

STAGING A RENAISSANCE ON THE WATERFRONT¹

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Neglected for years, New York's waterfront has suddenly become some of the hottest property in town. But before embarking on redevelopment ventures, some perspective on the history, politics, management, and character of this waterfront is called for.

The New York City waterfront is in the early stages of an economic and physical renaissance. After years of neglect, municipal agencies, citizens groups, and private developers are focusing their attention on revitalizing the city shoreline. Proposals for new uses of the waterfront appear regularly in the news media as the result of new policies adopted by the Koch administration. Although it is too soon to judge the outcome of these initiatives, clearly there has been a remarkable shift in the prospects for revitalizing the city's coast. The renewal of New York City's waterfront is part of a process that is occurring in almost all American cities: once-active shipping and industrial facilities are being converted into new residential and commercial developments. Such cities as Boston, Philadelphia, and Baltimore have received widespread acclaim for their success in bringing new activity to previously deserted and decaying shorefront areas.

New York has been remarkably slow in taking advantage of the opportunities presented by its 578 miles of coastline. Ten years ago, there were great hopes and expectations for the revival of the New York City waterfront - Battery Park City, Roosevelt Island, and Manhattan Landing were heralded as steps toward creating what one observer foresaw as a "New Venice." With the notable exceptions of Operation Sail and the South Street Seaport, those dreams and visions have remained largely unfulfilled. Although millions of New Yorkers jam the public beaches on a hot summer day, and several communities actively use their waterfront, the average citizen is completely cut off from the shoreline.

Now that new projects and policies are being considered for the city's coast, an understanding of the distinctive characteristics of the New York City waterfront is essential if the current set of plans and policies is to be successfully implemented.

Four major factors have influenced the current state of affairs on the city's coast: the sheer size and diversity of land uses that have developed along the city's shore; fundamental changes in shipping technology and in the economic function of the city itself; the policies of city, state, and federal units of government in managing the coast; and the role of local groups and private entrepreneurs in fostering new uses of the waterfront.

The Scope and Range

The New York City coast is not a simple, homogeneous waterfront, but rather a complex system of bodies of water. It encompasses rivers, straits, canals, bays, creeks, and portions of Long Island Sound and the Atlantic Ocean. In terms of natural features, the shoreline ranges from the steep rocky bluffs overlooking the Hudson to the sandy beaches of the Atlantic Ocean. The rivers within the city include the Hudson, East, Harlem, Bronx, Westchester, and Hutchinson rivers. The larger bays include the Upper and Lower Bays, Jamaica Bay, Raritan Bay, Flushing Bay, Little Neck Bay, and Eastchester Bay. Other major

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waterways include the Kill Van Kull, Arthur Kill, Ambrose Channel, and the Narrows. Each of these water-bodies has its own physical characteristics in terms of tidal flow, salinity, flushing capacity, and marine or freshwater life. Surprisingly, a broad range of commercially valuable fish are supported within the city's waterways including the striped bass, flounder, and several varieties of shellfish.

Although it is often difficult to tell that New York is a city built around water, four of the city's five boroughs - Manhattan, Brooklyn, Queens, and Staten Island - are on islands. Only one, the Bronx, is on the mainland. In terms of size, the length of New York's coast exceeds that of Boston, Chicago, and Baltimore combined. Unlike San Francisco or Chicago, where a primary body of water visually and physically unites the city. New York has a multiplicity of waterfront areas each with its own historical pattern of development and predominant land use. The activities which occur on the city waterfront can be roughly classified into four main groups:

Traditional port and port-related industries: The New York harbor, or Port District, takes in much, but not all, of the city waterfront. The harbor encompasses the northeast coast of New Jersey and much of the five boroughs of New York City. This district was established in 1921 when the Port Authority of New York and New Jersey was created to develop and administer transportation terminals in the bi-state region. Although the region's busiest airports are located in New York City, the Port Authority has built its major marine terminal on the New Jersey side of the Hudson, at Port Elizabeth, New Jersey. And, although New York City works jointly with the Port Authority on some maritime matters, it has also continued to operate its own piers and docks. The city's port facilities are scattered along the Manhattan, Brooklyn, and Staten Island shoreline. Cargo warehouses and transfer terminals designed to support shipping activity are situated next to the waterfront as are industrial plants which still depend on access to waterborne goods and materials.

Residential neighborhoods next to the shoreline: The neighborhoods that line the waterfront range from some of the city's best communities such as Riverdale and Brooklyn Heights, to some of its worst such as East Harlem and the South Bronx. Between these poles are a variety of specialized communities that have developed around shoreline activities. City Island in the Bronx is the center of sailing and boatyards; the Upper West Side of Manhattan is closely linked to Riverside Park which abuts the Hudson River north of 72nd Street, and Mill Basin has a substantial number of private homes with boat slips.

Beaches and beach communities: The city's 18.4 miles of beaches provide an important safety valve for millions of residents during the summer months. Coney Island, Orchard Beach, and the Rockaways attract more people on a peak day than do the Yankees and Mets combined in an entire season. Distinctive communities such as Sea Gate and Manhattan Beach have grown up around beach areas. Moreover, an enormous concentration of nursing homes and senior citizens' housing projects are located next to the boardwalk in Far Rockaway. Coney Island remains the city's premier amusement park despite the city's ill-conceived efforts at urban renewal there, and Breezy Point continues to be an active and vital colony of beach bungalows and cottages.

