partners across the region identified the complexity of the application processes for various federal, state and local waterfront permits as one of their greatest challenges. In response, the MWA applied for and received a grant from the Robert Sterling Clark Foundation to help make the waterfront permitting process more transparent.
NEED FOR MORE FLEXIBLE DOCKING HARDWARE, PARTICULARLY FOR EMERGENCY SITUATIONS

If the Holland and Lincoln Tunnels were to suddenly close, or if the railways and bridges delivering goods to Long Island were to shut down, could waterborne transit take up the slack? During prolonged transit disruptions such as black-outs or transit strikes, or in emergency situations such as the collapse of the World Trade Center towers, people have flocked to boats for transportation or evacuation. On 9/11, more than 250,000 people were moved out of Lower Manhattan by boat in a matter of hours, but many people had to climb over decorative railings and jump onto the decks of vessels gunning their engines at sheer concrete walls. Even on an ordinary, non-emergency day in the NY/NJ area, a great need exists for more places to dock, but there are no comprehensive guidelines requiring boat access at waterfront developments.

SOLUTION

BUILD MORE DOCKS; DEVELOP NEW PIER AND BULKHEAD DESIGN GUIDELINES

• Effect new bulkhead, pier and landing design guidelines that will ensure safety and flexibility for a wide range of water uses. Include details on fendering, cleats, bollards and other docking components required for all boats, including historic ships (for further reading see page 9 in the Aquatecture White Paper).
• New design standards should be accompanied and informed by scientific data outlining the environmental impacts caused by building at the waterfront and in the water.
A proactive approach to dredging would improve policy in at least two areas: administration and facilitation. The Regional Sediment Management Plan released in October 2008 by the NY/NJ Harbor Estuary Program identifies specific steps to improve the ecosystem, public health and the local economy, and recommends actions to achieve them. The report can be found at [www.harborestuary.org](http://www.harborestuary.org).

**ADMINISTRATION**

- Shift jurisdiction for dredged material from the NYC Dept. of Sanitation to the Economic Development Corporation or the Port Authority of New York and New Jersey.
- Reclassify dredged sediment from a “solid waste” product to a marketable product whose potential for reuse in multiple ways is recognized. Processed and dewatered sediment, its contaminants either removed or stabilized, can be used as construction material or agricultural soil.
- Analyze the environmental impact of processed dredged material and then create a management plan for its reuse.

**FACILITATION**

- Find places to put the dredged material or reuse it.
- Establish a cost/payment plan so that marine businesses (large and small) equitably bear the cost.
- Offer help and guidance to smaller businesses.
WATERBORNE TRANSIT IS NOT RECOGNIZED AS PART OF THE SOLUTION FOR PUBLIC AND ENVIRONMENTAL HEALTH

Crisscrossed by congested highways and dependent on relatively few bridges and tunnels to move people and cargo, the NY/NJ region has some of the country’s unhealthiest air quality. Most of our Port facilities are located on the west side of the Hudson River – in Newark, Elizabeth, Staten Island and Jersey City – while millions of people live east of the Hudson River (on Long Island, in the four boroughs, and throughout much of the northeast United States). More than 100 million vehicles cross the George Washington Bridge every year, many of them trucks. The closest freight rail crossing of the Hudson River is 140 miles north of New York City. As noted by the U.S. Dept. of Transportation Maritime Administration (MARAD), 10,000 more trucks per day are expected to be rolling along the I-95 corridor by 2020. Considering the proven link between pollution and asthma, this does not bode well for the many urban dwellers with breathing problems.

SOLUTION
TAKE TRUCKS OFF THE ROAD; MOVE MORE CARGO BY FERRY AND BARGE

Waterborne shipping is a cheaper and more environmentally friendly way to address traffic congestion and air pollution. One barge can transport the cargo carried by 60 or more tractor-trailers. The cost savings potential has had repercussions even on the historic Erie Canal, where shipping is beginning to pick up after decades of disuse. According to the NY State Canal Corporation, one gallon of diesel moves a ton of cargo 59 miles by truck, 202 miles by train and 514 miles by canal barge.

- Create a regional freight plan that increases waterway use and takes trucks off roads, bridges and tunnels.
- Develop facilities for barges and roll-on/roll-off ferries.
- Reduce marine emissions, which are expected to be the largest contributor to greenhouse gases by 2020.

The EPA recently set new national emissions standards and recently, the NYC Council passed a law requiring Staten Island ferries to switch to ultra-low-sulfur fuel. Legislation pending before the Council would extend these regulations to private ferries.

Moving Cross-Harbor Freight

Our region relies on a small number of bridges and tunnels to move hundreds of thousands of trucks and millions of people every day. For decades, the need to improve cross-harbor mobility has gone largely unaddressed. NYC’s population is at an all-time high, but large scale road or rail expansions basically stopped a half-century ago.

