

# THE PORT OF NEW YORK AUTHORITY

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## TWELFTH ANNUAL REPORT

DECEMBER 31, 1932

### COMMISSIONERS

#### NEW YORK

JOHN F. GALVIN  
Chairman  
HOWARD S. CULLMAN  
JOHN F. MURRAY  
GEN. GEORGE R. DYER  
JOHN J. PULLEYN  
A. J. SHAMBERG

#### NEW JERSEY

FRANK C. FERGUSON  
Vice-Chairman  
GEN. WILLIAM C. HEPPENHEIMER  
JOSEPH G. WRIGHT  
GEORGE deB. KEIM  
IRA R. CROUSE  
JOHN J. QUINN

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## IN MEMORY

of

### EUGENIUS H. OUTERBRIDGE

At a regular meeting of the Commissioners of The Port of New York Authority held in the City of New York on the first day of December, nineteen hundred thirty-two, the following tribute to the memory of the Honorable Eugenius H. Outerbridge was offered and unanimously adopted:

#### THE BUILDER OF A GREAT PORT

This is the title which belongs to

### EUGENIUS H. OUTERBRIDGE

It is the honorary degree which he would be pleased to have conferred upon him.

Eugenius H. Outerbridge knew the business of steamships, of railroads and the great movements of trade and commerce. He knew the ports of the world and he knew intimately business,—many kinds. He was an importer, an exporter, a banker and a manufacturer. His rich experience gave solid substance to his reflections. To such broad knowledge was added the rare gift of foresight. Without foresight, there can be no planning. Without planning, there should be no building.

He was not content merely to meet the needs of the moment, though as a business man, he solved day to day problems and solved them well. Tactful, a born diplomat, he met trying situations with sagacity, patience and fortitude. His technique was simple. It was the method and the manner of the true gentleman. He scorned any other way. His tools were those of sincerity, tolerance and complete knowledge of the situation in hand. But to him the greater job, as he saw it, was to plan and build for the future. Fifty, one hundred years, were to him but a short look ahead for a port. He saw the Port of New York in the making, not as something complete. Full of blunders and mistakes, ready, unless wisely directed, to make many more—a giant in chains. He saw nothing to be gained in piecemeal building. He saw still less to be gained in warfare between the two great States of New York and New Jersey. The larger interests of both, as he saw them, lay in continuous, combined effort, for their own and the nation's good, *holding*, as the Port Compact says, *in high trust for the nation the special blessings and advantages* of this great port. But he saw with realistic certainty that before physical achievement, before engineering or law could come upon the stage to play their roles, there must be brought into play the will and the spirit to achieve. To bring this will and spirit to life, he rallied to his side engineer and lawyer, railway executive and banker, business man and social worker, tradesman and great industrialist. He had the confidence of all of them. He was President of the Chamber of Commerce of the State of New York, he was the founder and head of two substantial manufacturing plants in New Jersey. He was a leader in a multitude of philanthropic and civic works. He was a director of a savings bank, of a life assurance society—of institutions too numerous to mention. He had a personal charm, unequalled by any of his contemporaries.

The Port Compact, signed April 30, 1921 and the Port Authority, thereby created, was the triumph of his great work. He brought together a body of cooperative good will without which this institution could not have existed. When the Authority came into existence in 1921, it was unthinkable that anyone but he should be its head. He was the unanimous choice of his colleagues. The following year, 1922, the Comprehensive Plan for the Development of the Port was adhered to by the two States and by the Congress of the United States. Our records reveal that the principles now resident in the statutes of the States and in the resolution of Congress are, with but slight modifications

in the language as it came from his pen. These principles put into form the results of the study of a lifetime, supported as they were by the weight of factual information assembled under his direction by experts of his choosing. Broad enough to meet changing economic conditions, they are the chart by which the Authority steers its course. No man knew more about the subject than did he and everyone who knew anything about it acknowledged him as premier in this field.

To achieve the Port Compact and the Port Authority would be triumph enough. He, however, knew that it was the foundation, not the building itself. He had brought together a unique personnel of engineering, law and business. But more was needed. A new plan of financing that would reduce the cost of wasteful terminal operations, that would create new terminal facilities which would pay for themselves and would lessen not add to the burden of the taxpayers. The self-liquidating public works project, now nationally known, was the pioneer financial plan of this institution. To him must go the credit for winning the bankers of New York and New Jersey to this new method of financing public works. He brought together every important investment banking institution in the District. On the Port Authority Financial Council, of which he was the chairman, were members of every one of these investment banks. They all knew him, they all trusted him, they responded to his call for their cooperation. The result is the financial structure of the Port Authority.

His contribution did not cease with this phase of the building of the Port. In the great plans for new rail coordination, the rail carriers were to play a new role. Where they were competitors, they were now to join in cooperation. Union terminals, unification of belt line service, rail tunnels and the like could come about only through their cooperation.

He had the confidence of all the railway executives. His entire forgetfulness of himself, his consideration for others and their responsibilities, his devotion to the public welfare brought them to his side. As in finance credit rests on confidence and confidence rests on character; here, too, his own character begat confidence in the institution of which he was the head. Financiers, railway executives, business men generally, the leaders of trade and civic bodies—all joined hands with him. The railings of skeptics, the brief opposition of narrow men in public place did not disturb nor check him. But for these efforts, there would now be no Port Compact and no Port Authority. He lived to see his dreams blossom into reality.

He had other duties of trust. He was an active business man. Yet as our first Chairman, he turned to and ran it as its Executive Head. He ran it as he ran his own private business with fairness, efficiency and thoroughness. The men and women he brought to the task worked as though inspired under his leadership. But it was at great personal sacrifice, as his close friends knew only too well. When he did cry aloud to be relieved, his resignation was pocketed by the then Governor of New York, his former colleague on this Commission, because the latter felt he could not replace him while the institution was getting on its feet. When our Captain was finally relieved at his own urgent request, he still continued his interest and to his last days was our valiant friend and adviser.

At the very rim of the Port District there stands, begun during his administration, a physical link binding the two states. The New York piers rest on Staten Island, his first home within the Port District and now his final resting place. Before it was dedicated, the Commissioners of the Port Authority thought it fitting to call it THE OUTERBRIDGE CROSSING. It was intended as a tribute to our first Chairman in recognition of his great service to the Port. It is now a fitting monument to his memory. But greater than the steel structure as a monument is this institution itself. It embodies his spirit, his purpose, and his work.

We here solemnly resolve that to the full extent of our powers, this institution shall carry on and hold its course true to the traditions and standards of

## EUGENIUS H. OUTERBRIDGE

So doing, we shall fittingly do honor to

## THE BUILDER OF A GREAT PORT

# THE PORT OF NEW YORK AUTHORITY

80-90 Eighth Avenue, New York City

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## EXECUTIVE DEPARTMENT

JOHN E. RAMSEY, General Manager

JOHN J. MULCAHY, Assistant General Manager

L. J. KEEFE,  
Secretary

WILLIAM LEARY,  
Treasurer

MORRIS M. FROHLICH,  
Assistant Secretary

E. E. MENZER,  
Assistant Treasurer

H. S. QUIGEL,  
Real Estate Agent

MARION RODGERS,  
Auditor

P. L. GERHARDT,  
Industrial Consultant

DR. EDWARD LEVY,  
Medical Director

M. BRUNER, Jr.,  
Chief Clerk

EDWARD J. TSCHIMBKE,  
Librarian

JAMES CLARK McGUIRE,  
Purchasing Agent

E. TRACY LANTERMAN,  
General Claim Agent

---

## LAW

JULIUS HENRY COHEN, General Counsel

PAUL WINDELS,

Associate Counsel, New York,

WILBUR LAROE

Associate Counsel, Washington

RUSSELL E. WATSON,

Associate Counsel, New Jersey

LEANDER I. SHELLEY,  
Attorney

A. J. TOBIN,  
Real Estate Attorney

---

## DEVELOPMENT AND OPERATION

BILLINGS WILSON, Assistant General Manager

W. P. HEDDEN,  
Chief, Bureau of Commerce

E. MORGAN BARRADALE,  
Superintendent of Tunnel Operation

GLENN S. REEVES,  
Engineer, Port Development

SYDNEY CUMBERLEDGE,  
General Superintendent of Bridges

CORNELIUS F. CAHALANE, Police Consultant

## ENGINEERING

O. H. AMMANN, Chief Engineer

J. C. EVANS,  
Terminal Engineer

EDW. W. STEARNS, W. E. THOMPSON,  
Assistant Chief Engineer / Tunnel Engineer

ALLSTON DANA,  
Engineer of Design

CHAS. W. MURDOCK,  
Mechanical Engineer

JAMES H. DUGAN,  
Assistant Engineer of Design

CHAS. S. GLEIM,  
Assistant Engineer of Construction

W. A. CUENOT,  
Chief Draftsman

E. W. BOWDEN,  
Assistant Engineer

---

## CONSULTING ENGINEERS

JAMES FORGIE,  
Consulting Engineer

OLE SINGSTAD,  
Chief Consulting Engineer on  
Tunnels

LEWIS B. STILLWELL,  
Consulting Electrical Engineer

FREDERIC R. HARRIS,  
Consulting Engineer

ROBERT RIDGWAY,  
Consulting Engineer

GEORGE L. WATSON,  
Consulting Engineer

DANIEL E. MORAN,  
Consulting Engineer on  
Foundations

MORGAN F. LARSON,  
Consulting Engineer

RALPH SMILLIE,  
Consulting Engineer

---

## CONSULTING ARCHITECT

AYMAR EMBURY II, Inland Terminal No. 1

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## ENGINEER-ARCHITECTS FOR INLAND TERMINAL

ABBOTT, MERKT & CO.

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## CONSULTING GEOLOGIST

PROF. CHAS. P. BERKEY

## TABLE OF CONTENTS

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	PAGE
Accountants' Certification.....	11
Letter of Transmittal.....	13
Section I—Development and Protection of the Port	
Part 1—Port Development.....	17
Part 2—Port Protection.....	27
Section II—Construction	
Part 1—Bridges .....	34
Part 2—Inland Terminal.....	36
Part 3—Midtown Hudson Tunnel.....	37
Section III—Operation of Interstate Vehicular Crossings	
Part 1—Holland Tunnel.....	40
Part 2—George Washington Bridge.....	45
Part 3—Bayonne Bridge.....	48
Part 4—Arthur Kill Bridges.....	51
Section IV—General	
Part 1—Financial .....	53
Part 2—Real Estate.....	60
Part 3—Insurance .....	64
Part 4—Medical .....	67
Section V—Reports and Statistics.....	69

LAWRENCE SCUDDER & CO.

ACCOUNTANTS AND AUDITORS

February 15, 1933

The Port of New York Authority,  
80-90 Eighth Avenue,  
New York, New York.

GENTLEMEN:

We have made an examination of the books of account and records of The Port of New York Authority for the year ended December 31, 1932.

The cash on hand and investment securities in the vault were verified by count. Sinking Fund and General Reserve Fund investments were similarly verified. The cash on deposit in the various banks, together with the collateral pledged to secure these deposits were verified by certificates received from the depositaries.

All vouchers supporting disbursements from the funds of The Port of New York Authority were audited by us. Expenditures from the funds in custody of the State Treasurers of the States of New York and New Jersey are made by them after the Comptrollers of the respective States have audited the vouchers.

Discount on bonds sold to December 31, 1932, has been charged to investment account in accordance with the policy adopted by the Commissioners.

Interest on bonds of the George Washington Bridge and Bayonne Bridge to April 1, 1932, was charged to investment account. Interest on bonds of the George Washington Bridge from April 1, 1932, to December 31, 1932, was charged in the ratio of 85% to operations and 15% to investment account.