Undeveloped areas of the city's shoreline: These include valuable wetlands and open space in Jamaica Bay, Eastchester Bay, Arthur Kill, and Raritan Bay. These land use categories are not mutually exclusive. Rather, they highlight the fact that the city's waterfront is not a homogeneous area; it is a heterogeneous system in which waterfront activities are often mixtures of different land uses which do not and should not fit the neat separation of uses that planners often value.

Patterns of Ownership

The ownership of the land along the waterfront is in the hands of both the public and private sectors. The U.S. military has been, historically, a major land holder on the New York City waterfront. Several forts

were constructed in New York harbor to protect the nation from invasion: the earliest and most prominent of these was Castle Clinton, also known as the Battery, located at the southern tip of Manhattan. Among the remaining military reservations are Fort Totten in Queens, Fort Hamilton in Brooklyn, and Fort Wadsworth in Staten Island, all of which are prime waterfront locations.

The National Park Service is responsible for Gateway National Recreational Area which encompasses 20,000 acres located at five sites in New Jersey and New York. Gateway includes excess military land, undeveloped state property, parts of Marine Park, Jamaica Bay, Riis Park in Brooklyn and Queens, as well as several Staten Island beaches and parks which are now city-owned but are soon to be transferred to the federal government.

Under a charter issued in 1668 by Governor Dougan, the city obtained title to much of the land within its boundaries. Although a large portion of this land was subsequently sold, the city retained the coastal property by leasing docks and piers to private firms. The policy of leasing the municipally-owned waterfront has continued to the present time. Thus, much of the Manhattan and Brooklyn shoreline is city-owned and more than 10,000 acres of waterfront parks are under local control. Other significant portions of the shoreline are owned by the Penn Central Railroad, Consolidated Edison, and numerous oil companies and industrial firms.

The scale and diversity of the waterfront presents both challenges and opportunities. Fundamental components of the city's physical infrastructure - highways, power plants, airports, railroad yards, and water pollution control plants are located on the city's shoreline and present distinctive problems for enhancing access and use of the coast. At the same time, some of the city's leading tourist attractions - the Statue of Liberty, the United Nations, and the World Trade Center - are situated on or next to the city shoreline. Thus, policies for the management of the waterfront must take into account the diversity of uses which occur on the waterfront and the enormous range of activities that could be accommodated there.

The New York City shoreline is, in essence, a multi-product firm which provides recreational, residential, and industrial goods and services. It includes the historic Throg's Neck section of the Bronx, the oil storage tanks on the Arthur Kill, and the residential neighborhoods on the north shore of Queens. No single policy or set of projects could cope with this mix of uses. A flexible and adaptive strategy is needed to match the magnitude and variety of the city's coast.

The City and Port Development

The key to the growth of New York City has been its extraordinary harbor, which possesses a rare combination of natural features. It provides shelter from the open sea, which is only seventeen miles away, relatively tide-free conditions, and easy access to the interior. The natural depth of the harbor entrance allowed pre-Civil War ships to enter and depart at all times, and the limited width of the Narrows assured the harbor's safety and defense during the Revolutionary Era. Moreover, the extensive shoreline within the harbor offered enormous potential for enlarging and extending port facilities. As Robert Albion wrote in *The Rise of the New York Port*, "the exceptionally compact configuration of the New York harbor gave it a marked advantage over its American rivals. Both sides of Manhattan, the Brooklyn and Jersey shores as well as Staten Island, were always available, and dredging has opened channels from the Upper Bay to yet further development."

The pattern of port development in New York has undergone a series of changes during the past three hundred years as new methods of passenger and cargo transportation have emerged. The first wharf in New York City, known as the Great Dock, was built on the southern tip of Manhattan by the Dutch in 1649. As trade increased during that century, landfill was used to expand Lower Manhattan into the East River. Present day South, Front, and Water streets in Lower Manhattan were all created between 1686

and 1820 by landfill and wharf building.

New York did not develop as a major port until the beginning of the nineteenth century. The Port of New York handled only 5.7 percent of the nation's trade in 1790 but by 1870 it was handling 57 percent of the nation's trade. The Erie Canal, which opened in 1825, linked the Port of New York with the Midwest and, along with other developments, contributed to the growth of New York's shipping activity. Steam ferry service between South Street and Brooklyn began in 1814, and in 1818, packet runs, regular trans-Atlantic freight and passenger trips, were initiated between New York and England. In the nineteenth century, municipal services were needed to support an active port: the city's first fire boat was launched in 1850, and its First harbor police force was organized in 1858.

After the Civil War, shipping activity on the East River declined as steamers replaced clipper and sailing ships. The huge steam ships found more accessible docking space on the once inactive Hudson. Therefore, the West Side of Manhattan emerged as the center of the city's port activity. Further, the development of the trans-continental railroad led to the growth of rail lines and yards next to the city's piers and docks. By the start of the twentieth century, congestion and real estate development in Manhattan had led to the construction of port facilities in Brooklyn and on the Jersey side of the Hudson.

