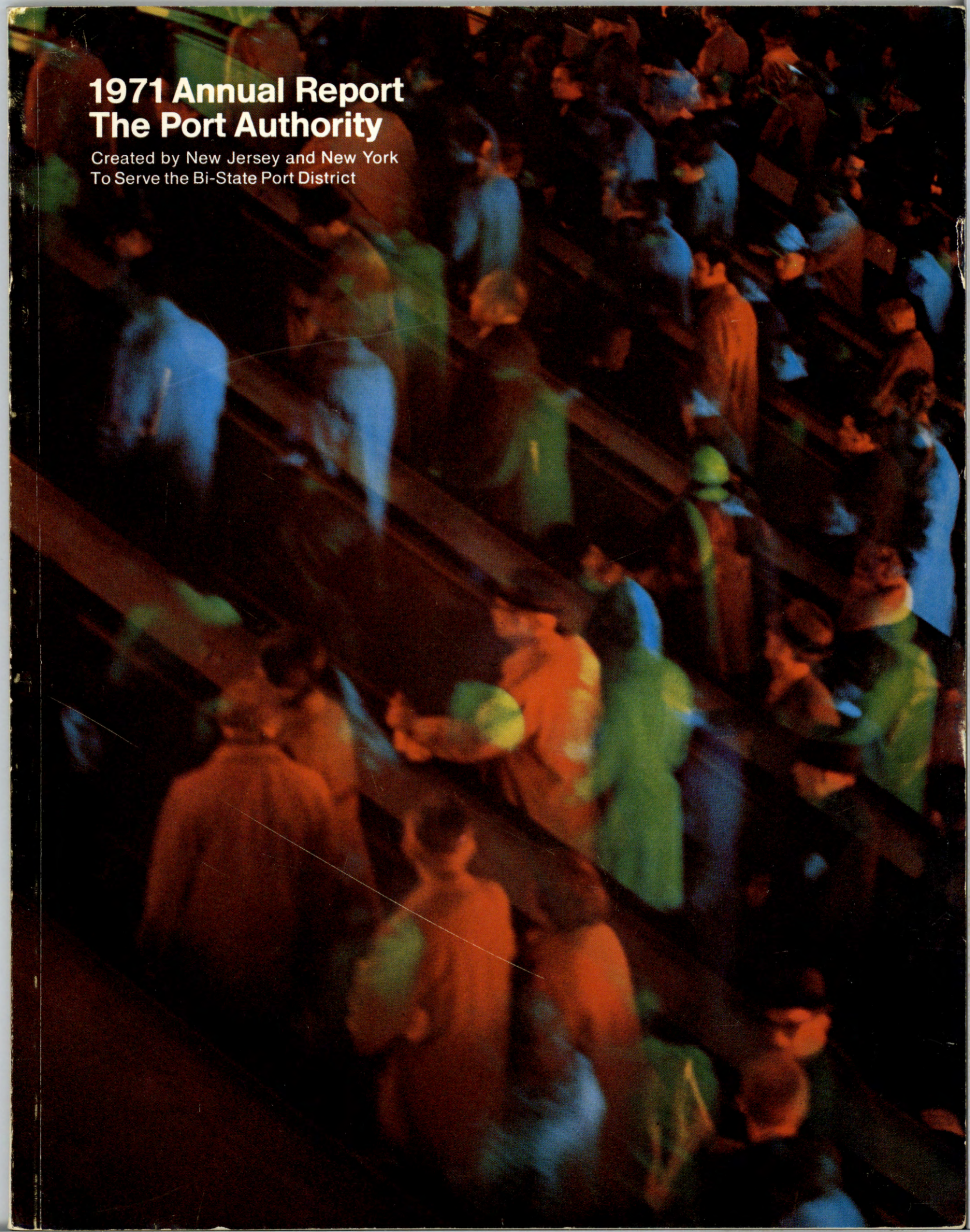


1971 Annual Report The Port Authority

Created by New Jersey and New York
To Serve the Bi-State Port District





Honorable William T. Cahill,
Governor of the State of New Jersey



Honorable Nelson A. Rockefeller,
Governor of the State of New York

Respectfully submitted
in accordance with
The Port Compact of 1921 to
The Honorable William T. Cahill,
Governor, and the Legislature of
the State of New Jersey and
The Honorable Nelson A. Rockefeller,
Governor, and the Legislature of
the State of New York

Commissioners

- James C. Kellogg, III
Chairman
- Hoyt Ammidon
Vice Chairman
- Andrew C. Axtell
- Sidney S. Hein
- James G. Hellmuth
- Philip B. Hofmann
- Walter Henry Jones
- Bernard J. Lasker
- Gustave L. Levy
- William J. Ronan
- W. Paul Stillman

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On the cover: The main bank of escalators in the new PATH terminal in lower Manhattan typifies the busyness which pervades the largest rail passenger terminal built in the metropolitan area in over 30 years.

To:

The Honorable William T. Cahill, Governor, State of New Jersey

The Honorable Nelson A. Rockefeller, Governor, State of New York

The year 1971 was marked by significant progress in planning for mass transportation projects in New Jersey and New York. The Inter-Agency Task Force established by your Excellencies in 1970 issued its first interim report in March 1971. The remainder of the year was a period of intensified study of the various proposals being considered to improve the quantity and quality of railroad passenger service between the two States.

The specific measures being studied included:

- maximizing the currently under-utilized capacity of Penn Station in New York by providing additional direct commuter rail service to and from New Jersey;
- a new trans-Hudson rail tunnel leading to a new passenger terminal in mid-Manhattan;
- improving Penn Station in Newark under a program which would include its acquisition by the Port Authority from the Penn Central.

Work also continued on planning for rail links to Newark and Kennedy Airports. Three consultants selected by the State of New Jersey and retained by the Port Authority were nearing completion of an engineering and traffic study of an extension of PATH from Penn Station, Newark, to Cranford, via Newark Airport and the main line of the Central Railroad of New Jersey. Engineering plans for extending the Long Island Rail Road to Kennedy Airport were being developed jointly by the Port Authority, the Metropolitan Transportation Authority and the airlines.

In addition to this planning for the future of the New Jersey-New York District, the agency also continued to carry out the assignments already given to it by the two States.

In the field of rail transportation, the most significant achievements of 1971 were the completion of PATH's new air conditioned terminal in lower Manhattan and the progress being made on construction of the new PATH Journal Square Transportation Center in Jersey City.

The new PATH terminal in Manhattan, the largest rail terminal to be built in the metropolitan area in over 30 years, replaced the obsolete 62-year-old Hudson Terminal. The longer platforms allow the operation of longer trains, and thus provide greater capacity. With the delivery of 46 additional new cars in 1972, PATH trains will be up to eight cars long (instead of being limited to six cars). And, as need arises, PATH will be able to operate ten-car trains at the new terminal.

By the end of 1971, a total of 36 contracts representing a cost of over \$50 million had been awarded for construction of the new PATH Journal Square Transportation Center on an eight-acre site in the heart of Jersey City. This coordinated public transportation facility is scheduled to open in 1973.

In another area of mass transportation, plans for enlargement of the Port Authority Bus Terminal moved ahead during the year as peak hour activity at the terminal continued to increase. Almost 66 million passengers used the existing Bus Terminal in 1971.

In water transportation, the general cargo tonnages at the Port Authority's six marine terminals were down from 1970 because of the prolonged longshoremen's strike. But the construction activity at the Elizabeth-Port Newark complex—America's container capital—continued to reflect

the quickening conversion to containerization of the world's general cargo merchant fleet. A new 87-acre container terminal was being built at Elizabeth. At Port Newark, the initial construction phase of the Navy Area 110-acre extension project was under way.

In November the Port Authority began construction of a six-berth Passenger Ship Terminal on Manhattan's Hudson River front between 48th and 52nd Streets. This long-needed improvement will provide a thoroughly modern and convenient facility for the thousands of passengers on trans-Atlantic and cruise liners. In addition to the mid-Manhattan terminal, Pier 40 at Houston Street will continue to be used as a companion three-berth facility, thus making a total of nine steamship berths. The new Passenger Ship Terminal is scheduled for completion in 1974.

At the Port Authority's three major airports, passenger traffic increased slightly. The 1971 total of 38 million passengers was up 2 per cent from 1970, a year in which the passenger volumes in the New York-New Jersey region declined for the first time in history. The indications at year's end were that a general recovery in domestic traffic was under way. The Port Authority continued its programs to expand existing airports to their maximum capacity. The \$150 million expansion of the Central Terminal Area at Kennedy International Airport was virtually completed, and structural work on the Newark Airport redevelopment program neared completion.

Traffic at the Port Authority's six tunnels and bridges totaled 154,362,000 vehicles, an increase of 4.1 per cent over 1970. The time-saving exclusive bus lane on the New Jersey approach to the Lincoln Tunnel, begun as a year's experiment in late 1970, enabled up to 35,000 commuters each morning to reach Manhattan destinations some 10 to 25 minutes quicker than before. During 1971 the exclusive lane attracted a 6 per cent increase in bus riders, and was declared a permanent fixture.

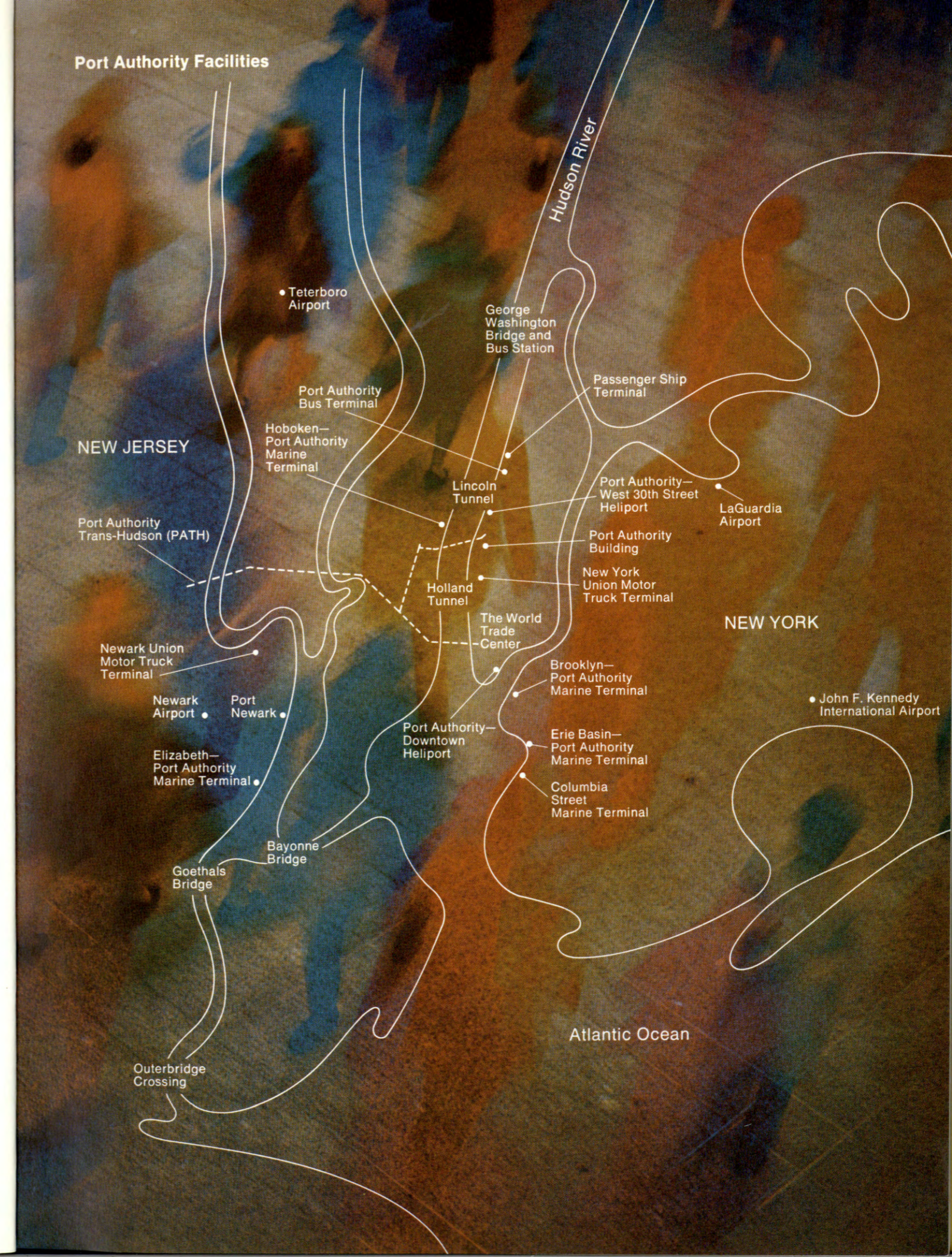
At The World Trade Center, a growing community of international commerce was in operation during 1971, even while construction activity continued toward the completion of this new headquarters of the import and export trade that is the single most important factor in the economic well-being of the Port District. At year's end more than 150 international firms and government agencies had already established offices in The World Trade Center's North Tower Building. The South Tower Building was topped out in July, and on this occasion the American Society of Civil Engineers cited The World Trade Center as the outstanding civil engineering achievement for the year. The World Trade Institute, the education arm of the Center, was opened in September. The Interfile trade communications system, which will link with similar centers in many other countries, had its first working demonstration.

This summarizes the activities of the Port Authority in the year 1971, its 50th Anniversary year of service to the people of the Port District.

Respectfully yours,

James C. Kellogg, III

James C. Kellogg, III
Chairman



What the Port Authority Is and What It Does

The Port of New York Authority is an agency of the States of New Jersey and New York. Port Authority Commissioners are public officers. Port Authority projects are public projects, but the Authority has no taxing power and cannot pledge the credit of either State. It must raise the capital funds required to construct the projects assigned it by the States by borrowing money on its own credit.

The Port Authority was created by a Compact between the two States in 1921 as a financially self-supporting agency capable of developing and operating terminal, transportation and other facilities of commerce within the bi-State Port District. The Port Authority can undertake only those projects which have been authorized by the two States.

In the Port Compact, New Jersey and New York:

- Pledged their "faithful cooperation in the future planning and development of the Port of New York;"
- specifically defined "the Port of New York District," the area in which their joint interest lay; and
- created The Port of New York Authority as their agency to carry out within the District, the projects which they declared "can best be accomplished through the cooper-

ation of the two States by and through a joint or common agency."

Organization

The Port Authority consists of twelve Commissioners. Six are appointed by the Governor of New York and six by the Governor of New Jersey, subject to confirmation by the State Senates. The Commissioners serve without pay or fees of any kind for overlapping terms of six years. Traditionally, appointments have been based upon records of accomplishment in business, the professions and community and public leadership. The Commissioners report directly to the Governors of New York and New Jersey, who have veto power over actions of their respective Commissioners taken at meetings of the Board.

To carry out their policy decisions and manage the day-to-day operations of the Authority, the Commissioners rely on an Executive Director and a professional staff. The Executive Director is charged with the same responsibility for executive action and administration as the president of a private corporation. The policies of the Board are transmitted to the administrative staff through him and staff recommendations to the Board are presented by him. The Executive Di-

rector and the General Counsel are elected annually by the Board of Commissioners.

Projects

The projects and activities which the Port Authority has undertaken in accordance with the Port Compact and the additional specific directives of the two States in subsequent concurrent legislation fall in the general fields of land transportation, air transportation, water transportation, and world trade. The facilities operated by the Port Authority in accordance with the directions of the two States are:

Tunnels and Bridges Linking the States of New York and New Jersey

Goethals Bridge
Outerbridge Crossing
Holland Tunnel
George Washington Bridge
Bayonne Bridge
Lincoln Tunnel

Rail and Bus Commuter Facilities

Port Authority Bus Terminal
Port Authority Trans-Hudson (PATH) System
George Washington Bridge Bus Station

Regional Airports Serving the Two States

John F. Kennedy International Airport
LaGuardia Airport
Newark Airport
Teterboro Airport
Port Authority—West 30th Street Heliport
Port Authority—Downtown Heliport

Marine Terminals and Other Facilities Handling the Commerce of the Two States

Elizabeth—Port Authority Marine Terminal
Port Newark
Hoboken—Port Authority Marine Terminal
Brooklyn—Port Authority Marine Terminal
Erie Basin—Port Authority Marine Terminal
Columbia Street Marine Terminal
Passenger Ship Terminal (under construction)
Port Authority Building
New York Union Motor Truck Terminal
Newark Union Motor Truck Terminal

World Trade

The World Trade Center

Other Activities

In addition to planning, financing,

building and operating certain terminal, transportation and other facilities of commerce, the Port Authority, under the Port Compact, may "make recommendations to the legislatures of the two States or to the Congress of the United States . . . for the better conduct of the commerce passing in and through the port of New York, the increase and improvement of transportation and terminal facilities therein, and the more economical and expeditious handling of such commerce..."

To carry out this function, the Port Authority is continually engaged in planning studies on all matters related to the future of transportation and the need for transportation facilities in the Port District. This work involves constant cooperation and coordination with the many municipal, county, State and Federal governmental agencies and departments which have responsibilities in the field of transportation and with the many private organizations involved, such as railroads, bus companies, shipping lines, airlines, civic associations and others.

The Port Authority has a responsibility to promote and protect the commerce of the Port. The entire economy of this metropolitan area depends upon its position as a transportation center, and the New Jersey-New York

Port is constantly competing with other ports for cargo business. To carry out this responsibility, the Port Authority represents the interests of the Port before the Interstate Commerce Commission, the Civil Aeronautics Board, the Federal Maritime Commission, and other regulatory agencies, in matters such as rate cases, route cases, etc.

Another facet of the Port Authority's activities to promote the commerce of the Port is its program of port promotion and trade assistance. Trade transportation specialists, working from nine Trade Development Offices in the United States and overseas, assist shippers in their export-import operations and emphasize how shippers can cut costs and/or expedite their shipments via the Port of New York.

The expansion of international trade and the flow of commerce through the Port is the specific purpose of The World Trade Center, which is now in operation even while construction work proceeds. The Center will serve as a unified community of commerce which will bring together the marketing and service facilities of world trade to permit the Port to better serve international commerce and to attract larger volumes of international trade.

Planning for the Future

For half a century, ever since its creation by the 1921 Compact between the States of New Jersey and New York, the Port Authority has continually planned for and acted upon the growing transportation needs of the Port District's people in an ever-changing environment.

The role of the Port Authority in this field was restated in a resolution adopted unanimously at a meeting of the Port Authority's Board of Commissioners with Governor William T. Cahill of New Jersey and Governor Nelson A. Rockefeller of New York on December 13, 1971. After expressing tribute to the Executive Director Austin J. Tobin, who is retiring as of March 31, 1972 (see Page 51), the resolution continued as follows:

"RESOLVED, that the Governors and the Commissioners restate the pledge in the Port Compact of 1921 that the States will extend their 'faithful cooperation in the future planning and development of the Port of New York' and express their determination that the Port Authority shall maintain its financial integrity and continue to develop facilities for present and future economic well being of the bi-State port area; and

"RESOLVED, that to this end the Governors and the Commissioners direct the staff to continue and to intensify the study of New York and New Jersey mass transportation projects initiated by the Board at the request of the two Governors in the spring of 1971, including the rail link project to Kennedy and Newark Airports, a new rail tunnel under the Hudson River at 48th Street, and other projects proposed by the Inter-Agency Task Force of the States of New York and New Jersey; and

"RESOLVED, that the two States reaffirm their determination to maintain the credit of the Port Authority with full recognition of existing obli-

gations and contractual undertakings by the two States and the Port Authority with the holders of Port Authority bonds, and recognize that the impairment of the Port Authority's credit would prevent the effectuation of its current programs and make impossible any further contribution by it toward solving the region's rail transit problems;

"RESOLVED, that the two States are determined that realistic solutions will be found for the critical mass transportation problems of the bi-State region; and

"RESOLVED, that the Port Authority shall continue to be the instrument of the two States to work with the New Jersey Department of Transportation and the Metropolitan Transportation Authority in developing these solutions; and

"RESOLVED, that the Commissioners and the Governors express their confidence that the Port Authority will develop feasible and meaningful mass transportation and other programs and projects for the benefit of the bi-State port area."

The Port Authority announced on December 16, 1971 that it would recommend legislation to the States to change the name of The Port of New York Authority to "The Port Authority of New York and New Jersey," in order to better identify the Port Authority's status as a bi-State agency.

Studies Under Way

In February 1971, at the request of Governor Cahill, the Port Authority authorized major studies of various proposals to improve the quantity and quality of railroad passenger service between the two States. Several of these proposals coincided with the recommendations of the Inter-Agency Task Force which Governors Cahill and Rockefeller had appointed in 1970 to assess interstate public transporta-

tion needs and to develop a program to fulfill these needs. This Task Force consisted of Commissioner John C. Kohl of the New Jersey Department of Transportation; Dr. William J. Ronan, Chairman of the Metropolitan Transportation Authority; and Executive Director Tobin of the Port Authority. On March 1, 1971 the Inter-Agency Task Force recommended investigation of the feasibility of (1) maximizing the currently under-utilized capacity of Penn Station in New York by providing additional direct commuter rail service to and from New Jersey, and (2) a new trans-Hudson rail tunnel leading to a new passenger terminal in mid-Manhattan.

Extensive studies were immediately begun, involving a number of Port Authority departments under the leadership of the Planning and Development Department. Engineering and operational studies were undertaken of track connections, expanded facilities in New Jersey and improvements to Penn Station in New York, all planned to provide additional direct services to Manhattan.

Preliminary studies of the proposed trans-Hudson rail tunnel have focused on forecasts of potential traffic by 1985, as well as operational plans and integrated train schedules for the commuter railroads involved, and design concepts of the tunnel, car yards and connections, and the Manhattan terminal itself. In addition, borings have been taken along the proposed rail alignment between Manhattan and New Jersey. Preliminary cost estimates are being prepared. These studies are expected to be completed by the end of 1972.

In June 1971 the two States enacted legislation providing for the Port Authority to finance and construct a project consisting of rail access facilities to Newark Airport and Cranford, New Jersey, and to Kennedy Airport. Sub-



The role of the Port Authority in planning for and acting upon the growing transportation needs of the Port District's people was restated in a resolution adopted unanimously at this meeting of the Port Authority's Board of Commissioners with Governor William T. Cahill of New Jersey and Governor Nelson A. Rockefeller of New York on December 13, 1971. At the meeting, from left, were Commissioner James G. Hellmuth, Commissioner Bernard J. Lasker, Commissioner William J. Ronan, Vice Chairman Hoyt Ammidon, Governor Rockefeller, Governor Cahill, Chairman James C. Kellogg, III, Commissioner Philip B. Hotmann, Commissioner Walter Henry Jones, and Commissioner Andrew C. Axtell.

sequently the State of New Jersey selected three consulting firms to undertake an engineering and traffic study of an extension of PATH from Penn Station in Newark, to Cranford, via Newark Airport and the mainline of the Central Railroad of New Jersey. The Port Authority agreed to pay for the consultants' services as part of the bi-State agency's regional planning program.

By the end of the year the consultants were nearing the completion of their work to determine a proposed alignment for the extension, including station designs, yard requirements, needed property acquisition, and a station at Newark Airport to interchange passengers with the airport's planned inter-terminal transportation system. The cost estimates and the analyses of patronage estimates also were nearing completion.

The Port Authority also made progress during the year on the acquisition by PATH of the Penn Central Transportation Company's station at Newark. Preliminary engineering studies and estimated operating results were transmitted to the trustees of the Penn Central. Meetings were held with the railroad's staff to determine the most feasible and expeditious method of transferring the responsibility for the station's operation to the Port Authority. Progress on the acquisition of this facility has been slowed by the complications involved in the bankruptcy of the Penn Central.

As well, the Port Authority, the Metropolitan Transportation Authority and the airlines have been jointly developing a plan for extending the Long Island Rail Road to Kennedy Airport to provide service to and from Penn Station in New York and Jamaica.

Exclusive Bus Lane

The exclusive bus lane on the New Jersey approach to the Lincoln Tunnel completed a highly successful first year of operation in December. This has been acclaimed as a welcome addition to the regional transportation system, enabling up to 35,000 riders each morning to reach their Manhattan destinations some 10 to 25 minutes quicker than before.

The Port Authority operates the 2.5-mile exclusive bus lane along roadways of the New Jersey Turnpike Authority, the New Jersey Department of Transportation and the Port Authority under an operating and cost-sharing agreement. The United States Department of Transportation provided initial financing for the project, which is under the general sponsorship of the Tri-State Regional Planning Commission. About 800 buses travel a normally westbound lane adjacent to the median barrier during the morning peak period.

The positive impact on New Jersey-to-New York commuter travel was cited by John C. Kohl, New Jersey Transportation Commissioner, whose

support, as Tri-State Chairman in 1970, was crucial to getting the project inaugurated, several years after it had first been proposed by the Port Authority. "This is proof," Commissioner Kohl said, "that we are meeting one of the primary objectives of the project: the encouragement of public transportation."

Because of the splendid operating record, the enthusiastic public response and the positive results of evaluation surveys, the interagency Project Policy Committee determined in late 1971 that the one-year experimental project should be continued on a permanent basis. As a result of this decision, plans are being developed to replace interim manual traffic control devices with electrically-changeable, remote-controlled equipment and to make other improvements.

Highway Planning

Throughout the year numerous meetings were held with the New Jersey Department of Transportation, the New Jersey Turnpike Authority and consultants in the preparation of preliminary plans for Route 81 connecting US 1 with the Turnpike in the vicinity of North Avenue, Elizabeth. As a result, planning is close to completion for this important route which will provide a vital connector between US 1 and the Turnpike, and improved access for an industrial area in Elizabeth, as well as improved access to

the redeveloped Newark Airport and the Elizabeth-Port Authority Marine Terminal.

Approval was also obtained from the New York State Department of Transportation and the Federal Highway Administration for revisions to ramps connecting the Grand Central Parkway with LaGuardia Airport. Separate entrances from the Parkway will be combined in order to improve the external circulation at the airport and to provide more efficient exits from the parking lot. (See Page 34.)

Because of the initiation of one-way tolls in 1970, it was necessary to revise the tolls plaza plan on Staten Island for the Outerbridge Crossing. This required obtaining approvals from the New York State Department of Transportation and New York City. Preparation of construction plans for the plaza and its connections with the Richmond Parkway and West Shore Expressway on Staten Island are now proceeding. Close liaison was also maintained with the New Jersey Department of Transportation on the new expressway approaches in Perth Amboy leading to the Outerbridge Crossing. (See Page 38.)

Staggered Work Hours Program Extended

In an effort to reduce peak hour pressures on mass transportation systems, the Port Authority and the Downtown-Lower Manhattan Association jointly initiated a Staggered Work Hours Program in 1970. By the end of 1971 some 70,000 employees of Federal, State and city agencies and of 116 major private firms in the area were participating in the program.

On the basis of these favorable results, efforts are under way to increase participation in lower Manhattan to 120,000. In addition, this concept has been extended to midtown Manhattan where a Midtown Task Force on Stag-

gered Work Hours, made up of nine public agencies and 17 civic and trade associations, has been created to initiate a similar program during 1972. (See Page 16.)

Harbor Development

Efforts to secure Federal legislation and appropriations to provide safer navigation and more efficient harbor channels continued to be a major Port Authority activity in 1971. In response to testimony by the Port Authority in May before the Senate and House Committees on Appropriations \$9,040,000 was allocated in the 1972 Public Works and Atomic Energy Commission Appropriations Act to enable the Army Corps of Engineers to continue authorized improvements on Newark Bay Channel and the New York Harbor Anchorages.