During the year 1932, the following amounts were set aside for sinking fund purposes: Series "A" Sinking Fund, \$353,306.52; Series "C" Sinking Fund, \$1,000,000.00; Series "E" Sinking Fund, \$503,347.11. The Series "A"

bond indenture provides for a specific sinking fund payment of \$700,000.00 for the year 1932, whereas the Series "C" bond indenture makes no specific provision for a definite sinking fund payment during that period. The Series "E" sinking fund payment is in accord with the bond indenture providing for a payment of \$500,000.00 during this period.

*We hereby certify* that, in our opinion, the accompanying General Balance Sheet, subject to the foregoing comments thereon, correctly reflects the financial condition of The Port of New York Authority as at December 31, 1932.

Respectfully submitted,

LAWRENCE SCUDDER & CO.

**LETTER OF TRANSMITTAL—ANNUAL REPORT  
FOR YEAR 1932**

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NEW YORK, March 1, 1933

*To the Governor and Legislature of the State of New York:*

*To the Governor and Legislature of the State of New Jersey:*

Despite the general business depression which continued during the year 1932, the Port Authority has maintained a strong financial position and its credit standing, as reflected by the market price of its outstanding obligations, is gratifying.

Traffic and revenues showed a downward trend during the year, and, for the first time since the depression set in the revenues of the Holland Tunnel in the month of March, 1932, showed a decrease under the same month for the previous year. On the George Washington Bridge, however, during the final weeks of the year traffic was increasing, and for the month of December revenues showed an increase of \$5,918.69, or three per cent, over the same month in the previous year.

Construction work on Inland Terminal No. 1 progressed at a satisfactory rate and had advanced to a stage in October, 1932, where it was possible to install the carriers in the space assigned to them in the basement and first floor of the building. Due to labor conditions experienced by

the general contractor, completion of the building has been delayed about nine weeks. It is anticipated that work will be completed before May 1, 1933, and that the general offices of the Port Authority will be moved into new quarters on the fifteenth floor prior to that time.

Although at the present time demand for commercial space in the metropolitan area is unquestionably much below normal, satisfactory progress may be reported in the renting of space in the new building.

Because of the fact that the bond market has continued in a weak condition and that credit is generally unsettled, no progress could be made with the financing of the Midtown Hudson Tunnel through regular channels. Engineering studies were continued throughout the year but on a greatly reduced scale—the funds for this work as well as for the purchase of certain parcels of real estate having been obtained through temporary loans. Efforts were made to obtain funds from the Reconstruction Finance Corporation with which to finance this project. The Port Authority felt that the work of constructing this facility in accordance with your mandate should go forward; that if the work could proceed at this time it would contribute toward relief of unemployment; and, further, that if started immediately there would be considerable saving in cost due to reductions in the prevailing rates of wages and prices of materials. It was the feeling of the Commissioners that the form of agreement should make provision against impairing the credit of the Port Authority. Negotiations are being continued and it is hoped that a mutually satisfactory agreement will be reached.

Aware of the unusual changes taking place in the economic structure, the Commissioners of the Port Authority have given constant attention to all expenditures. Construction work remaining uncompleted but which is not absolutely necessary has been deferred. Payrolls

and other expenses have been considerably reduced and the Governors of the two states have been advised that, in view of the present efforts being made to reduce budgets, the usual annual request for appropriations totaling \$200,000 to carry on port development and port protection work will be reduced this year to one-half of that amount, or \$100,000.

During the year a total of 235 positions have been abolished and the incumbents either released or transferred to other vacancies. In many cases, these incumbents accepted positions carrying a much lower rate of pay rather than be released outright. In cases where it has been possible to do so, it has been the policy not to fill positions which become vacant due to deaths, resignations, etc. These payroll reductions amount to about \$644,000 annually. Reductions in salaries made during the year 1932, ranging from five to thirty-three per cent on all employees receiving \$5,000 per annum and over, resulted in an annual saving of about \$75,000. In addition, all employees during 1932 were required to take an extra two weeks' vacation without pay. This resulted in a payroll saving of \$93,500. The aggregate annual payroll reductions during 1932 amounted to about \$812,500. Since the end of the year 1932, further consideration has been given to payroll changes, and not only have drastic reductions in rates of pay been made effective February 1st, but also an additional number of employees were released.

While the program followed might appear to have been drastic, nevertheless it was as liberal as present conditions would justify, because it is not the policy to add to the ranks of the unemployed when possible to avoid doing so.

It is most regrettable that conditions beyond the control of the Port Authority necessitated the derangement of an organization which had taken so many years in its formation and which had received the fundamental training

and experience so necessary to the proper conduct of such a task as the building of the Midtown Hudson Tunnel.

Respectfully submitted,

THE PORT OF  
NEW YORK AUTHORITY

JOHN F. GALVIN,  
*Chairman,*  
FRANK C. FERGUSON,  
*Vice Chairman,*  
HOWARD S. CULLMAN,  
JOHN F. MURRAY,  
GEORGE R. DYER,  
JOHN J. PULLEYN,  
A. J. SHAMBERG,  
WILLIAM C. HEPPENHEIMER,  
JOSEPH G. WRIGHT,  
GEORGE DEB. KEIM,  
IRA R. CROUSE,  
JOHN J. QUINN,  
*Commissioners.*

## SECTION I—DEVELOPMENT AND PROTECTION OF THE PORT

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### Part I—Port Development

#### *Union Inland Freight Station No. 1*

On October 3, 1932, eight trunk line carriers serving the Port of New York, opened their Union Inland Freight Station No. 1 on the first floor of the Port Authority's Commerce Building, in the block between 15th and 16th Streets and Eighth and Ninth Avenues in Manhattan. The Baltimore & Ohio, Central Railroad of New Jersey, Delaware, Lackawanna & Western, Erie, Lehigh Valley, New Haven, New York Central and Pennsylvania Railroads leased the first floor and basement in this building for a five-year term renewable for nine succeeding terms of five years each. The station is operated by a joint agent responsible to a Board of Managers on which each of the participating railroads is represented.

The Port Authority has been active in promoting the use of this station. Particular attention has been given to informing shippers and receivers of freight as to the advantages of reduced cost of transfer between rail stations and ship on import and export less-than-carload freight, which the union station makes possible. This economy in transfer will be very helpful in preserving the competitive position of the Port of New York in securing small lots of package freight moving to or from overseas points.

The use of the terminal by shippers has increased steadily from date of opening. In the ninth week of operation an average of 129 trucks per day visited the terminal as compared to an average of thirty-two trucks per day in the first week. Because of the ability to receive and deliver package freight at a single point, shippers and truckmen

from all sections of the port have made use of the terminal. Trucks come regularly from Brooklyn and Jersey City and an occasional shipment from as far as Bridgeport, Connecticut, fifty miles away.

The tonnage handled through the terminal from October 3rd, the date of opening, to December 31, 1932, amounted to 6,092 tons.

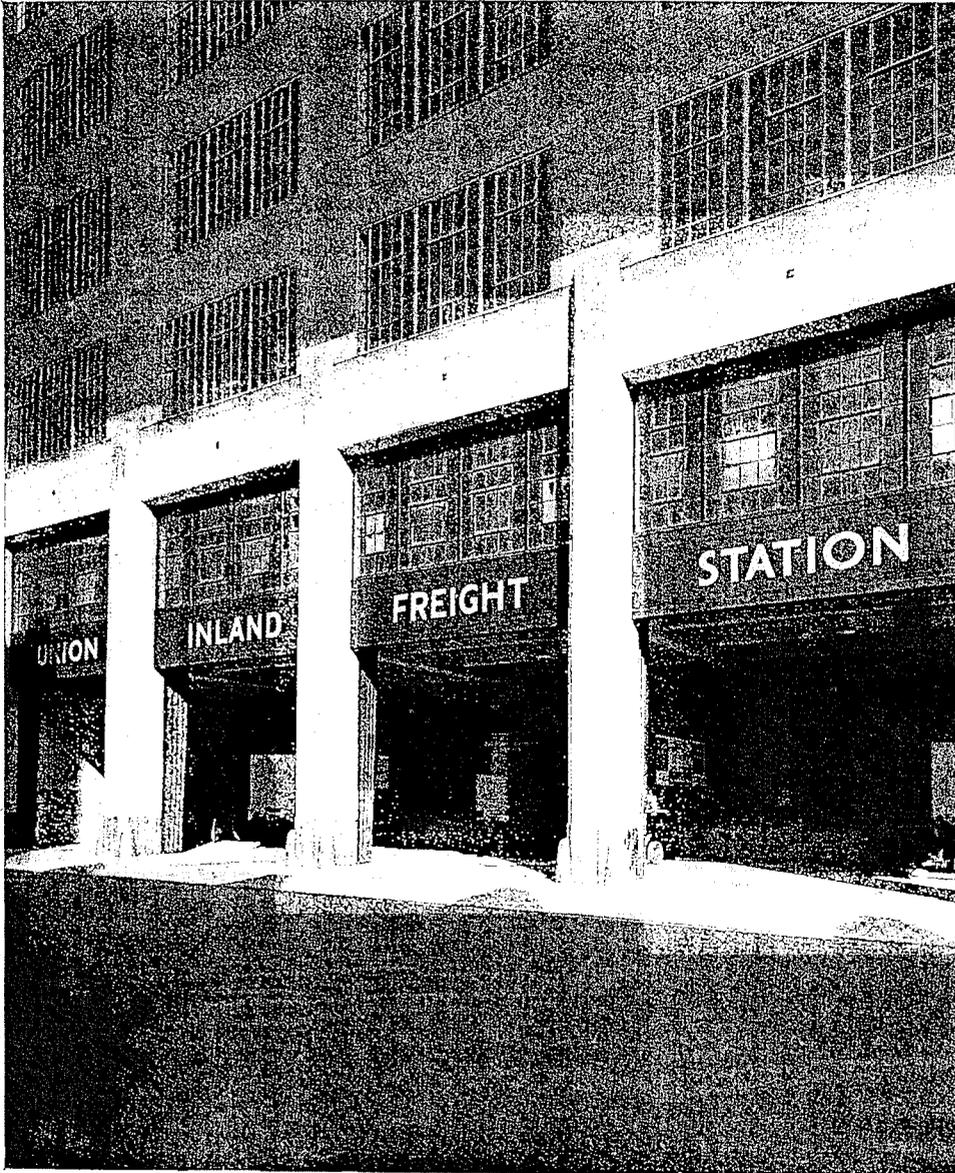
Economies in truck operations are beginning to be reflected in new contract rates offered by truckmen to shippers using the Inland Freight Station. Savings of 5 cents to 8 cents per hundred pounds, or from 33 $\frac{1}{3}$  to 40 per cent of the rates applicable to the individual pier stations, have been reported.

Movement of inbound freight through the new station has been much less than movement of outbound freight. Under existing tariff regulations only such inbound l. c. l. freight as is specifically marked for Union Inland Freight Station No. 1 will be delivered at that point. The Port Authority has proposed to the Trunk Line Association that the railroad terminal tariffs and the eastbound bill books, which contain instructions to agents as to the station to which freight consigned to addresses in various zones on Manhattan Island shall be sent, be amended so as to assign a zone to the Union Inland Freight Station. This proposal is now being considered by the Trunk Line Association.

#### ***Store Door Delivery***

Early in 1932 the railroads announced that an optional collection and delivery service would be placed in effect at the Port of New York.