The Port and Technological Change

During the past 25 years substantial changes have occurred in marine transportation technology and in the economic function of the central city. These changes have, in turn, shaped the character of the activities taking place on the New York waterfront. Waterfront cargo is generally classified as either general or bulk cargo. General cargo is low-tonnage, high-value freight, consisting of all forms of goods and merchandise. Bulk cargo is high-tonnage, relatively low-value freight, such as petroleum, ore, gravel, and grain. Bulk cargo is commonly shipped directly to the facilities that utilize the raw materials: petroleum, to the refineries and storage tanks; sand and gravel, to the cement and concrete plants.

General cargo has been traditionally shipped by a method called "break-bulk" in which the cargo is loaded and unloaded from the ship by individual packages on pallets or in crates by net and other labor intensive means. Over the past two decades a variety of new technologies have been developed for moving such cargo more efficiently. These include palletization, the LASH system, roll-on/roll-off and, most importantly, containerization.

Containerization allows goods to be placed in large, standardized metal boxes, known as containers, which can be packed by the shipper or freight consolidator and unpacked by the receiver or consumer. Goods can therefore be shipped directly from a manufacturing plant to port and from the port to distributing point without the time-consuming packing and unpacking process involved in "break-bulk." The economic benefits of containerization are impressive: the time used in loading and unloading ships is reduced and thus labor costs are lowered; the turnaround time for a ship to enter port, unload, obtain a new load of cargo, and leave port is shorter, and, consequently, a ship can spend more time at sea transporting goods and less time in port. In addition, the potential opportunities for loss of cargo through theft are limited because the containers are sealed and it is much harder to steal a container than a small crate or carton. The attractiveness of containerization for moving general cargo has resulted in the construction of new ships specifically designed to carry containerized cargo and the corresponding design of truck and train units for carrying containers.

Containerization, however, imposes high space requirements on the land adjacent to the port. Between 30 and 50 acres of back-up space are needed for each container berth for the storage and handling of containers. Such large amounts of back-up space are difficult to find and assemble and expensive to acquire in the high-density urban areas, especially where ports are in close proximity to the central

business district. Therefore, new port facilities capable of accommodating container ships have had to be developed at new locations outside the central city. In the San Francisco Bay area, for example, the Port of Oakland has replaced San Francisco as the locus for cargo shipping. In the late 1950s the Port Authority of New York and New Jersey anticipated the rise of containerization and undertook the development of the world's single largest container cargo facility at Port Elizabeth, New Jersey, largely relying on landfill construction techniques.

Developments in land surface transportation have also influenced activities in the New York port. Because railroads were the primary land surface mode for the movement of cargo until the construction of the interstate highway system, Manhattan's West Side piers were initially developed in close conjunction with railroad lines. Railroad lines ran parallel to the city's waterfront, terminating at the docks where both freight and passenger terminals once existed. Railroad companies were major owners and occupants of piers and waterfront acreage as illustrated by the huge Penn Central Yards at 30th and 60th streets in Manhattan and the 65th Street yards in Brooklyn.

With the rise of the interstate highway system and fast long-haul trucking, highway as well as railroad linkages have become necessary to move goods to and from the port rapidly. The growing role of trucks in moving waterborne cargo on land is reflected by trailer trucks designed to go directly aboard ship. Trucks are also able to reach directly industries and communities located in hinterland areas and in dispersed parts of the metropolitan regions where rail service does not exist. In the Port of New York, 72 percent of the imports and 75 percent of exports are moved to and from the port by truck.

Changes in passenger transportation have also affected waterfront activity. Air transportation has replaced the ocean liner as the dominant mode of intercontinental transportation. In 1955, 700,000 trans-Atlantic passengers went by ship through the Port of New York; by 1978, that number had dropped to just 42,000 persons. Although there has been substantial growth in the leisure cruise market, such shipping activity is primarily concentrated in fly/sail package tours in which the cruise ships depart from warm-water ports such as the Port of Miami and San Juan, Puerto Rico. Although the number of cruise passengers sailing through the Port of New York increased from 184,000 in 1957 to 300,000 in 1978, the total number of harbor passengers in the Port of Miami exceeded 1.5 million in 1977.

It is also important to note that broader fundamental changes in New York City's economic structure have, as one side effect, reduced the need for the city's port facilities, especially those located in Manhattan. At one time, the East River and Hudson River piers offered locational advantages to the manufacturing and industrial firms located in the central business district. As the city has shifted from a goods to a service-based economy, shipping activity on these docks has been considerably reduced. Furthermore, the lack of direct interstate highway linkages and traffic congestion on city streets diminishes the accessibility of these central city piers to industrial Firms located in suburban areas.