In November 2008, however, the Port Authority will restart the Cross Harbor Freight Tunnel project, first proposed almost 100 years ago. For the first time, the project has broad support amongst stakeholder groups and transportation agencies in New York and New Jersey. This burst of momentum, spearheaded by Rep. Jerrold Nadler (8th District, New York), is fueled by an investment in the federal transportation bill passed in Congress in 2006. The project, to be directed by the Port Authority of NY/NJ, offers a broad range of potential for improvements including the Greenville Yards in Jersey City and Oak Point in the Bronx.
ACCESSING GOVERNMENT FUNDING OPPORTUNITIES

For many years, financial support for maritime industries by city, state and federal governments has not kept pace with investment in other types of economic activity and development. While industries such as banking, professional sports and housing benefit from various financial incentives, marine services and marine transportation companies do not enjoy comparable support, even though they dramatically influence tourism, importing and exporting, recreation and other important elements of the regional economy. Every gallon of home heating oil and virtually all consumer goods, for example, arrive in this region via water. This sector is just as critical to our quality of life as health care, housing and education, yet is virtually ignored by those allocating financial support at all levels of government.

This is partly due to the fact that water-dependent businesses are not as visible to the society that depends on them as are land-based businesses. Barges and tug companies set their schedule with tides, and many water deliveries of fuel, goods and construction materials occur at night. Add to this lack of visibility the near 100-year emphasis on highway expansion, and we begin to understand why marine services and marine transportation companies have had difficulty making their collective voice heard in the clamor for public financing. Despite its staggering cost, for example, a new highway interchange for a shopping mall is widely seen as an essential economic benefit, while in most cases financial support for dredging private marine facilities has not attracted the attention of elected officials. The ingrained political and cultural tradition of public support for highway and airline transit initiatives leaves fewer economic resources for the less vocal but no less valuable maritime industry.

SOLUTION

- Offer low-interest loans to waterfront property owners and small businesses to help them rebuild bulkheads and repair infrastructure.
- Issue bonds from the NYC Industrial Development Agency to support investments in waterfront and water-dependent jobs.
- Focus existing programs (such as New York State’s Environmental Protection Fund or New Jersey’s Green Acres programs) on investments in cleaner fuels and air quality improvements, in addition to land and open space preservation.
- Redirect a portion of existing government funds that are funneled to land-based social programs – such as those sponsored by community groups, museums or schools – toward waterfront programs.
LACK OF RESPECT FOR MARITIME EMPLOYMENT

The maritime industry’s capacity to deliver goods cheaply is important—but just as valuable is its ability to provide good-paying jobs for people along a spectrum of skill and educational levels. The industry, however, suffers from the perception that it is “dirty,” despite the fact that laws on clean water and air have been in effect for more than a generation. Part of this label’s legacy has been a cultural and political tendency to support industries such as construction, professional sports and media, leaving fewer financial resources for critical maritime industries such as waterborne transportation, tug and barge companies, dry-docks and ship repair, and other water-dependent businesses which sustain our quality of life.

SOLUTION

BROADEN THE ECONOMIC BASE OF THE MARITIME COMMUNITY

Rebounding from a decades-long slump during which shipyards were closed, the cruise ship industry was written off and marinas were turned into condominiums, the waterfront economy is growing again. In 2008, a number of new leases and terminals were sold to investors ranging from the Toronto Teachers Pension Fund to DP World, Dubai’s port company. A new study by the NYC Economic Development Corporation recommends the creation of up to 28 new dry docks and additional marine facilities such as tugboat docks and marine support service hubs to support the growth of our port-related economy.

FORWARD-LOOKING PUBLIC POLICY

- Conduct a study of water-dependent businesses to expand the economic impact of Port activities to include transit, education and tourism.
- Create maritime employment districts to help groupings of similar businesses such as ship-repair yards and commercial marinas find greater stability.
- Establish a low-interest loan fund to support green business development and practices.

EDUCATION AND TRAINING

- Create workshops and other customized training and continuing education courses for waterfront designers, architects, landscape architects and engineers.
- Cultivate an educational consortium with a maritime focus that links public schools, after-school programs, community colleges, four-year colleges and job-training programs.
- Link maritime institutes such as Kingsborough Community College, Stevens Institute of Technology, SUNY Maritime and the US Merchant Marine Academy.
A Letter from the President of the MWA

In an unprecedented series of meetings, hundreds of leaders of maritime organizations, government agencies and businesses came together over the course of a year to address issues relating to the stewardship and redevelopment of the New York and New Jersey waterfront. This is the Metropolitan Waterfront Alliance.

Divided into six Task Forces, they shared their expertise and collaborated across boundaries, recognizing that timing is crucial. Critical land use, regulatory, and environmental decisions made now will determine the success or failure of efforts to reclaim the waterfront for public use, preserve the water-dependent businesses that underlie our quality of life, and nurture the recovery and health of our harbor estuary.

This is one of six policy papers drawn from hundreds of hours of discussion and debate and informed by a wide range of practical knowledge. These papers provide background on key issues and offer a series of challenges and solutions. Together they led to the Waterfront Action Agenda, which is forward-looking, as well as socially, environmentally and commercially responsible. Civic and political leaders take note: our waterfront is not what it could be. Following the prescriptions set forth in the MWA Waterfront Action Agenda, we can begin to realize our Harbor’s potential.

- Roland Lewis
  President and CEO
  Metropolitan Waterfront Alliance

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