On September 15, 1932, the Trunk Line Association filed with the Interstate Commerce Commission a tariff to become effective October 17th containing the rules, regulations and charges under which this optional collection and delivery service would be rendered. Protests to the Interstate Commerce Commission by various interests resulted in the voluntary postponement by the carriers of the effective date of the tariff. Certain amendments, suggested by the Interstate Commerce Commission, were incorporated and it is expected that the new tariff will be filed at an early date.



15th Street Side of Port Authority Commerce Building

The plan provides for an optional collection and delivery service covering the four boroughs of New York City and the New Jersey municipalities as far as Rahway and Paterson. The charges range from 6 cents to 20 cents per hundred pounds depending on the minimum carload weight in the official classification, with special rates for paper, flour, silk, automobiles, and higher rates for less-than-carload lots.

#### ***Belt Line No. 1***

The plans for this facility have been revised under the general direction of a Fact-Finding and Policy Committee, designated by the Pennsylvania Railroad and the Brooklyn Chamber of Commerce to cooperate with the Port Authority in bringing estimates of cost and savings up to date.

This proposed belt line, when constructed, will provide a direct all-rail route connecting the New Jersey and New York sides of the port. It begins at the railroad classification yards in the vicinity of the Newark Meadows and runs to Greenville, Jersey City; thence through a freight tunnel under the Upper Bay to Bay Ridge in Brooklyn, New York; thence over the Bay Ridge Division of the Long Island Railroad, through Fresh Pond Junction to the New York Connecting Railroad, over the Hell Gate Bridge to the New York, New Haven & Hartford Railroad in the Bronx. Extensions to the Secaucus classification yard of the Delaware, Lackawanna & Western, and the Croxton classification yard of the Erie, as well as to Belt Line 13 on the easterly side of the Palisades, linking all of the waterfront terminals, are included as a part of this belt line. A connection on the New York side to the Bush Terminal and South Brooklyn waterfront is also a part of this line.

A thorough study of engineering costs, potential traffic, cost of operation and economic practicability of this proposed line, has recently been made and submitted to the chairman of the Eastern Railroads Presidents' Conference Committee.

The most important section of this line is the proposed tunnel under New York Bay. This represents by far the major portion of the new construction costs. Connections to the classification yards, in most cases, already exist. Actual construction of this project cannot be undertaken until agreements have been reached with the railroads for the use of this tunnel and its connections.

#### ***Belt Line No. 13***

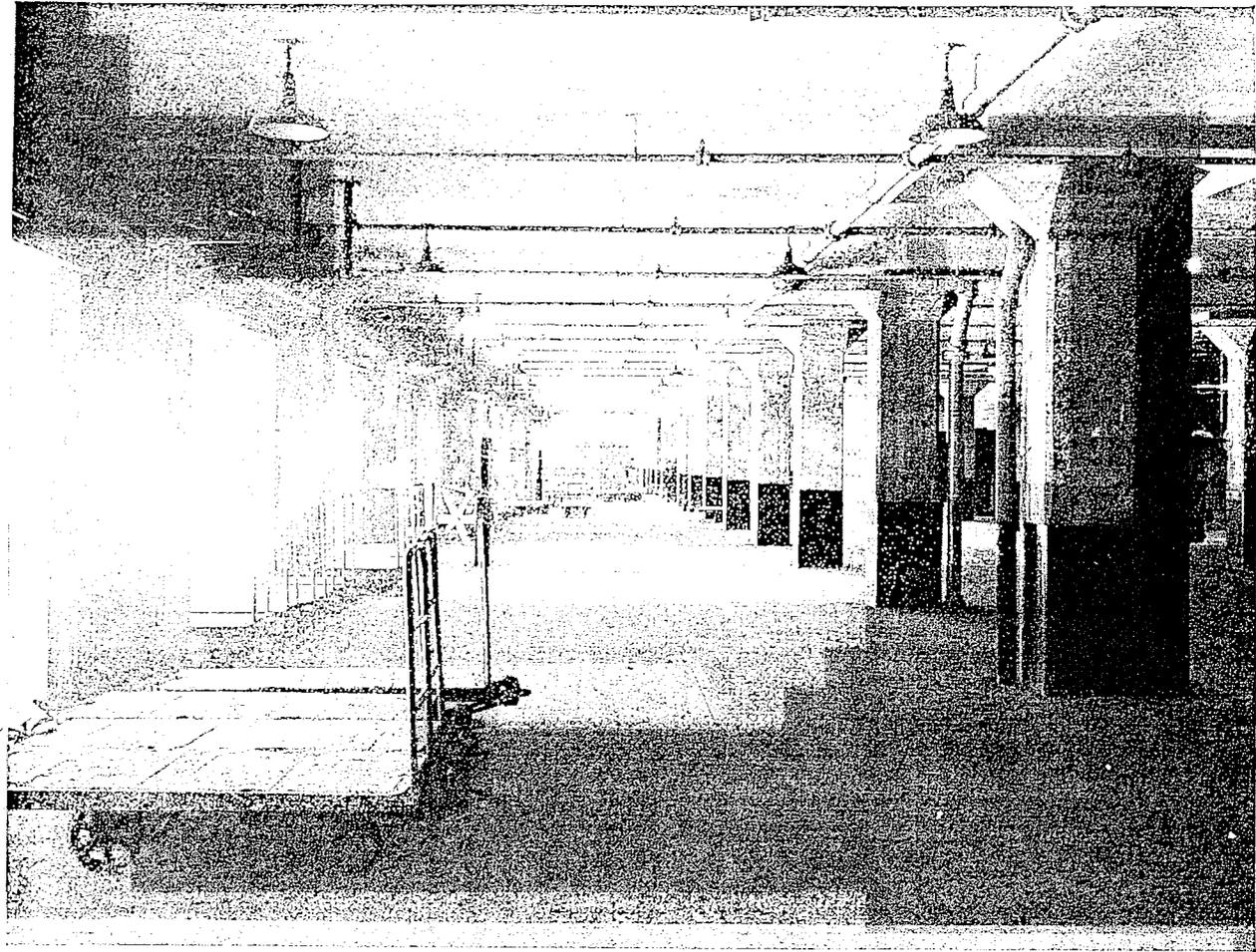
In cooperation with the New Jersey shippers, negotiations were carried on with the Trunk Line Association for the establishment of switching rates in lieu of class and commodity rates on local movements between industries and stations on Belt Line No. 13. The carriers advised they are not prepared to agree to establishment of switching rates in Belt Line No. 13 territory, but are willing to take up for individual consideration the question of lowering specific commodity rates to meet truck competition. Further action waits upon the shippers.

#### ***Northern New Jersey Transportation Survey***

On February 1, 1932 the Port Authority opened a field office in Newark, New Jersey, as headquarters for a survey of the transportation needs of the New Jersey section of the Port District west of the Hackensack River.

Records of tonnage handled by railroads, steamships and barges for certain months in 1932 have been compiled. Thus far 1,500 shippers have been interviewed, but because of the large number to be covered, the shipping survey will not be completed in the Newark territory until the middle of 1933.

The information gathered in this survey will be particularly useful in ascertaining the need, if any, for union stations for handling less than carload freight. It will develop also the amount of local freight movement by rail and truck within the Port District, aiding in the planning of new intraport freight and vehicular connections.



Port Authority Commerce Building, Interior View of Union Inland Freight Station

### ***New York Food Marketing Research Council***

This Council, established in 1926 by the Port Authority, United States Department of Agriculture and other public agencies, for the purpose of promoting and coordinating research in all aspects of the distribution and handling of foodstuffs in the New York market was placed in inactive status for the fiscal year July 1, 1932-June 30, 1933. This action was prompted by the reduced budgets of the cooperating members.

### ***Federal Aid to the New York State Barge Canal***

The New York State Barge Canal is an important artery of commerce between the Port of New York and the Great Lakes territory. This is the only water route to the interior which permits the Port of New York to compete with the Mississippi River system serving the Port of New Orleans, and the St. Lawrence waterways, serving Montreal and Quebec, in movement of low value, bulk commodities, such as grain, petroleum, phosphate rock, sulphur and wood pulp.

This waterway built by the State of New York at a cost of \$175,000,000 is used primarily for interstate commerce between the Great Lakes and ports on the Atlantic seaboard. It is the only waterway of its kind in the United States which does not enjoy Federal support. The Chief of Engineers of the United States War Department has found that a program of improvement, by deepening to 14 feet between locks and raising bridges to a minimum of 20 feet vertical clearance, is justified by the traffic which is using and will use the waterway. In spite of depression the traffic on the canal increased thirty-five per cent in 1931 as compared to 1929. Several additional self-propelled cargo ships and tankers were added to the canal fleet during the same period.

In furtherance of the proposal that the Federal Government aid in the future improvement of the canal, the Port Authority was instrumental in having introduced bills in the Federal Congress (S. 4059—H. R. 9497) providing for Federal aid to the State of New York in carrying out the

aforementioned improvements. Under some such arrangement the title, control, maintenance and operation of the canal will continue to remain in the hands of the state, but the national interest will be safeguarded by having all plans and specifications for improvements approved by the War Department.

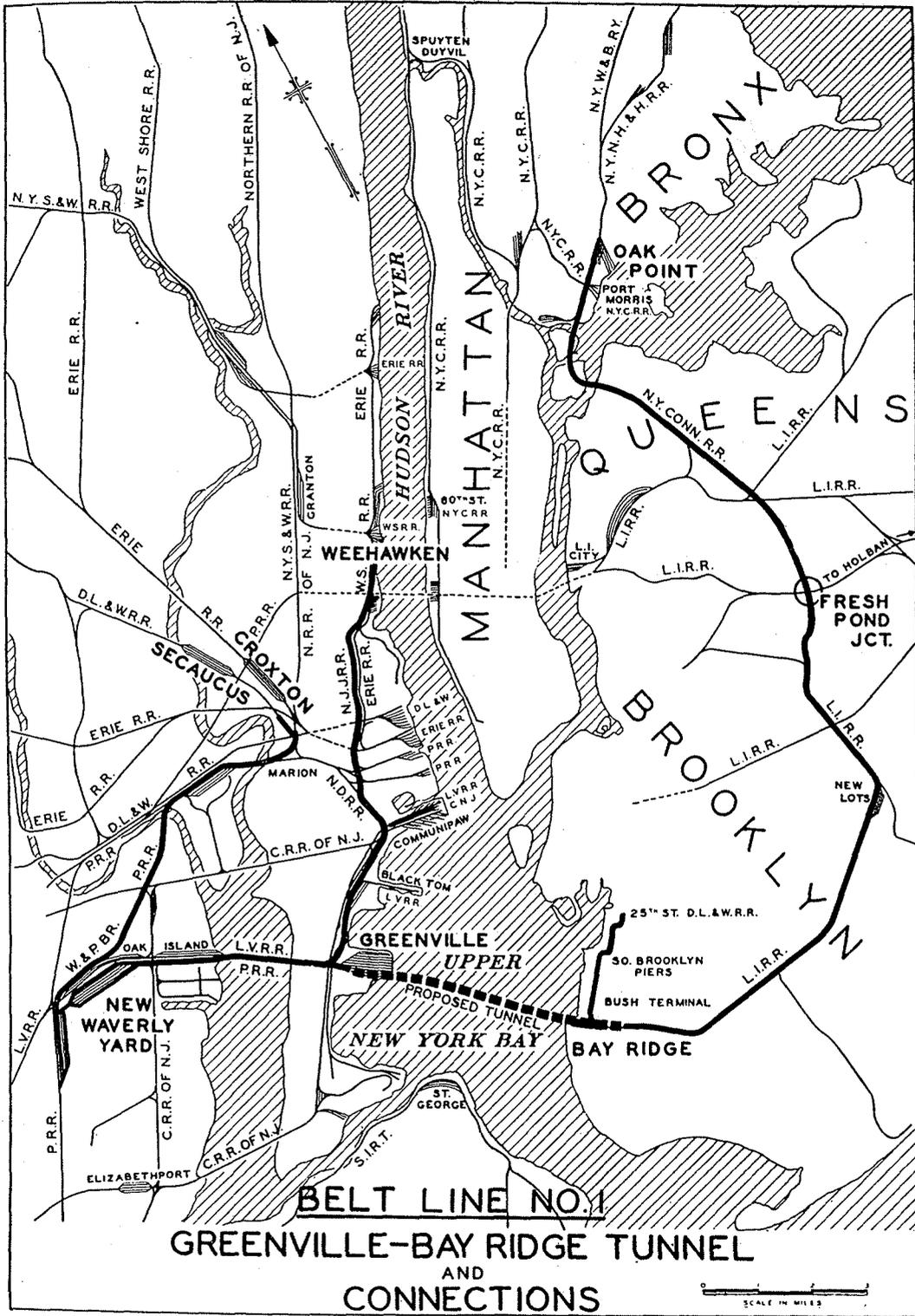
The Rivers and Harbors Committee of the House of Representatives requested a report by the Board of Engineers for Rivers and Harbors upon the advisability of Federal aid without taking title to the canal from the state. At a hearing in Albany on August 25th, the Port Authority, in cooperation with the Albany Port District Commission and Chambers of Commerce of all the important communities from New York City to Buffalo and Oswego, urged the advisability of the Federal aid proposal. Supplemental briefs were subsequently filed with the Army Engineers Board. The matter is now before the Board of Engineers in Washington.