These changes in transportation technology and in the city's economic base have brought about major shifts in the type and location of shipping in the Port of New York. In 1968, 18 percent of the port's general cargo was containerized; in 1977, 70 percent of the cargo was containerized. Container cargo is the fastest growing portion of the general cargo market. However, only one-fifth of the Port District's container berths are in New York City: New Jersey has 24 container berths, and New York City has only six. Approximately 75 percent of the port's container traffic is handled on the New Jersey side of the port while 20 to 25 percent of the remaining container traffic is handled on the New York side. Of the break-bulk cargo that goes through the port, approximately 80 percent is handled in New York City locations. The shift from break-bulk to container cargo has made Newark Bay, rather than the Hudson or East rivers, the center of cargo shipping in the Port of New York today. In 1958, 72 percent of the 4.8 million hirings in the Port of New York were in New York City and 28 percent on New Jersey piers. By 1978, total hirings fell to 2 million and were evenly divided between New York and New Jersey.

Dwindling Use

As a result of these economic and technological processes, waterfront land use in New York City has undergone a dramatic change. Such traditional users of port facilities as cargo and passenger shipping firms, railroads, warehouses, and port-related industries have reduced their operations on the city's coast. The West Side of Manhattan, once the locus of port activity provides a vivid illustration of these changes.

Although cargo shipping through the Port of New York has increased during the past two decades, the Manhattan side of the Hudson River has not participated in this growth. One measure of this change can be seen through waterfront hirings. In 1958, the Manhattan waterfront accounted for 37 percent of port hirings; in 1978 it accounted for only 5 percent of port hirings. Of the 30 city-owned piers still standing on the West Side, none are used for cargo shipping, and only three - which are part of the Consolidated Passenger Ship Terminal - are used for passenger shipping. Of the remaining West Side piers which have not burned down, most are either vacant, partially demolished, or used for storage, parking or freight forwarding and consolidation. The only Manhattan piers used for cargo shipping are on the East River. For most New Yorkers, their first, and often last, encounter with the Hudson waterfront occurs when they must visit Pier 76 to reclaim their towed-away car.

Despite the changes that have influenced the location of shipping in the New York Harbor, the Port of New York has been, and continues to be, a major marine port for foreign trade in and out of the United States. It is the nation's leading port in terms of vessel activity, value per ton of cargo and amount of containerized cargo. In 1978, 7,620 merchant ships arrived in the Port of New York, 16.3 percent of the total number arriving at the eleven leading U.S. ports. With regard to total volume of cargo, it is third after New Orleans and Philadelphia, both of which handle a great deal of bulk cargo (e.g. raw materials such as coal, oil, and grain). Although the port's oceanborne cargo has increased from 32 million tons in 1959 to 61 million tons in 1978, the port's portion of the total U.S. oceanborne foreign trade has declined from 19 percent to 7 percent during this same time period. Several factors have contributed to the extensive growth of shipping in ports other than New York, most notably: the growth of population and markets outside the northeast; the development of the Saint Lawrence Seaway and inland ports; the discriminatory rail rates set by the Interstate Commerce Commission; and the disproportionate increases in New York Port operating costs.

Waterfront Planning and Policy Making

During the 1960s, state, regional, and local planning agencies issued a number of reports about the changing pattern of waterfront use and the possibilities for renewal of the city's shoreline. In 1965, the Tri-State Regional Planning Commission issued a particularly farsighted report which highlighted emerging trends in the pattern of waterfront development throughout the New York region:

Many of the facilities for shipping, railroading and manufacturing which line the harborfront are reaching old age and physical decline. At the same time, changing technology argues against the replacement of these facilities with new buildings serving old needs. Cargo shipping has moved from the Hudson River to Newark Bay; railroading has lost ground to trucking; manufacturing has moved to the suburbs.

But what might appear to be a depressing omen for the future can be viewed as an opportunity for the harborfront to be opened up for people places to live and enjoy the waterside.

In 1966, the Regional Plan Association analyzed the changing pattern of land use on the Hudson River and set forth basic design principles for waterfront planning in its report, *The Lower Hudson*, part of the

Second Regional Plan. And, in a 1969 supplement to the *Plan for New York City*, issued under the Lindsay Administration, the City Planning Commission pointed to development opportunities on the waterfront:

The waterfront is now the city's most extensive underdeveloped and promising natural resource. . . . At a time when cities everywhere are running out of land and breathing space, New York finds itself with mile upon mile of unused or underused waterfront, often beautifully sited, owned by the City, free of relocation problems, and expandable with air-rights or landfill.

The New York State Urban Development Corporation was particularly active in identifying and proposing new approaches to uses of the city's coast. Under Ed Logue, Craig Whitaker, and the late Sam Ratansky, the UDC conducted a ground-breaking study designed "to take an overall look at New York City's waterfront and to identify significant development opportunities within a planned context." The findings of this 1971 report are still applicable today:

Increasingly, agencies and builders are looking to the waterfront to provide development opportunities which do not involve the heavy social costs of relocation and the delays and costs incurred in acquiring and demolishing existing buildings. Although several waterfront projects have moved ahead, and some of these express a high level of design quality, few, if any, are part of a concept or plan for a larger segment of the waterfront.