Passage of the 1971 Vessel-Bridge-to-Bridge Radiotelephone Act, a bill which would require radiotelephone communications between vessels in New York Harbor as well as in other inland waters of the United States, marked the successful culmination of long and vigorous efforts by the Port Authority to secure this requirement for safer navigation. At the invitation of the United States Coast Guard, the Port Authority has offered several suggestions or proposed rules to implement this new law. In associated legislation still pending, the Port Authority testified during 1971 before the Senate Committee on Commerce and the House Committee on Merchant Marine and Fisheries to request certain changes in the proposed 1971 Ports and Waterway Safety Act which is designed to empower the Coast Guard to provide vessel traffic systems in harbors. Specifically, the Port Authority recommended that such systems be advisory in nature rather than controlling, and that they be developed under Federal auspices with

local participation. In addition, the Port Authority began a study of port navigation hazards to assist the Coast Guard in establishing an effective harbor radar traffic system.

Supertankers with drafts of 70 to 90 feet are rapidly becoming the principal means of transporting crude oil between the Middle East and many ports throughout the world. Such ships cannot be handled in most U.S. ports and the cost of providing adequate channels is prohibitive. This situation has stimulated great interest in deepwater, supertanker terminals from which the crude oil would be transshipped by pipeline or tank barge. The economic, environmental and other considerations inherent in the development of such terminals are of concern to Federal, State and local governments, shipping and petroleum interests and the ports throughout the nation. The Port Authority staff, working closely with the American Association of Port Authorities, has helped bring public attention to this subject.

The United States Senate Committee on Public Works adopted a resolution in 1971, directing the Corps of Engineers in cooperation with local and other Federal agencies, to study the economic, operational and environmental feasibility of developing a North Atlantic deepwater facility for supertankers and other deep-draft carriers of bulk cargoes to serve the North Atlantic Coast between Maine and Virginia. At the same time, the Port Authority is maintaining close liaison with the Federal Maritime Administration in its study of an off-shore bulk terminal to serve the Eastern coast of the United States.

Improving the Environment

During 1971 the Port Authority expanded its efforts to assure that its operations and programs are conducted in harmony with the environ-

ment. The activities of all line and staff departments in this field were coordinated by the Authority's Office for Environmental Programs, established in May 1970. These activities included: specific improvement programs at facilities to assure conformity with increasingly higher standards of air and water qualities; cooperation with Federal, State and local agencies in the determination of pollution control standards and the development of appropriate legislation to enforce such standards; experiments with possible improvements, such as the use of low lead gasoline in Port Authority vehicles; and active investigation of longer range environment programs such as solid waste management.

The Port Authority continued to press for a start in the Federal-State program recommended by the Army Corps of Engineers in 1968 for clearing away the sunken hulks and abandoned piers that blight the harbor's waterfront and are the sources of floating debris fouling the channels. This program was authorized in the 1970 Rivers and Harbors and Flood Control Act and funds were provided in a subsequent appropriations bill for advance engineering by the Corps of Engineers for a harbor cleanup. As this was written, the Office of Management and Budget has refused to clear the project and release the funds that would begin its implementation.

Waterfront Land Use

To aid water transportation-oriented industry in finding suitable land in the Port for development, the Port Authority in 1971 published a survey, *Undeveloped Land Adjacent to Deep Water in the Port of New York*. The survey describes 22 major tracts in the Port District with a total of 1,400 acres of undeveloped waterfront land. Since publication, several sites de-

scribed in the report have provoked interest among potential developers. In a related activity anticipating eventual passage of pending Federal coastal zone or land use legislation, the Port Authority is participating actively with other planning agencies in a Coastal Zone Study under the sponsorship of the Tri-State Regional Planning Commission. This study is aimed at creating a coastal zone plan to help resolve multiple-use conflicts for the shoreline.

Industrial Development Guide

Under its mandate to protect and promote the Port's commerce, the Port Authority completed plans for *The New York-New Jersey Metropolitan Area Industrial Development Guide*. This detailed reference work will be published in early 1972. The *Guide* will be the first of its kind ever attempted for this bi-State area, designed to acquaint the industrialist with the benefits of producing and marketing his goods in the bi-State Port District and its immediate environs. Its principal objective is to assist the vast number of governmental and private organizations which share responsibility for the economic development of the district, in attracting new industries to the area as well as in retaining those which are already located here.

Transportation and Foreign Trade Surveys

Regional planning has always been a basic element of the Port Authority's organization. Sound planning requires continual accumulation of essential statistical information and analysis of that data to determine future public demand for new and expanded transportation facilities and services.

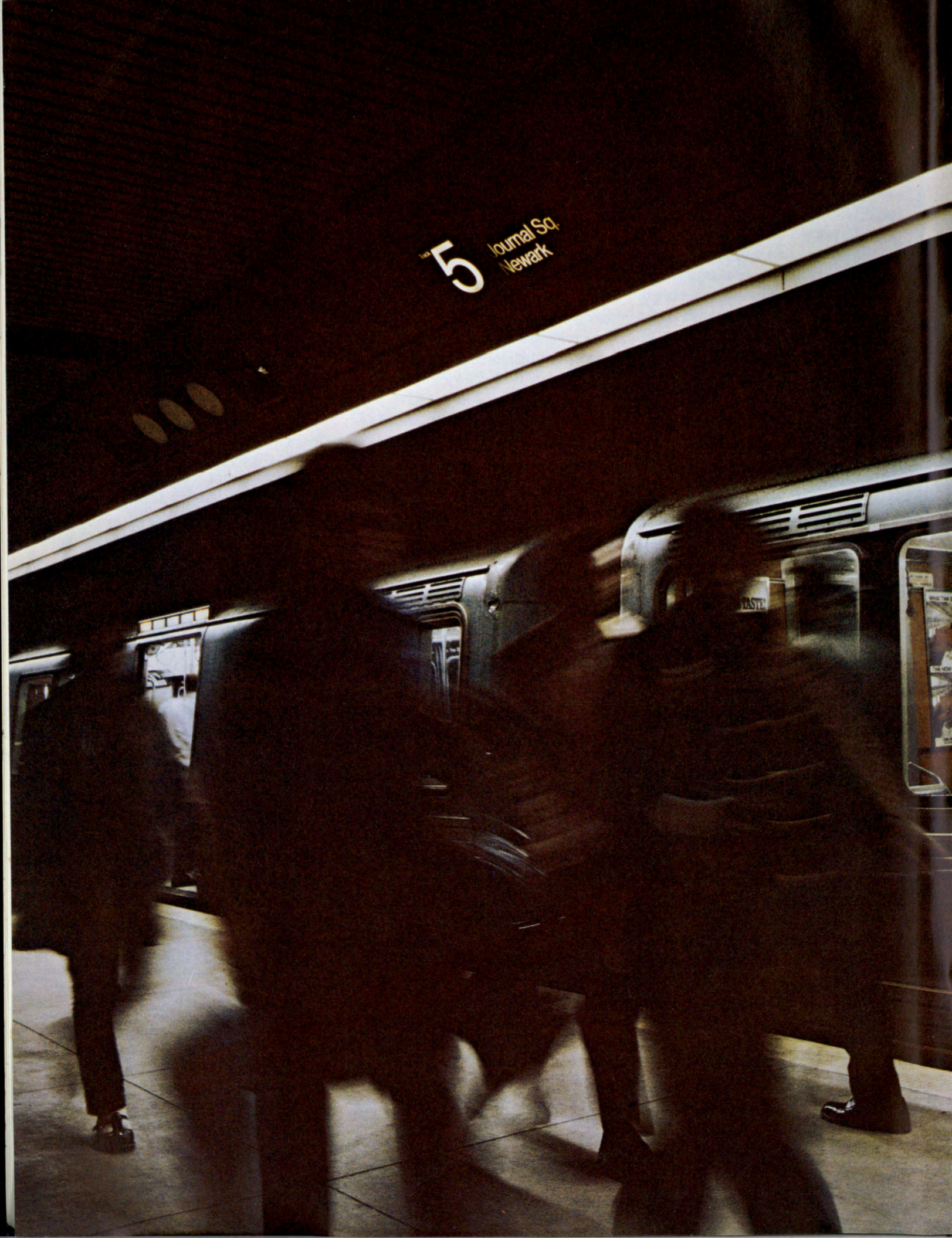
During 1971 the Planning and Development Department made more surveys and field studies than in any previous year in the Port Authority's

history. They included the recording of PATH turnstile volumes, origin and destination interviews at the Port Authority's tunnels and bridges and at Kennedy, LaGuardia, Newark and Teterboro Airports, passenger counts on commuter and long distance railroads and buses, checking general aviation and airport bus activity, collecting information on PATH riders' attitudes toward exact change turnstiles as well as attitudinal surveys of bus passengers using the exclusive bus lane, surveys of vehicular activity throughout the region, checking baggage interchange activity at Kennedy Airport, checking Kennedy Airport access movements, collecting data on general and export railroad freight moving in freight cars or in trailers on flatcars into and out of the Port District.

On a larger scale, the Port Authority initiated last year a comprehensive inflight survey in Philadelphia, Chicago, Boston, and Washington as well as New York to determine market characteristics of trans-Atlantic flights on the whole Eastern Coast of the United States. Another special effort was the initiation of a series of pedestrian and vehicular traffic surveys in the vicinity of 48th and 52nd Streets, Manhattan, in connection with the study of a new Hudson River rail tunnel, and along the Hudson River waterfront in mid-Manhattan where the Port Authority is constructing the new Passenger Ship Terminal. (See Page 23.)

Foreign Trade Report

The Port Authority continued to survey and analyze the movement of export and import freight by sea and air through the bi-State Port. This statistical compilation and analysis was published under the title, *The Port of New York Foreign Trade 1971*, and distributed widely as an aid to the Port's shipping industry in planning for the future.



PATH and Rail Transportation

In 1959 the two States enacted legislation which permits assistance by the Port Authority as program administrator in railroad equipment programs without impairment of the Authority's financial structure. The New York State Commuter Railroad Equipment Program was initiated in accordance with this legislation and the approval of the New York electorate in 1961 permits New York State to guarantee up to \$100 million of special Port Authority bonds to purchase cars for lease to New York commuter railroads.

In 1962 the two States enacted legislation authorizing and directing the Port Authority to acquire, rehabilitate and operate the Hudson & Manhattan Railroad. The Port Authority Trans-Hudson Corporation (PATH) was created as a subsidiary of the Port Authority and acquired the H&M system, now known as PATH, on September 1, 1962.

The leading event for PATH during 1971 was the opening of its new air-conditioned terminal in lower Manhattan, replacing the 62-year-old Hudson Terminal. Significant progress also was made in the construction of the PATH Journal Square Transportation Center in Jersey City.

Other important elements of the PATH modernization program also moved forward, including manufacture of 46 new air-conditioned rapid transit cars and implementation of PATH's new exact change fare collection system. Three new traction power substations were substantially completed and various track and signal improvements were made in the area west of Journal Square. Installation of PATH's new two-way radio communication system also proceeded.

In addition, work was completed on a Federally-aided study of potential

improvements for PATH's older stations. A project was authorized to modernize the stations, contingent upon receipt of a Federal grant.

New Terminal In Lower Manhattan

On July 6, the first commuter day after the July 4 weekend, thousands of PATH riders began using the new rail rapid transit terminal built beneath The World Trade Center in lower Manhattan. The new station, the largest rail terminal built in the metropolitan area in over 30 years, is the first air-conditioned rail rapid transit terminal in the United States.

Although the station construction was not completed, the changeover was made during the holiday weekend to provide passengers the comfort of air conditioning throughout the summer months. A three-day weekend was required to make the track connections without interruption or inconvenience to weekday service.

The modern features of the new PATH terminal include high-speed escalators, pleasing aesthetic treatments using travertine marble for walls and columns and terrazzo for floors, a brightly-lit and spacious mezzanine, and improved audio and visual communications systems.

The new terminal's longer platforms will enable PATH to increase the length of its trains and thus provide greatly increased capacity on its lower Manhattan line. With the delivery in mid-1972 of 46 additional rapid transit cars now on order, PATH will begin operating eight-car trains on its Newark-World Trade Center service and seven-car trains on its Hoboken-World Trade Center service. The antiquated Hudson Terminal was limited to six-car trains, and even then all doors could not be opened because of excessive platform gaps. Should the need arise, PATH will be able to

operate ten-car trains at The World Trade Center in the future.

The new terminal's track structure has been designed to reduce the vibration and noise of train movements. Acoustic panels are used on the ceiling over the platforms and sound-deadening materials have been applied on the underside of the platforms and on the sound barrier wall that extends from rail level up to car floor height. A system of neoprene padding under the rails and around the cross-ties also lowers sound levels. In addition to extensive use of welded rail, acoustic buffer walls have been extended for a short distance into the tunnels beyond the platforms to minimize noise transmission into the passenger areas. The result is a remarkably quiet terminal.

This was the first station on the PATH system to be equipped completely for exact change operation. There are 40 exact change turnstiles which accept any combination of nickels, quarters, and dimes equalling the 30-cent PATH fare. In addition, there are change-making machines which will accept dollar bills, quarters and dimes. Under the new fare collection system, PATH's station agents are relieved of change-making duties and thus freed to provide information and assistance to passengers.

The new terminal accommodates about 20,000 people each peak hour and about 85,000 passengers each week day. By 1975, the terminal will handle a projected 25,000 people in the peak hour and a total daily volume of about 100,000 passengers, with additional capacity for future traffic growth.

Journal Square Transportation Center

By the end of 1971, a total of 36 contracts representing a cost of over \$50 million had been awarded for con-



The new PATH terminal in lower Manhattan, the largest rail terminal built in the bi-State region in over 30 years, began operation on July 6, 1971. Above are the first passengers to arrive, at 5:15 a.m., as they were greeted by a special message. The modern air conditioned PATH terminal, which replaced the obsolete 62-year-old Hudson Terminal, serves 85,000 travelers daily.

The spacious platforms (below) are more than 500 feet long, which will permit the operation of longer trains and thus provide greater passenger capacity and comfort.



struction of the PATH Journal Square Transportation Center. An additional \$4 million in work by PATH forces also was under way. Major contracts authorized by the PATH Board cover excavation and foundations, a temporary station entrance, structural and architectural precast concrete, steel, electrical, mechanical and plumbing installations, and general construction. The work also includes various improvements to track and signals in the Journal Square station area and other essential rail facilities for the Center. The Center will cost \$80,648,000 and is being assisted by a Federal grant of \$39,166,000 administered by the United States Department of Transportation under the provisions of the Urban Mass Transportation Act of 1964, as amended. Scheduled for completion in late 1973, the Center is being built on an eight-acre site over and adjacent to the PATH and Penn Central tracks between John F. Kennedy Boulevard and Summit Avenue in the heart of Jersey City.

The Journal Square Transportation Center project will provide a coordinated public transportation facility comprising two new PATH station platforms capable of handling longer trains, a consolidated bus station with off-street berths for buses serving 30 routes, a concourse for PATH and bus passengers with space for consumer services, a landscaped street-level plaza, and off-street commuter parking for over 600 automobiles. The Center also will contain a building housing PATH's administrative offices and will be the site of PATH's new Operations Control Center.

The Grove Street improvements were the first portions of the Journal Square Transportation Center project to be completed. The new entrance to the Grove Street station, situated in a remodeled park, was opened to the public in June 1970.

A new temporary station entrance on John F. Kennedy Boulevard was opened to PATH passengers in December 1971. This replaced the old entrance facing the Transport of New Jersey Bus Terminal and Sip Avenue, and will allow demolition of the 59-year-old Journal Square station to be completed.

At track level, an extension of the eastbound platform was completed in November and a similar extension of the westbound platform was nearing completion. The south retaining wall of the new bus terminal also was taking shape rapidly at the end of the year.

Other Major Modernization Projects

Production was well under way on an \$8.8 million contract for 46 new rapid transit cars being built at Hawker Siddeley Canada Limited's plant. These additional cars, to be delivered in mid-1972, will enable PATH to operate longer trains between Newark, Harrison, Jersey City, Hoboken, and The World Trade Center.

Another important segment of PATH's modernization program is the complete replacement of the antiquated rotary converter traction power system of the old Hudson and Manhattan Railroad with a modern silicon rectifier power system. A fourth new substation to serve the tunnel areas in New Jersey and New York was opened in mid-year beneath The World Trade Center. Over \$8 million has been spent on this phase of PATH's power system modernization.

During 1971, PATH also practically completed three new substations in the above-ground area west of Journal Square as part of a \$7.1 million project. The new substations will provide the increased traction power capacity required to operate longer trains at higher speeds between New-

ark and The World Trade Center.

Work is also under way on a \$2.7 million project for the installation of a modern, system-wide supervisory control system for traction power. The supervisory system will enable employees in PATH's new Operations Control Center, to be located in the Journal Square Transportation Center, to monitor and control all vital components of the traction power and utility systems.

The three-stage rehabilitation of the PATH signal system is nearing completion. This \$2 million improvement program calls for rebuilding or replacing all signal equipment, modernization of automatic and interlocking signal control equipment, improvement of signal power distribution facilities and centralizing the control of the signal system. In addition to the tunnel signal work, about \$1.6 million is being spent in the above-ground area between Journal Square and Newark. PATH also completed signal work involved in the transfer of the interlocking console from the abandoned Hudson Terminal to an interim Control Center at Journal Square. In addition, a new signal interlocking plant was completed for The World Trade Center terminal. In allied construction progress, a new General Storehouse and Signal Shop at Waldo, between the tunnel portals and Journal Square, was completed in 1971.

In 1971, PATH continued its work on a \$5.8 million program for rehabilitation of tunnel trackage. A comprehensive, four-year track renewal program for the above-ground area, costing approximately \$3.3 million, was completed in 1970.

During the year, PATH completed the installation of two-way train-to-wayside radio equipment on its 123 newer cab-equipped cars. The installation of radios on its 47 older cars also was nearing completion, and the

necessary antennas were installed in all tunnel areas. This \$730,000 communications system will permit direct radio communications between the PATH Operations Control Center and crews and passengers on all trains. Even in a partially completed state, this system has been an invaluable aid in improving the reliability of operations.

The final step in the modernization of the PATH communications system is a \$774,700 project for the replacement of antiquated cable and related equipment throughout the 13.9-mile interstate transit system. Under this project, new cable, intercom systems, tunnel telephones and public address equipment is being phased into operation over a two-year period.

Exact Change Fare Collection

During 1971, PATH equipped its five major terminals — Newark, Journal Square, Hoboken, 33rd Street and The World Trade Center — with the new exact change fare collection system. Conversion of its eight intermediate stations in Harrison, Jersey City and Manhattan from tokens to exact change was scheduled to be completed by mid-1972.

As part of this project, all of PATH's thirteen stations will be equipped with closed circuit television equipment and passenger assistance telephones. This equipment will be monitored from the Operations Control Center and provide added security for passengers.

Service Improvements

Considerable attention was devoted during 1971 by PATH staff to achieving refinements in service for the greater comfort and convenience of passengers. Twice each year, PATH's train schedules — which provide for almost 1,100 train movements each



The PATH Journal Square Transportation Center, now under construction in the heart of Jersey City, as the new commuter facility will look upon completion. The Center will provide a new PATH Station as well as a modern off-street bus terminal to prevent traffic congestion. Public officials have hailed this \$80 million investment as a powerful stimulus to the rejuvenation of Jersey City.



The Journal Square platforms are being extended to accommodate longer PATH trains.



The first steel grillage is placed in the foundation.



Structural steel rising for the ten-story PATH Administration Building, part of the coordinated Journal Square Transportation Center in Jersey City. At lower right is PATH's new temporary Journal Square station entrance.



Construction proceeded on the extension of PATH platforms at Journal Square.

week day—are reviewed in detail. As a result, several additional trips were scheduled on the Newark-World Trade Center, Hoboken-World Trade Center and Hoboken-33rd Street routes during the fringes of morning and evening peak hours. By the provision of more seats in the periods just before and after the rush hours, passengers were encouraged to shift their travels from the most crowded periods.

In an allied effort, PATH and the Erie Lackawanna Railway made a concerted effort during the year to improve transfers at Hoboken. The Erie Lackawanna adjusted the Hoboken arrival and departure times of many of its early morning, midday and late evening trains to provide more adequate time for passengers to transfer to or from PATH. In turn, PATH improved the frequency of service between Hoboken and its New York terminals.

PATH also continued to strive for improved operational reliability. The on-time performance record for 1971 was an impressive 95.7 per cent of all trains arriving at their destinations within three minutes of scheduled time.

Station Modernization

As another key element in its modernization program, PATH conducted a technical study of the potential for improvement of its older stations in New York and New Jersey. The \$117,750 study, aided by a grant from the Urban Mass Transportation Administration, concluded that the PATH station environment could be enhanced considerably by various architectural and design changes, as well as by improved ventilation, lighting, signing and acoustical treatments. Accordingly, the PATH Board authorized a project for the modernization and rehabilitation of PATH's older stations at an estimated cost of \$16,775,000,



PATH police officer discusses rail safety with children attending one of PATH's many educational tour programs conducted during the summer.

contingent upon receipt of Federal aid. The Board also authorized filing of a grant application and the execution of a grant contract with the United States Department of Transportation for Federal assistance to the project under the Urban Mass Transportation Act of 1964, as amended.

Passenger Services Program

PATH has an extensive information program designed to inform passengers and the general public of the services available on the bi-State transit system. A special passenger services unit has the broad responsibility of serving as the "eyes and ears" of the passengers and making reports and recommendations to management on every aspect of operations affecting the passengers' comfort and convenience.

The passenger services staff is consulted in advance on all operational changes, car equipment purchases and station planning. An inspection team checks trains and stations on a regular basis and makes recommendations for appropriate improvements

to the operating staff. Communications during delays and service disruptions are the single most important area of concern, according to surveys of passenger comments. On the basis of these comments, new communications devices have been installed, including an all-station public address system and equipment permitting announcements to be made on trains by conductors. PATH is currently completing installation of a system-wide, train-to-wayside radio network which will permit direct announcements to be made to passengers on board trains from the Operations Control Center.

In a first for rail transit systems, PATH has staffed its Control Center during each peak period with trained passenger services personnel whose sole responsibility is to provide up-to-the-minute information to the traveling public. In the event of a delay, the passenger services representative, functioning under the direction of the Operations Supervisor, insures that proper announcements are made over the public address systems and that

the connecting suburban rail carriers are advised of the nature and expected duration of the problem. At the end of each peak period a report is submitted to PATH's Vice President and General Manager covering all actions which were taken on the passengers' behalf and any other matters involving passenger inconvenience and traffic congestion. These reports receive equal attention with the daily performance reports on train movements.

A wide variety of printed materials is provided to keep passengers and the public informed of service changes, schedules and other developments in PATH's modernization program. Chief among these is the *Service Guide*—in English and Spanish—issued twice yearly to coincide with changes in train schedules. The *Service Guide*, which lists the frequency of service on all lines, is also distributed to major employers and schools in PATH's service area. A *Newsletter* discussing developments on the system is issued periodically, and bulletins and posters also are used to alert passengers to any changes.

Thousands of children have received safety lectures in the local schools and thousands of others have been escorted on guided tours of the system during the summer vacation months. In addition to the summer tour program, which focuses on youngsters from "inner city" sections of the Port District, PATH has employed disadvantaged youths to supplement the regular maintenance force on such major projects as track and station cleaning.

Staggered Work Hours

The increasing concentration of passenger travel during the morning and evening rush hours is one of the most significant long-range problems fac-

ing the transit industry in general and the PATH system in particular. According to survey data collected by an international association of public transport agencies, PATH's traffic is concentrated more heavily during the weekday peak hours than that of any other urban rapid transit system in the world. Almost half of PATH's current weekday traffic is carried during the morning and evening peak hours, with the remainder being spread out at a low level during the other 22 hours of the day.

The Staggered Work Hours Program in lower Manhattan represents an important effort to reduce the concentration of traffic in the peak hours. The adoption of revised work schedules by tens of thousands of lower Manhattan workers in 1970 and 1971 culminated some 18 months of study and research on this concept by the Port Authority and the Downtown-Lower Manhattan Association. These efforts included a successful experiment which the Port Authority conducted in 1969 with its own employees.

Participation in the program has grown from almost 50,000 persons employed by 45 organizations to more than 70,000 people from some 116 private firms and public agencies. The reduction of crowding on several New York City subway lines and PATH trains serving lower Manhattan, coupled with the enthusiastic reaction of the employees to their new work schedules, has led the project sponsors to set a new goal of 120,000 participants in the lower Manhattan program for the year 1972.

Passenger Volumes And Deficits

PATH carried 76,525 fewer passengers in 1971 than in 1970, a reversal of the upward trend in passenger volume since the system's new air-con-

ditioned rapid transit cars were placed into service in 1965. Passenger volume in 1971 was 38,877,360, a decrease of 0.2 per cent. The primary cause of this slight decline is believed to be the sluggish state of the economy.

Traffic to and from lower Manhattan declined 1.6 per cent, reflecting decreased employment within the financial district. In contrast, traffic on PATH's midtown line to 33rd Street rose 2.4 per cent. Since over 60 per cent of PATH's passenger volume is oriented to lower Manhattan, the gains on the midtown line were not sufficient to offset the downtown losses.

PATH's deficit during 1971, as reported to the Interstate Commerce Commission, was \$17,800,000. This deficit underlines the problem of operating a high-quality rapid transit service with a capacity which is fully utilized only for brief peak periods of each week day.

New York State Commuter Railroad Equipment Program

A total of 467 air-conditioned passenger cars and eight diesel-electric locomotives have been purchased for use in commuter service within the State of New York on the Penn Central and Long Island railroads since 1962 under the New York State Railroad Equipment Program. Along with other new equipment being purchased by the States of Connecticut and New York under other railroad modernization programs, the Port Authority-financed commuter cars will permit the retirement of virtually all non-air-conditioned pre-World War II railroad equipment still used in commuter service in the eastern half of the Port District.

Eighty new stainless steel multiple-unit electric coaches were delivered in 1971 to the Penn Central Transportation Company for use on the Hudson

and Harlem division lines serving Westchester County. The Port Authority purchased these new cars from the General Electric Company and is leasing them to the trustees of the railroad.

The Commuter Railroad Equipment Program was initiated by the State of New York in 1959 to provide public financial assistance in the purchase of critically needed rolling stock for lease to the railroad providing suburban service on the New York side of the Port District. The Port Authority's role as program administrator is based on concurrent legislation enacted by the States of New York and New Jersey, under which either State may act to make the Port Authority the administrator of its own particular commuter railroad equipment financing program. The approval of the New York electorate in November 1961 permits the State of New York to guarantee up to \$100 million of special Port Authority bonds to finance rolling stock for commuter railroad service.

The Port Authority's agreements with the Metropolitan Transportation Authority and Penn Central require the payment of rentals on the cars in amounts equal to the debt service on the outstanding bonds and administrative costs of the commuter car program. These rentals have been paid when due in accordance with the terms of the various car lease agreements.

As administrator of the program, the Port Authority can neither derive revenues nor incur expenses which may in any way add to or detract from the revenues pledged to Consolidated Bonds or to any Port Authority bonds other than those issued under the program. These State of New York Guaranteed Commuter Car Bonds are not included in determining the amount of the Authority's General Reserve Fund requirements.



Terminals

The Port Authority Bus Terminal in mid-Manhattan, which serves 225,000 travelers each day, including many thousands of commuters chiefly from New Jersey, is the busiest mass transportation terminal in the world. The Bus Terminal was opened in 1950 and an expansion program, completed in 1963, added another bus operating level. Currently still another and even greater enlargement is in progress which will increase the Bus Terminal's capacity by 50 per cent.

The George Washington Bridge Bus Station, built as part of the lower level project of the bridge, opened in 1963. It replaced widely scattered street-level bus loading areas and speeded travel time for commuters.

In addition, the Port Authority built and operates the Port Authority Building, opened in 1932; the New York Union Motor Truck Terminal, opened in 1949; and the Newark Union Motor Truck Terminal, opened in 1951.