#### ***Channel Improvement***

The policy of cooperating with the United States Army Engineers in field investigations and traffic surveys of channels was continued. The Port Authority also appeared several times before the Committee on Rivers and Harbors of the House of Representatives, asking authorization for improvements recommended by the Chief of Engineers.

Among the projects favorably recommended by the Chief of Engineers and tentatively accepted by the Committee on Rivers and Harbors after public hearing in Washington, for inclusion in the next Rivers and Harbors bill, are the following:

1. Dredging Hudson River to a depth of 40 feet for its entire width from pierhead line to pierhead line between 59th Street and Upper New York Bay.
2. Dredging 30-foot channel in Hudson River along New Jersey side from Weehawken to Edgewater to serve piers of the large industries located in that section.



3. Dredging of an anchorage area for quarantine inspection and other purposes in the vicinity of Perth Amboy, New Jersey.

4. Improvement of the Elizabeth River to a depth of 12 feet between harbor lines so that barges may tie up alongside of bulkheads without hampering the movement of other craft in the fairway. This project has been reported favorably by the Chief of Engineers and tentatively accepted by the Rivers and Harbors Committee with the proviso that no Federal funds shall be spent on channel improvement until local interests are prepared to pay the cost of bulkheading along the channel.

The Port Authority also participated in other hearings relative to proposed channel improvements and has also assisted the United States Engineers in their studies.

#### ***57th Street Bridge***

In 1890 the North River Bridge Company was chartered by Act of Congress to construct a bridge across the Hudson River subject to approval of the Secretary of War. No substantial progress was made in carrying the project forward and the charter lapsed, later being renewed by Act of Congress in 1922. The North River Bridge Company is now seeking the approval of the Secretary of War for its latest revised plans which contemplate a clearance of 185 feet above the pierhead line and 200 feet at the center of the river.

In the years following the chartering of the bridge company, many changes have taken place. The electrification of railroad lines has made possible the use of subaqueous transit tunnels; the success of the Holland Tunnel has demonstrated the feasibility of adequately ventilated vehicular tunnels, and the states of New York and New Jersey have agreed upon a plan for developing the port, which includes freight facilities and interstate vehicular crossings, coordinated with each other under the administration of the Port Authority.

The approval of the Secretary of War of the plans for the 57th Street Bridge would constitute an embarrassment to the effectuation of the coordinated port facilities program. The proposed bridge would impair the accessibility to, and therefore the value of, the expensive piers which the City of New York is building within a half a mile of 57th Street, for the accommodation of certain superliners which would be excluded from operating above this point on account of insufficient clearance.

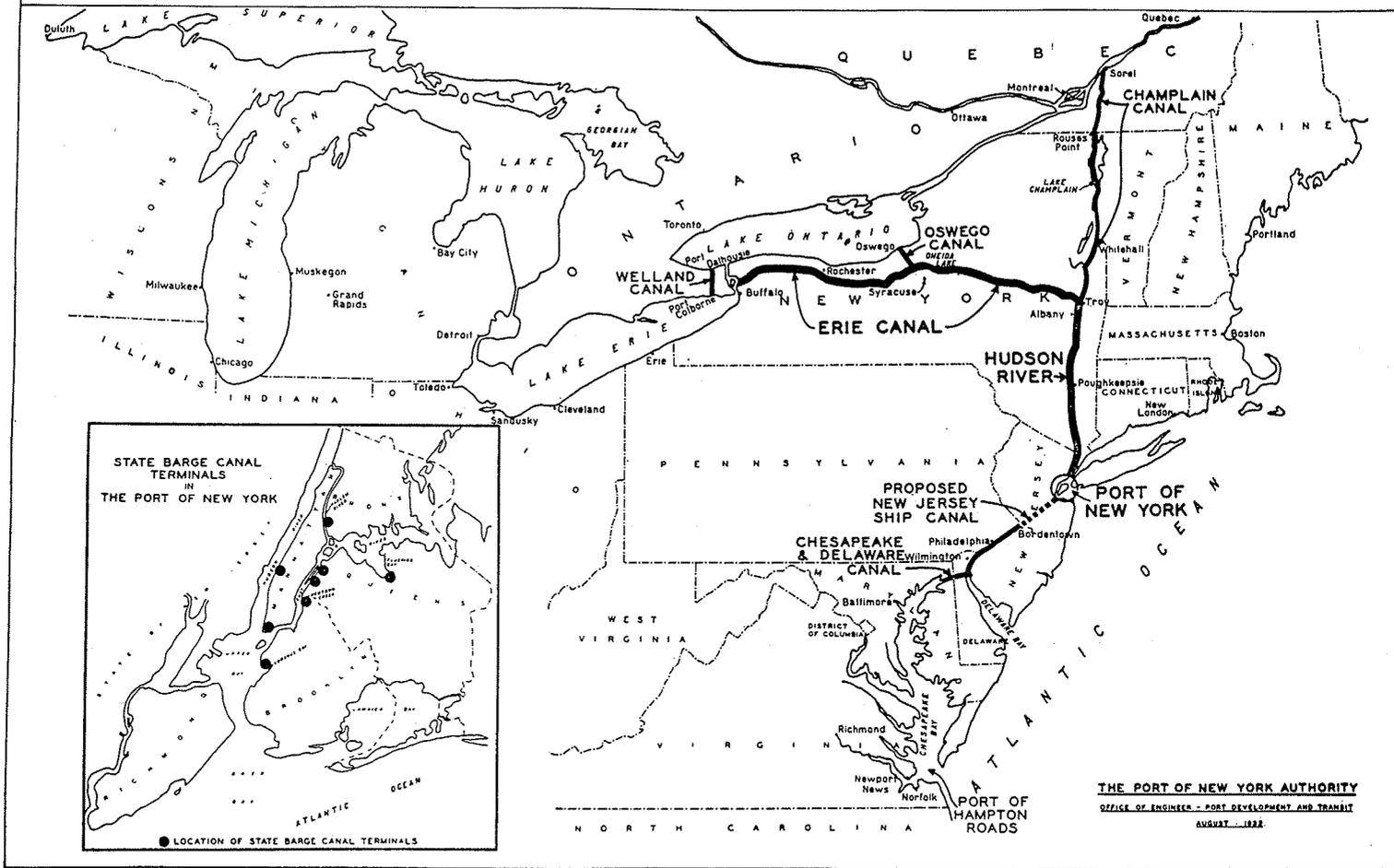
The bridge does not harmonize with the plans adopted by the two states for handling Manhattan freight traffic. Hauling of freight by way of the 57th Street Bridge would result in an increase of trucking mileages and undesirable concentration of freight shipments at the extreme northern edge of the freight district of Manhattan.

The proposed use of the 57th Street Bridge for rapid transit could not be carried out without the cooperation of agencies engaged in developing rapid transit lines on both sides of the port. These agencies have not adopted the North River Bridge Company's plans. They have been pursuing studies of their own through the Suburban Transit Engineering Board, which includes the representatives of the railroads, City of New York, the Port Authority, the North Jersey Transit Commission, and other public agencies.

As a highway facility the 57th Street Bridge is unnecessary and would lead to undesirable congestion in the Columbus Circle area. The coordinated program of the two states for interstate crossings at proper locations, which includes the completed Holland Tunnel, the George Washington Bridge, and the proposed Midtown Hudson Tunnel at 38th Street, leaves not the slightest possible justification for another crossing at 57th Street.

The Secretary of War has been urged to deny the application for a permit.

**THE PORT OF NEW YORK  
IN RELATION TO  
THE STATE BARGE CANAL AND OTHER WATERWAYS**



The Board of Estimate and Apportionment of the City of New York at a meeting on October 28, 1932, adopted a resolution unqualifiedly opposing the construction of the bridge. The Board of Pilot Commissioners, the New York State Chamber of Commerce, the Fifth Avenue Association, the Regional Plan Association and others have taken the same position.

While the Secretary of War is considering the application for a permit to construct the bridge under the old 1890 charter, a bill has been introduced in Congress to repeal the Act creating the North River Bridge Company.

#### ***Supervision of Emergency Work Bureau Forces***

The Emergency Work Bureau, which is providing employment from funds of the Emergency Unemployment Relief Committee, requested the Port Authority to outline and in a general way supervise activities which would furnish work for men of the so-called "white collar" class. The Port Authority agreed to provide a limited amount of technical supervision with the understanding that the Emergency Work Bureau assumed full responsibility for the personnel and assigned New York and New Jersey residents in equal proportions.

A branch office of the Emergency Work Bureau was opened at 14th Street and Eighth Avenue on November 16, 1931. These quarters were made available through the courtesy of the management of the County Trust Building. Men paid from the Emergency Unemployment Relief Committee's fund are divided into two shifts assigned to this branch office. Each shift works for a period of five days, Monday to Friday, in alternate weeks. At times both shifts have been assigned on the same day including Sundays, to cover special field surveys.

Beginning with the assignment of thirty men in the first week, this force has been built up to about six hundred men.

The men have been used on field and office studies in collecting, compiling and analyzing records which will prove of value to the Port Authority and other public agencies, and which would not otherwise have been collected.

## SECTION I—DEVELOPMENT AND PROTECTION OF THE PORT

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### Part 2—Port Protection

#### *Boston Differential Case, I. C. C. Docket 23327*

The City of Boston and the Boston Port Authority, by complaint filed in April, 1930, requested the Interstate Commerce Commission to prescribe differentially lower rates to Boston in place of present parity of rates with New York, and to order publication of separately established rates and charges for terminal services, such as lighterage, carfloatage, motor-truck service to off-track stations, etc. The Port Authority intervened in opposition and took the position that nothing in Boston's geographical and transportation situation justified lower rates than the rates via the Port of New York; that the Boston complaint was opposed by the business interests of New England; that the complaint was simply an opportunist attempt to take advantage of the lighterage complaint filed by the State of New Jersey; and that the complaint was based on unsound principles and was contrary to law. No decision has yet been rendered by the Interstate Commerce Commission in this proceeding.