Numerous large-scale waterfront redevelopment projects were proposed in the late 1960s and early 1970s. Battery Park City, Manhattan Landing, the Coney Island Renewal Project, and a Convention Center that was to be built atop Hudson River piers were just a few of the projects that emerged from the golden era of master plans and moral obligation bonds. With the exception of Waterside, an imaginative housing complex constructed on a six-acre deck over the East River, and the River Park Houses, built in conjunction with Roberto Clemente State Park by UDC, few of the dramatic waterfront plans of the sixties were ever fully implemented. And it was thirteen years from the date Waterside was first proposed until construction was completed. Enormous governmental and financial obstacles impeded this pioneering project, including the fact that the City Planning Commission rejected it as "too futuristic" when it was first proposed in 1961.

Action Constraints

Although several public and quasi-public groups recognized the changes occurring on the city's waterfront, the municipal agency with formal authority over the waterfront, the Department of Ports and Terminals, was not among them. According to the City Charter, this department has "exclusive charge and control of the wharf property owned and possessed by the City." Although Ports and Terminals is scheduled to be abolished as part of Koch's proposed budgetary cutbacks, it exercises several important functions affecting waterfront activity: the management of municipally-owned waterfront and of the city's terminal markets, the regulation of coastal structures, the design and engineering of shipping facilities, and most recently, the redevelopment of waterfront sites. Until 1970, state law limited the management of city-owned waterfronts and waterways to the sole function of aiding "navigation and commerce." In that year, the state legislature amended the general city law to allow cities to manage their waterfront "for any business, commercial, maritime, or public purpose." This amendment expanded the authority of the department to develop new uses of the shoreline. But even before 1970, when the department only had clear authority to develop maritime uses, it was still inordinately slow in introducing modern shipping facilities into New York.

The activities of the department were constrained by limited resources, low visibility, and a traditional orientation towards maritime cargo operations as its primary mission. This is, in part, due to its political

constituency which consists of the shipping industry and the International Longshoremen's Association (ILA), The longshoremen's unions in New York City are organized geographically around a designated set of piers, and seniority requires hiring according to the amount of time a person has worked on a specific pier. Thus, each worker is tied to "his pier," and if a longshoreman seeks work on another pier, he goes to the bottom of that pier's pecking order.

Consequently, each local has sought to maintain and attract shipping activities to its own piers and has strongly resisted efforts to convert docks to any non-maritime uses. This policy still continues despite the fact that unemployed longshoremen are guaranteed an annual income of \$20,000 a year.

Waking Up to Containerization

In contrast to the Port Authority, which prepared for the advent of containerization, the city's Department of Ports and Terminals did little to adapt to emerging shipping technologies. In the mid-1960s, when the shift to containerization was at its height, the city built the Chelsea Piers, a \$25 million break-bulk cargo facility on the Hudson River which has never been used by a cargo ship. The inability of the city to recognize and plan for containerization was poignantly stated in the 1969 *Plan for New York*:

Containerization caught the city government asleep. The city continued to put its port investments into obsolete piers on the Hudson River. In 1963, it considered a grandiose proposal for a \$640 million rebuilding of the piers from the Battery to 72nd Street on the Hudson. The Planning Commission opposed this recommendation and it died.

It was only after the Port Authority had allocated most of the region's container cargo traffic to its facilities in New Jersey that the city government initiated plans to build new container terminals in New York. During the 1969 mayoralty campaign, the predominantly Italian Brooklyn longshoremen's unions, led by Anthony Scotto, supported the re-election of Mayor Lindsay, while the predominantly Irish Manhattan locals supported the candidacy of Mario Procaccino. After his re-election Lindsay announced plans to revitalize the Brooklyn waterfront, and the city subsequently pursued an aggressive policy of building shipping facilities in Brooklyn and Staten Island. The proposed Red Hook Containerport and the Howland Hook Containership Terminal in Staten Island are reflections of the city's revised port development strategy.

Despite the fact that Brooklyn offers distinct assets as a port site because of its access to the ocean and skilled labor force, it does have several disadvantages - poor rail and highway linkages with the rest of the metropolitan region and the country and limited back-up space for containers. Traditionally, cargo in the Port of New York has moved by carfloat among the different terminal facilities. Conrail, which has jurisdiction over the reorganized Northeast rail system, has not established a car-float facility to allow cargo to be transported across the harbor from New Jersey to Brooklyn. Consequently, cargo must now be trucked from New Jersey rail lines to Brooklyn docks or shipped by train up the west side of the Hudson across a bridge at Selkirk, New York (near Albany), and then down the other side, a journey which can take from three to 21 days. In addition to the absence of a direct rail link to the Brooklyn waterfront, inadequate height clearances on the bridges leading to the city also prevent more than 12 percent of the nation's freight cars from entering the city. And, although direct train service from Bay Ridge to the mainland of the U.S. has recently resumed, the right-of-way is cluttered with garbage, and oftentimes the train must stop so that a discarded refrigerator or miscellaneous furniture can be removed from the track.

The poor state of the city's rail connections and the severe implications it has for both industry and shipping have led many groups to call for the construction of a rail tunnel linking Brooklyn with either New Jersey or Staten Island. However, the cost of such a tunnel, estimated at between \$960 million and \$1.1 billion, and the time that would be needed for construction reduce the likelihood of its ever being

built.