The year 1971 brought new and greater challenges for improved service to the Port Authority Bus Terminal. This is already the world's busiest mass transportation facility, through which each day travel the myriad commuters to and from work, the shoppers and visitors of the thriving Port District, and thousands of people on more distant journeys all over the continent. Such is the growing demand that for the second time in the Bus Terminal's 21-year history a major expansion is planned to provide the improved service that the public requires.

The George Washington Bridge Bus Station continued an active record of performance. The Newark and New York Truck Terminals, which are freight consolidation and distribution stations, were 100 per cent occupied during the year.

Port Authority Bus Terminal

When the Port Authority Bus Terminal opened in 1950 it had two levels for bus operations, with provision on the roof for a third bus level. This was deemed adequate for all the future demand foreseeable at that time. But a decade later the need for more bus space was already manifest, and the roof was converted from auto parking to bus operations. Now after scarcely another ten years, the Bus Terminal has again become inadequate to meet the increasing requirements for mass transportation that is efficient and comfortable.

Construction of the new expansion is planned for mid-1972, with completion expected in about two and one-half years. The project calls for extending the existing Terminal to 42nd Street, increasing the Terminal to more than one and one-half times its present size. The Terminal's peak-hour capacity will be about 50 per cent greater.

During 1971 almost 66,000,000 passengers used the Bus Terminal. Although the total number of bus movements remained about the same as in 1970, the peak hour activity continued to increase. This phenomenon is due primarily to the uninterrupted growth of traffic on the middle-distance carriers—the companies which serve areas 20 to 70 miles from the Bus Terminal.

The year was also marked by the growing success of the exclusive bus lane on the New Jersey approach to the Lincoln Tunnel, which was inaugurated in December 1970. This innovation saves 10 to 25 minutes morning travel time for commuters to the Bus Terminal. (See Page 38.)

The Bus Terminal enlargement will require a Port Authority investment of more than \$80 million. Provision will be made for a continuous northward extension of each floor of the

present Terminal, except the street level (where the existing 41st Street will remain), all the way to 42nd Street on the site between Eighth Avenue and the McGraw-Hill Building.

The Bus Terminal's purpose, from the beginning, was to eliminate the congestion and delay of inter-city bus traffic having to use city streets. The planned expansion further serves this objective. New vehicular levels above grade will bridge over 41st Street and become accessible to the existing overhead ramp system which is part of the complex of approaches to the Lincoln Tunnel. The tunnel will also be connected to the existing and new bus levels below grade by means of a new underpass for buses only, to be constructed beneath West 41st Street, emerging west of Ninth Avenue. The new underpass will greatly relieve congestion at the intersection of Ninth Avenue and 41st Street caused by intermingling of long haul buses with other vehicular traffic.

A major feature of the expansion will be its ability to accommodate a high rise office tower in part of the air space over the Bus Terminal extension. It is planned that a private developer will design, finance, construct, own and operate the office building and pay full real estate taxes on the office tower to the City of New York. In addition to providing a needed mass transportation facility in mid-Manhattan and yielding immediate monetary benefit to the City, the project will be completely in accord with the City's plan to revitalize Manhattan's west mid-town area through such improvements as the new Passenger Ship Terminal being built by the Port Authority and the City's program for a convention center.

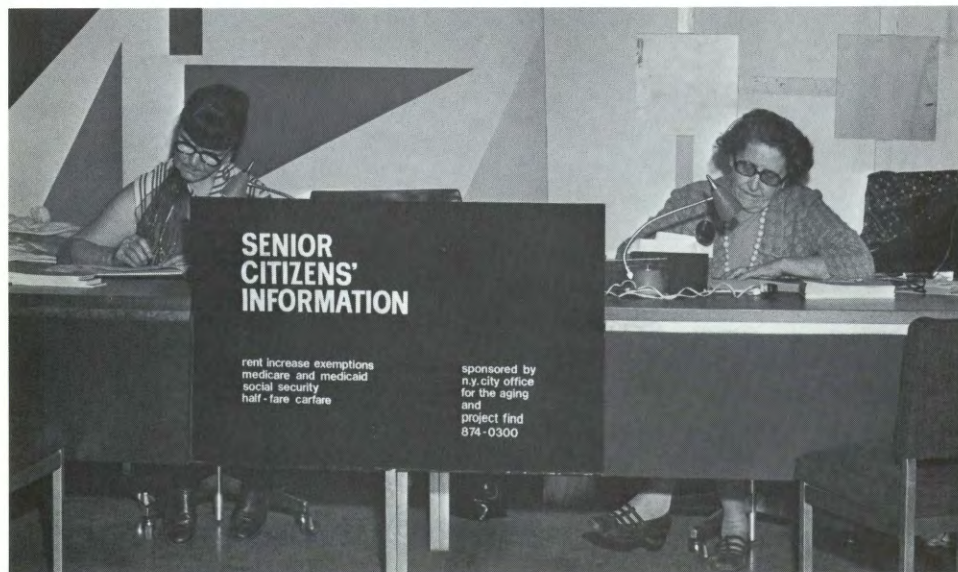
Upon completion, the Bus Terminal expansion will provide parking for 500 additional automobiles. Together with existing capacity, it will be possible to



At the FIND Coffee House, 425 West 43rd Street, which was established in June 1971 through the cooperative efforts of the Port Authority, the New York City Office for the Aging, the Travelers Aid Society of New York and Project FIND, an Office of Economic Opportunity program on the West Side. Here the elderly people of the neighborhood have their own place of recreation. (FIND for Friendless, Isolated, Needy, Disabled.) The lonely men and women who used to sit day after day in the Port Authority Bus Terminal now come to FIND to chat, sip coffee, play cards, read and enjoy a new world of diverse activities.

Mrs. Elizabeth Stechner Trenbony, executive director of FIND, said: "This is the first project of its kind in the country. We've already had inquiries from all over the world about it."

At the Information Center for Senior Citizens (below) in the Bus Terminal's Main Waiting Room, advice is given about housing, Medicare, Medicaid, Social Security and other such subjects of concern. Youngsters of high school age (at right) work as taxi attendants and police aides in the Bus Terminal's Self Help Program—full time in summer and after school during the school term.

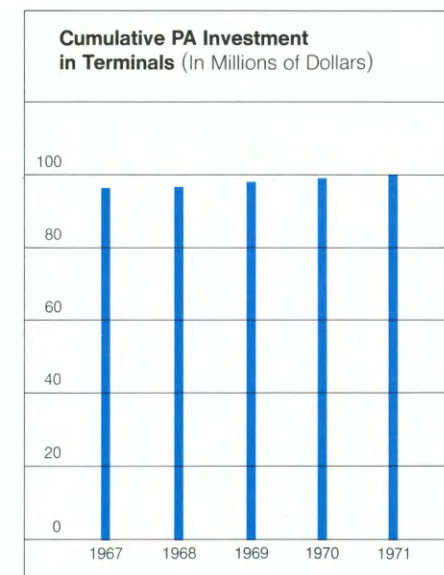
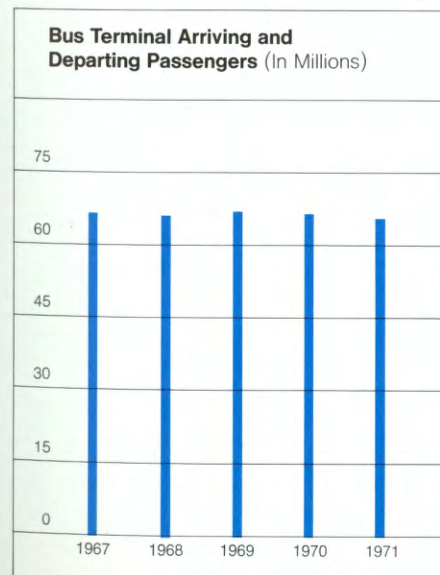


accommodate about 1600 cars. The overhead ramp system between the parking levels and the Lincoln Tunnel will afford parkers direct access between mid-town Manhattan and New Jersey without entering the streets.

In December 1971 the Board of Estimate of the City of New York authorized a zoning reclassification of the present Bus Terminal and the issuance of a special permit to allow the erection of the office tower above the Bus Terminal extension, as well as certain street closing and map changes recommended by the City Planning Commission to accommodate the project. This action of the Board of Estimate had to await the securing of many prior approvals before the project could move forward.

George Washington Bridge Bus Station

The Bus Station serves approximately 45,000 commuters daily. Built as part of the lower level project of the George Washington Bridge, its direct ramp connections to the bridge relieve local streets of about 1,800 daily bus movements. The Station, which serves as focal point for Bergen and Rockland Counties, is in its eighth year of operation.



Bus Terminal patrons on the busy escalators leading to and from the subways. In 1971 almost 66 million passengers, primarily New Jersey commuters, used the Bus Terminal.



Water Transportation

In 1948 the Port Authority, under lease from the City of Newark, began the re-development and operation of Port Newark (opened in 1915) and Newark Airport.

In 1952 the Port Authority began the reconstruction of the historic Hoboken Piers under lease with the United States Maritime Administration and the City of Hoboken (dedicated in 1956 as the Hoboken-Port Authority Marine Terminal).

In 1956 the Port Authority purchased from private ownership two miles of Brooklyn waterfront, which has now been rebuilt and modernized as the Brooklyn-Port Authority Marine Terminal. Also on the Brooklyn waterfront are the Erie Basin-Port Authority Marine Terminal (purchased from private ownership in 1958 and redeveloped) and the Columbia Street Marine Terminal (built in 1922 and transferred by the State of New York to the Port Authority in 1944.)

In 1962 the Port Authority opened the Elizabeth-Port Authority Marine Terminal, an entirely new container facility on Newark Bay in Elizabeth, New Jersey (begun in 1958).

In 1971 the Port Authority began construction of the Passenger Ship Terminal along the mid-Manhattan Hudson River front.

For 1971, general cargo tonnages at the Port Authority's six marine terminals totaled 11,338,838 long tons, a 7.9 per cent drop from 1970. This decreased tonnage activity was directly attributable to an eight-week-long Atlantic and Gulf Coast longshoremen's strike which crippled the flow of United States waterborne commerce.

Construction

The accelerated conversion of the world's general cargo merchant fleet to containerization was directly reflected in the intensified level of con-

struction activity at the Elizabeth Marine Terminal.

Substantial progress was made in 1971 on the construction of a new 87-acre container terminal to be operated by Maher Terminals, Inc., beginning in mid-1972. The terminal will comprise 1,600 feet of berthing space on Newark Bay, two container cranes and a 147,000-square-foot building for receiving and delivery.

Upon completion, the Elizabeth terminal will comprise 16,850 feet of berthing space capable of accommodating 16 modern containerships, and over 900 acres of supporting facilities. This will bring the Port Authority's investment in the facility to \$205 million.

At Port Newark, the reconstruction of Port Street and the initial construction phase of the Navy Area extension project highlighted the year.

Port Street, the major artery leading from Routes 1 and 9 at Newark Airport eastward to Port Newark and the Newark industrial meadowlands, was widened from four to six lanes, completely repaved, and provided with a new drainage system. The new roadway, completed in midsummer, now affords improved access to the seaport for truckers, tenants and employees.

In the Navy Area, several buildings and headhouses dating back to the Navy's World War II industrial ship-building operation were demolished preparatory to developing the site for marine terminal purposes. The reconstruction of Berths 21 and 23 to accommodate modern ocean-going vessels is under way. In addition, a levee enclosing approximately 81 underwater acres was constructed. The enclosure will be filled and sand-surcharged to provide firm footing for new structures.

When the entire extension project is completed in 1975, Port Newark will be provided with an additional 110 acres of upland area along 3,000

feet of new and rehabilitated berthing space. At that time, the Port Authority's total investment in Port Newark will be \$185 million.

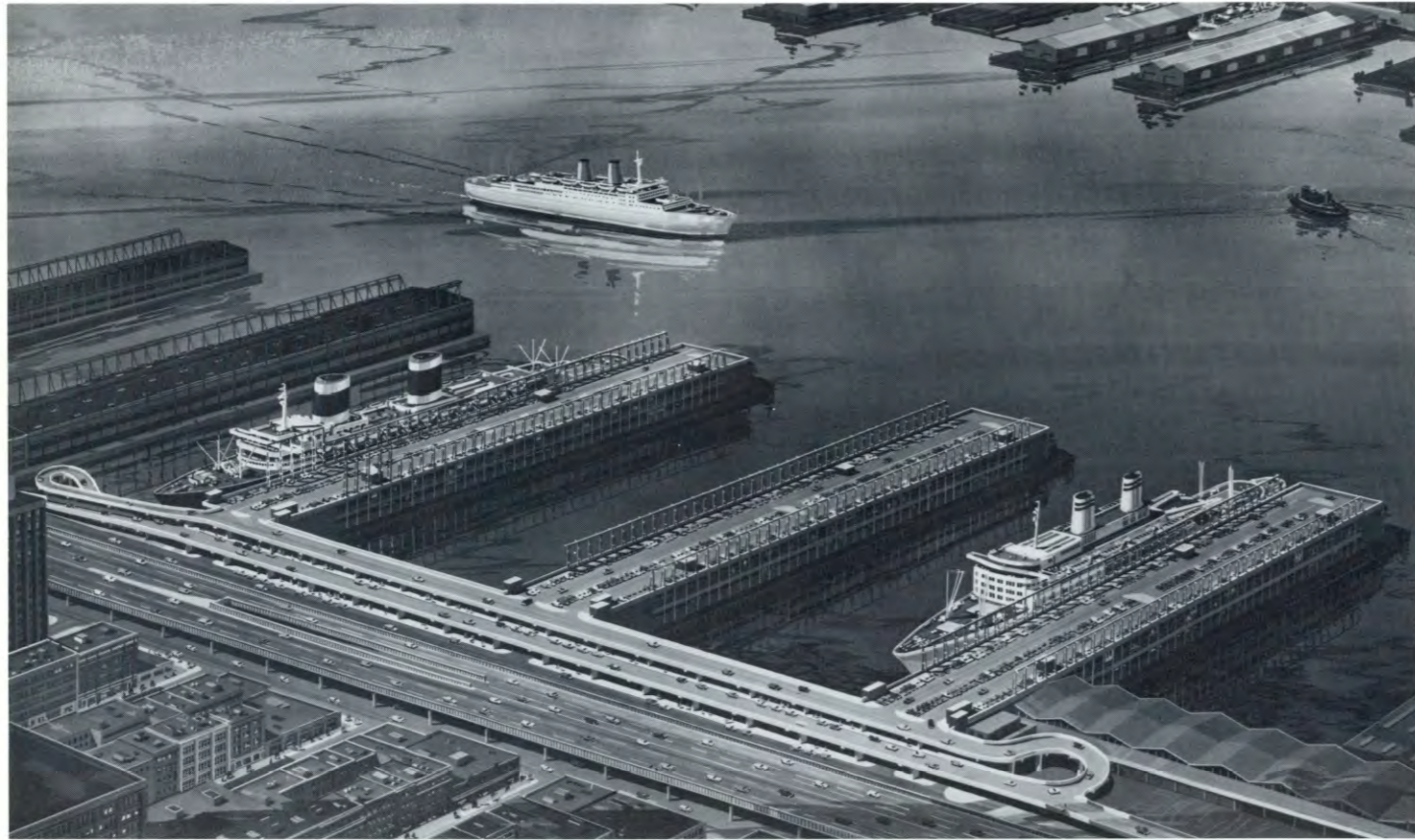
Improved rail access to the Brooklyn waterfront has been realized by the construction of a rail platform at Piers 4 and 5. This project took on added significance with the decline of intra-harbor lighterage service. The platform has increased the capability of the Brooklyn piers to handle rail cars in carfloat service via the New York Dock Railway.

Paving programs at Port Newark and Elizabeth continued rapidly. During 1971, an additional 127 acres of upland area were paved at the seaport complex.

Passenger Ship Terminal

Construction of a six-berth Passenger Ship Terminal between 48th and 52nd Streets on Manhattan's Hudson River waterfront commenced on November 1. This followed the Federal Maritime Commission's approval, in late October, of the agreement between the Port Authority and the City of New York for the construction and operation of the terminal. The terminal will be financed principally by the City, and will be constructed and operated by the Port Authority under a 20-year lease. The bi-State agency will collect user charges from the steamship lines to cover the rental payments to the City and operating and maintenance costs.

The new terminal will be created by rebuilding the interiors of Piers 88, 90, and 92 and refurbishing their exteriors. The second level of the piers, to be heated and air conditioned, will be used for passengers and baggage. The ground level of each pier structure will be retained as a service area for the delivery of equipment and ships' stores. Flat roofs will replace the piers' peaked roofs, with ramps



The new Passenger Ship Terminal, now under construction on the Hudson River between 48th and 52nd Streets, as it will look upon completion. The six-berth terminal for trans-Atlantic and cruise ships will provide comfortable and attractive passenger facilities that have been needed for many years.

leading to rooftop parking areas capable of accommodating about 1,000 cars.

In addition, Pier 40 at Houston Street will be used as a companion three-berth facility, thus providing a total of nine steamship berths to accommodate trans-Atlantic and cruise liners.

The total project will cost an estimated \$36,900,000. Pending the scheduled completion in March 1974, passengers will be conveniently served by facilities at Piers 40, 84, 86 and 97.

Elizabeth Annex

An agreement announced in October by Governor William T. Cahill of New Jersey provides for the leasing of property immediately adjacent to the Elizabeth Marine Terminal from the Central Railroad of New Jersey which will enable the Port Authority to provide

the additional distribution space and upland marshaling areas required to meet future containerized cargo demands at Port Newark and Elizabeth. In addition, a new 4,750-foot-long, four-lane roadway linking Bay Avenue with North Avenue will be built on the leased property, thereby providing improved southerly highway access to the seaport.

Under the comprehensive agreement, the Port Authority has leased two parcels of property from the CNJ totaling approximately 127 acres located to the west of McLester Street. The CNJ constructed and began operation of a railroad container yard on its adjoining property to handle forecast increases in rail traffic to the port area. The agreement would provide the Central Railroad with substantial new revenues, and would bring the

City of Elizabeth tax revenues which could grow beyond \$500,000 a year.

Hoboken Lease

With the expiration of American Export-Isbrandtsen Lines' lease at the Hoboken Marine Terminal on November 30, John W. McGrath Inc., terminal operators, signed a three-year agreement with the Port Authority assuring uninterrupted service at the facility. John W. McGrath has been the stevedore at Hoboken since 1961, operating the terminal for American Export and other lines. American Export moved its operation from Hoboken in November, 1970, but McGrath continued to operate the facility for Alcoa, Blue Sea Line and China Merchants Line. The McGrath firm estimates that it will handle about 400,000 tons of cargo at Hoboken in 1972.



At the start-of-construction ceremony for the new Passenger Ship Terminal. Mrs. Helen Delich Bentley, Chairman of the Federal Maritime Commission, helps pull down iron railing of abandoned piers, with Port Authority Chairman James C. Kellogg, III, wearing hard hat (left), and Mayor John V. Lindsay of the City of New York (right).

LASH Operation

Prudential-Grace Lines expanded its Port Newark terminal and leased additional berthing space and upland area at the Elizabeth Marine Terminal to accommodate its LASH (Lighter-Aboard-Ship) operation. Cargoes are loaded aboard LASH lighters by a shore-based mobile crane at Berths 2 through 6 at Port Newark. The lighters are then towed to Berth 78, Elizabeth, for loading aboard a LASH vessel. By this co-terminal operation, Prudential-Grace can simultaneously load containers over the ship's side from the wharf at Elizabeth, while lighters, prestowed at Port Newark, are being handled over the stern.

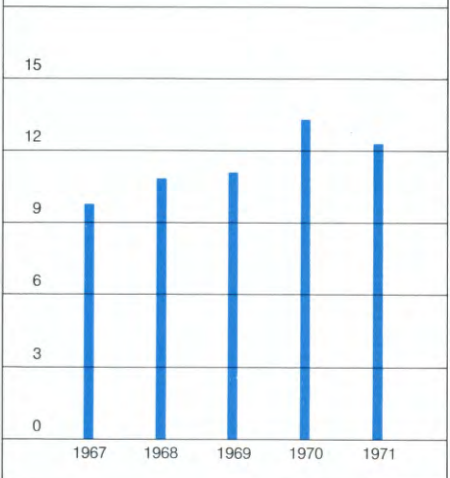
Port Service Improvement Committee

The Port Service Improvement Com-

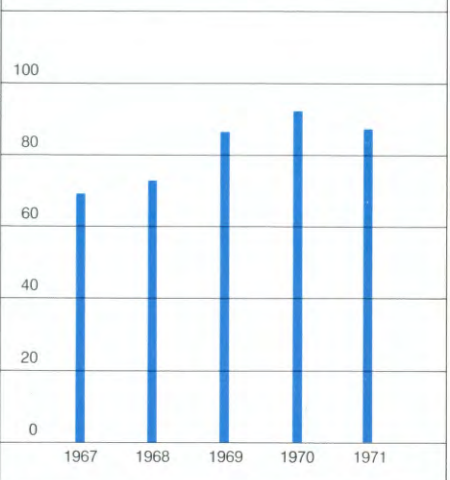
mittee, an interdepartmental Port Authority group formed in 1970, made significant improvements affecting service in shipping waterborne cargoes through the bi-State Port. One of its major projects, the Port Orientation Program, has done much to educate newly hired shipping industry personnel about specialized port operating techniques. This program has become the focal point of an increasingly effective campaign to improve inter-industry communication and understanding.

The Committee has also begun a concerted effort to improve the shipping interface among the various transportation modes involved in the movement of oceanborne cargoes. The interchange between motor carrier and ocean terminal has received particular attention. In addition to an

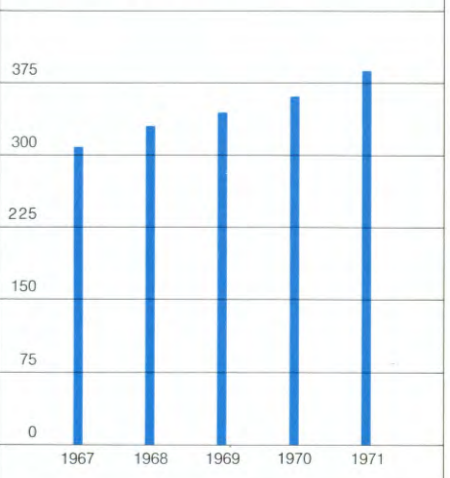
Tonnages at PA Marine Terminals (Long Tons Millions)



Payrolls at PA Marine Terminals (In Millions of Dollars)



Cumulative PA Investment In Marine Terminals (In Millions of Dollars)





The Elizabeth Marine Terminal continued to expand to accommodate the accelerated trend towards the use of containerships. At adjoining Port Newark an extension project was also under way.

One of the new ACT containerships (below), largest refrigerated container vessels afloat, at Elizabeth on maiden voyage from Australia and New Zealand.



intensive operational study of the present interface, Committee staff has also developed new truck appointment systems and more efficient import documentation.

The Committee is also developing a computer simulation model of a containerized marine terminal. The objective of this model is to offer flexibility in developing guidelines for future terminal design as well as to provide a means of evaluating alternative strategies for improvement of current operations at marine terminals. Paralleling this project are the Committee's efforts toward eventual implementation of a system of electronic data communication for the entire Port. The use of computer techniques in the flow of documentation can do much to ease the paperwork bottleneck in ocean commerce.

To further simplify the documentation process, Committee staff has been consulting with the Bureau of Customs and the National Customs House Brokers and Forwarders Association on the design of a standard delivery order for import cargo at the Port.

The latest Committee project is the Seaport Information Center now in operation at Port Newark. The Center, located in a forty-foot trailer, is staffed and equipped to provide directions and general information to the many truckmen and private individuals who now enter the area not knowing how they should go about picking up or delivering their cargo.

International Association of Ports and Harbors

A. Lyle King, Director of Marine Terminals, was elected President of the International Association of Ports and Harbors at the organization's biennial conference in Montreal in June 1971.

The principal aim of the Association is to increase the efficiency of

member ports through cooperative studies of port development and operations. The Association's Special Committee on Large Ships gathers information and forecasts the future need for deeper channels throughout the world in view of the larger vessels being built. The Special Committee on Containerization similarly analyzes future port and terminal requirements to accommodate the growth of containerized shipping.

By providing an opportunity for port and harbor administrators to exchange information and discuss matters of mutual concern, the IAPH, with 164 member ports in 57 nations, does much to advance both the growth of waterborne commerce and international friendship.

South Brooklyn Waterfront Redevelopment

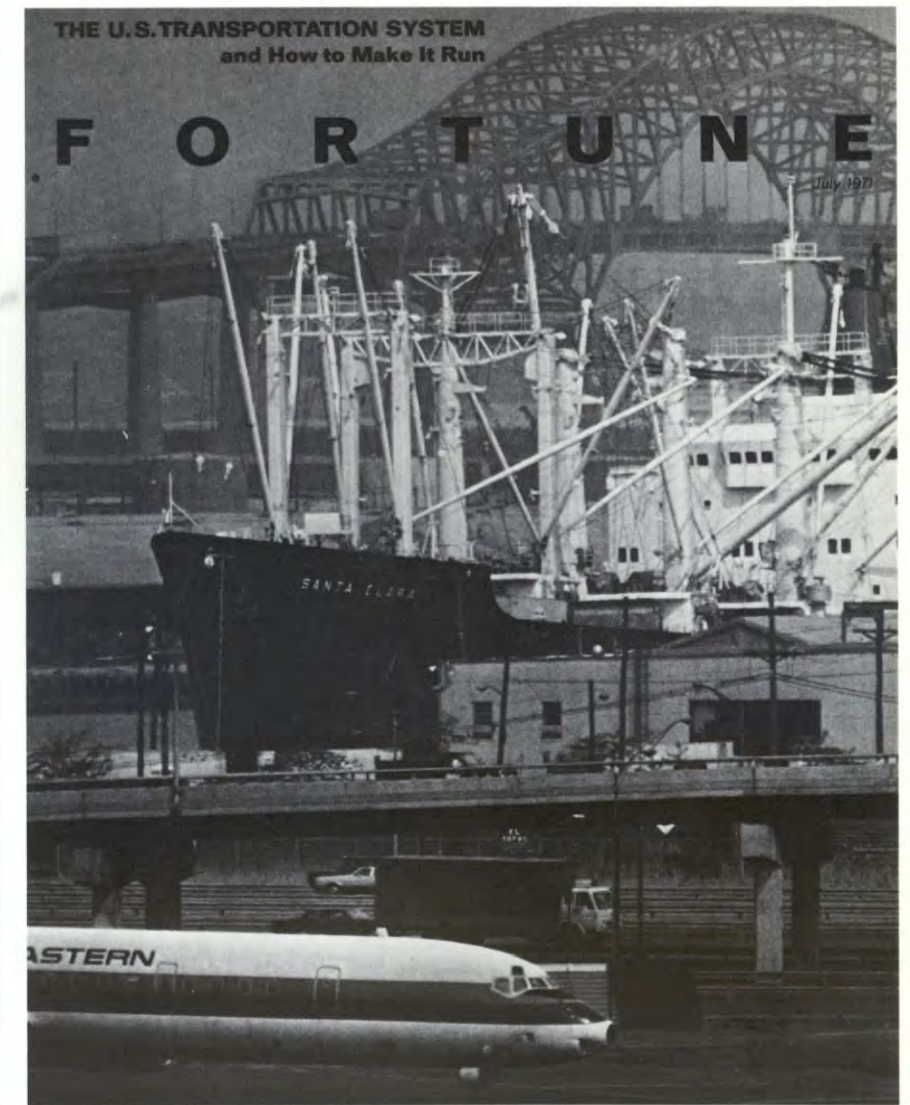
At the request of the City of New York, the Port Authority has been working with the City in planning container terminal facilities to be developed in Brooklyn jointly by the City and the Port Authority along Buttermilk Channel, the waterway that separates Governors Island from South Brooklyn. Discussions of physical and financial plans for this project continued in 1971 between the City, the Port Authority and the Brooklyn community.