#### *Lumber Loading Charges at Newark—I. C. C. Docket 24254*

In the last Annual Report reference was made to the pending case before the Interstate Commerce Commission dealing with the discrimination against the Port of New York, particularly the Port Newark sector, in the matter of absorbing lumber loading costs. The carriers absorbed such costs at competing ports of Philadelphia, Baltimore and Wilmington, but failed to do so at Port Newark.

The Interstate Commerce Commission, on February 17, 1932, rendered a decision which required that the discrimi-

nation against Port Newark be removed on or before May 31, 1932. Upon application of the defendant railroad the date was extended to June 15th, at which time tariffs were filed by the carriers making uniform charges for lumber loading at all North Atlantic ports.

***Railroad Warehousing and Storage Practices at New York—  
I. C. C. Ex parte 104 Part 6***

On January 6, 1932 the Interstate Commerce Commission announced an investigation into the storage and warehousing practices of the railroads at the Port of New York. In May the Port of New York Authority petitioned the Commission to broaden the scope of its inquiry to cover all of the North Atlantic ports, where the railroads compete for import, export, and other waterborne commerce, much of which commerce is stored or warehoused at the ports, thereby making the railroads' charges and practices an important factor in influencing the flow of traffic.

The New York hearings opened on June 27th, the Port Authority appearing and renewing its petition. On July 2d the Interstate Commerce Commission announced that it denied our petition, stating, however, that the denial was without prejudice and with the right of renewing the petition at the conclusion of the New York hearings. Apparently the Interstate Commerce Commission did not desire to broaden the scope until first ascertaining whether the practices under investigation justified some corrective measures.

At hearings resumed in Washington on August 27th the Port Authority renewed its motion to broaden the scope of the investigation to include all North Atlantic ports. The action of the Commission on both the motion for broadening the scope and the evidence of carriers' practices at New York, is still pending.

***Gulf Import and Export Rates—I. & S. Docket 3718***

In the Tenth Annual Report for the year 1930 reference was made to the successful conclusion of a litigation before the Interstate Commerce Commission involving the relation

of import and export rates into central territory, Gulf and South Atlantic vs North Atlantic ports. On January 6, 1931 the Interstate Commerce Commission denied to the Gulf and South Atlantic ports the right to establish the very low rates proposed for the purpose of diverting traffic from New York and other North Atlantic ports. The denial at that time was on the application for relief from the Fourth Section of the Commerce Act for the purpose of permitting the Southern carriers to carry lower rates to competitive points north of the Ohio River than contemporaneously maintained to points in their own territory south of the river.

Balked in their attempt to carry these low rates into central territory while maintaining higher rates to intermediate points, the Southern carriers, with the support of the Gulf and South Atlantic ports, in 1932 proposed to reduce all of their import and export rates both north and south of the Ohio River to a basis substantially lower than goes in effect from the Port of New York. Upon protest of the Eastern Trunk Lines, the Port of New York Authority and representatives of the other North Atlantic ports, the Interstate Commerce Commission suspended the proposed rates pending investigation.

Hearings began at Washington in April, 1932. By testimony of witnesses and by filing of subsequent brief by counsel, the Port Authority pointed out that the proposed rates sought to divert import and export traffic from the direct routes to those which are unduly long, uneconomical and wasteful. The Southern carriers' proposal would establish lower rates than the Commission had fixed as the minimum compensatory rates in the previous proceeding, F. S. A. 2040, settled in 1931. The proposed adjustment would establish the same rate on export and import traffic for 1,134 miles that the Commission had established at domestic traffic for 280 miles.

The Port Authority's evidence showed that the principal Gulf port, New Orleans, now enjoys as low ocean rates as any North Atlantic port, lies at the mouth of the vast inland waterway system of the Mississippi Valley, enjoys excellent

railroad and steamship service, and needs no artificial or discriminatory advantages to swell her rapidly growing commerce. The Port Authority did not seek any preferential freight rates for New York or attempt to curb the development of the Gulf ports in a normal way but took a broad position of parity and equal opportunity, as being sound national transportation policy.

The Merchants' Association of New York and the Shippers' Conference of Greater New York joined with the Port Authority in the brief filed with the Commission on December 1, 1932. No decision in this case has yet been rendered by the Interstate Commerce Commission.

***Rates on Sugar from Gulf and South Atlantic Ports—I. & S. Docket 3814***

The attempt of the Southern railroads to put into operation a general scheme of low import class and commodity rates to divert traffic from the Port of New York and other North Atlantic ports, mentioned above, was supplemented by a proposal to reduce drastically the rates on domestically refined sugar from these ports to midwestern territory. The Port Authority joined the Eastern railroads, and other port interests on the North Atlantic seaboard, in protesting these rates on the same grounds set forth in the general case, I. & S. 3718.

The Commission suspended the sugar rates and hearings were held in Washington, October 25, 1932. The Commission has not yet ruled upon these rates but in the meantime the Eastern Trunk Lines filed rates which substantially meet those proposed by the Southern carriers. These rates were also suspended by the Commission pending termination of the issues involved in the entire sugar rate adjustment.

The Southern carriers also filed reduced rates on green coffee in carloads to midwest destination effective September 18, 1932. These rates, as well as the sugar rates, were protested but the Commission failed to suspend them. Thereupon the Eastern railroads filed reduced rates from New York and other North Atlantic ports to meet the Gulf competition. These became effective November 27, 1932.

### ***Export Steamship Rates—U.S.S.B. Docket 72***

This case, mentioned in the Eleventh Annual Report, relates to a complaint filed by Philadelphia interests against rates maintained by steamship lines in the movement of petroleum products from New York and Philadelphia to West African ports. Hearings were held before an Examiner of the United States Shipping Board on January 13, 1932. The Port Authority intervened in this case in order to clarify the interpretation of the shipping act relating to prejudice and discrimination, and to protect shippers through the Port of New York from the necessity of subsidizing special and exceptional service to outport shippers.

Following the hearings a brief was filed by counsel, May 21, 1932, setting forth our views and urging dismissal of the complaint. In December the Shipping Board announced that the complaint had been dismissed. Upon request of the Philadelphia interests an opportunity for additional oral argument before the Shipping Board was granted on January 9th.

### ***Regulations for the Handling of Explosives***

By Act of Congress in 1921 the Interstate Commerce Commission was empowered and directed to formulate rules and regulations for the safe transportation of explosives and other dangerous articles by common carriers by land and water. Regulations covering common carriers by land have been in effect for many years but the Interstate Commerce Commission's regulations covering common carriers by water have not yet been issued.

As a result of several waterfront fires and the sinking of one vessel, by an explosion, directly over one of the important river transit tunnels in the Port of New York, a committee of owners of waterfront property and subaqueous tunnels came together in 1932 to investigate and determine the adequacy of the regulations covering handling of dangerous articles by vessels. This committee included representatives of the Port Authority, the City of New York, transit companies, utility companies, railroads

and others operating bridges, tunnels, piers and terminals, which might be endangered by fire and explosion in vessels' cargoes. Following the study and report on the matter the committee endorsed the principle of more adequate regulation of transportation of dangerous articles by water and urged the prompt adoption of a code of regulations by the Interstate Commerce Commission.

After conferences with these agencies and with the steamship lines the Port Authority appeared at a public hearing held by the Interstate Commerce Commission on January 4, 1933, to urge prompt adoption of regulations which will adequately protect life and property from explosions or fires due to improperly stowed cargoes.

#### ***Diversion of Canadian Grain***

Effective November 15, 1932, the British Parliament enacted a tariff law placing a duty of 2 shillings per quarter (6c per bushel at par) on wheat but exempting wheat of Canadian origin from payment. The British Customs Authorities have ruled that, in order to secure this preference in entering United Kingdom free of duty, Canadian wheat must move on a through consignment from a point in Canada to a point in the United Kingdom. This ruling seriously affects the movement of large quantities of Canadian wheat which normally finds the cheapest and most flexible route via Buffalo, Oswego and other United States lake ports to the Port of New York and other United States North Atlantic seaboard ports, the latter being ice-free during the period in which the ports of Montreal and Quebec are frozen up. The movement of Canadian wheat to the United Kingdom via the United States, which amounted in the fiscal year 1931 to over 21,000,000 bushels, is an important item in the trade of the Port of New York, furnishing bottom cargo to a large number of ships on their eastbound voyages. The Barge Canal grain fleet, Gowanus Terminal Elevator and the port organizations for handling the shipping of wheat have for years built up this Canadian wheat business.

A test shipment of Canadian wheat forwarded to Liverpool from Ft. William via the steamship "*Laconia*" from the Port of New York was rejected as not entitled to the empire preference by the British Customs Authorities in December, 1932. The shipment was accompanied by a certified bill of lading and photostatic copy of all papers so that it could be unquestionably identified as having Canadian origin, but the British Customs Authorities held that to comply with regulations the shipment must be identified as having been consigned to a person or firm in Great Britain or North Ireland, when it left Canada.

The Port Authority in cooperation with other interested parties now has the matter under discussion with Federal Government officials for whatever intergovernmental action may be possible.

## SECTION II—CONSTRUCTION

### Part I—Bridges

#### *George Washington Bridge*

The principal construction work on the bridge structure and approaches was completed prior to the opening of the bridge for traffic on October 25, 1931. Construction work carried out during the year 1932 has consisted of the erection of steel superstructure for the tower tops, placing of a granite facing for the New York tower bases and the improvement of vehicular and pedestrian traffic facilities, the necessity for which developed under operation.

The additional steelwork for the tops of the towers was erected by the Contractor for the steel towers and floor system without interfering with the flow of traffic on the bridge. The work was completed in October, 1932.

Under the contract for the main approach ramp of the New York approach, additional pedestrian facilities were installed during the year at the New York anchorage and improvements were made in the approach roadways in the vicinity of Northern Avenue, where traffic passing to and from Riverside Drive makes a sharp turn. Under the contract for the tunnel in West 178th Street, the permanent paving of the street was laid in March, 1932, only a temporary surface having been placed initially in order to allow for settlement of the backfill above the tunnel structure.

On the New Jersey approach alterations and additions in equipment were made to facilitate the access of pedestrians to the bridge.

The work under several of the construction contracts was completed in 1932 as follows:—The contract for the Riverside Drive connections of the New York approach, in February, 1932; the contracts for the electrical system

and for the plumbing system for the field office building in New Jersey, in January, 1932; the contract for the electrical equipment and installation on the main structure, in February, 1932; the floodlight towers at the New Jersey plaza, in January, 1932; the alterations to apartment houses on Haven Avenue in connection with the work on the New York approach, in March, 1932.

Two new contracts were awarded during the year. One was for the demolition and removal of apartment house No. 609-611 West 178th Street on the site of the ventilation building for the 178th Street tunnel. The other contract was for the granite facing for the New York tower base and certain miscellaneous construction in Fort Washington Park. The latter contract was awarded in August, 1932 and completed in November, 1932.

### ***Bayonne Bridge***

While essentially completed during 1931, a few of the contracts on the work were finally completed early in 1932. The contract for the electrical equipment and installation was completed in January; the installation of toll indicating and collection equipment was made under the contract for the toll buildings and was completed in May; and the contracts in connection with the field office building were completed in March, 1932.

One contract only was awarded during the year—the contract for the furnishing and planting of trees on both approaches to the bridge and shrubbery at the field office in Port Richmond. The work was done during April and May of 1932.

On the morning of Saturday, December 3, 1932, there was unveiled, with appropriate ceremony, two plaques presented by the American Institute of Steel Construction, Incorporated, as an award of merit for the most beautiful steel bridge, Class A, erected in 1931.