While the proposed Red Hook facility has been billed as a container port, it is actually, according to plans for its first phase of development, a mixed-use terminal consisting of three break bulk piers and one container berth. To a great extent the Red Hook terminal is a reflection of both the decline of the Manhattan waterfront and the political support given to former Mayor Lindsay and Governor Carey in their re-election efforts by the International Longshoremen's Association rather than to a systematic analysis of the spatial and location requirements of a new maritime facility for New York City. Whether, in an era of Fiscal shortages, this is an effective use of city funds is an issue in which the city's numerous financial experts have shown surprisingly little interest.

Coasting Along

Apart from its involvement in port development, the city's Department of Ports and Terminals also plays an important role as the manager of the city-owned waterfront property. Yet, even though changes in the pattern of port activity left the city with large amounts of coastal land and structures that were not used for shipping, the department gave no serious thought to how the city might adapt to the consequences of technological change. Rather than identify and encourage new uses of the municipally-owned waterfront, the department allocated the land to marginal economic functions such as parking and storage. A 1975 study of leasing practices of the Department of Ports and Terminals indicated that the city received \$11 million in revenue from the 20 million square feet of city-owned and leased waterfront property.¹ For agricultural use that figure would represent a fabulous rate of return (about \$22,000 per acre, per year). However, it is somewhat less than an impressive rate of return in terms of urban real estate. Moreover, the land management itself was conducted in a series of individual decisions concerning particular parcels rather than in the context of an overall leasing policy.

The Beame Administration made a half-hearted attempt to hire an independent consulting firm to systematize its waterfront land management, yet it was not until Anthony Gliedman became commissioner of Ports and Terminals under Mayor Koch that the department began to develop a comprehensive inventory of its holdings and overhauled its leasing practices. Before the Koch administration, municipal records for the city waterfront were maintained in an archaic form, generally on index cards and in file books with no systematic means of retrieval according to location, amount, or use of municipal waterfront property.

Several other local agencies exert a considerable influence on the city's coastal resources as well. The Department of City Planning has designated special districts to preserve natural unspoiled portions of the coastline in Riverdale and Staten Island. Further, as part of the State of New York's coastal management program, City Planning has recently completed a comprehensive review of land use on the city's coast and proposed policies to guide development in a broad set of areas. Despite the fact that one municipal agency, City Planning, has responsibility for coastal management and another agency, Ports and Terminals, has authority over the waterfront, there has been a remarkable improvement in cooperation between the two, especially with regard to the city's urban land use review process. City Planning and the city's Environmental Protection Administration are also jointly involved in preparing an areawide wastewater treatment management plan to clean up the city's waterways under Section 208 of the Federal Water Pollution Control Act of 1972. More than 40 percent of the city's parkland is located on the waterfront, but many of these parks are unsafe, inaccessible, undermaintained, and short of facilities. Few cities have as much waterfront park land as New York does; few do

as little to develop and maintain marine recreation facilities. For example, a 1978 audit of Manhattan's 79th Street Marina, which is under the jurisdiction of the Parks Department, stated that the marina "is in run down condition, badly in need of repairs and renovation. It has suffered from years of neglect both by

the concessionaires and the Parks Department." Under Parks Commissioner Gordon Davis, the Parks Department has taken steps to correct the situation at the 79th Street Marina, but such inland parks as Prospect Park, Van Cortlandt Park, and Central Park continue to receive far more attention than any of the city's shoreline parks. Although the department has a special administrative unit for the management of Central Park, there is no comparable unit for dealing with the city's shorefront parks.

The Federal Role

Numerous federal agencies exercise influence over activities occurring on the New York City coast, ranging from the Interstate Commerce Commission, which sets rail rates for cargo shipped to the Port of New York, to the Environmental Protection Agency, which regulates the dumping of wastes in the harbor area. Unlike such cities as New Orleans and Houston, where the U.S. Army Corps of Engineers invested enormous sums to create navigable waterways. New York's geographic assets as a harbor made such man-made intervention unnecessary. As Robert Albion notes in his book, "it is evidence of the natural advantages of New York that up to 1911, only \$21,000 of a national total of \$800 million in river and harbor improvements had been spent in improving the port which handled so much of the nation's foreign commerce." Even though the Army Corps of Engineers is currently funding a harbor debris clean-up program, New York State still receives less than 1 percent of the corps's funds for channel projects.

Federal programs for coastal management have traditionally emphasized the preservation and protection of natural areas located outside central cities. However, in recent years, the Office of Coastal Management in the National Oceanic and Atmospheric Administration in conjunction with the Heritage Conservation and Recreation Service and HUD launched several modest programs to facilitate urban waterfront redevelopment. At one time, the Defense Department was a major operator of facilities on the city's waterfront, but as national defense priorities have changed, such facilities as the Brooklyn Navy Yard and Brooklyn Army Terminal have been converted to civilian purposes.