Marine Terminals at a Glance

All Terminals	
Ship Arrivals	3,428
General Cargo (Long Tons)	11,338,838
Total Employment	9,430
Estimated Total Payroll	\$87,322,000

New Jersey Marine Terminals	
Ship Arrivals	2,136
General Cargo (Long Tons)	9,459,187
Total Employment	6,907
Estimated Total Payroll	\$62,641,000

New York Marine Terminals	
Ship Arrivals	1,292
General Cargo (Long Tons)	1,879,651
Total Employment	2,523
Estimated Total Payroll	\$24,681,000



This is the cover of the July 1971 *Fortune*, an issue which concentrated on transportation in the United States. The editors searched from coast to coast for a compact and comprehensive view that would include all forms of transportation, and found their ideal photograph in the concentration of mass transportation and shipping facilities in the area of Newark Airport and the Port Newark-Elizabeth seaport.

By courtesy of *Fortune*, the cover (original in color) is here reproduced along with *Fortune's* description:

"The photograph on *Fortune's* cover contains practically every form of transportation except the ricksha. The scene is looking eastward from the control tower at Newark Airport. Photographer Lee Balterman used a 600-mm. lens, which makes distant objects look close; the section of Newark Bay Bridge in the background is about three miles from the control tower. Directly behind the DC-8 airliner is the New Jersey Turnpike, and behind the superhighway is a stretch of the Central Railroad of New Jersey line. The ship, at berth in Port Newark, is a freighter operated by Prudential-Grace Lines."



Air Transportation

The Legislatures of the two States, by legislation adopted in 1947, specifically authorized the Port Authority to operate air terminals in the area.

That same year, the Port Authority concluded a lease with the City of New York under which the bi-State agency undertook the responsibility for further development and operation of LaGuardia Airport (built from 1937 to 1939) and New York International Airport (started in 1941 and opened for operation in 1948). New York International Airport was rededicated as John F. Kennedy International Airport in 1963.

In 1948, under a similar lease with the City of Newark, the Port Authority assumed responsibility for further development and operation of Newark Airport (built in 1928) and the adjacent Port Newark facility.

In 1949 the Port Authority purchased Teterboro Airport from a private owner. In 1970, Pan American World Airways assumed the operation of Teterboro, which is devoted strictly to general aviation uses for business and private aircraft, under a long-term agreement with the Port Authority.

The Port Authority has also constructed two heliports in Manhattan on land owned by the City of New York—the West 30th Street Heliport (opened in 1956) and the Downtown Heliport (opened in 1960).

Air passenger traffic at the three major airports operated by the Port Authority — John F. Kennedy International, LaGuardia, and Newark — continued to reflect the lower levels of activity experienced generally by the air transportation industry over the past two years.

During 1971 a total of some 38 million passengers used the three airports. This represents a 2 per cent increase in traffic over 1970, a year in which passenger activity declined in

the New York-New Jersey region for the first time in history. The slight increase in 1971 brought passenger volumes back to the level of 1969.

The 1971 number of domestic passengers, 27.7 million, was close to that of the previous year. There were 10.3 million overseas passengers in 1971, a rise of 8 per cent, showing some loss of vigor in the growth that overseas travel has had for a number of years. Much of this was due to depressed volumes of Puerto Rico travel.

A 3 per cent decline in aircraft movements was attributable to a reduction in the number of scheduled flights by the airlines and to the greater use of the large-capacity Boeing 747 aircraft, each of which is capable of replacing two conventional aircraft on the routes they serve.

One result of the lower number of flights was the reduction by the Federal Aviation Administration of the number of hours in which its hourly flight allocations would apply to Kennedy Airport. The hourly allocations were removed altogether from Newark Airport, but remain in effect at LaGuardia Airport.

The allocation and reservation requirements of the FAA high density rule, the improved air traffic procedures and the administrative actions taken by the Port Authority have resulted in a 55 per cent decrease in delays of 30 minutes or more at the airports since 1968.

Despite the small increase in passenger volumes at the airports in 1971, indications at year's end were that a general recovery in domestic traffic was under way and the region should be prepared to handle a larger increase in passenger demand in 1972.

Expanding Capacity

Programs to expand Port Authority airports to their maximum capacity continued during the year. Structural work

on the Newark Airport Redevelopment Program neared completion. The \$150 million expansion of the Central Terminal Area at Kennedy International Airport was virtually completed. In addition, plans were announced for a new multi-deck parking structure to be built adjacent to the Central Terminal at LaGuardia Airport.

A new approach to the environmental questions raised by airport expansion was developed by the Port Authority when it commissioned the National Academy of Sciences to study the effects of a proposed extension of the Kennedy Airport runway system on the ecology of Jamaica Bay. The study, financed by the Port Authority and completed early in the year, indicated that construction of new runways would damage the natural environment of the Bay. The Port Authority announced that these considerations would preclude using the Bay for new runways to provide increased airport capacity for the metropolitan region.

In view of the urgent need for additional air terminal capacity, the Port Authority is participating with the FAA and the New Jersey State Department of Transportation in a jointly financed consultant study of STOLport (short take-off and landing airport) sites in northern New Jersey. The study is exploring potential passenger volume, design and accessibility of three sites in northern New Jersey.

Phase Two of the Civil Aeronautics Board Northeast Corridor V/STOL (vertical or short take-off and landing) investigation, which was to have authorized route awards for STOL service between major cities, has been postponed until the spring of 1972.

Taxi Service

Taxi service from Kennedy Airport and LaGuardia Airport to nearby points in Queens and Brooklyn was



The new three-engine McDonnell Douglas DC-10, the first commercial airliner designed to meet the new Federal Aviation Administration standards of reduced sound levels for jet aircraft, was inspected by public officials and community leaders on its demonstration debut in June 1971 at LaGuardia Airport.

Queens Borough President Sidney Levis, after seeing and hearing the DC-10, said: "This is the first major breakthrough in aircraft noise reduction. Noise decibel sound level has been reduced considerably, with the usual high-pitched trailing sounds of earlier jets being virtually muffled."

improved considerably by experimental taxi dispatch programs instituted at several passenger terminals by the Port Authority with the cooperation of the taxi drivers union. Passengers are now assured of taxi service on a first-come, first-served basis regardless of destination, and drivers are assured of returning to a favorable place in the taxi line following their acceptance of a short-haul trip. The program has been so successful it will be expanded to all passenger terminals.

Equal Opportunity

The Port Authority at year's end awarded two contracts embodying a program developed by the Port Authority in cooperation with represen-

tatives of the Newark community to provide for greater participation of minorities in construction work at Newark Airport. The program contains two essential features: a commitment by the contractors employed by the Port Authority to make every effort to achieve goals specified in the contract for employment of qualified minority journeymen and apprentices in their work, and a training program in the construction trades for semi-skilled minority members. A Review Council—which consists of representatives from the Port Authority, the contractor, the community and, if they wish, the unions — will oversee the contractor's program and establish wage rates for trainees on the job.

The airlines operating at Newark

Airport will incorporate similar provisions in their contracts for interior finishing of the new terminal buildings with work beginning in early spring.

In New York, the Port Authority continued efforts to foster minority employment on construction projects at Kennedy and LaGuardia Airports through its contract compliance programs. At year's end, the Port Authority also became signatory to the so-called New York Plan for training workers in construction trades.

The Port Authority supports and serves as a resource for a number of aviation education and career training programs, including that of August Martin High School in Queens. The school provides students with the opportunity to combine training in the aerospace field with a general academic education.

Environmental Protection

The Port Authority continued efforts to reduce and eliminate adverse environmental effects which result directly or indirectly from airport activities.

At Kennedy and LaGuardia Airports, floating collars which collect petroleum products have been placed near drainage outfalls to prevent residues from paved areas from entering adjacent waterways. Procedures have been instituted for absorbing and removing fuel spills, and a comprehensive water pollution control program is under development.

All incineration activity is banned at airports. Steps have been taken to insure that the sulphur content of fuel used for heating conforms with City and State air pollution codes. Where possible, natural gas is being used for heating purposes.

Environmental education programs have been developed for airport tenants, and housekeeping procedures tightened. Airport Pollution Control



At John F. Kennedy International Airport, the aerial gateway of the United States, the International Arrival Building and Airline Wing Buildings complex was expanded to twice the original size at a cost of \$65 million.

One of the 26 waiting lounges (below) of the International Arrival and Airline Wing Buildings, where over 5,000 comfortable seats were provided for departing passengers and their relatives and friends.



Councils, which include tenant representation, were established to review, advance and develop the ongoing environmental programs.

On the aeronautical side, 1971 saw the advent of the DC-10—the first aircraft to come under the Federal Aviation Administration's new noise standards. Wide-body aircraft like the DC-10 and the forthcoming L-1011 are the first aircraft to incorporate all known noise reduction technology. Prior to the introduction of the DC-10 into service at LaGuardia Airport, demonstration flights were conducted for public officials and community leaders. All agreed that the new aircraft was significantly quieter. The progressively greater use of these aircraft is expected to bring considerable improvement.

As far as the existing jet fleet is concerned, the FAA continued to deliberate on whether it should act to reduce engine noise by ordering a program of retrofit — the acoustical treatment of engine nacelles. This course of action is advocated by the Port Authority as the most effective and immediate means of providing relief to airport neighbors. The Airport Operators Council International, an organization of public agencies which operate the nation's leading airports, supports this plan.

Concerned by the slow pace of the FAA's rule-making on retrofit, the Port Authority backed legislation in the Congress that would require prompt implementation. The Director of Aviation, John R. Wiley, testified in July in support of such a measure before the Subcommittee on Aviation of the Senate Commerce Committee.

The Port Authority continued to explore every possible means of noise control at its disposal. It joined with the FAA in supporting an experimental program at Kennedy Airport to attempt to limit the duration of overflights over

a particular community, along with more equitable distribution of these overflights. The experiment was based on a study of community reaction to aircraft noise around Kennedy Airport, sponsored by the National Aeronautics and Space Administration.

The Port Authority also continued to encourage efforts within the industry to control aircraft exhaust emissions. New aircraft, such as the DC-10 and the Boeing 747, are virtually smoke-free. The major airlines continued to equip their aircraft with anti-pollution combustors in accordance with an agreement with the FAA, which will result in the elimination of most smoke pollution by the end of 1972.

Air Cargo

The region's airports handled 1,013,156 tons of air freight in 1971, a 6 per cent increase over the previous year.

The longshoremen's strike along the East and Gulf Coasts during October and November, which diverted much freight from the docks to the airports, contributed to the overall increase. This influx was handled with greater speed and efficiency than the similar diversion caused by the dock strike of 1968-69. The Customs Bureau cooperated in expediting import cargo and the airlines, at the Port Authority's urging, devised a system of cargo space reservations, limitation and re-routing that won approval from the Civil Aeronautics Board. All sectors of the air cargo industry cooperated. In addition, the airlines increased their cargo facilities by new construction and conversion of existing structures.

For the second year, the Port Authority supported legislation to empower the Waterfront Commission to regulate the air freight industry in the New York-New Jersey metropolitan region in the interest of improved security. The bill would give the Com-

mission a number of powers, including licensing of all air cargo firms operating at the airports. The legislation, already enacted by the States of New Jersey and New York, requires the consent of the Congress to become law.

John F. Kennedy International Airport

Kennedy Airport served a total of 19,189,430 passengers in 1971, an increase of 0.5 per cent over 1970. Domestic traffic totaled 9,265,329 passengers, down 6.7 per cent from 1970, but this was offset by a rise in the overseas sector to 9,924,101 passengers, up 8.3 per cent from 1970.

More than \$100 million in new Port Authority construction and expansion was completed or under way at the end of 1971. The \$65 million expansion of the International Arrival and Wing Buildings complex to twice its original size was completed. Construction continued on second-level loading bridges to serve the new wide-body jet aircraft. Work began on enlargement of the lobby of the International Arrival Building, including additional baggage handling facilities in the Customs area. In addition, eight new Plane-Mates, the mobile lounges which raise and lower to different loading levels, were purchased to transfer passengers between the expanded terminal and aircraft at apron gate positions.

At the request of the Port Authority, the airlines using the International Arrival Building scheduled their passenger arrivals during the summer peak period so that not more than 2,500 passengers would arrive in any one hour. In past summers, the number of incoming passengers would often surge during the daily three-hour peak periods, and thus severely strain the capacity to process passengers without long delays. With the 2,500-pas-

senger hourly limitation, and vastly expanded areas, the Port Authority and the airlines have minimized the inconvenience.

Outward relocation of the dual Peripheral Taxiway System, to make room for new construction and expansion of the terminal buildings, was 80 per cent completed. Cargo Taxiways R and S were relocated and widened. Runway 13L/31R was resurfaced. Taxiway erosion pavement was installed to protect the surface against the force of the new jet aircraft.

On-airport portions of three new Instrument Landing Systems were installed on the approaches to Runways 4L, 22R, and 31L. Work is proceeding on the development of an automated Surface Traffic Control System (STRACS), to provide guidance for aircraft moving over Kennedy Airport's extensive taxiway system.

The multi-phase \$175 million construction program of Pan American World Airways is 80 per cent complete. This includes a large-scale expansion of the unit terminal building in the Central Terminal Area and a major maintenance base — the only such facility in the entire Northeast—consisting of a hangar and facilities for the maintenance and overhaul of wide-body jets. The base was partially completed at year's end, and when fully operational will provide over 6,000 jobs with an estimated annual payroll of \$80 million. The Port Authority is financing most of the construction of the maintenance base, which will be available to provide a full range of maintenance for all scheduled domestic and foreign-flag airlines desiring to use the facility. Pan Am will lease the base from the Port Authority for a 25-year term.

The initial phase of Pan American's \$90 million unit terminal expansion was nearing completion, with overseas arrival facilities scheduled for



President Nixon held a news conference at Newark Airport on May 10, 1971 to announce plans for the Gateway National Recreation Area at the entrance to the bi-State port. Upon his arrival, the President was greeted by (left to right) Governor William T. Cahill of New Jersey, Governor Nelson A. Rockefeller of New York, Mayor Kenneth A. Gibson of Newark, and Mayor John V. Lindsay of New York. Behind the President on ramp is U.S. Secretary of the Interior Rogers C. B. Morton.

operation by the summer of 1972. American Airlines has under way an expansion of its hangar to accommodate the new 747 aircraft at a planned cost of \$9 million. Trans World completed hangar expansion for maintenance of the new 747s at a cost of \$8 million.

A number of airline cargo buildings are completed or under construction. These include American Airlines' \$10 million cargo terminal, the joint \$10 million terminal of Scandinavian Air Service and Japan Air Lines, the \$4 million Swissair hangar conversion, and the \$5 million BOAC cargo and service building. Now under way, with scheduled completion dates in 1972, are the \$14 million Lufthansa cargo terminal and expansion of Air France's cargo terminals. In the planning stage are similar expansion projects for other airlines, including Sabena, Alitalia, El Al, KLM, Trans World and United Airlines.

Airports at a Glance

Totals at the Three Major Airports*	
Plane Movements	846,388
Passenger Traffic	37,983,065
Cargo—(tons)	1,013,156
Revenue Mail—(tons)	212,511
Total Employment	55,612
Estimated Total Payroll	\$689,000,000

John F. Kennedy Airport	
Plane Movements	341,814
Passenger Traffic (total)	19,189,430
Domestic	9,265,329
Overseas	9,924,101
Cargo—(tons)	834,765
Total Employment	41,385
Estimated Total Payroll	\$500,000,000

LaGuardia Airport	
Plane Movements	316,570
Passenger Traffic	12,730,150
Cargo—(tons)	43,348
Total Employment	8,396
Estimated Total Payroll	\$117,000,000

Newark Airport	
Plane Movements	188,004
Passenger Traffic	6,063,485
Cargo—(tons)	135,043
Total Employment	5,831
Estimated Total Payroll	\$72,000,000

*In addition, Teterboro Airport, operated for the Port Authority under agreement by Pan American World Airways, handled 269,516 non-airline plane movements.

LaGuardia Airport

LaGuardia Airport registered a slight increase in passengers and aircraft movements. Serving an almost entirely domestic market, LaGuardia handled 12,730,150 passengers in 1971, an increase of 7.5 per cent over 1970.

The new wide-body DC-10 aircraft were introduced at LaGuardia during the last quarter of the year. First of the new generation of wide-body jets designed for short and medium haul flights, the DC-10 was designed specifically for service at smaller urban airports such as LaGuardia. Much of the year's work done there was to improve its capabilities to serve the new aircraft. The pile-supported over-water taxiways were strengthened from below by addition of new steel members to support the DC-10's weight. Work also began on the relocation and improvement of taxiways at the eastern end of the airport and the installation of taxiway center line lighting.

Automation was successfully introduced in parking lot toll collections, providing greater financial control and reliability. Plans were announced for a new, multi-story parking structure in the main terminal area, as well as additional terminal area roadway frontage, a feeder service road to parallel the Grand Central Parkway, and a new roadway entrance to the Marine Terminal Area.

American Airlines installed additional terminal facilities in the west end of the Terminal Building and in the adjacent hangars.

Newark Airport

Passenger traffic at Newark Airport continued to decline in the wake of reductions in airline schedules. The year's total of 6,063,485 passengers was 6.1 per cent below 1970.

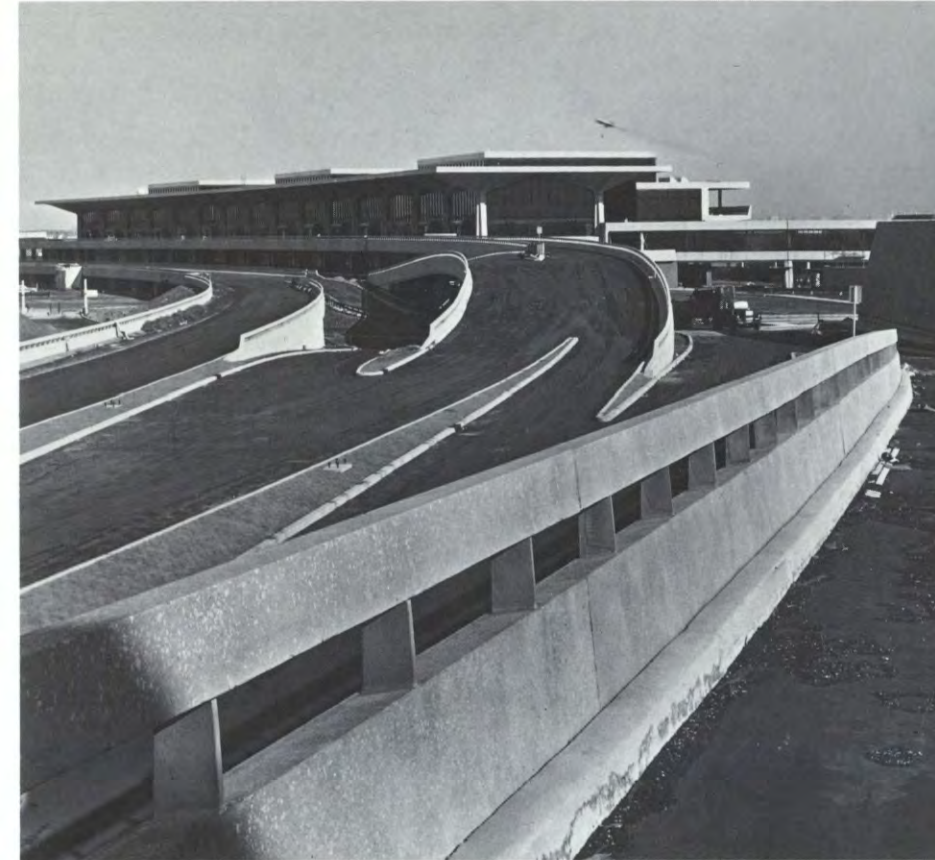
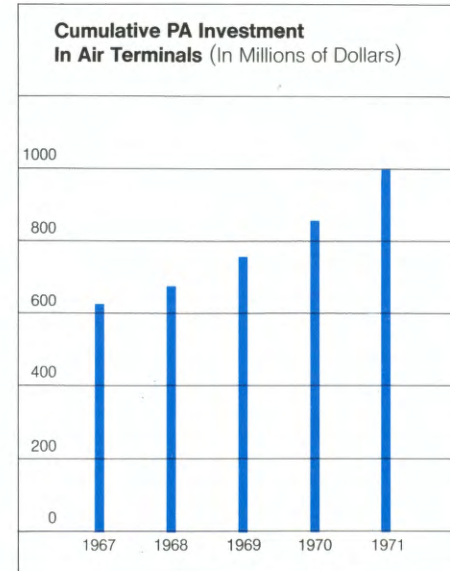
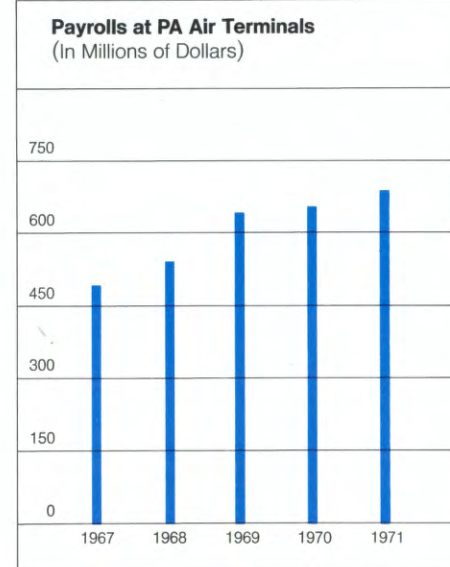
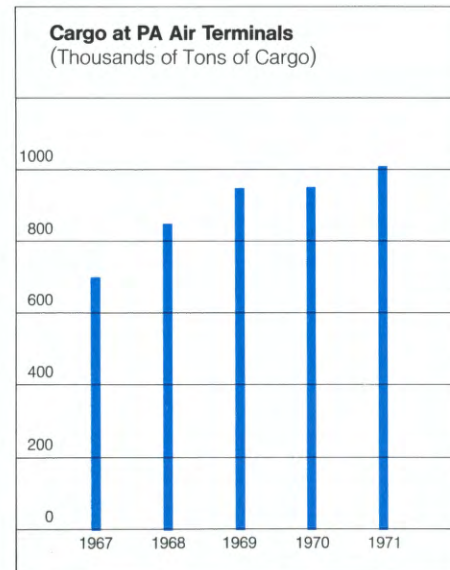
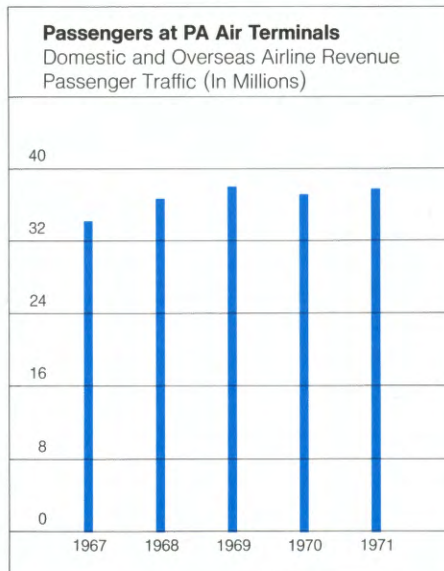
In addition to the new instrument

runway, 4L-22R, commissioned in 1970, the superstructures of Terminals A and B, together with associated roadways, auto parking, and major utilities for the new Central Terminal Area were virtually completed at year's end. The foundations for Terminal C are completed and the structural steel substantially in place. The Authority will finance approximately \$80 million of the construction of interior finishes in the three new terminals.

The last major landfill project under the Newark Airport Redevelopment Program was undertaken during 1971, to prepare the site for future parking lots and hangars in the southwest portion of the airport. Approximately 5 million cubic yards of fill are being dredged and delivered to the 250-acre site by a specially constructed hydro-barge.

Teterboro Airport

A master plan for Teterboro Airport was implemented during the year by Pan American World Airways, which operates the airport for the Port Authority. Four new hangars were virtually completed, one of which will house the operations and maintenance base of the Port Authority's helicopters. A fifth hangar is planned.



One of the three new terminals under construction as part of Newark Airport Redevelopment Program. Three-level system provides separate roadways for departures (top), arrivals (just below) and parking lot (left) which extends under roadway and under part of terminal building.



A close-up of the departure-level upper roadway at a new terminal building at Newark Airport, showing extraordinary width of roadway and curbspace along the building's long, curved front.



"Planemate" at Kennedy Airport is one of eight mobile lounges which transport passengers in air conditioned ease between aircraft and terminal building. Each "Planemate" carries up to 125 passengers and can be raised or lowered to proper heights.



Tunnels and Bridges

In 1924 the two States enacted legislation authorizing the Port Authority to build, operate and maintain the Goethals Bridge and the Outerbridge Crossing (both begun in 1926 and opened to traffic in 1928).

In 1925 the two States authorized the Port Authority to build, operate and maintain the George Washington Bridge (begun in 1927 and opened in 1931; lower level begun in 1958 and opened in 1962). The Bayonne Bridge was authorized by New Jersey in 1925 and by New York in 1926 (begun in 1928 and opened in 1931).

In 1931 the two States enacted the Bridge and Tunnel Unification Act under which control, construction and maintenance of interstate bridges and tunnels within the Port District were unified under the Port Authority. Control and operation of the Holland Tunnel (begun in 1920 and opened in 1927) was vested in the Port Authority.

Also in 1931 the two States authorized the Port Authority to construct the Lincoln Tunnel (first tube begun in 1934 and opened in 1937, North tube opened in 1945; South tube opened in 1957).

Traffic at the Port Authority's six tunnels and bridges between New Jersey and New York totaled 154,362,149 vehicles in 1971, an increase of 4.1 per cent over 1970. The time-saving exclusive bus lane on the New Jersey approach to the Lincoln Tunnel, inaugurated in late 1970, was acclaimed by commuters. The one-way toll collections, also begun in 1970, continued to operate smoothly. Major roadway rehabilitation was well under way at the Goethals Bridge and the Outerbridge Crossing. At the Lincoln and Holland Tunnels, the effectiveness of the tunnel police was increased by the installation of a computerized traffic surveillance and control system.

In 1971 the slow recovery in national economic activity tended to hold traffic volumes down, especially in the cyclically sensitive category of truck traffic, but unusually good weather at the beginning and end of the year more than compensated for this.

The Goethals Bridge, with a 10.1 per cent rise in traffic volume, showed the greatest growth for 1971 of all the six interstate facilities. Various improvements, especially on the New Jersey Turnpike, have brought traffic growth on the Goethals Bridge back up to the high rates experienced after the opening of the Verrazano-Narrows Bridge in 1964 by the Triborough Bridge and Tunnel Authority as a southern bypass route around Manhattan.

The southernmost facility, the Outerbridge Crossing, also benefited somewhat from the attractiveness of the southern bypass route, as well as from new commercial development in Middlesex County. Traffic there continues to be handicapped by the lack of good approach roads in both New Jersey and Staten Island.

At the Bayonne Bridge, third of the New Jersey-Staten Island crossings, growth was only 2 per cent. This facility serves only a local area and has no New Jersey limited-access highway connection. Its slow growth reflects these local conditions.

At the Hudson River crossings, the George Washington Bridge, which was opened to traffic 40 years ago, recorded the greatest increase in traffic, 4.2 per cent. The growth had been unusually low in 1970 because of various highway construction activities. With the continuing growth, congestion has become increasingly evident, especially during the summer, on both the bridge and its approaches. Completion of the median divider on the upper level roadway in late 1970 has added

greatly to the worth of this northern bypass route. Although the divider has reduced the number of lanes available in peak hours, this improvement brought an easier flow of traffic as well as greater safety for travelers.