## SECTION II—CONSTRUCTION

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### Part 2—Inland Terminal

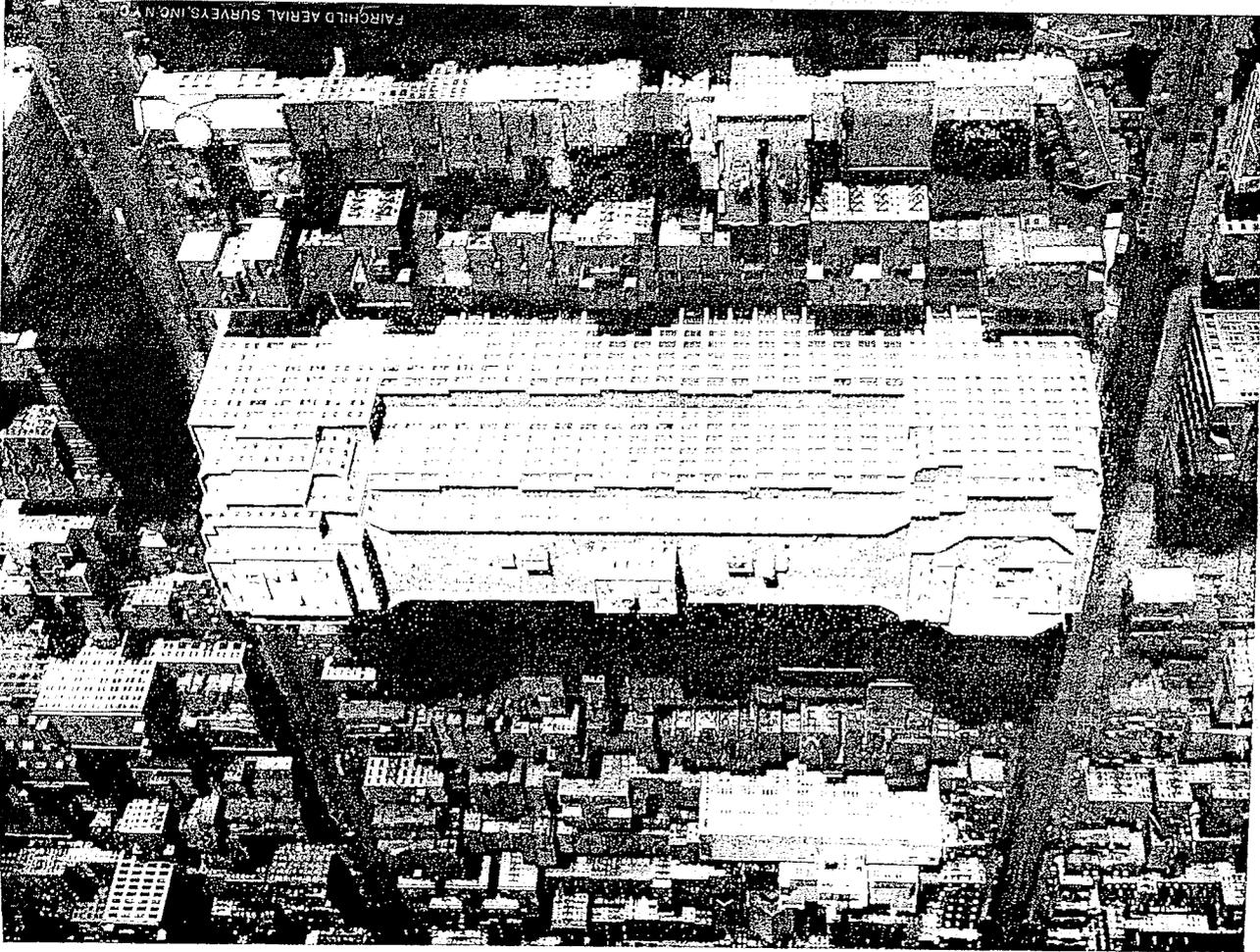
#### *Inland Terminal No. 1.*

The excavation and foundation work for Inland Terminal No. 1 was practically completed in 1931. A contract for the superstructure of the building was awarded in October, 1931, and active construction operations on this contract had been started before January, 1932. The work has progressed satisfactorily during 1932, although the building has not been completed as rapidly as was anticipated, owing to labor conditions.

The area leased to the railroads for the Union Inland Freight Station was occupied and put under operation by them on October 3, 1932. Other portions of the building have been completed to allow occupancy of the premises by tenants as called for, the first tenant having moved into the building on November 28, 1932.

The entire contract for the superstructure is now over ninety-five per cent completed and it is anticipated will be entirely completed by about March 1, 1933.

Air View of Port Authority Commerce Building, 8th and 9th Avenues, 15th and 16th Streets, New York City



## SECTION II—CONSTRUCTION

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### Part 3—Midtown Hudson Tunnel

#### *Midtown Hudson Tunnel*

The construction of the Midtown Hudson Tunnel was authorized by the legislatures of New York and New Jersey in February, 1931. Engineering studies and plans, which were well advanced during 1931, were continued in 1932 but with greatly reduced force because of inability to finance the project as reported hereinbefore.

The principal features of the river tunnel and the approaches have been determined and the work preliminary to construction, including the preparation of plans for the river tunnel contract, has now been so far advanced that construction can be started promptly after completion of the arrangements for financing the project.

The main tunnel, which is that portion of the project from tunnel portal in New York to tunnel portal in New Jersey, will consist of two tubes, the north tube having a length of approximately 7,200 feet and the south tube a length of 8,000 feet. The south tube will provide for two lanes of vehicular traffic moving from New Jersey to New York and the north tube for two lanes moving in the opposite direction.

The top of the tunnel is established at a depth of 62 feet below mean low water level at the pierhead lines and 70 feet below mean low water level at the lowest point of the tunnel. The tunnel will be built by the shield driven method, the construction procedure to follow closely that successfully used for the Holland Tunnel and other tunnels under the Hudson River. Each of the two tubes will have an outside diameter of 31 feet and will accommodate a roadway 21 feet 6 inches wide, which is 1 foot 6 inches

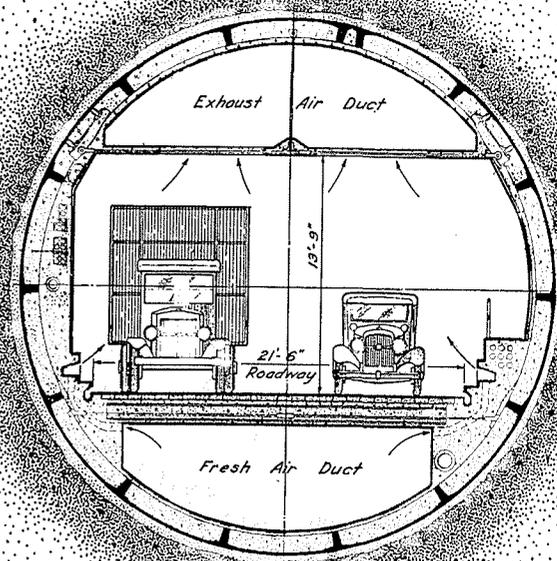
more than the width of the Holland Tunnel roadway. The extra width is provided to allow for the tendency toward wider vehicles.

The ventilation of the tunnel will be by the so-called transverse distribution method which has been in successful use in the Holland Tunnel. The space below the roadway will be used for the ducts conducting the fresh air from the ventilation buildings and the space above the ceiling will be used similarly for the exhaust air ducts. The fresh air will be forced into the air ducts in the tunnel by fans located in three separate ventilation buildings and from the ducts will be discharged into the roadway space throughout the length of the tunnel through continuous openings located along the roadway curbs. The vitiated air will be removed through air ports in the ceiling. Exhaust fans in the ventilation buildings will draw the vitiated air through the exhaust ducts and discharge it into the atmosphere through stacks extending above the roofs of the ventilation buildings.

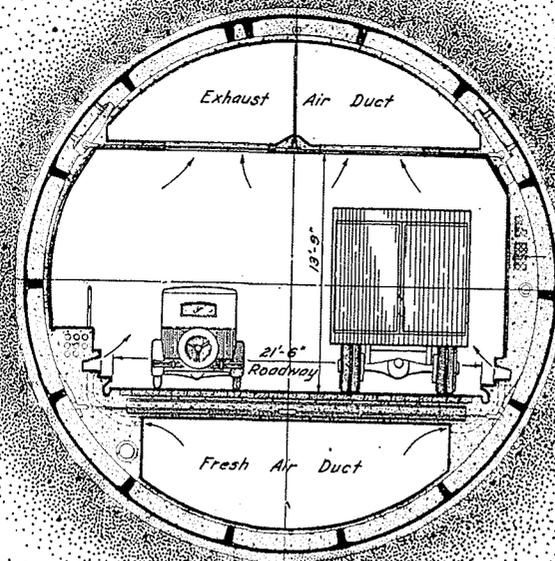
The construction of the ventilation shafts and the river tunnel will be embraced within the first contract. This work does not include tunnel finish, paving, electrical or mechanical installation. Plans for this contract have been in preparation and are practically completed.

Studies of the approach facilities and negotiations with the municipalities, both in New York and New Jersey, have also been continued.

The plans for the New York approach have been developed under the direction of a joint committee of the City and the Port Authority appointed to secure cooperation between the two bodies in the important and complex problem of developing a plan for the New York approach satisfactory to both, and in particular, for the purpose of coordinating the plans for the river tunnel with those for the City's proposed crosstown tunnel. In addition, negotiations have been in progress with the Dock Department of the City with respect to the location of the tunnel at the waterfront and its relation to the City's steamship piers at that point and with respect to the location of the river ventilation building.



SOUTH TUNNEL



NORTH TUNNEL

TYPICAL SECTIONS  
UNDER RIVER TUNNELS

In Manhattan, the tunnel roadways will attain the surface in the vicinity of 38th Street and Tenth Avenue. The New York approach is so planned that tunnel traffic will flow to and from a number of crosstown streets and north and south avenues in such manner as to avoid congestion at any point. Also, the locations of the entrance and exit plazas are such as to permit easy access to the west side express highway.

As in New York, the plans for the New Jersey approach have been developed with the cooperation of the local interests. Representatives of these interests have acted on a committee with representatives of the Port Authority. Engineering representatives of the State Highway Commission, Hudson County and the local municipalities have likewise collaborated with the Port Authority staff in the preparation of the plans. On the New Jersey side, the tunnel will connect with many important highway arteries. The tunnel portals will be located in Weehawken east of the Palisades from which point highway connections are provided with Hoboken to the south and with the communities on top of the Palisades to the north. The tunnel approach will continue west across the Palisades and make connection with the Hudson County Boulevard on top of the Palisades and with State Highway No. 1, both of which form important north and south arteries. The approach will terminate in the Hackensack Meadows at its intersection with State Highway No. 3, which runs in the northwesterly direction of the important industrial centers, Passaic and Paterson.

Both in New York and in New Jersey certain portions of the tunnel and approaches will pass under or occupy properties of the railroad companies. Accordingly, concurrently with the development of plans for the approaches, preliminary negotiations leading to agreements with the railroads have been in progress.

## SECTION III—OPERATION OF INTERSTATE VEHICULAR CROSSINGS

### Part I—Holland Tunnel

From April 21, 1930 to March 1, 1931, the Holland Tunnel was operated by the Port Authority as agent for the two states. Effective March 1, 1931, the control, operation, tolls and other revenue of the Holland Tunnel has been vested in The Port of New York Authority.

#### **Personnel**

Experience gained from operations indicated that traffic through the tunnel could be handled safely and efficiently with a smaller force than that employed in the previous year. Accordingly, the staff therefore was reduced from 416 to 398.