The federal presence today is most acutely felt through its extensive regulatory apparatus and support of such large scale projects as Westway, the 4.2 mile Interstate highway proposed to be built on landfill along the Hudson. Although Westway has been considered a highway, it is really a large-scale land development project being funded as a transportation project. The original project, designed by a superb team working under the direction of Lowell Bridwell, former head of the Federal Highway Administration, encountered two rapidly decaying components of the city's infrastructure: the physical deterioration of the old West Side Highway and the decline of the West Side piers. Once it became clear that the Hudson River piers were no longer usable for shipping, the possibility of using federal funds to redevelop the waterfront with a below-ground highway made enormous sense. Such a project, it was reasoned, would enhance the city's shoreline, provide valuable space for recreation and housing, and finally, serve as a modern urban highway. But, since the project began in 1972, conditions have changed. The energy crisis has made modernization of the city's mass transportation system essential (and made it more feasible through the trade-in of Westway funds), the endless project delays have created doubts about the timetable for completion of the project, and opposition to increased urban air pollution has intensified. Ironically, there have been more studies of Westway's impact on air and water pollution than on its far more significant effects on the land areas adjacent to the highway. Even though a prominent architectural firm, Venturi and Rauch, has been hired to design the proposed park above the highway, neither the state nor the city has given serious attention to policies for the management or maintenance of the rest of the landfill area.

On the Horizon

In the mid-1970s, while cities throughout the nation were rediscovering their waterfronts, New York's coast was in shambles. The collapse of the moral obligation bond and the city's fiscal crisis had delayed

or effectively stopped several projects such as Roosevelt Island, Battery Park City, and the proposed Hudson River Convention Center. The Department of Ports and Terminals seemed either unaware of the potential value of the municipally-owned waterfront or unable to manage it in such a way as to maximize economic or social benefits. The city's urban renewal program had virtually destroyed thriving recreational facilities in Coney Island and parts of the Rockaways. With the exception of Robert Wagner, Jr. and Henry Stern, few politicians were willing to risk the wrath of the International Longshoremen's Association and talk about the need for redeveloping the waterfront with non-maritime uses.

A variety of events have converged, however, to bring about a fundamental change in the city's orientation to the waterfront. Operation Sail in 1976 was clearly the turning point. Put together by an ad hoc citizens group, this landmark event stimulated a new awareness and involvement of the city's most valuable natural resource - its waterfront. The success of other cities in renewing their docks also contributed to increased concern for New York's coast. And the city's improved economic health led to private sector efforts to renovate old buildings and warehouses on or near the waterfront for housing.

But the most fundamental change occurred in the priorities of the municipal government. The Koch administration placed a new emphasis on waterfront redevelopment. Further, new procedures for seeking bids on waterfront parcels were adopted, and the city aggressively marketed its waterfront through advertisements in national as well as local newspapers. Unused piers have been converted to recreational uses; requests for bids have been sought and received on several East River projects; and efforts are underway to renovate several waterfront properties and to improve neglected areas such as Sheepshead Bay.

These municipal programs have been complemented by a number of other initiatives by the private sector community groups and state and regional agencies. The success of the River Cafe, at Fulton Ferry in Brooklyn Heights, has demonstrated the value of a waterfront location for restaurant dining and provided a prototype for future developments which combine revenue-producing uses with public areas. At the local level, efforts by citizens groups to clean-up the Bronx River shoreline and to convert the old East River Asphalt Plant and an unused fireboat pier into a community environmental center have generated new community involvement with the city's coast.

A new UDC plan for Battery Park City designed by former Planning Commissioner Alex Cooper combines both intelligence and common sense in its approach to rescuing this financially troubled and long delayed project. In addition, the new Convention Center planned for the 30th Street rail yards should also generate positive spillover effects on the adjacent waterfront areas. Moreover, the Rouse Development Corporation, which scored a major waterfront success with Boston's Quincy Market, has proposed a major renovation of the South Street Seaport and the New York Maritime Museum. Although the Rouse Corporation has impressive credentials in urban waterfront revitalization, serious questions have been raised about the compatibility of a "Bloomingdale's-by-the-Sea" type of development with the desire both to maintain historic character of the South Street area and to meet the physical requirements of the Fulton Fish Market. Although the full potential of South Street Seaport has yet to be realized, certainly New York should avoid the homogeneity of style and content which characterizes waterfront redevelopment projects in other cities.

Despite these objections, the Rouse proposal does highlight growing public-private cooperation in the renewal of the city's waterfront. The city's Office of Economic Development has been instrumental in trying to secure federal UDAG funds to facilitate the Rouse project. Lastly, as part of its new concern for stimulating development in the New York Region, the Port Authority has also discovered and emphasized the development opportunities on the city's waterfront.

Apart from these efforts, much more remains to be done. The city waterfront is large enough to

accommodate a wide range of activities. But it is astonishing that the planning and management of this valuable resource is not an issue of serious concern to citizens and public officials. The waterfront of New York should be a major priority for municipal government. It merits such promise because it has such enormous potential for a city in need of both economic development and environmental amenities. To develop a variety of uses, the city needs a new agenda for its waterfront. The components of such an agenda should include:

A new leasing policy for the city-owned waterfront: Municipal ownership and long-term leasing allows overall control to be vested in the public sector while still permitting and encouraging private development of the waterfront. Ground leaseholds are used extensively by the private sector in the construction of Manhattan office buildings and in the development of coastal facilities in several other urban areas. A policy of long-term leasing reduces the need for public expenditures and also allows the city to keep the option to recycle coastal property, not by relinquishing control forever, but merely for the term of the lease.