Mounting congestion is also mainly responsible for the low growth rates at the two tunnels, 1.7 per cent at the Holland Tunnel and 2.2 per cent at the Lincoln Tunnel. High priority is being given to bus mass transit, in order to provide better service for commuters. This is manifest in the inauguration of the exclusive bus lane operation at the Lincoln Tunnel, and in research programs to increase the utility of all crossings.

The growth rate of automobile traffic showed strength throughout 1971. Truck traffic, which had declined sharply in late 1970, began recovering slowly in the early months of 1971 and in the last half was growing at a strong 5 per cent rate.

Regional Traffic

The soundness of providing northern and southern bypass routes continues to be confirmed by experience. The bypass concept was developed during the mid-1950s in a joint study of arterial facilities for the New York-New Jersey metropolitan area made by the Port Authority and the Triborough Authority. Today, two-thirds of all motorists passing through Port Authority facilities use the peripheral crossings — the George Washington Bridge to the north and the Staten Island bridges to the south—in preference to the two tunnels feeding directly into Manhattan. Trans-Hudson private automobile traffic continued to be only a minor part of vehicular traffic in Manhattan, as over 97 per cent of daily trips ending in Manhattan originate either within Manhattan or in other areas east of the Hudson River.

Both the northern and southern bypass routes are especially attractive to those travelers whose journeys neither begin nor end in Manhattan.

In the near future, connections on both the New Jersey and Staten Island sides will speed travel at the Outerbridge Crossing, particularly for those using the newly expanded New Jersey Turnpike. Connections to both the New Jersey Turnpike and the Garden State Parkway are nearing completion. On Staten Island, over the next few years, major connections will be completed from the Outerbridge Crossing to the Staten Island Expressway leading into the Verrazano-Narrows Bridge.

Exclusive Bus Lane

On December 18, 1971 the exclusive bus lane on the New Jersey approach to the Lincoln Tunnel completed its first year of operation and was widely hailed as an outstanding success. Up to 35,000 commuters save from 10 to 25 minutes on each morning trip to the Port Authority Bus Terminal in Manhattan on their way to work. The average total flow during this peak period was 809 buses. Over the year

The exclusive bus lane on the New Jersey approach to the Lincoln Tunnel completed its first year of operation in 1971. Up to 35,000 commuters save from 10 to 25 minutes travel time each morning on their way to Manhattan.



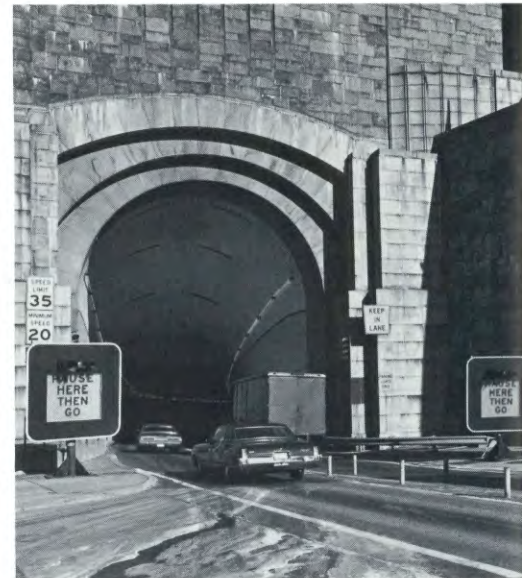
the exclusive lane attracted a 6 per cent increase in bus riders.

Tunnel Traffic Control System

Installation of the Tunnel Traffic Control System in the north and center tubes of the Lincoln Tunnel and both tubes of the Holland Tunnel was substantially completed and the equipment was operational at the end of 1971. The system has been successfully operating in the Lincoln Tunnel south tube since 1965. This is a computerized traffic surveillance and control system which identifies incipient traffic stoppages. During peak hours, it controls the quantity of traffic entering a tunnel, in order to maximize traffic flow through the tunnel. A closed circuit television system for remote visual coverage of the tunnel, catwalk cars for quick police response to traffic stoppages, environmentally controlled shelter booths at the police posts in the tunnel and a two-way tunnel radio system complete the elements of the system for each tube.

One-Way Toll Collection

The one-way toll collection system, begun in 1970, with tolls collected



Traffic in the Holland and Lincoln Tunnels is controlled by computer-regulated signs capable of any one of seven legends, or none, as needed.

only in the eastbound direction at all six Port Authority vehicular crossings, continued to please the public. This change permitted elimination of unnecessary toll booths at the George Washington Bridge, the Lincoln Tunnel and the Holland Tunnel. Work at the Bayonne and Goethals Bridges will be completed in 1972. At the Outerbridge Crossing certain toll lanes have been closed pending complete plaza reconstruction.

Goethals and Outerbridge Roadway Rehabilitation

Work began in June 1971 at the Goethals Bridge on roadway rehabilitation. To avoid inconvenience to motorists, all work was done during the night. In addition to the roadway resurfacing, the expansion joints are being replaced and associated roadway slabs are being repaired. The work will be completed in 1972.

The first phase of a major rehabilitation of the Outerbridge Crossing's roadway pavement was completed in 1971. This was in anticipation of increased traffic volumes upon completion of new highway connections on the New York and New Jersey sides.



A split-screened TV monitor of the Tunnel Traffic Control System shows the approach to and departure from one of the numerous monitoring points.

This initial work, on the New York viaduct, consisted of removing the asphalt overlay in the center 32 feet of the roadway, repairing and sealing the structural concrete-slab base and restoring the riding surface with new asphalt pavement. The second phase of the rehabilitation is scheduled for 1972 and will include the bridge span and the New Jersey viaduct.

Research

As part of the United States Department of Transportation's Urban Corridor Demonstration Program, the Tri-State Regional Planning Commission has designated the Port Authority research staff to develop and implement the installation of a traffic surveillance system and an automatic bus identification system on Interstate 495, which connects the New Jersey Turnpike and New Jersey Route 3 with the Lincoln Tunnel and the Manhattan Central Business District. The objective is to relieve congestion on this highway, the most heavily traveled corridor in the country, by more rapid detection and response to incidents which cause congestion. Work on both systems, which will rely on the use of

on-line computer systems for data accumulation, analysis and control purposes, began in late 1971 and will continue until mid-1973. Other studies during 1972 will continue on potential uses of on-line computer technology to serve such operational functions as toll registration, automatic toll collection and tunnel ventilation control.

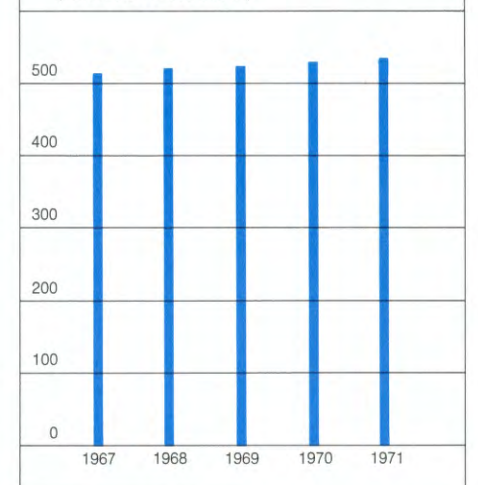
Crossings (traffic in thousands)

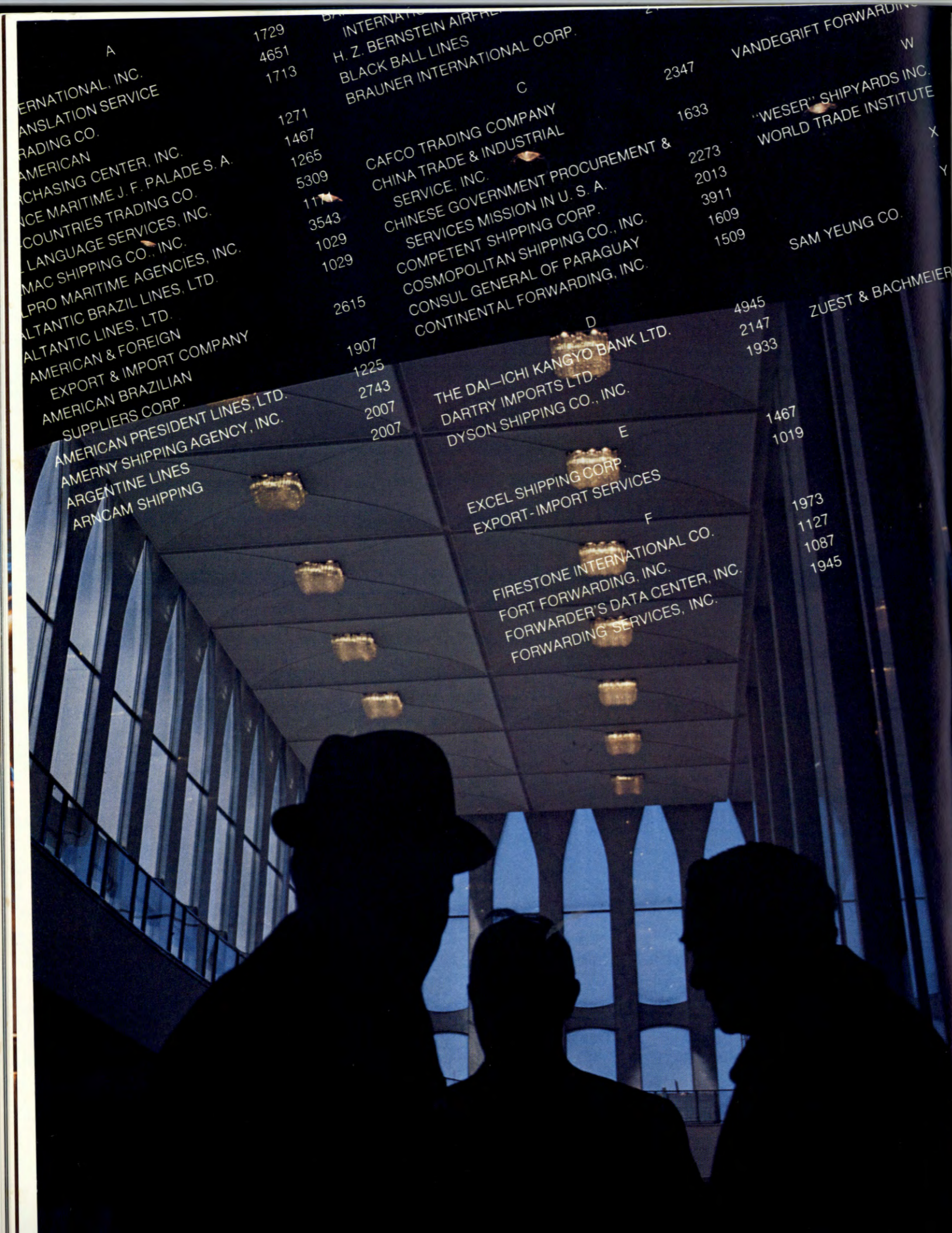
	1971	1970
All Crossings		
Automobiles	133,899	127,931
Buses	3,573	3,723
Trucks	16,890	16,627
Total Vehicles	154,362	148,281
George Washington Bridge		
Automobiles	67,250	64,455
Buses	599	647
Trucks	6,248	6,040
Total Vehicles	74,097	71,142
Lincoln Tunnel		
Automobiles	25,562	24,818
Buses	2,781	2,883
Trucks	3,850	3,806
Total Vehicles	32,193	31,507
Holland Tunnel		
Automobiles	16,600	16,065
Buses	82	87
Trucks	3,763	3,960
Total Vehicles	20,445	20,111
Staten Island Bridges		
Automobiles	24,487	22,593
Buses	111	106
Trucks	3,029	2,821
Total Vehicles	27,627	25,520



Port Authority police on duty at a bank of TV monitors which continuously observe tunnel traffic.

Cumulative PA Investment In Tunnels and Bridges (In Millions of Dollars) (Includes GWB Bus Station)





World Trade

The flow of international commerce through the New Jersey-New York Port is the foundation of the economy of the region, and the Port competes with other ports for that business. In accordance with the Port Compact of 1921, the Port Authority, therefore, carries on a continuing program to encourage the shipment of cargo via this port. To accomplish this program, the Port Authority maintains Trade Development Offices in Chicago (opened in 1945), Cleveland (1948), Washington (1948), New York (1955), London (1958), Zurich (1958), San Juan (1959), Pittsburgh (1959), and Tokyo (1966).

In 1962, the two States directed the Port Authority to develop a new facility of commerce — The World Trade Center — to promote the flow of international trade through the port. Construction of the Trade Center began in August 1966; the first tenants moved into the complex in December 1970.

A growing community of world trade firms and organizations representing the full range of international commercial activities was already operating from The World Trade Center in 1971, even while construction work continued through the complex. At the end of the year, more than 150 international firms and government agencies had already established offices in The World Trade Center's North Tower Building — address One World Trade Center, New York, New York 10048. This vanguard of organizations included importers, exporters, freight forwarders, Custom House brokers, international banks, steamship lines, agents and brokers, trade associations and overseas government trade offices. The 2,558 employees engaged at year's end are the first of some 50,000 people who will be working in The World Trade Center every day when the project is completed.

Construction of The World Trade Center, undertaken by the Port Authority in accordance with legislation enacted by the States of New York and New Jersey in 1962, made a number of significant advances during the year. These included the opening of the new PATH World Trade Center Terminal in early July; the topping out of the South Tower Building, also in July; the opening of the World Trade Institute in September; the completion of the North Tower Building's spacious main lobby in December; and a working demonstration of the Interfile trade communications system which will ultimately link The World Trade Center with similar centers around the world.

Construction and Operations

With the topping out of the South Tower Building, both tower buildings reached their full 110-story height. While the tower buildings rose skyward, work proceeded on the completion of the Port's new United States Custom House at the northwest corner of the 16-acre site, and the Northeast Plaza Building. Excavation work proceeded throughout the year in preparation for construction of the Southeast Plaza Building.

The installation of building operating equipment in both tower buildings is keeping pace with construction time tables. Virtually all steel erection for the tower buildings, the Custom House and the Northeast Plaza Building was completed during the year, and the configuration of the plaza, with its fountain area, was clearly apparent.

In July 1971, the American Society of Civil Engineers cited The World Trade Center as the outstanding civil engineering achievement for the year. The society's selection was made on the basis of criteria which included the contribution of the project to the well-being of people and communi-

ties, resourcefulness in planning and in the solution of design problems, pioneering in the use of materials and methods, innovations in construction, and aesthetic values. As a winner of the ASCE citation, The World Trade Center joins a distinguished roster of outstanding engineering projects honored in previous years, such as the NASA complex, the Chesapeake Bay Bridge-Tunnel, the St. Louis Gateway Arch and John F. Kennedy International Airport.

At year's end 3,500 men were working on The World Trade Center site. Special efforts continue to be made to increase minority participation in the project. Contracts for electrical and painting work at the Center were awarded during the year to minority contractors, and two additional firms received awards for tenant alteration work. In the area of minority worker representation, emphasis was placed on obtaining job opportunities in the highly skilled trades. These efforts were particularly successful in the steam fitter and iron worker crafts.

Operational demands of The World Trade Center assumed greater importance as the number of tenants increased during the year. The Operations Staff, located in the Trade Center, handled an exceptionally heavy workload which included the preparation and administration of maintenance contracts for mechanical and electrical labor, elevator servicing, temperature controls and refrigeration equipment, and building cleaning services. These extensive operational responsibilities also involve the management of security forces and the operation and maintenance of the Hudson River water pump station, the refrigeration equipment, mechanical equipment rooms, and miscellaneous electrical systems. Other activities included the implementation of a fire safety plan in con-



The World Trade Institute's first class of 36 international businessmen and government officials from 26 countries, attending an eight-week work-study course in export procedures and trade development, prepared in cooperation with the Agency for International Development and the United Nations Industrial Development Organization.

formity to new rules and regulations for high rise buildings promulgated by the New York City Fire Department.

Plans for the development of a hotel as part of The World Trade Center project were in abeyance pending further discussions with the office of the Governor of New Jersey, who had vetoed a proposed agreement between the Port Authority and a hotel operator. At year's end, additional information was being developed at the Governor's request on the size and cost of a hotel.

World Trade Institute

In September the World Trade Institute, the education arm of The World Trade Center, welcomed its first class of 36 international businessmen and government officials from 26 countries. They joined in an eight-week course in export procedures and trade development, which was prepared in

cooperation with the Agency for International Development and the United Nations Industrial Development Organization.

The course marked the first step in the Institute's planned program of providing a forum where businessmen of all nations can meet to explore new markets, discuss mutual problems and develop the concepts, techniques and procedures that can lead to expanded international trade. Institute courses are unique in their practical and timely approach to international trade.

Two additional Institute courses completed during the year included a five-week work study program in export and trade promotion and a special language course. Beginning in 1972, the Institute will offer courses, work shops and seminars tailored to the needs of American companies seeking to expand their export markets. Scheduled Institute activities over the next year include product

and craft adaption conferences, export expansion seminars, a multinational management program, port service management work shops, and the establishment of a product analysis and research center.

Institute courses were held during the year in temporary quarters on the 13th floor of the World Trade Center North Tower Building. Permanent Institute facilities will be located on the 55th floor of the North Tower Building, where the Institute's educational facilities will include flexible classroom areas, seminar rooms, a two-level international business reference library and specially equipped language laboratories. Institute areas will be designed for computer-assisted problem analysis and simulation. Institute students will also have access to vast quantities of international business information through the facilities of The World Trade Center's Information Center.

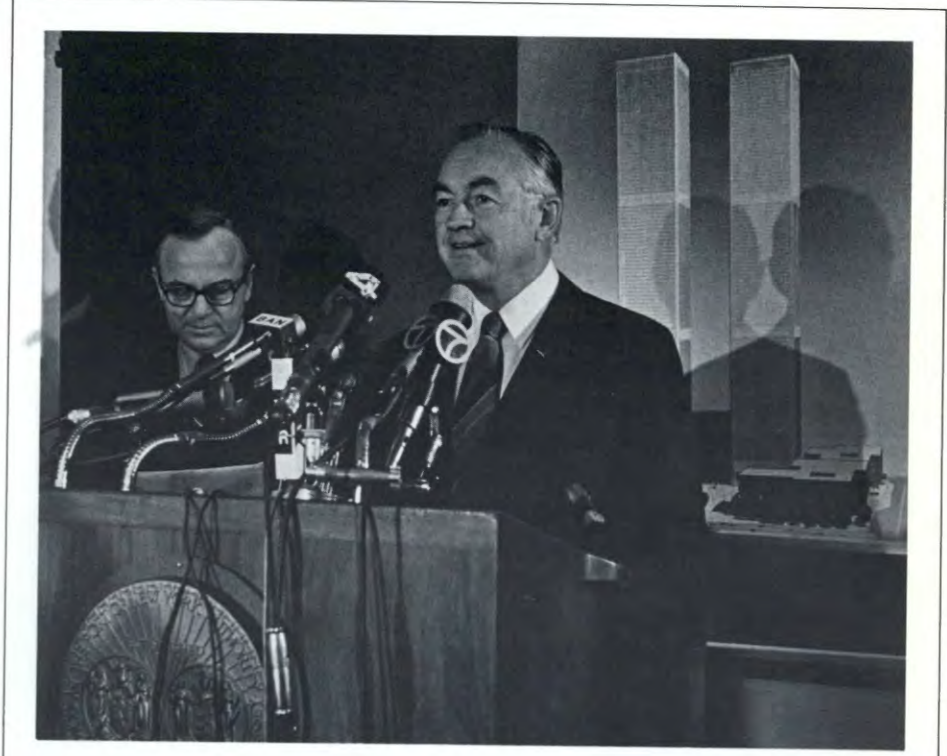
Communications

A significant advantage of World Trade Center occupancy will be the availability of an Integrated Communications System which will permit direct and immediate contact between firms in the Center on the one hand, and information sources, customers, clients and branch and home offices on the other. The capabilities of this system will extend to the storage and distribution of timely world trade data, the electronic management of a host of business operations and on-the-spot transmittal of world trade documents. Throughout the year, the staff of The World Trade Center worked closely with a group of communications firms which will provide a broad array of telephone, computer, microfilm and television services in the project.

Work also proceeded on the development of Interfile, an automated index of world trade information services which will link The World Trade Center to similar centers in major commercial areas throughout the world. The development of the Interfile system is a principal effort of the World Trade Centers Association, with The World Trade Center in the Port of New York serving as Association headquarters.

A demonstration of the Interfile system was held in June before some 600 officials of world trade centers and representatives of foreign and domestic trade associations and agencies assembled in Brussels for the second General Assembly of the World Trade Centers Association. Prince Albert of Belgium activated this demonstration at the Assembly's opening ceremony.

Interfile was developed by the Port Authority and will become operational on a fully computerized basis at The World Trade Center in mid-1972. Members of the World Trade Centers Association will participate by adding data on the best information sources



U. S. Secretary of Commerce Maurice H. Stans was an enthusiastic visitor at The World Trade Center in November 1971, just before his departure for Moscow for official trade talks.

In a conference with representatives of the news media on the international business situation, Secretary Stans said: "What this World Trade Center will do will be to concentrate a great many American and foreign companies interested in foreign trade activities. I believe that this temple of trade will be a symbol of the opportunity that exists in the United States to develop commerce with other countries and I think that the proximity of traders to each other, the particular location here in New York, the excellence of the facilities, ought to make this a tremendous vehicle for the expansion of our trade. And heaven knows, we need that."

of their respective regions. Thus the Interfile system has the capability to become the best collection of trade information sources available anywhere in the world. Interfile will be accessible from most foreign trade center locations via the General Electric Company's time-sharing network. The Interfile service will be located in the World Trade Information Center on the Trade Center's Concourse.

Another service to be offered at the Information Center is the Electronic Yellow Pages (EYP). This is an automated directory of tenants developed by the New York Telephone Company which will provide basic information on all Trade Center tenants. The World Trade Information Center will be a communications hub enabling the In-

formation Center users to make direct contact with tenants and information sources through the use of special telephone links and other sophisticated electronic equipment.

Protecting and Promoting the Port's Commerce

International trade is the single most important factor directly responsible for the economic well-being of the Port District. The Port Authority is mandated not only to protect the commerce of the Port, but also actively to promote that trade. The major responsibility of this promotional activity falls upon the Port Authority's nine Trade Development Offices located in important business and cargo-generating centers in the United States



At the topping out ceremony of The World Trade Center South Tower Building on July 23 as the last beam with banners and traditional flag started up the side to its place at the peak.

At the same ceremony (below), Samuel Baxter, at left, president of the American Society of Civil Engineers, presents Port Authority Chairman James C. Kellogg, III with plaque designating The World Trade Center as the outstanding civil engineering achievement of 1971.

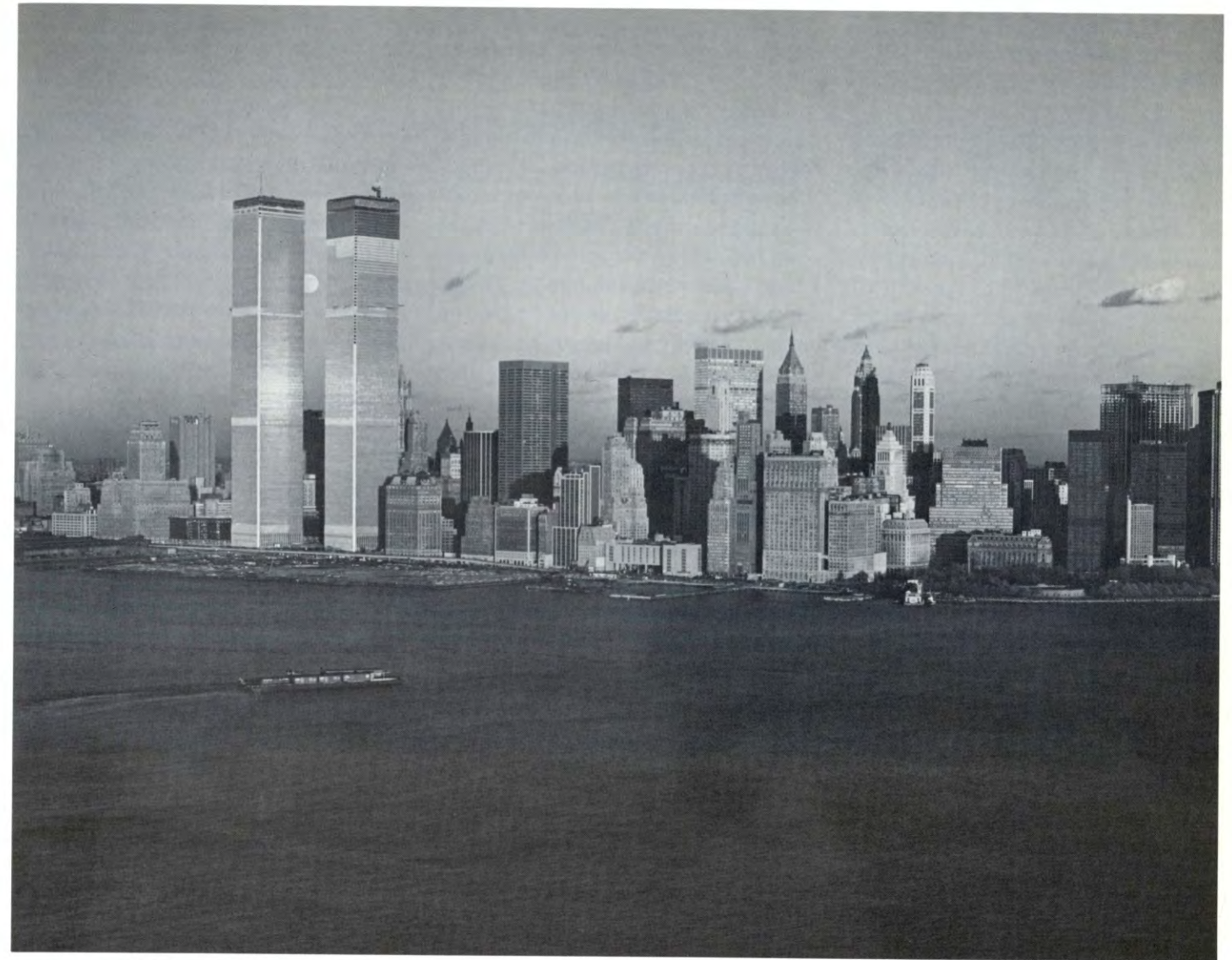


and overseas. In 1971, the staff of these offices made 9,329 calls on shippers in 40 states and 52 foreign countries.

In April 1971 a new film entitled *Gateway to Down Under* was released in connection with the Port of New York's trade mission to Australia and New Zealand. The film focused on the growing importance of containerization in the Australia-New Zealand trade, as well as other modes of transportation, and was enthusiastically received by the international trading community "Down Under." The monthly commerce magazine *Via Port of New York* devoted a special issue to the historic trade links between the Port and the two Australasian commonwealths from the days of clipper ships to the modern containerships. An exhibit featuring The World Trade Center and the Port's outstanding marine terminal facilities was displayed at the United States Trade Center in Sydney and in several other cities.

The Port Authority's advertising program in trade publications, which is designed to inform the shipping public of the Port's facilities and services, won an award from the American Association of Port Authorities for excellence in port advertising for the fifth consecutive year.

In June 1971 the Trade Development Division of the World Trade Department held its Second International Trade Development Workshop. This two-week session in New York was attended by all staff members of the nine Trade Development Offices located in Cleveland, Chicago, Washington, Manhattan, Pittsburgh, San Juan, Tokyo, London and Zurich. The staff was addressed by top management of the shipping industry, airlines, United States Customs, the Port Authority and firms engaged in international commerce. These executives, each an expert in his field, discussed



The World Trade Center at dawn, above the Hudson River and downtown Manhattan, with both the North Tower and South Tower Buildings at their full 110-story height. More than 150 international firms and government agencies are already established in their offices.

the rapidly changing technology in international commerce and transportation as well as potential new markets for international trade.