#### **Tolls**

The original scale of local, single trip rates was continued throughout the year.

The sale of combination tickets for use over the Bayonne Bridge and through the Holland Tunnel, under schedule put into effect November 15, 1931, was continued until April 1, 1932, when the following new schedule was established.

Item	Vehicle Type	Continuous Trip Bayonne Bridge and Holland Tunnel Rate
1.	Passenger auto, station wagon, hearse, ambulance, tractor without trailer, extra trailer .....	\$0.75
2.	Passenger auto, with 2-wheel trailer .....	1.35
3.	Motorcycle .....	.35
4.	Truck, up to 2 tons carrying capacity, 2 axles .....	.75
5.	Truck, over 2 tons and including 5 tons carrying capacity, 2 axles .....	1.00
6.	Truck, over 5 tons carrying capacity, 2 axles .....	1.25
7.	Tractor and semi-trailer, 6 wheel truck, 3 axles .....	1.50
8.	Tractor and trailer or truck and trailer, 4 axles .....	2.50
9.	Bus, 2 axles .....	1.40
10.	Bus, 3 axles .....	1.50

The only change in the schedule was that which eliminated the rate of eighty-five cents for passenger automobiles (2 seats). This class of traffic was included in the "Passenger Automobile" classification at seventy-five cents.

### **Traffic**

Due to general adverse business conditions and the reflection thereof upon the traffic, the total vehicles handled during 1932 was 10.6 per cent below 1931. A total of 11,403,863 revenue vehicles used the Holland Tunnel during 1932 as compared with 12,756,174 in 1931, which was the greatest number using the facility in any year since the commencement of operations in November, 1927. During the early months of the business depression the traffic continued to show a monthly increase over the prior year until March, 1932, when traffic fell off 7.7 per cent. Then followed a gradual decrease on an increasing scale until the month of October when traffic declined 15.8 per cent below the previous year. November showed a 14.8 per cent decrease and December 15.6 per cent.

Approximately the same downward trend occurred in all classes of traffic except light trucks, which declined less than two per cent.

The largest single month's traffic since the opening was in August, 1931, when 1,223,866 vehicles used the tunnel.

There has been a falling off in the number of fires that occurred in the tunnel, from a peak of 193 in 1928 to 80 in 1932. The number of disabled vehicles has also decreased from 2,208 in 1928 to 1,293 in 1932. The amount of gasoline furnished to patrons within the tunnel has decreased from a maximum of 684 gallons in 1928 to 114 gallons in 1932.

### **Revenues and Expenses**

The gross operating income of the Holland Tunnel for the year 1932 was \$6,276,147.40, an increase of \$188,519.62 or 3.1 per cent over the 1931 gross income included in Port Authority account, which, however, included only the ten months March to December. Prior to March 1, 1931 the Holland Tunnel was operated by the Port Authority for

the benefit of the two states. The gross income for the twelve months of 1931 amounted to \$7,020,417.11. The decline, therefore, in gross revenues from 1931 was \$744,269.71, or about ten per cent. The difference due to "Miscellaneous Income" is negligible so that the decrease may be ascribed to the falling off in traffic which was approximately ten per cent. The average rate per vehicle was about fifty-four cents each year.

The net operating income for 1932 was \$2,605,076.96 as compared with a net income of \$3,031,987.89 for the period March 1 to December 31, 1931.

The cost of operation decreased from a total of \$1,566,113.21 in 1931 (taking twelve months for comparative purposes) to \$1,542,086.06 in 1932, a decrease of \$24,027.15 or 1.5 per cent. Because of the incurrence of extraordinary expenditures, actual economies effected were more pronounced than indicated by a comparison of totals.

For instance, decreases of:

- \$12,676.73 for superintendence
- 17,704.54 for other maintenance
- 3,869.88 for cleaning
- 5,846.98 for lighting
- 9,018.70 for power
- 6,790.59 for ventilation
- 2,797.11 for machinery and tools
- 10,529.83 for automobiles, vehicles, etc.
- 44,301.48 for policing
- 13,054.53 for collecting tolls
- 6,885.45 for injuries and damages

were partially offset by increases of:

- \$18,150.05 for painting
- 28,815.91 for depreciation
- 29,316.98 for insurance

The salient increases in operating expenses are explained as follows:

In 1932 the tunnel ceiling and other parts of the structure were painted for the first time since the tunnel was placed in operation in 1927, necessitating the employment of a

gang of temporary painters. The increase in depreciation of equipment is caused by the fact that only six months' depreciation of equipment is reflected in the 1931 account while the 1932 account covers the full year. Prior to July 1, 1931, tunnel equipment was not depreciated. The increase in insurance is due to the fact that 1931 account carries only ten months' charges, March 1 to December 31, while the 1932 account covers the full year. A portion of this increase is also attributable to the method in which workmen's compensation insurance charges are accrued and actually paid. The 1931 accrual developed to be much less than the amount calculated on the actual payroll basis, the adjustment being made in 1932.

### ***Improvements and Changes***

Tests on the recording of smoke in the tunnel by means of photo-electric cells have been continued and indicate that this equipment may prove satisfactory. There remains to be provided a means of calibrating the readings of the recorder in terms of visibility in the tunnel. Work is in progress on determining this calibration.

A mezzanine floor of approximately five-hundred square feet in area was erected at the northerly end of the machine shop, to which the shop office and telephone repair men were transferred from the main floor, thereby securing additional space needed for the repair of automobiles.

The practice of switching on the red "Stop Traffic" light whenever a vehicle comes to a stop in the tunnel was inaugurated. This was found to have a noticeable effect in reducing the number of rear end collisions in the tunnel since it gives all drivers immediate warning whenever there is a stoppage. Under the system in effect prior to this improvement patrolmen investigated the nature of each stoppage to determine whether or not one or both lanes was closed before turning on either the yellow or red lights.

Hand rail posts, at intervals of 100 feet throughout the length of both tunnels, were painted red. This was done to aid the travelling public in determining the proper spacing to be maintained between cars.

During the year the ceiling, bench walls and baffle plates in the tunnel were repainted at an approximate cost of \$21,000.

Changes were negotiated in the original power contracts which it is anticipated will result in annual savings of approximately \$23,000.

### **SECTION III—OPERATION OF INTERSTATE VEHICULAR CROSSINGS**

#### **Part 2—George Washington Bridge**

The George Washington Bridge has been in operation since October 25, 1931.

##### ***Personnel***

Experience gained from operations indicated that traffic over the bridge could be handled safely and efficiently with a smaller force than that originally appointed. The staff therefore was reduced from ninety-one to eight-four. Further reductions have been made since the close of the year.

##### ***Toll Equipment***

The toll collection and recording equipment in use on this bridge has been perfected to the point where practically one hundred per cent performance is being obtained, insuring as far as possible the correct reporting of all revenues collected.

This equipment consists of counting treadles embedded in each traffic lane in such a position that every vehicle axle passing over it is electrically recorded, and subsequently converted into number of vehicles as a check upon the work of the toll collector who is required to manually register the passage of each vehicle through his toll lane according to tariff classification. Overhead and remote traffic indicators, synchronized with each toll register, afford constant opportunity for checking the work of toll collectors and protect the motorist against any improper application of the authorized tariff.

##### ***Added Pedestrian Facilities***

In the spring of 1932 two automatic, coin operated telescopes were installed on sidewalks at the George Wash-

ington Bridge at a cost of \$1,218 for the use of pedestrian patrons. The charge made for their use is ten cents and a revenue of \$629.10 was realized up to January 1, 1933.

In September, thirty benches each capable of seating six persons were installed on the bridge sidewalks for the convenience of pedestrian patrons.

### **Highways**

On July 28, 1932, Highway 4 from Paterson, N. J., to the George Washington Bridge was opened for traffic providing a direct and highspeed connection for the thickly populated communities within this district. There still remains Highway 6, extending from the bridge plaza southwest which will probably be opened for traffic about midsummer 1933. Then all contemplated highway feeders to the bridge will have been completed.

On October 3, 1932, Lemoine Avenue, Fort Lee, known as New Jersey State Highway No. 1, US 9-W, was opened for traffic from Coytesville to Fort Lee, relieving the traffic pressure on Hudson Terrace and affording a direct approach to bridge plaza from all points north.

On the New York side approach highways were completed before the bridge was opened to traffic except the tunnel connections between Northern Avenue east to the Harlem River.

### **Traffic**

A total of 5,509,946 revenue vehicles used the bridge during the calendar year, and tolls were collected from 245,268 pedestrians. Of the vehicles handled, ninety-one per cent were passenger cars.

Truck traffic has shown a steady growth throughout the year, despite the depression, indicating an increased popularity of the bridge route as compared with that of competing ferries, a situation most encouraging and indicative of what may be expected when business returns to normal.

The peak day was September 5th, when 37,875 vehicles were handled.

During October and November, 1931, there was a large amount of curiosity traffic using the George Washington

Bridge. By December of that year, however, traffic had settled down into a normal condition and a comparison of that month with December, 1932 presents the first opportunity to determine the trend of traffic over this bridge. Figures for these months show very conclusively that week-day traffic for 1932 is considerably above week-day traffic in 1931. Despite the fact that in December, 1932 there were two very heavy snow storms on successive week-ends, there was an increase in traffic of 2.5 per cent over December, 1931.

During the past year competing ferries have reduced their rates as a result of competition from the bridge. On December 17th the Dyckman Street Ferry, which spans the Hudson River between Dyckman Street, New York, and Englewood Cliffs, New Jersey, ceased operation, at least for the winter.

#### ***Revenues and Expenses***

The gross income for the first full year of operation ending December 31, 1932, amounted to \$3,044,880.14. After deducting operating expenses, interest on funded debt and other income charges amounting to \$1,740,303.60 there remained a net income of \$1,304,576.54. A detailed comparison with previous year of income and expenses cannot be made until 1934.

## SECTION III—OPERATION OF INTERSTATE VEHICULAR CROSSINGS

### Part 3—Bayonne Bridge

The Bayonne Bridge was opened to traffic on Sunday, November 15, 1931.

#### **Personnel**

When the bridge was opened for traffic, the operating staff consisted of seventeen men. Experience gained from operations indicated that traffic over the bridge could be handled safely and efficiently with a smaller force than that originally appointed. Accordingly, a reduction of six men was effected and the operating force is now eleven men.

#### **Tolls**

The following schedule of tolls is now in effect:

Item	Vehicle Type	Single Trip	Continuous Trip (2 hour limit)	
			Bayonne Br. & Holland Tunnel	Bayonne Br. & Outerbridge Cr. or Goethals Br.
1.	Passenger auto, station wagon, hearse, ambulance, tractor without trailer, extra trailer	\$ .50	\$ .75	\$ .75
	Horse drawn vehicle.....	.50	....	.75
2.	Passenger auto with two wheel trailer....	.70	1.35	1.35
3.	Motorcycle .....	.25	.35	.35
	Bicycle, animals per head.....	.25	....	.35
4.	Truck, up to and incl. 2 tons carrying capacity, 2 axles.....	.50	.75	.75
5.	Truck, over 2 tons and incl. <del>7</del> tons carrying capacity, 2 axles.....	.75	1.00	1.25
6.	Truck, over 5 tons carrying capacity, 2 axles	1.00	1.25	1.50
7.	Tractor and semi-trailer, six wheel truck, 3 axles .....	1.10	1.50	1.75
8.	Tractor and trailer or truck and trailer, 4 axles .....	1.50	2.50	2.75
9.	Bus, 2 axles.....	1.00	1.40	1.50
10.	Bus, 3 axles.....	1.10	1.50	1.60
	Pedestrians .....	.05	....	....