Reduce the regulatory barriers to waterfront construction: Rather than facilitate private initiatives, the city, through its rules and regulations, impedes construction on the coast. For example, the city's building code prohibits issuance of a certificate-of-occupancy to buildings that do not have foundations. As a result floating restaurants and structures are technically illegal in New York City. Although this regulation was originally designed to assure a structure's physical safety, provisions for exceptions must be made so that new and appropriate forms of coastal construction can achieve legal status and continue to be developed.

Improve access to existing beaches and waterfront parks: Although Robert Moses built many of the city's beaches and shorefront parks, he is also responsible for the construction of the band of highways that wrap around the waterfront and impede access to the shorefront. As the energy crisis intensifies, the value of the city's waterfront as a recreational resource will become even more valuable. New access paths, walkways, and directional signs are needed for the city's vast network of coastal parks. In addition, express buses and subways to the city's beaches should be initiated on summer weekends and holidays. If the MTA can have express subways to Aqueduct Racetrack and to JFK. International Airport, why not to the city's beaches?

Stimulate tourism on the waterfront outside Manhattan: The city has an array of coastal attractions which are hard to reach and poorly promoted. The New York Aquarium at Coney Island, the concentration of restaurants on City Island, the historic buildings on Ellis Island and the magnificent vistas from Fort Wadsworth in Staten Island would, in any other city, constitute a major waterfront attraction. New York needs a deliberate and systematic policy to encourage tourism at these and other locations in the "outer boroughs." As a first step, a "Waterfront Loop" bus similar to the city's successful "Culture Loop" bus route should be initiated. In addition, conditions on Staten Island Ferry boats - and at the terminals - should be radically improved so that they can be promoted as a major tourist attraction.

Foster marine recreation on the city's waterways: Apart from the Staten Island Ferry and the Circle Line boat ride around Manhattan, there are only limited opportunities for citizens to experience the city's waterways. Several forms of water-oriented recreation should be encouraged: improved marinas, rent-a-boat operations, and an expanded network of waterborne transportation, including hydrofoils. A strategy to plan, develop, and promote water recreation facilities is essential.

Strengthen rather than eliminate the Department of Ports and Terminals: The Koch administration is planning to abolish the Department of Ports and Terminals as part of its proposed budget cuts. Although this may make some sense in the short-run, it is questionable as a long-term strategy. The Department of Ports and Terminals now serves as a "one-stop" agency for potential developers with the authority over several bureaucratic processes. Under the proposed reorganization, its authority will be divided between

the Office of Economic Development and the Department of General Services. It is doubtful whether either of these units will treat waterfront development as their primary mission or have the expertise in marine design and technology that waterfront construction requires. The elimination of Ports and Terminals might have made sense when it was doing little to improve the city's waterfront, but why impose such a penalty now that the agency is so successfully carrying out city policy (and earning money - the \$3 million-a-year department generates \$26 million a year in revenues)? Further, what will happen in future decades if a different mayor has different priorities?

The proposed abolition of Ports and Terminals was first put forth as part of a money-saving package, but it is now being promoted as a management technique. In fact, it is neither. If Ports and Terminals is not eliminated, it clearly needs to improve its capability in overtime policy and port promotion as well as in waterfront redevelopment. Should the proposed reorganization take effect, it would make the most sense for the city to designate a person or entity to coordinate the waterfront related functions of the Department of General Services, City Planning, and Office of Economic Development.

Take an active role in federal policies affecting the waterfront: New York's competitive position as a port has been hurt by both Conrail and the Interstate Commerce Commission. The city needs to be far more aggressive in articulating its position to federal agencies and more active in supporting passage of enabling legislation for the coastal management state program. In addition, it should press for a greater share of the state and federal coastal management funds. Although Congressman John Murphy is the head of the House Merchant Marine and Fisheries Committee, his influence has not been sufficiently used to direct federal coastal funds toward the city.

Given the city's fiscal crisis, it would be foolish to expect the waterfront to be treated equally with such municipal services as police, fire, or education. Fortunately, municipal policy for the waterfront based on private development with public benefits need not be costly. In fact, an intelligent waterfront policy should both generate revenues and improve the livability of the city. The basic role for the public sector should be to offer a positive climate in which the energies of citizens and private Firms can be harnessed to provide social, economic, and environmental benefits to the city. Although there is currently a great deal of enthusiasm about the city's waterfront renewal and several projects in the works, it is wise to remember that a similar sensibility prevailed in the late 1960s. With luck and a new commitment to get things done with public-private cooperation, it is just possible that history won't repeat itself on the city's coast.

NOTES

1. For a detailed discussion of the city's waterfront leasing policies, see Mitchell L. Moss, "The Lost Waterfront of New York," *Coastal Zone Management Journal*. Volume 6, Number 2-3, 1979.