One measure of the Port Authority's continuing efforts to increase American trade around the world was recognized by the United States Department of Commerce, which presented the Port Authority with the President's E star award for export service.

An E award was first presented to the Port Authority in 1962 in recognition of the contribution made by its Port Commerce program to the devel-

opment of America's international commerce. The E star award, originated in 1969, is given only to past winners of the President's E award, to recognize additional outstanding work in world trade promotion. The Port Authority was the first port organization to receive the E star award.

Additional Charges On Waterborne Traffic

The Port Authority was successful in 1970 in a proceeding before the Interstate Commerce Commission that denied the Eastern railroads an increase

of 4 cents per 100 pounds in rates on export and import traffic. The rail carriers, however, secured a restraining order from the courts and as a result the charge was allowed to go into effect. The matter is presently pending.

Assistance Rendered To Port Carriers

The Port Authority is continually called upon to assist rail and motor carriers in their operations in the Port. In this connection, the agency supported a successful petition of the Central Railroad of New Jersey to have the Com-

mercial Exempt Zone extended to include its yard in Elizabeth for TOFC (trailer-on-flat-car) and COFC (container-on-flat-car) movements.

This extension placed the CNJ's TOFC/COFC services on a competitive level with similar operations of all the other Port District rail carriers. Currently, True Transport, a motor carrier specializing in the hauling of steamship containers, is applying for an extension of operating rights to cover that portion of New York State not presently authorized. The Port Authority has filed in support.

Legal Guard Maintained On Ocean Shipping Practices

The growth of containerization has resulted in many changes in ocean shipping practices. One such innovation is the elimination of multiple ports of call and the concentration on a limited

number of ports in a specific port range. Although calls are advertised, in many instances the ports are bypassed and the ocean carrier arranges and pays for inland transportation to or from the port bypassed. This practice has resulted in numerous proceedings before the Federal Maritime Commission involving both East and West Coast ports, brought by various port organizations at the bypassed ports. The Port Authority is participating in certain of these cases to guard against the establishment of any principle of law that could be detrimental to this Port's interest.

ICC Petitioned On TOFC/COFC Rate Structure

The Port Authority, together with the Virginia Port Authority, Maine Port Authority and Massachusetts Port Authority, has petitioned the Interstate

Commerce Commission to institute an investigation into the rate structure covering export and import TOFC and COFC movements.

This investigation is being sought because of the growing importance of containerization at the bi-State Port. The existing rate structure for TOFC and COFC movements is predicated on a mileage basis. This means that Baltimore, which is generally closer to the important cargo-generating areas of the industrial Midwest, has an advantage over New York.

It will be recalled that in 1963 the Port won a signal victory before the Supreme Court in a rate proceeding which equalized export-import box-car rail rates at all North Atlantic ports. The growth of containerization and container movements in piggyback service have tended to negate the beneficial effects of this hard-won victory.

Proceedings Before the Federal Maritime Commission

Subject Joint Agreement No. 8200 Far East Conference and Pacific Westbound Conference. The Port Authority opposed agreement which could have diverted cargo from New York to West Coast ports. Requested that rates be limited in application. (FMC 872)

Status FMC decision adverse to Port Authority and appealed through the U. S. Court of Appeals and Supreme Court, which found that there was insufficient evidence to disapprove Agreement 8200. Concluded.

Subject Investigation by FMC of overland common points (OCP) and overland rates via Pacific Coast ports. The Port Authority requested FMC to investigate application of OCP rates to cargo that would normally flow through North Atlantic ports. (FMC 65-31) and (FMC 66-61)

Status The U. S. Supreme Court upheld action by a lower court sustaining the FMC decision that OCP rates were lawful under the provisions of the Shipping Act of 1916. Concluded.

Subject Complaint by Empire State Highway Transportation Association against surcharge published by New York Terminal Conference and investigation of surcharge on truck loading and unloading. The Port Authority intervened to assure that level of surcharge would not be detrimental to the commerce of the Port. (FMC 65-39) and (FMC 65-46)

Status Oral argument concluded. Pending.

Subject Investigation by FMC of the procedure followed in handling of truck freight at piers in the Port of New York. The Port Authority intervened to be assured that an equitable detention rule be established at the Port of New York. (FMC 69-28)

Status Pre-hearing conference held. Pending.

Subject New York Shipping Association modified agreement covering formula for assessing charges to cover ILA fringe benefits. The Port Authority opposed the agreement, which would have meant higher shipping costs to the Port of New York. (FMC 69-57)

Status Hearings held. Pending.

Subject Container lines operating in trans-Atlantic trade filed agreement setting up new conference. The Port Authority intervened to protect competitive position of Port of New York. (FMC 69-58)

Status As a result of a request by the steamship lines party to the proposed conference, the FMC has discontinued this proceeding. Concluded.

Subject FMC instituted investigation to determine whether rates maintained by certain carriers operating in the U. S. Atlantic/Puerto Rico trade are just and reasonable. The Port Authority has intervened to protect competitive relationship of New York versus Florida ports. (FMC 70-6)

Status Pending.

Subject Investigation by FMC to determine whether absorption by Sea-Land of motor carrier charges instead of providing direct water service to Portland, Oregon violates the Shipping Act of 1916. The Port Authority intervened to prevent establishment of a principle of law detrimental to competitive position of the Port of New York. (FMC 70-19)

Status Initial report issued finding that under specified conditions, absorptions are legal. Pending.

Subject Investigation by FMC to determine if certain terminal practices of the Port of Seattle violate Sections 15 and 17 of the Shipping Act of 1916. The Port Authority intervened to protect the competitive position of the Port of New York. (FMC 70-50)

Status Pre-hearing conference held. Pending.

Subject Pacific Westbound Steamship Conference proposed to publish a Dual Rate System with the requirement that shippers signing contracts would be required to make all shipments to the Far East via West Coast ports. The Port Authority requested the FMC to require the Pacific Westbound Conference to amend tariff wording to prevent this practice. The Conference agreed to revise the wording and the Port Authority withdrew from the proceeding conditioned on this modification. (FMC 71-54)

Status Pending.

Proceedings Before the Interstate Commerce Commission

Subject Central Railroad of New Jersey filed petition for inclusion in C&O/B&O system. The Port Authority filed in support of CNJ (reopening of Fin. 23178)

Status Pre-hearing conference held. Pending.

Subject Application by True Transport, Inc. to obtain operating rights to transport marine containers between New York Commercial Zone and points in Middle Atlantic States and New England. (MCC-133565) True Transport is subsequently applying for certain additional operating authority, which the Port Authority is again supporting.

Status Pending.

Subject Increased waterborne charge. U. S. railroads published an increase of 4 cents per 100 pounds on waterborne shipments at all ports except South Atlantic, South Florida and Gulf Ports. The Port Authority protested that port relationships would be distorted by the increase. (I&S 8508)

Status Commission found increase not justified and ordered cancellation. Railroads secured Temporary Restraining Order which resulted in carriers being allowed to assess increased charge. Court hearings held. Pending.

Subject Railroads file for increases in freight rates, which if approved, would have distorted port relationships. The Port Authority intervened to protect the port's competitive position. (Ex Parte 267)

Status The Commission required the railroads to protect and maintain existing port differentials. Concluded.

Subject CNJ and B&O Railroads filed tariffs discontinuing lighterage service in New York Harbor. The Port Authority protested the discontinuance of lighterage would be tantamount to abandonment of a service and would discriminate against shippers on the New York side of the harbor. (I&S 8593)

Status Commission decision authorized B&O and CNJ to discontinue lighterage service. Concluded.

Subject Penn Central Railroad published additional charges on all traffic handling in carload and lighterage service in the Port of New York. The Port Authority opposed the charge as detrimental to the competitive position of the port. (I&S 8645)

Status Hearings held. Pending.

Subject Central Railroad of New Jersey petitioned the Interstate Commerce Commission to redefine the New York Commercial Exempt Zone to include their TOFC/COFC Yard. (MC-C-2) (MC-37)

Status The Port Authority filed a statement supporting the petition. Inclusion authorized.

Subject The Interstate Commerce Commission instituted investigation of export-import rates relationships as they apply to the various port groups. (Ex Parte 270-Sub. #1)

Status The Port Authority will participate in this proceeding. Pending.

Subject Application of Norfolk and Western and Chesapeake and Ohio to merge and include in their system five Eastern railroads—Erie Lackawanna, Delaware and Hudson, Boston and Maine, Reading and Central Railroad of New Jersey. The Port Authority conditionally opposed merger which would have reduced the number of competitive rail systems to two in number. Withdrew opposition provided the CNJ and Erie Lackawanna were included in the system. (Fin. 23832 & 23833)

Status The N&W and C&O have withdrawn their application for authority to merge and the proceeding has been discontinued.

Proceedings Before the Civil Aeronautics Board

Subject Investigation of air cargo rates between European points and New York compared with rates between Europe and Baltimore, Boston, Chicago, Cleveland, Detroit, Philadelphia and Washington, D. C. The complainant cities assert that they are discriminated against by the present rate structure which results in a rate per mile between these points and Europe which is generally higher than between New York and Europe. Baltimore, Philadelphia and Washington, D. C. want to be common-rated with New York and the other cities seek rates based on mileage. The Port Authority supports basing air cargo rates in the markets at issue on the mileage actually flown by the carrier with the most direct service in the markets. Docket 20522

Status Awaiting a decision by CAB Examiner. Pending.

Subject Evaluation of need for nonstop air service between Ponce, Puerto Rico and various East Coast U. S. cities, including New York/Newark. Currently, air service in these markets is via San Juan with connections to scheduled air taxi service between San Juan and Ponce. The Port Authority supports authorization of one carrier between the Port District and Ponce. Docket 22508

Status CAB Examiner has recommended one carrier in the subject market. Pending.

Subject Investigation of desirability of liberalizing limitation of 12,500 pounds maximum weight for air taxi aircraft. Air taxis, whether they provide scheduled or demand service, do not require CAB certification. The Port Authority recommended replacing the present weight limitation with a limitation of 25 passengers or 6,500 pounds of cargo and suggested that the CAB encourage air taxi use of STOL aircraft by expeditiously treating applications for exemption from the payload limitation for STOL operations. Docket 21761

Status CAB Examiner recommended adoption of a new limitation of 30 passengers or 7,500 pounds of payload. Pending.

Subject Trans World, United and American Airlines requested CAB approval of an agreement to reduce service, thereby increasing the percentage of seats occupied, in four markets including two New York/Newark markets—Los Angeles and San Francisco. The airlines stated the agreement was necessary because they believed unilateral action on the part of any of them would adversely affect their competitive position. The Port Authority supported the agreement with several conditions. Docket 22908

Status CAB approved agreement with conditions suggested by Port Authority.

Subject Phase I of this proceeding investigated the need for and feasibility of V/STOL (vertical or short takeoff and landing) air service in the Northeast Corridor. The Port Authority suggested the establishment of a national V/STOL development program to expedite the institution of an efficient V/STOL transportation system. Phase II will deal primarily with the designation of a carrier or carriers to provide the service. Docket 19078

Status Phase I concluded. CAB decided V/STOL air service is needed and feasible. Phase II is under way, but proceeding slowly.

Subject Review of United States flag air service between Europe and several United States points including Hartford, Connecticut. New York was specifically excluded as a terminus or gateway for the proposed new services because of the congestion at Port District airports. The CAB is considering Hartford because it believes some people now originating at New York may find it convenient to enplane at Hartford instead. The Port Authority has petitioned for permission to participate in this proceeding. Docket 19255

Status The first procedural stage, a prehearing conference, has not yet been scheduled. Pending.

Subject Review of air routes to and from Omaha and Des Moines. The Port Authority opposes designation of a specific airport at New York/Newark for any service authorized to and from Omaha and Des Moines. Docket 18401

Status CAB did not designate specific airport. Pending.

Administration



James C. Kellogg, III
Chairman



Hoyt Ammidon
Vice Chairman



W. Paul Stillman



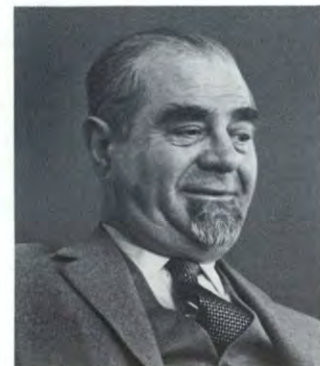
William J. Ronan



Walter Henry Jones



Bernard J. Lasker



Sidney S. Hein



Gustave L. Levy



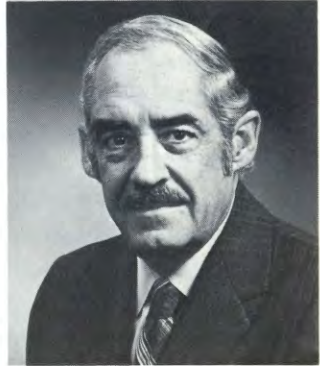
James G. Hellmuth



Andrew C. Axtell



Philip B. Hofmann



Matthias E. Lukens
Acting Executive Director

The Port of New York Authority was created on April 30, 1921 by Compact between the States of New York and New Jersey to act as their Port development agency. It was the first public authority in the United States.

The Authority consists of twelve Commissioners, six appointed by the Governor of New York and six by the Governor of New Jersey to serve overlapping six-year terms without compensation or fees of any kind.

Leaders in business, finance, law and public affairs, the members of the Board of Commissioners are:

Chairman James C. Kellogg, III of New Jersey is the senior partner of the brokerage firm of Spear, Leeds and

Kellogg, and a former Chairman of the Board of Governors of the New York Stock Exchange.

Vice Chairman Hoyt Ammidon of New York is Chairman of the Board of the United States Trust Company of New York.

Andrew C. Axtell of New Jersey is Chairman of the Board of the Essex Welding Equipment Company.

Sidney S. Hein of New York is the senior member of the law firm of Hein, Waters, Klein and Zurkow.

James G. Hellmuth of New York is Vice President of the Bankers Trust New York Corporation.

Philip B. Hofmann of New Jersey is Chairman of the Board and Chief Executive Officer of Johnson and Johnson.

Walter Henry Jones of New Jersey is a former State Senator who now specializes in corporate law.

Bernard J. Lasker of New York is senior partner in the brokerage firm of Lasker, Stone and Stern, and a former Chairman of the Board of Governors of the New York Stock Exchange.

Gustave L. Levy of New York is senior partner in the firm of Goldman, Sachs and Company, and a former Chairman of the Board of Governors of the New York Stock Exchange.

William J. Ronan of New York is Chairman of the Metropolitan Transportation Authority.

W. Paul Stillman of New Jersey is Chairman of the Board of the First National State Bank of New Jersey and of the Mutual Benefit Life Insurance Company.

The year was saddened by the death of Commissioner Charles Engelhard on March 3, 1971 at the age of 54. Commissioner Engelhard was first appointed to the Board by Governor Robert B. Meyner in 1960, and reappointed by Governor Richard J. Hughes in 1967.

In March 1971 the New Jersey State Senate confirmed Governor William T.

Cahill's appointment of Philip B. Hofmann, Chairman of the Board and Chief Executive Officer of Johnson and Johnson, to fill the unexpired term of Commissioner Engelhard, which runs until 1973.

At the Board's annual meeting, April 8, 1971, Commissioner Kellogg was re-elected to his fourth term as Chairman. Commissioner Ammidon was re-elected to his second term as Vice Chairman.

Chairman Kellogg was first appointed to the Port Authority Board by Governor Meyner in 1955, reappointed by Governor Meyner in 1960 and by Governor Hughes in 1966. He became Vice Chairman of the Board in 1960, and was first elected Chairman at the

Board's annual meeting in 1968.

Vice Chairman Ammidon was appointed to the Board by Governor Nelson A. Rockefeller in December 1968, upon the retirement of Chairman S. Sloan Colt, for the term to 1974. He is Chairman of the Operations Committee, and also serves on the Finance Committee.

In May 1971 the New Jersey State Senate confirmed Governor Cahill's reappointment of Commissioner Stillman to the Board. Commissioner Stillman was first appointed to the Board by Governor Meyner in 1960, and reappointed to a second term by Governor Hughes.

In May 1971 the New York State Senate confirmed Governor Rocke-

feller's appointment of Commissioner Ronan to a full six-year term. Commissioner Ronan was first appointed in 1967 by Governor Rockefeller.

On July 12, 1971 Commissioner William A. Sternkopf, Jr. submitted his resignation to Governor Cahill, which the Governor accepted.

The Board of Commissioners is organized into four permanent committees, as follows: Committee on Finance, W. Paul Stillman, Chairman, and Bernard J. Lasker, Vice Chairman; Committee on Port Planning, William J. Ronan, Chairman, and Andrew C. Axtell, Vice Chairman; Committee on Construction, Sidney S. Hein, Vice Chairman; Committee on Operations, Hoyt Ammidon, Chairman, and Walter Henry Jones, Vice Chairman.

These committees originate and review policies and projects according to their special functions, and either take action themselves, or, where appropriate, make recommendations to the Board.

On December 12, 1971 Austin J. Tobin, Executive Director of the Port Authority, announced his retirement as of March 31, 1972.

Mr. Tobin began his Port Authority service as a Law Clerk in 1927, rising to Assistant General Counsel in 1935, and was first elected by the Board in 1942 as the Port Authority's Executive Director. The Board has re-elected Mr. Tobin every year since to this vital post, with its duties of carrying out the policies and programs authorized by the Board. At the annual meeting in April 1971, the Board unanimously chose Mr. Tobin for his 30th consecutive year as Executive Director.

Following Mr. Tobin's announcement of his impending retirement, the Board designated Matthias E. Lukens, who has served as Deputy Executive Director since 1961, as Acting Executive Director. Chairman Kellogg also

announced that a special committee of the Board would be formed to recommend to the Board the nomination of an Executive Director.

Mr. Lukens joined the Port Authority in 1947. He is Senior Vice President of the Port Authority Trans-Hudson (PATH) Corporation, and has served as President of the Airport Operators Council International. In 1971 he received the Port Authority's highest award, the Howard S. Cullman Distinguished Service Medal, for his "very great record of exceptional service, and for his major contributions to the success of the work and programs of the Port Authority over the past quarter of a century."

The Port Authority is represented in all legal matters by the General Counsel, Sidney Goldstein. The General Counsel is legal advisor to the Board of Commissioners, the Executive Director and the Staff. Mr. Goldstein was re-elected to his position at the Board's annual meeting.

Miss Doris E. Landre is the Secretary of the Port Authority. The Secretary is responsible for the preparation and retention of the official minutes of the Board of Commissioners, as well as all of the Authority's other official documents.

The Port Authority is organized into a system of line and staff departments which report to the Executive Director. The line departments are Aviation, Marine Terminals, Rail Transportation, Terminals, Tunnels and Bridges, and World Trade. The Port Authority subsidiary, the Port Authority Trans-Hudson (PATH) Corporation, is within the Rail Transportation Department. The staff departments are Administration, Comptroller's, Engineering, Finance, General Services, Law, Operations Services, Organization and Procedures, Personnel, Planning and Development, Public Affairs, Real Estate, and Treasury.

Austin J. Tobin Announces His Retirement

On December 12, 1971, Austin J. Tobin, Executive Director of the Port Authority, issued the following statement:

"By 1972, I will have served The Port of New York Authority for 45 years and will have been its Executive Director for 30 years.

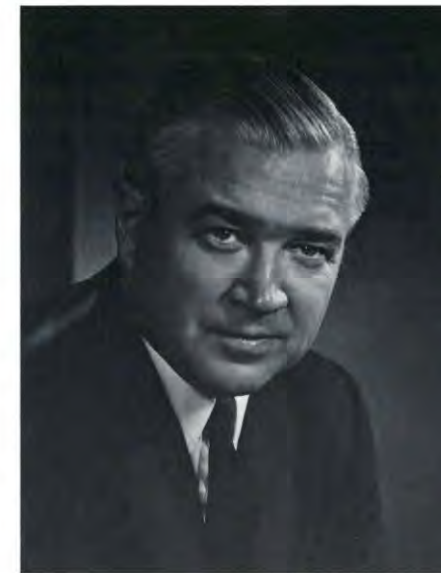
"The time has come for the orderly transfer of executive responsibility to other hands. I have therefore advised the Chairman and the Vice Chairman of the Authority that I will retire as of March 31, 1972.

"In the interim and during this transitional period, the Board and I will expect our very able Deputy Executive Director Matthias E. Lukens to assume the major burdens of this office."

Austin J. Tobin's career in the Port Authority spans almost the entire life of the bi-State agency. Born in Brooklyn on May 25, 1903, he came to work as a Law Clerk in 1927, fresh from Holy Cross and Fordham, joining the fledgling public organization that had been created in 1921 out of the vision and toil of statesmen on both sides of the Hudson River. At that time the Port Authority was little more than a beginning on paper; the six-year-old agency still had no facilities and scarcely 300 employees. The opening of the first two facilities (the Outerbridge Crossing and the Goethals Bridge) came in 1928.

From Law Clerk Mr. Tobin rose to Assistant Attorney, then Real Estate Attorney, and became Assistant General Counsel in 1935 and Executive Director in 1942, the post to which the Board has re-elected him every year since.

On April 30, 1971, the Port Authority observed its fiftieth anniversary. By contrast with half a century ago, the Port Authority, now with 8,000 employees, comprises 25 great land, sea and air facilities serving the people



of the Port District and representing an investment of more than \$2.7 billion.

At a special meeting of the Board on December 13, 1971, attended by both Governor William T. Cahill of New Jersey and Governor Nelson A. Rockefeller of New York, the Board unanimously adopted a resolution which stated in part:

"WHEREAS, Austin J. Tobin has been a member of the staff of The Port of New York Authority since 1927 and has served as Law Clerk, Assistant General Counsel and since 1942 as Executive Director of the Port Authority; and

"WHEREAS, Austin Tobin in administering the policies and programs established by the two States and the Commissioners of the Port Authority, has contributed greatly to the development of transportation, terminal and other facilities of commerce in the Port of New York District over the last thirty years, including expansion of the Lincoln Tunnel and of the George Washington Bridge, the entire development of the major commercial airports in the metropolitan district, the Port Authority Bus Terminal, the Brooklyn Marine Terminal, the Port

Newark Seaport, the world's leading containership terminal at Elizabeth, the acquisition and improvement of the PATH System and The World Trade Center; and

"WHEREAS, Austin J. Tobin had advised that he will retire as of March 31, 1972; and

"WHEREAS, the Commissioners and the Governors wish to pay tribute to Austin J. Tobin;

"NOW THEREFORE, on motion of Chairman Kellogg, seconded by Vice Chairman Ammidon; be it

"RESOLVED, that the Governors of the States of New York and New Jersey and the Commissioners of the Port Authority hereby express their esteem and admiration for, and on behalf of the people of the Port District, their gratitude to Austin J. Tobin for his contributions and dedication in the service of the two States in the planning and development of terminal, transportation and other facilities of commerce in and for the Port of New York-New Jersey District during his 45-year career as one of the outstanding public administrators of our time."

On December 13, 1971, the Board designated Matthias E. Lukens, who has served as Deputy Executive Director of the Port Authority since 1961, as Acting Executive Director.

Staff

The Port Authority and its subsidiary, PATH, employ a staff of more than 8,000 men and women, who serve in many diverse occupations. Among them are engineers, lawyers, economists, policemen, clerks, accountants, gardeners, draftsmen, artists, computer programmers, buyers, librarians, cooks, traffic specialists, planners, secretaries, helicopter pilots and many more. Each position requires particular talents to assure the effective operation of public transportation and terminal facilities in the Port District.

Staff Development

A salient characteristic of our time is the recognition that education and personal development do not terminate with school or college. Technology's advances affect each occupation, expand the scope of every skill and require a correlated development of personnel.

Through participation in various formal training programs, staff members are better able to meet the increasing challenges placed on the Port Authority. For this reason a wide variety of opportunities for personal development is offered each year to all Port Authority employees. Several previously successful programs were offered again in 1971, while new programs were added to the expanding curriculum. Selected management workshops were conducted to provide further development of managerial skills in areas such as leadership, communications, team-building and problem-solving. Patron relations training programs were continued and expanded to provide Port Authority field employees with a greater awareness of the importance of courteous service to the public. A management training program for engineers, designed specifically to sharpen their

leadership and human relations skills, was continued in 1971.

As the need of the organization expanded, new programs were developed to meet them. A review program was initiated to assist engineers in attaining their Professional Engineer license and to expand their professional competence. A programmed high school equivalency course was undertaken to upgrade the skills of entry-level employees.

These and many other training and development programs were administered by Port Authority staff and selected guest instructors. However, employees were encouraged to further their own development by participating in the Port Authority's Education Refund Plan, which aided 810 employees to progress their formal education.

Public Service Careers Program

Under an agreement with the United States Department of Labor, the Port Authority established the two-phase Public Service Careers Program to develop permanent employment opportunities for disadvantaged people who have special employment problems, and to stimulate the assignment of unskilled employees to positions at higher levels by upgrading their skills and eliminating unnecessary barriers to advancement. The two phases of the program were completed over an 18-month period with 63 new employees hired and trained for entry-level positions, and the skills of an additional 67 present employees upgraded. The entry-level component of the program graduated 35 men as Building and Grounds Attendants and 27 women as Junior Stenographers. In the upgrading component, participants were trained for positions as Clerk-Typists, Record Management Clerks, Information Agents and Main-

tenance Men, through the support of staff members from eleven different departments as instructors.

Central Brooklyn Model Cities

By agreement with the City of New York, the Port Authority undertook the administration of a series of skills training programs for unemployed and underemployed residents of the Central Brooklyn Model Cities area with a view toward upgrading the economic base of the community and enhancing the job marketability of its community members. At the same time, instructors from the community are being trained to undertake the administration of the program when the Port Authority's one-year contract expires. Extensive training programs are under way in Drafting, Heavy Vehicle Driving, General Maintenance, Electrical Appliances Service, Oil Burner Repair, Air Conditioning and Refrigeration Repair and Installation, and Basic Office Practices.

The Mobility Program

The Mobility Program, initiated in 1966 and aimed at maintaining and increasing the Port Authority's reserve of well-rounded and experienced managers and administrators, has become the agency's most far-reaching training and development program for professional and managerial staffs.

While internal mobility assignments constituted the major portion of the program in 1971, there was a broadening of assignments to other organizations. The exchange of personnel with the Greater London Council, initiated in 1970, continued as did assignments to the New York Urban Coalition. Additions to the program included staff assignments for one-year periods to the East African Railways and Harbours Corporations and the South Jersey Port Corporation.

Equal Opportunity

Through the efforts of the Equal Opportunity Programs Unit, the Port Authority's involvement in programs designed to equip minority and disadvantaged individuals with the skills or education necessary to gain responsible employment was expanded markedly during 1971. The expanded programs were the product of a joint effort of Port Authority staff and representatives of various communities within the Port District.

Some 50 Port Authority staff members participated in the newly instituted Harlem Prep Volunteer Program. This program provided administrative, teaching, and tutorial assistance to Harlem Prep, a private college preparatory school in Central Harlem which prepares high school dropouts for admission to college.

At the request of the Public Education Association and in cooperation with the administration and faculty of School District 7, the Port Authority participated in the development of an experimental career-oriented curriculum on the subject of transportation. This educational pilot project, identified as the School District 7 Project, was conducted at Clark Junior High School in the Bronx. Field trips exploring various transportation systems and facilities that serve the metropolitan area highlighted the development and implementation of a new and innovative transportation curriculum for the New York City school system.

Council for Airport Opportunity

In addition and as a result of an extensive staff study, a Council for Airport Opportunity was created in 1971. The Council's task will be to direct a comprehensive effort aimed at improving the education, training and

employment opportunities for the disadvantaged and minority workers in communities surrounding metropolitan airports, and also improving the chances for minority entrepreneurship. Council membership includes representatives of the public agencies, airlines, airport service companies, and community members of the bi-State region. The Council is currently in the organizational stages of establishing program priorities and hiring the staff needed to implement them. When fully established, the council will operate employment centers and also offer consulting services and occupational training.

Recognition of Service

Each year the Port Authority recognizes employees for outstanding and selfless accomplishments. At the Annual Medal Awards Ceremony 38 staff members were cited for distinguished service, special achievement, acts of heroism, or special activities meritorious of citation.

Similarly, the Port Authority honors its long-term employees. Each year, employees who have attained 25 years of service with the organization are welcomed into the Port Service Club. In 1971, this unit of honor welcomed 153 new members, bringing the membership total to 1,156.



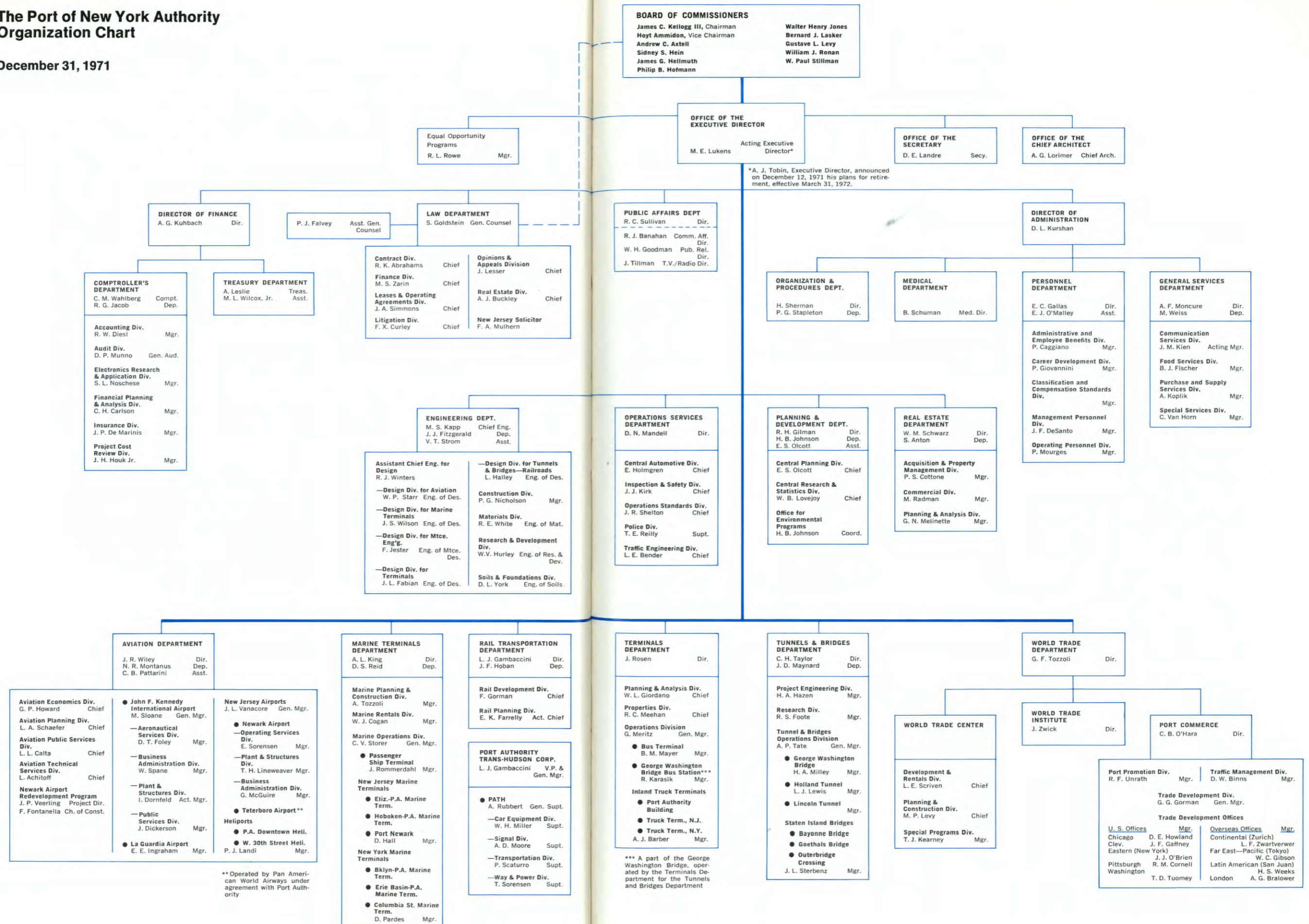
Port Authority structural engineers and draftsmen on a field trip to Newark Airport as part of a program to see the actual projects they helped to design on paper.



Acting Executive Director Matthias E. Lukens congratulates Lieutenant Maxwell Sinowitz on his promotion from Sergeant at graduation ceremonies for 57 new Port Authority police officers after a ten-week training program.

The Port of New York Authority Organization Chart

December 31, 1971



Basic Policies and Financial Structure

The States of New Jersey and New York directed the Port Authority "...to proceed with the development of the Port of New York... as rapidly as may be economically practicable...". The Authority, however, may not levy taxes, assessments or pledge the credit of either State or any municipality. In other words, its program of public works was to be supported and financed by the private sector, and to this end the two States pledged their "cordial cooperation... in the encouragement of the investment of capital...".

In order to finance — on a self-supporting basis and without cost to the general taxpayer — the land, sea and air terminal, transportation and other facilities of commerce directed by the two State Legislatures, it is necessary for the bi-State agency to conduct its affairs with prudence and to employ sound management practices in order to build a strong credit base and a sound financial structure.

To achieve the continuing objectives of strength and stability in its financial structure and command the confidence of investors, it is necessary for the Port Authority to meet certain legal and fundamental financial standards.

The statutes establishing the General Reserve Fund provide for the pooling of revenues to the end that older facilities with established earning power can aid new projects during developmental periods until they reach their anticipated point of self-support. These statutes provide for the amount of the General Reserve Fund to be equal to ten per cent of the total par value of the Authority's outstanding bonds secured by a pledge of that fund including Consolidated Bonds.

The Port Authority's long-established policy is to retire bonded debt

as rapidly as sound financial management permits and to maintain, at year-end, a combined amount in its reserve funds, including reserve funds in trust, equal to at least the next two years' mandatory bonded debt service. Acceleration of debt retirement before mandatory dates may be accomplished out of the General Reserve Fund only to the extent that reserve funds exceed the ensuing two years' debt service.

Bonds for an additional facility cannot be issued with a pledge of the General Reserve Fund unless the Port Authority Commissioners certify to investors that the pledge will not materially impair the sound credit standing of the Authority, the investment status of the Authority's bonds, or the ability of the Authority to fulfill its commitments and undertakings.

Judicious planning, advanced engineering techniques and sound management practices are utilized to bring new projects to their anticipated point of self-support as soon as possible.

The 1962 statutes adopted by the Legislatures of the two States, which authorized Port Authority acquisition of the interstate Hudson and Manhattan Railroad, specifically recognized and met the fundamental need of protecting the credit of the Port Authority to insure that it could continue its self-supporting programs so vital to the economy of the two States in accordance with the directives of the two Legislatures. The Legislatures recognized that the credit of the Port Authority would be impaired if the Authority undertook responsibility for the operation of such a perpetual deficit facility, unless the States entered into a contract with the Authority bondholders which gave assurance that additional deficit financing of future railroad projects would be undertaken only within specific financial limits.

Adherence to these requirements and policies has resulted in a sound financial structure which has been recognized by individual investors and financial institutions throughout the United States. Over the years, more than three and one-half billion dollars of Port Authority obligations have been purchased by investors.

Combined Operations in Brief

Gross operating revenues of The Port of New York Authority for the year 1971 totaled \$279,935,000, an increase of 9.6 per cent. This rise reflects the continuing increase in the development and utilization of the Authority's facilities. At the same time, operating, administrative and development expenses, including start-up costs for new projects, increased about 20.9 per cent to reach \$175,333,000. As a result, net operating revenues before provision for debt service and reserves decreased about 5.2 per cent to a total of \$104,602,000.

Investment income on securities held in the reserve and operating funds totaled \$20,344,000. This was supplemented by an upward adjustment of \$378,000 in the value of the Authority's security portfolio, reflecting the improvement in the Government Bond market. Thus net revenues available for debt service and reserves were \$125,324,000.

Interest on Authority debt totaled \$31,266,000 and long-term bonded debt amortization amounted to \$23,428,000. In addition, a \$35,000,000 principal payment was made to reduce the outstanding bank loans in accordance with the agreements with the banks. Total debt service charged to revenues and reserves, including reserve funds in trust, therefore, was \$89,694,000.

At year-end 1971 the General Reserve Fund balance amounted to

\$144,675,000 and continued to meet the statutory requirement of ten per cent of outstanding bonded debt. The Consolidated Bond Reserve Fund had a balance on December 31, 1971, of \$253,000 after application of \$22,000,000 to investment in facilities and \$35,000,000 to meet the annual installment on the 1968 bank loan. Total reserves at year-end, including reserve funds in trust, were \$199,671,000 which exceeded the next two years' debt service on bonded debt. The total debt service for the Authority for the years 1972 and 1973, including scheduled payments on bank loans, amounts to \$283,183,000.

The Authority's financial affairs are administered by A. Gerdes Kuhbach, Director of Finance; Alexander Leslie, Treasurer; and Carl M. Wahlberg, Comptroller.

Financial Position At Year-End

On December 31, 1971, the total assets of the Authority were \$3,287,170,000, represented by the cumula-

tive amount invested in facilities and balances in construction, operating and reserve funds. This is an increase of 12.6 per cent, or \$368,786,000 over last year.

The amount invested in facilities of the Port Authority rose by \$362,308,000, including interest during construction of \$38,515,000 on bonded

Highlights	1971	1970
Gross Operating Revenues	\$ 279,900,000	\$ 255,300,000
Net Operating Revenues	104,600,000	110,300,000
Debt Service Charged to Revenues and Reserves	89,700,000	92,400,000
Cumulative Invested in Facilities	2,760,800,000	2,398,500,000
Bonded Debt Outstanding	1,446,700,000	1,270,700,000
General Reserve Fund	144,700,000	127,100,000
Consolidated Bond Reserve Fund	253,000	2,700,000
Reserve Funds in Trust	54,700,000	56,300,000

debt and bank loans, to a cumulative total of \$2,760,810,000 at year-end 1971. This increase is largely represented by additional investment at:

The World Trade Center	\$139,900,000
John F. Kennedy International Airport	117,600,000
Newark Airport	35,100,000
Port Authority Trans-Hudson Railroad	29,200,000
Elizabeth-Port Authority Marine Terminal	17,200,000
LaGuardia Airport	10,000,000
Port Newark	6,200,000

Bonded debt increased during the year by \$176,057,000 to a total of \$1,446,748,000. This was the net result of the issuance of Consolidated Bonds and Notes in the total amount of \$205,000,000, the retirement of \$23,943,000 bonded debt through income and reserves and the refunding of notes in the amount of \$5,000,000.

At year-end, debt retired through income as detailed in Statement E, Page 67, and reserve funds totaled \$1,431,335,000, which is about 52 per cent of the amount invested in facilities.

Reserve Funds

At year-end 1971, the General Reserve Fund balance was \$144,675,000 and continued to meet the statutory requirements of ten per cent of outstanding bonded debt while the Consolidated Bond Reserve Fund totaled \$253,000. These balances, together with other reserve fund balances in trust totaling \$54,743,000 (see below), continued to meet the long-established policy of maintaining total reserve funds in an amount equal to at least the next two years' mandatory debt service on bonded debt (excluding scheduled debt service on the bank loans obtained by the Authority in 1968, 1970 and 1971).

Bond covenants require that the reserve funds be maintained in cash or invested in certain government securities. Thus, at year-end, \$197,675,000 was invested in securities as set forth in Statement B "Financial Position." Income from investment of reserve funds, including reserve funds in trust, totaled \$17,628,000 in 1971.

The policy of adjusting the value of United States securities held in the

portfolio at year-end to the lower of aggregate amortized cost or market value resulted in an upward adjustment in reserve funds of \$231,000.

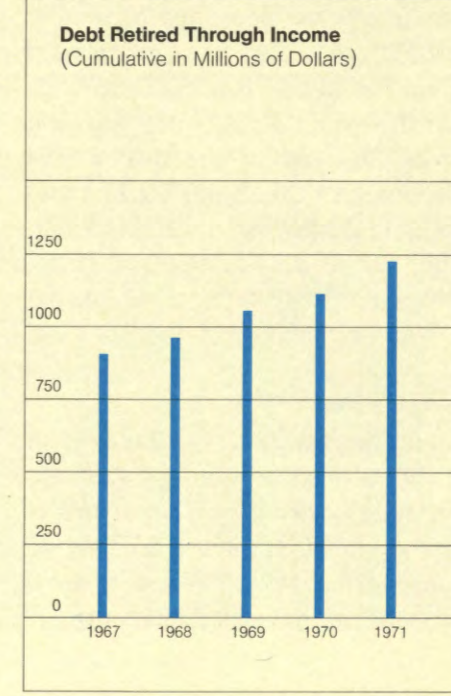
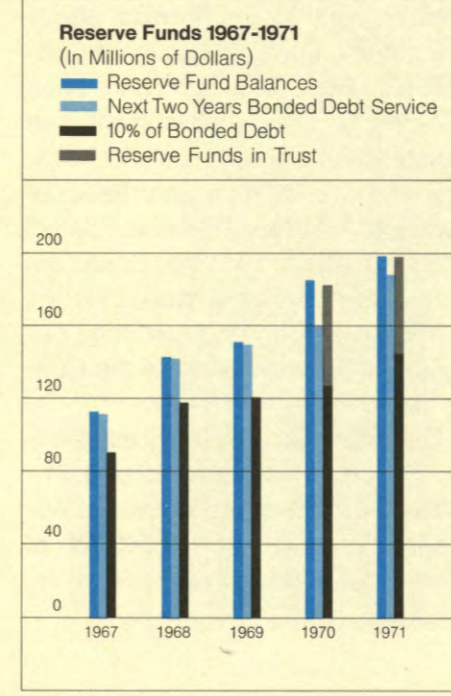
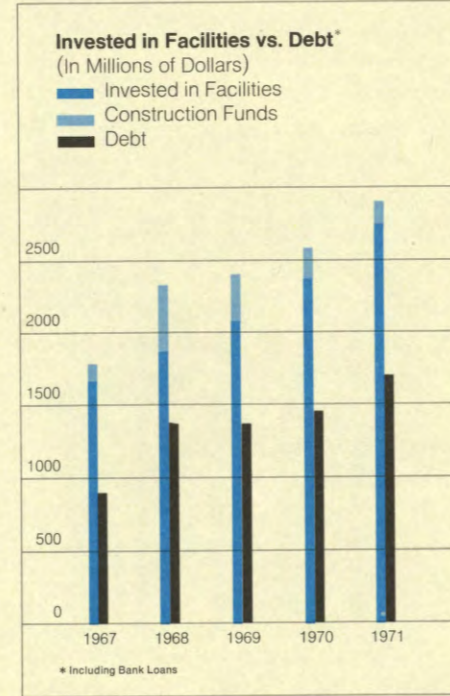
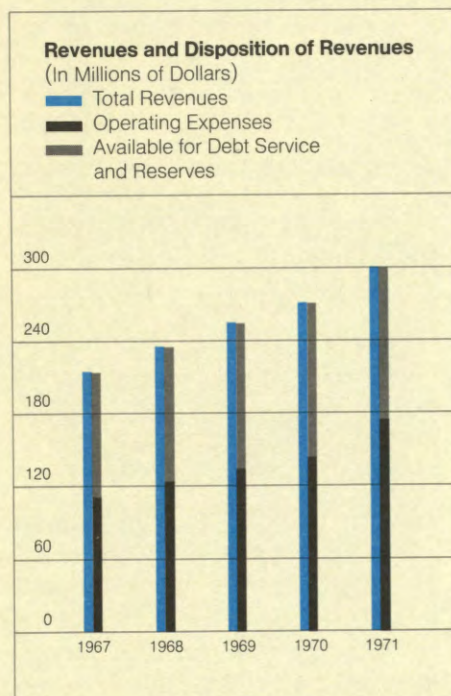
The only obligations of the Port Authority which were issued prior to the establishment in 1952 of the issue of Consolidated Bonds and which presently remain outstanding are certain of the Authority's General and Refunding, Air Terminal and Marine Terminal Bonds which are listed in Statement G, Page 68. In the Consolidated Bond Resolution of 1952 the Authority covenanted that no additional General and Refunding, Air Terminal or Marine Terminal Bonds would be issued.

By year-end 1970, the Special Reserve Fund (for General and Refunding Bonds), the Air Terminal Reserve Fund and the Marine Terminal Reserve Fund had reached a level sufficient to secure fully the payment of principal of and interest to redemption on the outstanding bonds for which such Funds had been established. On December 31, 1970, pursuant to the bank loan agreements of

1968 and 1970, the Authority placed in trust with the First National City Bank, as Trustee, \$60,749,000 from the Authority's Special Reserve Fund, Air Terminal Reserve Fund and Marine Terminal Reserve Fund to secure fully, unconditionally and absolutely the Authority's obligation to provide for the redemption as scheduled and the payment of interest until redemption on the Authority's outstanding General and Refunding Bonds, Air Terminal Bonds and Marine Terminal Bonds.

These bonds bear interest at rates ranging from 1 1/4 % to 3% a year. The Trust Agreements do not require the payment or redemption of any such bonds in advance of their scheduled redemption by operation of the sinking funds therefor. After the establishment and during the maintenance of these trusts, no further payments are required to be made into such Reserve Funds. Furthermore, all Consolidated Bonds of the Authority, including any which may hereafter be issued, are now equally and ratably secured by a pledge of the net revenues of all existing facilities of the Authority and any additional facilities which may hereafter be financed or refinanced in whole or in part through the medium of Consolidated Bonds. Such net revenues are no longer subject to the prior liens or pledges to which certain of these net revenues had previously been subject in favor of General and Refunding, Air Terminal and Marine Terminal Bonds.

The establishment and maintenance of the Reserve Funds in Trust permit the application of all net revenues of the Authority to the payment of debt service on Consolidated Bonds, with all remaining balances, except such amounts as may be necessary to maintain the General Reserve Fund in the amount prescribed by the General Reserve Fund statutes, to be paid into the Consolidated Bond Reserve Fund.



The net revenues accumulated in the Consolidated Bond Reserve Fund are fully available to meet debt service on the bank loans obtained by the Authority in 1968, 1970 and 1971.

Financial Income

The long-term investment portfolio averaged about \$186,198,000, principally reserve funds, and was invested primarily in securities of or guaranteed by the United States Government. Long-term investment earnings amounted to \$17,731,000.

Investment in short-term government securities and bank time deposits averaged approximately \$276,779,000 during the year. The short-term portfolio represented principally the investment of construction funds awaiting disbursement. Income from these short-term investments was \$17,031,000.

Investment income attributed to the operating fund amounted to \$2,716,000 (including \$48,000 miscellaneous income) and the amount attributed to reserve funds was \$17,628,000. The balance of \$14,466,000 attributed to the capital fund reduced construction costs.

Financing

Debt Issued

The Authority's bonded debt at year-end was \$1,446,748,000, a net increase of \$176,057,000 over last year.

On February 18, 1971, \$100,000,000 Consolidated Bonds, Thirty-seventh Series, 6 per cent, due February 1, 2006, were sold to an investment group headed by Halsey, Stuart and Co., Inc.; Blyth and Co., Inc.; Merrill Lynch, Pierce, Fenner and Smith Inc.; Salomon Brothers; and White, Weld and Co. at a price of 98.9 per cent of par resulting in a net interest cost to the Authority of 6.04 per cent.

On July 2, 1971, \$5,000,000 Consolidated Notes, Series Y, 3½ per cent, due December 15, 1971, were sold to First National City Bank at par. In the same month a total of \$100,000,000 was borrowed from ten banks. The loan, which is to be repaid in three annual installments with the final maturity due December 20, 1977, is evidenced by notes which bear interest at the rate of 5¼ per cent a year. The banks participating in the loan are First National City Bank; The Chase Manhattan Bank, N.A.; Bankers Trust Company; Manufacturers Hanover Trust Company; Chemical Bank; Irving Trust Company; Marine Midland Bank-New York; Marine Midland Bank-Western; Fidelity Union Trust Company; and The Bank of New York. The notes are special obligations of the Authority, the principal and interest of which are payable from monies available in the Consolidated Bond Reserve Fund. Neither the loan nor the interest on the loan is secured by or payable from the General Reserve Fund.

On October 27, 1971, \$100,000,000 Consolidated Bonds, Thirty-eighth Series, 5¾ per cent, due November 1, 2006, were sold to an investment group headed by Salomon Brothers; Merrill Lynch, Pierce, Fenner and Smith Inc.; White, Weld and Co.; Weeden and Co.; Bear, Stearns and Co.; and Donaldson, Lufkin and Jenrette, Inc. at a price of 98.0299 per cent of par resulting in a net interest cost to the Authority of 5.45 per cent.

Debt Retired

During the year, \$23,943,000 par value of long-term bonds was retired through mandatory sinking fund and maturity payments. In addition, \$5,000,000 Consolidated Notes, Series Y, were refunded as shown in Statement G.

On December 20, 1971, payment of the third annual installment of \$35,000,000 was made on the \$210,000,000 bank loan obtained in 1968. The outstanding amount of the three bank loans at year-end was \$265,000,000.

Facts for Bondholders

Consolidated Bonds

Consolidated Bonds are direct and general obligations of the Authority and the full faith and credit of the Authority are pledged to the payment of debt service thereon.

All Consolidated Bonds, including any which may hereafter be issued, are equally and ratably secured by a pledge of the net revenues of all existing facilities of the Authority (not including cars acquired under New York State's Commuter Railroad Car Program) and any additional facility which may be hereafter financed in whole or in part through the medium of Consolidated Bonds, as provided in the Consolidated Bond Resolution. The prior liens and pledges with respect to certain of such net revenues in favor of General and Refunding, Air Terminal and Marine Terminal Bonds of the Authority referred to in the Consolidated Bond Resolution have been satisfied by the establishment and maintenance of the Special, Air Terminal and Marine Terminal Reserve Funds in Trust (see "Reserve Funds" Page 66). All Consolidated Bonds are further secured by a pledge of the monies in the Consolidated Bond Reserve Fund, as provided in the Consolidated Bond Resolution.

On December 31, 1971, outstanding Consolidated Bonds totaled \$1,398,055,000. Over the years, the Authority has issued \$2,091,650,000 of Consolidated Bonds, exclusive of refundings.

PRICE WATERHOUSE & CO.

60 BROAD STREET
NEW YORK 10004

March 2, 1972

The Port of New York Authority
New York, New York

In our opinion, Statements A through H present fairly the financial position of the Port of New York Authority at December 31, 1971 and the results of its operations for the year, and Statement J presents fairly the assets and liabilities of the New York State Commuter Car Program at December 31, 1971 in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Also, in our opinion, Statement I presents fairly the ten-year financial data included therein. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Waterhouse & Co.

STATEMENT A Revenues and Reserves

	Year Ended December 31,			
	1971			1970
	Operating Fund	Reserve Funds (Statement D) (In Thousands)	Combined Total	Combined Total
Gross Operating Revenues	\$279,935	\$ —	\$279,935	\$255,318
Operating Expenses	175,333	—	175,333	144,988
Net Operating Revenues	104,602	—	104,602	110,330
Financial Income				
Income on investments	2,716	17,628	20,344	16,067
Security valuation adjustment	147	231	378	11,184
	107,465	17,859	125,324	137,581
Debt Service				
Interest on bonded debt	29,441	1,125	30,566	26,346
Serial maturities and sinking fund retirements	23,013	415	23,428	27,321
Interest on bank loans	—	700	700	6
Bank loan payment	—	35,000	35,000	35,000
Cancellation of bonds held in trust	—	—	—	3,704
Total Debt Service	52,454	37,240	89,694	92,377
Invested in Facilities	—	22,000	22,000	11,000
Transfers to Reserves	\$(55,011)	55,011	—	—
Net Increase in Reserves		13,630	13,630	34,204
Reserve balances—beginning of year		186,041	186,041	151,837
Reserve Balances—End of Year		\$199,671	\$199,671	\$186,041

STATEMENT B Financial Position

	December 31, 1971				December 31, 1970
	Capital Fund	Reserve Funds	Operating Fund	Combined Total	Combined Total
	(In Thousands)				
ASSETS					
Invested in Facilities	\$2,760,810	\$ —	\$ —	\$2,760,810	\$2,398,502
Investment in Securities (Statement F)	69,325	197,675	6,074	273,074	353,717
Cash and Time Deposits	178,261	1,996	15,617	195,874	118,877
Other Assets	2,672	—	54,740	57,412	47,288
Total Assets	3,011,068	199,671	76,431	3,287,170	2,918,384
LIABILITIES					
Bonded Debt (Statement G)	1,446,748	—	—	1,446,748	1,270,691
Bank Loans Payable	265,000	—	—	265,000	200,000
Debt Retired Through Income (Statement E)	1,231,664	—	—	1,231,664	1,142,040
Reserves (Statement D)	—	199,671	—	199,671	186,041
Accounts Payable and Other Liabilities	67,656	—	59,540	127,196	104,129
Provision for Self-Insurance	—	—	13,344	13,344	12,264
Deferred Credits to Income	—	—	3,547	3,547	3,219
Total Liabilities	\$3,011,068	\$199,671	\$76,431	\$3,287,170	\$2,918,384

See Notes to Financial Statements

STATEMENT C Changes in Financial Position

	Year Ended December 31,	
	1971	1970
	(In Thousands)	
Funds Provided From:		
Net Operating Revenues	\$104,602	\$110,330
Adjustments for Non-cash Transactions	2,752	1,942
	107,354	112,272
Financial Income	20,722	27,251
Consolidated Bonds	200,000	150,000
Consolidated Notes	5,000	75,000
Bank Loan	100,000	60,000
Federal Grants in Aid	8,681	5,966
Net Change in Other Asset and Liability Accounts	13,271	8,089
Total Funds Provided	455,028	438,578
Funds Applied To:		
Invested in Facilities	362,308	300,306
Interest on Bonded Debt and Bank Loans	31,266	26,352
Retirement of Bonded Debt	23,428	31,025
Repayment of Bank Loan	35,000	35,000
Refunding of Consolidated Notes	5,000	125,000
Payments from Reserve for Self-insurance	1,672	1,124
Total Funds Applied	458,674	518,807
Net Decrease in Cash and Investments	\$ 3,646	\$ 80,229

See Notes to Financial Statements

Notes to Financial Statements

December 31, 1971

Note A—Accounting Principles:

1. The Port of New York Authority, created in 1921 by compact between the States of New York and New Jersey with the consent of Congress, has no stockholders or equity holders; all revenues or other cash received must be disbursed for specific purposes in accordance with provisions of various statutes and agreements with holders of its bonds and others. The accounts of the Authority are maintained in accordance with generally accepted accounting principles appropriate in the circumstances.

2. The Authority's bond resolutions provide that operating expenses shall not include any allowance for depreciation. However, recovery of facility costs is accomplished through deductions from revenues and reserves of amounts equal to principal payments on debt. These deductions are credited at par to the account "debt retired through income."

3. The amount "invested in facilities" consists primarily of expenditures, including the expenditure of Federal and State grants, to acquire, construct, place in operation and improve the facilities of the Port Authority and includes net discount and expense incurred in connection with bonds and notes issued for construction purposes as well as net interest expense during the period of construction.

4. Investments in long-term and short-term United States securities are stated at the lower of their respective aggregate amortized cost or market value. Investments in Port Authority bonds are stated at their amortized cost.

5. Pursuant to bi-State legislation, the Authority is authorized and empowered, upon the election of either State, to purchase and lease railroad cars to commuter railroads of the electing State, and to borrow money for such purpose or for the repayment of advances from the electing State. By resolution dated April 12, 1962, the Authority established an issue of New York State Guaranteed Commuter Car Bonds. Such Car Bonds are secured by the net revenues of the Authority arising out of the lease of commuter railroad cars. Car Bonds are not secured by any other revenues, reserves or assets of the Authority, are not general obligations of the Authority and are not secured by the full faith and credit of the Authority. In the event that lease revenues are not sufficient to provide for scheduled payment of principal and interest, the punctual payment of such debt service is fully and unconditionally guaranteed by the electing State. Accordingly, the financial position of this program is presented separately in Statement J, and the assets and liabilities of the program are not included in any of the other accompanying financial statements of the Authority.

Note B—Commitments:

At December 31, 1971, the Authority was committed under various con-

tracts to the completion over the next two or three years of approximately \$230,000,000 of construction.

Note C—Leases:

LaGuardia Airport and John F. Kennedy International Airport are leased from the City of New York for a term expiring in the year 2015. Port Newark and Newark Airport are leased from the City of Newark for a term expiring in the year 2016.

The Hoboken-Port Authority Marine Terminal is leased from the City of Hoboken under a lease which will expire in the year 2002, unless a fifty-year extension is executed by then.

Certain parcels of the property at the Brooklyn-Port Authority Marine Terminal are held under two leases from the City of New York for terms expiring in the years 2011 and 2018.

Minimum annual rentals under the above leases presently aggregate approximately \$2,800,000. Additional rentals are payable if earned in connection with certain of these leases.

On March 11, 1971, the Authority authorized a lease with the City of New York for the development of a Consolidated Passenger Ship Terminal and for the interim operation of existing piers on the Hudson River on the west side of Manhattan Island. The initial lease term would expire 20 years from completion of construction of the new terminal. The Authority is to pay the City annually (i) the sum required each year to amortize over a 20-year peri-

od, bonds issued by the City to raise \$28,300,000 of the construction costs, and (ii) a portion of the excess, if any, of revenues over the total of such payments and operating and maintenance costs and reserve requirements.

Note D—Financing:

1. At December 31, 1971, a balance of \$265,000,000 in principal amount of three bank loans obtained by the Authority was outstanding. The first of these loans was obtained in 1968 in an amount aggregating \$210,000,000, bearing interest at 4¼ % per annum, maturing in 1975 and payable in annual installments of up to \$35,000,000 to the extent net revenues are legally available therefor. Three annual installments totaling \$105,000,000 have been paid on this loan by the Authority through December 31, 1971. The second loan was obtained in 1970 in an amount aggregating \$60,000,000, bearing interest at 5¼ % per annum, maturing in 1977 and payable in annual installments commencing in 1975 of up to \$20,000,000 from net revenues legally available therefor. The third loan was obtained in 1971 in an amount aggregating \$100,000,000, bearing interest at 5¼ % per annum, maturing in 1977 and payable in annual installments of up to \$30,000,000 in 1975 and up to \$35,000,000 in 1976 and 1977 from net revenues legally available therefor. The three loans were obtained from banks and trust companies located in New York and New Jersey and are subject to prepayment in whole or in part on interest payment dates.

Under the terms of the three loan

agreements, and as a result of the establishment and maintenance in trust of the Authority's Special Reserve Fund, Air Terminal Reserve Fund and Marine Terminal Reserve Fund (see Note E below), annual installment payments on the bank loans are, beginning in 1971, being made exclusively from net revenues legally available therefor in the Authority's Consolidated Bond Reserve Fund. Payment of the loans and interest thereon is subject in all respects to the payment of debt service on the Authority's General and Refunding Bonds, Air Terminal Bonds, Marine Terminal Bonds and Consolidated Bonds, as required by the applicable provisions of the Authority's bond resolutions, and to the payment into the General Reserve Fund of the amount necessary so as to maintain such Fund at the amount specified in the General Reserve Fund statutes. Neither the loans nor the interest thereon are secured by or payable from the General Reserve Fund.

2. On February 9, 1972, the Authority sold \$150,000,000 Consolidated Bonds, 39th Series, due 2007, at an average annual net interest cost of 5.889 per cent.

Note E—Special, Air Terminal and Marine Terminal Reserve Funds in Trust:

In accordance with the provisions of the bank loan agreements (see Note D above), the Authority on December 31, 1970, placed into trust amounts available from the Authority's Special Reserve Fund, Air Terminal Reserve Fund and Marine Terminal Reserve

Fund so that such Funds shall be maintained in amounts sufficient to secure fully, unconditionally and absolutely the Authority's obligation to provide for the redemption as scheduled and the payment of interest until redemption on the Authority's outstanding General and Refunding, Air Terminal and Marine Terminal Bonds. Under the terms of the Agreements of Trust, such bonds are not required to be paid or redeemed in advance of their scheduled redemption by operation of the sinking funds therefor.

Upon the establishment and maintenance of these Trust Funds, net revenues of the Authority's existing facilities are applicable to debt service on Consolidated Bonds and Notes and all remaining balances, except such amounts as may be necessary to maintain the General Reserve Fund in the prescribed amount, are payable into the Consolidated Bond Reserve Fund. Beginning in 1971, annual installment payments on the bank loans are being made exclusively from the Consolidated Bond Reserve Fund.

Note F—General:

Pursuant to legislative and judicial authorizations, the Authority on September 1, 1962 acquired by condemnation the former Hudson & Manhattan Railroad (Hudson Tubes) through the Port Authority Trans-Hudson Corporation, a subsidiary of The Port of New York Authority established for that purpose. The accounts of the subsidiary corporation are consolidated in the accompanying Port Authority financial statements.

STATEMENT D **Analysis of Reserve Funds** Year Ended December 31, 1971

	General Reserve Fund	Consolidated Bond Reserve Fund	Reserve Funds in Trust For			Combined Total
			General and Refunding Bonds	Air Terminal Bonds	Marine Terminal Bonds	
(In Thousands)						
Balance—January 1, 1971	\$127,069	\$ 2,681	\$19,268	\$33,069	\$3,954	\$186,041
Income on investments(A)	12,070	5,535	7	14	2	17,628
Security valuation adjustment(A)	162	69	—	—	—	231
	<u>139,301</u>	<u>8,285</u>	<u>19,275</u>	<u>33,083</u>	<u>3,956</u>	203,900
Transfers from Operating Fund	5,374	49,637	—	—	—	55,011
	<u>144,675</u>	<u>57,922</u>	<u>19,275</u>	<u>33,083</u>	<u>3,956</u>	258,911
Applications:						
Interest on bonded debt	—	—	261	757	84	1,102
Financial services	—	—	7	14	2	23
Serial maturities and sinking fund retirements(A)	—	(31)	349	—	97	415
Interest on bank loans	—	700	—	—	—	700
Bank loan payment	—	35,000	—	—	—	35,000
Invested in facilities	—	22,000	—	—	—	22,000
Total Applications	—	57,669	617	771	183	59,240
Balance—December 31, 1971	<u>\$144,675</u>	<u>\$ 253</u>	<u>\$18,658(B)</u>	<u>\$32,312</u>	<u>\$3,773(C)</u>	\$199,671

(A) After transfers from Reserve Funds in Trust to Consolidated Bond Reserve Fund.

(B) Includes Sinking Fund balance of \$758 thousand related to General and Refunding 8th Series Bonds.

(C) Includes Sinking Fund balance of \$155 thousand related to Marine Terminal 1st Series Bonds.

See Notes to Financial Statements

STATEMENT E **Debt Retired Through Income** Year Ended December 31, 1971 (In Thousands)

Debt Retired Through Income

Balance at January 1	\$1,070,533
Reserves applied to payment of bank loan as detailed in Statement D	35,000
Net revenues and reserves applied to retirement of bonded debt as detailed in Statement G	23,943
Total	<u>1,129,476</u>
Contributed by Federal and State Agencies in Aid of Construction	
Balance at January 1	67,676
Amounts received under Urban Mass Transportation Act	5,111
Amounts received under Federal Airport Act	3,570
Total	<u>76,357</u>
Appropriated Reserves Invested in Facilities	
Balance at January 1	19,468
Additions	22,000
Total	<u>41,468</u>
	<u>1,247,301</u>
Less:	
Cost of Refunding and Consolidating Debt	
Balance at January 1 and December 31	15,637
Total	<u>\$1,231,664</u>

STATEMENT F **Investment in Securities** December 31, 1971

	Principal Amount	Quoted Market Value (In Thousands)	Amortized Cost
Short-Term			
United States Treasury Bills	\$ 51,280	\$ 50,904	\$ 50,733
Government National Mortgage Association Participation Certificates	11,500	11,554	11,490
Total Short-Term	<u>62,780</u>	<u>62,458</u>	<u>62,223</u>
Long-Term			
Farmers Home Administration Insured Notes	64,017	69,699	63,913
Government National Mortgage Association Participation Certificates	51,625	49,362	50,448
United States Treasury Notes	44,775	46,562	44,846
Export-Import Bank Participation Certificates	18,875	17,297	19,040
United States Treasury Bonds	841	815	812
Total Long-Term United States Securities	<u>180,133</u>	<u>183,735</u>	<u>179,059</u>
The Port of New York Authority Bonds	29,821	22,714	24,703
Total Long-Term	<u>\$209,954</u>	<u>\$206,449</u>	<u>203,762</u>
Accrued Interest Receivable			7,089
Total Investment in Securities			<u>\$273,074</u>

See Notes to Financial Statements

STATEMENT G **Bonded Debt** Year Ended December 31, 1971

	January 1, 1971	Issued (In Thousands)	Retired	December 31, 1971
General and Refunding Bonds				
Eighth Series, 2% due 1974	\$ 3,702	\$ —	\$ 342	\$ 3,360
Ninth Series, 1½% due 1985	4,054	—	—	4,054
Tenth Series, 1¾% due 1985	2,014	—	—	2,014
Eleventh Series, 1¼% due 1986	7,275	—	—	7,275
	<u>17,045</u>	<u>—</u>	<u>342</u>	<u>16,703</u>
Air Terminal Bonds				
First Series, 3% due 1978	11,433	—	—	11,433
Second Series, 2½% due 1979	12,218	—	—	12,218
Third Series, 2.20% due 1980	4,950	—	—	4,950
	<u>28,601</u>	<u>—</u>	<u>—</u>	<u>28,601</u>
Marine Terminal Bonds				
First Series, 2½% due 1978	2,342	—	95	2,247
Second Series, 2.20% due 1980	1,142	—	—	1,142
	<u>3,484</u>	<u>—</u>	<u>95</u>	<u>3,389</u>
Consolidated Bonds				
First Series, 3% due 1982	18,176	—	1,336	16,840
Second Series, 2¾% due 1984	16,820	—	600	16,220
Fourth Series, 2¾% due 1985	24,000	—	1,000	23,000
Fifth Series, 2.90% due 1983	13,680	—	440	13,240
Sixth Series, 3% due 1986	21,600	—	600	21,000
Seventh Series, 3.40% due 1986	18,700	—	600	18,100
Eighth Series, 3.40% due 1987	38,000	—	1,000	37,000
Ninth Series, 3½% due 1971-1975	6,750	—	1,350	5,400
Tenth Series, 3¾% due 1987	26,700	—	900	25,800
Eleventh Series, 3% due 1971-1978	16,000	—	2,000	14,000
Twelfth Series, 3¾% due 1988	32,130	—	700	31,430
Thirteenth Series, 3½% due 1971-1977	8,750	—	1,250	7,500
Fourteenth Series, 2¾% due 1978	1,250	—	—	1,250
Fifteenth Series, 3½% due 1989	47,630	—	1,155	46,475
Sixteenth Series, 4% due 1971-1975	8,750	—	1,750	7,000
Seventeenth Series, 4.10% due 1976-1979	7,000	—	—	7,000
Eighteenth Series, 4¼% due 1989	21,650	—	525	21,125
Nineteenth Series, 3½% due 1971-1975	7,500	—	1,500	6,000
Twentieth Series, 3.70% due 1976-1979	6,000	—	—	6,000
Twenty-first Series, 1% due 1980	1,500	—	—	1,500
Twenty-second Series, 3¼% due 1971-1975	9,100	—	1,750	7,350
Twenty-third Series, 3½% due 1976-1981	12,600	—	—	12,600
Twenty-fourth Series, 3½% due 1991	22,250	—	500	21,750
Twenty-fifth Series, 3¼% due 1993	33,425	—	525	32,900
Twenty-sixth Series, 3.40% due 1993	23,875	—	375	23,500
Twenty-seventh Series, 3¾% due 1993	23,875	—	375	23,500
Twenty-eighth Series, 3¾% due 1994	24,250	—	375	23,875
Twenty-ninth Series, 3½% due 1994	24,250	—	375	23,875
Thirtieth Series, 3.20% due 1971-1973	4,500	—	1,500	3,000
Thirty-first Series, 3% due 1974-1978	7,500	—	—	7,500
Thirty-second Series, 3.10% due 1979-1980	3,000	—	—	3,000
Thirty-third Series, 3.20% due 1981-1984	6,000	—	—	6,000
Thirty-fourth Series, 3½% due 1995	34,475	—	525	33,950
Thirty-fifth Series, 3¾% due 1995	24,875	—	125	24,750
Thirty-sixth Series, 3¾% due 1996	25,000	—	125	24,875
Thirty-seventh Series, 3½% due 1996	25,000	—	125	24,875
Thirty-eighth Series, 3¾% due 1998	25,000	—	125	24,875
Thirty-ninth Series, 4% due 2002	100,000	—	—	100,000
Fortieth Series, 5% due 2003	100,000	—	—	100,000
Forty-first Series, 4¾% due 2003	100,000	—	—	100,000
Forty-second Series, 5½% due 2003	100,000	—	—	100,000
Forty-third Series, 6½% due 2005	100,000	—	—	100,000
Forty-fourth Series, 6.40% due 2005	50,000	—	—	50,000
Forty-fifth Series, 6% due 2006	—	100,000	—	100,000
Forty-sixth Series, 5¾% due 2006	—	100,000	—	100,000
	<u>1,221,561</u>	<u>200,000</u>	<u>23,506</u>	<u>1,398,055</u>
Consolidated Notes				
Series Y, 3½% due December 15, 1971	—	5,000	—	—
Refunded	—	(5,000)	—	—
Total Bonded Debt	<u>\$1,270,691</u>	<u>\$200,000</u>	<u>\$23,943</u>	<u>\$1,446,748</u>

See Notes to Financial Statements

STATEMENT H **Bonded Debt Amortization 1972-2006** December 31, 1971 (In Thousands)

Year	Debt Service Total All Issues			Amortization			
	Total	Interest	Amortization	Consolidated Bonds	General and Refunding Bonds		
					Air Terminal Bonds	Marine Terminal Bonds	
	Par Value: \$1,446,748						
1972	\$ 94,639	\$ 63,164	\$ 31,475	\$ 24,856	\$ 2,046	\$ 3,959	\$ 614
1973	94,389	62,276	32,113	26,192	1,385	4,065	471
1974	95,335	61,216	34,119	28,849	614	4,174	482
1975	95,968	60,082	35,886	30,165	941	4,286	494
1976	94,170	58,934	35,236	29,296	1,033	4,401	506
1977	94,249	57,774	36,475	30,245	1,194	4,519	517
1978	96,185	56,500	39,685	35,793	1,211	2,530	151
1979	95,109	55,116	39,993	37,944	1,228	667	154
1980	95,403	53,732	41,671	40,425	1,246	—	—
1981	94,745	52,274	42,471	41,207	1,264	—	—
1982	92,967	50,810	42,157	40,875	1,282	—	—
1983	93,405	49,270	44,135	42,835	1,300	—	—
1984	95,522	47,610	47,912	46,595	1,317	—	—
1985	94,461	45,809	48,652	48,010	642	—	—
1986	96,040	43,857	52,183	52,183	—	—	—
1987	91,677	41,774	49,903	49,903	—	—	—
1988	85,560	39,825	45,735	45,735	—	—	—
1989	83,452	37,862	45,590	45,590	—	—	—
1990	82,466	35,916	46,550	46,550	—	—	—
1991	82,349	33,799	48,550	48,550	—	—	—
1992	80,627	31,577	49,050	49,050	—	—	—
1993	80,276	29,226	51,050	51,050	—	—	—
1994	74,991	26,841	48,150	48,150	—	—	—
1995	71,351	24,451	46,900	46,900	—	—	—
1996	66,551	22,051	44,500	44,500	—	—	—
1997	63,018	19,768	43,250	43,250	—	—	—
1998	60,931	17,431	43,500	43,500	—	—	—
1999	58,096	15,096	43,000	43,000	—	—	—
2000	55,751	12,751	43,000	43,000	—	—	—
2001	54,874	10,374	44,500	44,500	—	—	—
2002	54,297	7,797	46,500	46,500	—	—	—
2003	46,782	5,282	41,500	41,500	—	—	—
2004	27,796	3,296	24,500	24,500	—	—	—
2005	26,312	1,812	24,500	24,500	—	—	—
2006	14,349	349	14,000	14,000	—	—	—
Total	<u>\$2,684,093</u>	<u>\$1,235,702</u>	<u>\$1,448,391</u>	<u>\$1,399,698</u>	<u>\$16,703</u>	<u>\$28,601</u>	<u>\$3,389</u>

NOTES: Includes all mandatory payments (including sinking fund requirements and serial maturities) whether payable from revenues or other sources, upon the assumption that: (1)—the presently outstanding bonds will not be retired prior to maturity except in accordance with the mandatory retirement provisions of the resolutions establishing the series of which such bonds form a part; (2)—the amortization payment will be made each year on the latest permissible date on which such payment is required to be made; (3)—such payments will be in the amount scheduled to be made for such year. Interest shown under "Debt Service Total All Issues" is computed on the same assumptions as amortization. The above amortization and interest amounts do not include either interest or annual installment payments on the bank loans maturing in 1975 and 1977. See Note D to Financial Statements for details concerning the payment of the bank loans. Amortization and interest applicable to General and Refunding, Air Terminal and Marine Terminal Bonds are secured by trusts as outlined in Note E to Financial Statements.

See Notes to Financial Statements

STATEMENT I Selected Financial Data—A Ten-Year Comparison (In Thousands)

	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962
Net Revenues (A)										
Gross Operating Revenues	\$ 279,935	\$ 255,318	\$ 242,797	\$ 226,931	\$ 207,511	\$ 189,953	\$ 178,630	\$ 167,256	\$ 154,025	\$ 135,059
Operating Expenses	175,333	144,988	134,297	123,831	110,095	102,113	98,901	89,177	79,797	65,742
Net Operating Revenues	104,602	110,330	108,500	103,100	97,416	87,840	79,729	78,079	74,228	69,317
Other Income (B)	20,344	16,067	13,639	10,749	7,792	6,893	5,553	5,123	4,825	4,806
Net Revenues Before Debt Service	124,946	126,397	122,139	113,849	105,208	94,733	85,282	83,202	79,053	74,123
Interest on Bonded Debt	29,441	26,346	25,507	24,580	23,254	22,369	21,249	20,291	18,752	16,280
Balance Available for Debt Retirement and Reserves	95,505	100,051	96,632	89,269	81,954	72,364	64,033	62,911	60,301	57,843
Times, Interest Earned	4.24	4.80	4.79	4.63	4.52	4.24	4.01	4.10	4.22	4.55
Mandatory Long-Term Debt Retirements	23,013	27,321	26,363	24,943	23,139	21,407	21,384	19,849	20,264	20,777
Net Revenues after Debt Service (C)	\$ 72,492	\$ 72,730	\$ 70,269	\$ 64,326	\$ 58,815	\$ 50,957	\$ 42,649	\$ 43,062	\$ 40,037	\$ 37,066
Times, Debt Service Earned	2.38	2.36	2.35	2.30	2.27	2.16	2.00	2.07	2.03	2.00
Net Changes in Reserves										
Transferred from Revenues (above)	\$ 72,492	\$ 72,730	\$ 70,269	\$ 64,326	\$ 58,815	\$ 50,957	\$ 42,649	\$ 43,062	\$ 40,037	\$ 37,066
Interest on Bank Loans	(700)	(6)	—	—	—	—	—	—	—	—
Bank Loan Payment	(35,000)	(35,000)	(35,000)	—	—	—	—	—	—	—
Short-Term Note Retirements	—	—	(15,000)	(28,000)	(46,000)	(40,000)	(31,500)	(33,000)	(33,000)	(31,000)
Long-Term Debt Retirement Acceleration	—	—	—	(958)	(2,531)	(1,195)	(3,551)	(3,147)	(2,590)	(2,038)
Invested in Facilities	(22,000)	(11,000)	—	—	—	—	—	—	—	—
Debt Service on Bonds Secured by Trusts	(1,540)	(3,704)	—	—	—	—	—	—	—	—
Adjustment of Securities Value (D)	378	11,184	(12,159)	(4,404)	(7,709)	(414)	(4,010)	107	(2,968)	2,311
Net Change	\$ 13,630	\$ 34,204	\$ 8,110	\$ 30,964	\$ 2,575	\$ 9,348	\$ 3,588	\$ 7,022	\$ 1,479	\$ 6,339
Reserves—at Year End										
General Reserve	\$ 144,675	\$ 127,069	\$ 120,264	\$ 117,950	\$ 90,649	\$ 83,285	\$ 85,593	\$ 80,611	\$ 73,950	\$ 68,761
Special Reserve (E)	18,658	19,268	9,615	14,045	12,642	15,219	9,090	10,352	10,781	12,955
Air Terminal Reserve (E)	32,312	33,069	19,739	10,379	8,364	10,051	5,299	5,413	4,423	5,826
Marine Terminal Reserve (E)	3,773	3,954	2,219	1,353	1,108	1,633	858	876	1,076	1,209
Consolidated Bond Reserve	253	2,681	—	—	—	—	—	—	—	—
Total	\$ 199,671	\$ 186,041	\$ 151,837	\$ 143,727	\$ 112,763	\$ 110,188	\$ 100,840	\$ 97,252	\$ 90,230	\$ 88,751
Debt—At Year End										
General and Refunding Bonds	\$ 16,703	\$ 17,045	\$ 18,446	\$ 19,661	\$ 22,290	\$ 24,490	\$ 25,717	\$ 27,035	\$ 33,190	\$ 38,761
Air Terminal Bonds	28,601	28,601	36,212	39,870	43,432	46,902	50,280	53,548	56,330	59,898
Marine Terminal Bonds	3,389	3,484	4,031	4,336	4,633	5,360	5,643	5,777	6,543	6,913
Consolidated Bonds and Notes	1,398,055	1,221,561	1,143,956	1,115,632	836,136	756,097	774,288	719,749	643,434	582,041
Total Bonded Debt	1,446,748	1,270,691	1,202,645	1,179,499	906,491	832,849	855,928	806,109	739,497	687,613
Bank Loans	265,000	200,000	175,000	210,000	—	—	—	—	—	—
Total	\$1,711,748	\$1,470,691	\$1,377,645	\$1,389,499	\$ 906,491	\$ 832,849	\$ 855,928	\$ 806,109	\$ 739,497	\$ 687,613
Invested in Facilities—At Year End	\$2,760,810	\$2,398,502	\$2,098,196	\$1,886,559	\$1,683,799	\$1,584,037	\$1,503,765	\$1,402,722	\$1,327,956	\$1,224,227
Debt Retirement Through Revenues and Reserves										
Annually	\$ 58,943	\$ 66,954	\$ 76,854	\$ 54,992	\$ 72,358	\$ 63,079	\$ 56,681	\$ 56,388	\$ 56,116	\$ 54,480
Cumulative	1,129,476	1,070,533	1,003,579	926,725	871,733	799,375	736,296	679,615	623,227	567,111

(A) These combined totals are presented for general information purposes only; the net revenues of the various facilities for the years listed before 1971 were pledged in support of particular issues of bonds without availability for other bonds or for expenses of facilities financed by other bonds, except, under limited circumstances, through the medium of certain reserve funds. Such net revenues are now fully available to pay debt service on Consolidated Bonds. See Note E in Notes to Financial Statements.

(B) Other Income includes income from investment of reserves and net operating revenues and other miscellaneous items.

(C) Net deficits of facilities, the net revenues of which are first pledged to Consolidated Bonds, are shown in this Statement as reductions in the annual amounts otherwise available for reserves to produce the annual amounts shown above as "Net Revenues after Debt Service." Short-term note retirements are shown under "Net Changes

in Reserves." Any balance of short-term maturities was refunded with the proceeds of bond issues.

(D) Investments of reserves and operating funds are carried at their amortized cost or market value, whichever is lower, except that for the year 1967 and thereafter investments in Port Authority bonds are carried at their amortized cost.

(E) Reserve Funds maintained in Trust since December 31, 1970. See Note E in Notes to Financial Statements.

See Notes to Financial Statements

STATEMENT J

The Port of New York Authority
New York State Commuter Car Program
Assets and Liabilities

	December 31, 1971		Combined Total	December 31, 1970
	Related to Cars			
	Leased to The Metropolitan Transportation Authority	Leased to Penn Central Transportation Company		Combined Total
	(In Thousands)			
Assets				
Invested in commuter cars, at cost	\$62,860	\$37,118	\$ 99,978	\$77,110
Investment in U. S. Government Securities, at cost (which approximates market)	699	3,024	3,723	604
Cash	21	253	274	390
Other assets	266	400	666	1,229
Total Assets	63,846	40,795	104,641	79,333
Liabilities				
State Guaranteed Commuter Car Bonds	60,630	32,890	93,520	72,015
Debt retired through income	2,370	4,860	7,230	5,235
Accounts payable and other liabilities	846	3,045	3,891	2,083
Total Liabilities	\$63,846	\$40,795	\$104,641	\$79,333

See Note A-5 to Financial Statements

About the color photographs

The color photographs in this report use either time exposures or multiple images to depict people and goods in motion in the transportation terminals and other facilities operated by the Port Authority to serve the people of the busy bi-State Port District. All color photographs were taken by Port Authority staff photographer Don Brewster.

On the Front Cover: The main bank of escalators in the new PATH terminal in lower Manhattan typifies the busyness which pervades the largest rail passenger terminal built in the metropolitan area in over 30 years.

PATH and Rail Transportation (Page 10): Passengers in new PATH terminal in lower Manhattan use longer and wider platforms which will permit the use of longer trains.

Terminals (Page 18): Passengers at the main entrance represent the 66 million passengers and the 2½ million buses using the Port Authority Bus Terminal each year.

Water Transportation (Page 22): Giant cranes are among the facilities at the Elizabeth-Port Authority Marine Terminal which make the Newark Bay transportation complex the containership capital of America.

Air Transportation (Page 28): Lobby of International Arrival Building at Kennedy Airport, showing some of the 38 million passengers a year who use the New York-New Jersey airports.

Tunnels and Bridges (Page 36): Traffic on the move through one of the three tubes of the Lincoln Tunnel, including buses which are sped on their way in morning rush hours on an exclusive bus lane.

World Trade (Page 40): Lobby of the North Tower Building of the Trade Center, showing a portion of tenant directory to illustrate the wide range of world trade functions represented among the 150 tenants in the building by year's end.

Credits:

Editor: Lessing L. Engelking
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Design: Jerome Press
Production: Joseph Cuciniello
Photographs: Governors' photos courtesy of States of New Jersey and New York.
Photo on page 27 courtesy *Fortune* magazine; Photo on page 33 courtesy *New York Daily News*.
All other photos by Port Authority staff photographers.

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