On April 1, 1932, the original toll schedule was revised downward in order to partially offset reduced competing

ferry rates. The changes involved the elimination of a higher rate for sedans, and places all passenger automobiles on a flat rate of fifty cents on all crossings. At the same time, trucks of capacity up to and including two tons were reduced from sixty cents to fifty cents. Combination rates in effect with the Holland Tunnel and Arthur Kill Bridges were reduced, commensurate with the reduction in single trip rates.

In order to encourage a more extensive demand for commutation rates applicable on the three Staten Island Bridges, the 26-trip passenger commutation coupon book was reduced from \$8.00 to \$6.00 giving the commuter the benefit of a twenty-three cent one-way toll compared with twenty-five cents applicable on competing ferries. The 60-trip passenger commutation coupon book, which formerly sold at \$15.00 was eliminated. Commutation rates on small trucks were reduced from forty-five cents to forty cents per trip, and all commutation truck tickets were issued for sale on the basis of a minimum of 50 trips per month instead of 100 trips per month. The results obtained from these reductions and changes have been encouraging.

#### ***Toll Equipment***

This bridge is equipped with the same type of toll recording and checking facilities as at the George Washington Bridge. The installation has been completed in all traffic lanes.

#### ***Traffic***

A total of 462,859 revenue vehicles used the bridge during the calendar year, and tolls were collected from 20,136 pedestrians. Of the vehicles handled 377,285 or 81.5 per cent were passenger cars.

The peak day was July 31st, when 3,811 vehicles were handled.

The Bayonne Bridge did not open for traffic until November 15, 1931, and as a result the Sundays in December of that year show a greater amount of traffic than Sundays in the same month of this year, due to curiosity traffic

in 1931. Despite the reduction in Sunday traffic during December, 1932, the total traffic for all days was practically the same as for December, 1931,—32,182 vehicles using the bridge in 1932 compared to 32,297 in December, 1931. It will be seen from this comparison that the week-day traffic, which is made up primarily of the regular riders has shown considerable growth.

***Revenues and Expenses***

The gross income amounted to \$304,953.58 for the year ending December 31, 1932 while the operating expenses, interest on funded debt and other income charges were \$435,166.74 leaving a deficit of \$130,213.16 for the first calendar year operation.

## SECTION III—OPERATION OF INTERSTATE VEHICULAR CROSSINGS

### Part 4—Arthur Kill Bridges

Goethals Bridge and Outerbridge Crossing, known as the Arthur Kill Bridges, have been in operation since June 29, 1928.

#### *Personnel*

The total personnel on the two bridges comprises twenty-four men of which eight are engaged in the Elizabethport, N. J.-Port Richmond, S. I. bus operation over the Goethals Bridge.

#### *Tolls*

The schedule of tolls applicable to the Arthur Kill Bridges is the same as that applying to the Bayonne Bridge except that at the Bayonne Bridge combination rates also apply with the Holland Tunnel. In view of this, the same changes in toll schedule as referred to under Bayonne Bridge similarly affects the two Arthur Kill Bridges.

#### *Toll Equipment*

The equipment at these bridges is practically identical with that at the George Washington and Bayonne Bridges except that National cash registers are used by the toll collectors on which to record fares, whereas Ohmer registers are used at the other bridges. These original cash registers have been adapted to the mechanical checking devices.

#### *Traffic*

General business depression has seriously affected the gross revenues accruing from these two facilities.

A total of 1,012,885 vehicles used these bridges in 1932 as compared with 1,250,335 in 1931, a decrease of 237,450 vehicles or 19.0 per cent. The larger proportion of this

decrease occurred at the Outerbridge Crossing, due primarily to a further reduction in toll rates on the competing Perth Amboy Ferry, and also due to the large decrease in tourist travel, which was more generally affected by business depression than were other types of vehicles.

The daily peak movement over these two bridges occurred as follows: Goethals Bridge, August 14th, 4,635 vehicles; Outerbridge Crossing, July 3rd, 3,393 vehicles.

#### ***Goethals Bridge—Bus Line***

Bus operation on Goethals Bridge by the Port Authority, inaugurated on March 31, 1931, was continued during the year 1932. While it has not yet reached a self-sustaining basis due to the depressed condition of industries in the vicinity of this bridge, a total of 214,762 passengers used this facility. Average monthly operating expenses were reduced 19.0 per cent and the operating deficit was reduced from \$9,000.25 in 1931 to \$3,747.60 in 1932. The revenue derived from bus passengers is credited to the income account of the bridges. The fare to bus riders is ten cents and fifteen cents depending on length of ride.

On September 1, 1932, the line was extended in Elizabeth to touch three trunkline railroad terminals, B. & O., P. R. R. and C. R. R.

#### ***Revenues and Expenses***

The gross income for the year ending December 31, 1932 was \$577,880.61 and after deducting operating expenses, interest on funded debt and other income charges of \$765,152.78 there was a deficit of \$187,272.17 for the year's operation.

## SECTION IV—GENERAL

### Part I—Financial

#### *General*

The Port Authority continued in a strong financial position despite general adverse business conditions. While these conditions affected revenues, the conservative investment policy which has been followed has considerably enhanced its financial position.

Facility	INCOME FROM INVESTMENTS	
	1932	1931
Holland Tunnel .....	\$64,179 10	\$45,693 21
George Washington Bridge.....	159,715 57	42,887 68
Bayonne Bridge .....	96,473 70	12,011 31
Arthur Kill Bridges.....	43,789 89	65,241 47
Inland Terminal No. 1.....	87,472 66	11,193 61
General Reserve Fund.....	64,836 63	.....
	<hr/>	<hr/>
	\$516,467 55	\$177,027 28

A total of \$300,000 in Series A bonds was retired on March 1, 1932, leaving \$141,700,000 all issues now outstanding. The bonds are direct obligations and are secured by revenues remaining after all expenses and interest charges.

The Port Authority is vested with all necessary and appropriate power to effectuate the comprehensive plan, except the power to levy taxes or assessments, or to pledge the credit of the states which created it.

#### *General Reserve Fund*

In order to provide greater security for bondholders, the two states authorized the Port Authority to pool all surplus revenues received from the operation of terminal and transportation facilities and apply them to a general reserve fund. The enabling acts provide that this fund shall be built up and maintained in an amount equal to ten per cent of all bonds currently outstanding. When

the fund has been built up to that point, surplus earnings are then subject to the direction of the two states. Whenever necessary the monies in this fund may be applied to the payment of obligations assumed by the Port Authority in connection with any of its projects.

During the year there was added to this fund the sum of \$1,105,076.98 so that on December 31, 1932 the balance was \$2,187,837.90.

This asset is made up of Port Authority and New York Municipal bonds to the total of \$1,172,315.86 and cash \$1,015,522.04.

No withdrawals are anticipated during 1933 and the additional amounts to be added will depend mainly upon net earnings of the Holland Tunnel.

In order more clearly to indicate the manner in which the General Reserve Fund functions, there follows a chart showing the disposition of earnings of each of the individual projects.

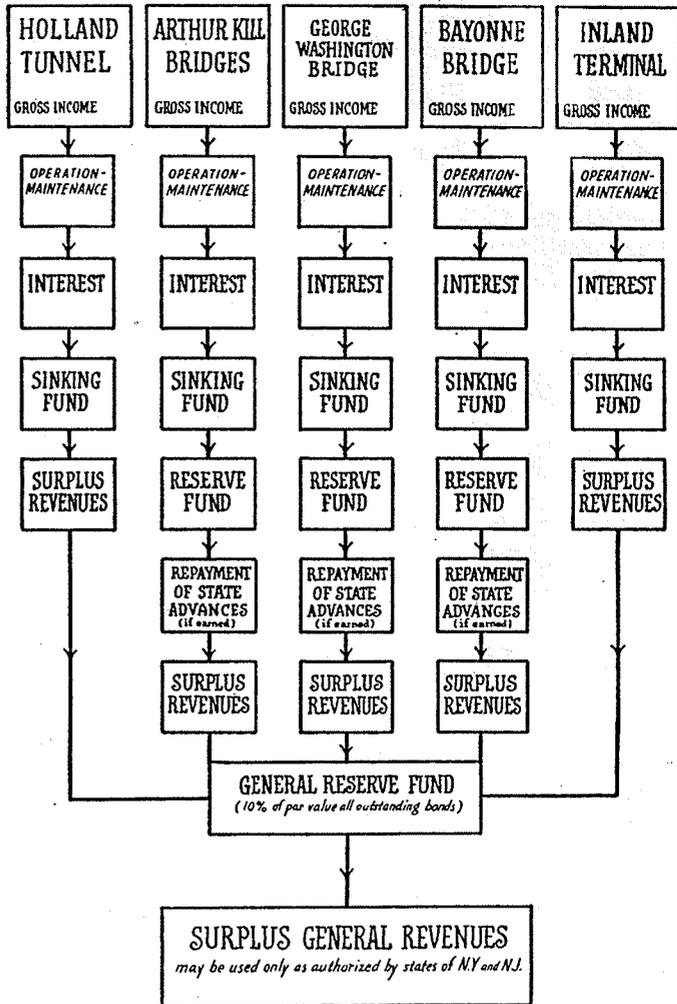
Reference to the chart will indicate that no monies were advanced by the two states in aid of Holland Tunnel and Inland Terminal financing, so that all surplus revenues from these facilities are directly available for the General Reserve Fund. Surplus revenues will not accrue from the other facilities until the specific requirements with respect to sinking and reserve funds and the repayment of state advances, are met.

#### ***Midtown Hudson Tunnel***

It was reported last year that progress in engineering studies and in acquisition of real estate for the Midtown Hudson Tunnel had been made possible through the use of funds obtained through temporary credits. At present these loans aggregate \$2,300,000 and are covered by a single note expiring April 29, 1933. The two states have advanced \$400,000 for preliminary studies, so that the actual cash received to date amounts to \$2,700,000.

The actual amount expended for property acquired is \$1,076,888.76. There has been expended for engineering work, test borings, interest on borrowed money, general

CHART SHOWING DISTRIBUTION OF EARNINGS OF EACH UNIT



expenses, etc., \$1,158,816.66. The balance remaining in this account as at December 31, 1932 is \$464,294.58.

The total commitments including mortgages outstanding, mortgage interest, amortization, engineering studies, surveys, etc., approximate \$2,400,000 so that negotiations for an additional loan of \$2,000,000 will be necessary if construction is not financed in the near future. It may become necessary to refund the whole of this temporary debt through the medium of short-term notes or otherwise.

Because of unfavorable market conditions it was not deemed prudent to proceed with the sale of securities in order to secure funds to progress construction work.

On August 5, 1932 there was filed with the Reconstruction Finance Corporation, a notice of intention to apply for a loan under the Emergency Relief and Construction Act of 1932. Several conferences were held in an endeavor to work out to the mutual satisfaction of the Corporation and the Port Authority, the terms of the loan, security and interest rate. In order to aid the Corporation in consideration of the project, a comprehensive report was prepared and submitted to the Reconstruction Finance Corporation in response to its Circular No. 3. Negotiations were subsequently carried on in Washington but it has not been possible to reach an agreement on what the Port Authority deemed to be reasonable terms. Although anxious to carry out the spirit of the legislation which anticipated the acceleration of work on self-liquidating projects, and the consequent lessening of unemployment, the Port Authority determined that it would proceed only upon a basis which would not injure its general credit. The negotiations thus far have not resulted in any agreement. Nevertheless, it is felt that the differences involved can be solved and hope is held that agreement will be reached in the near future.

### ***Sinking Funds***

#### ***Series A***

The New York-New Jersey Interstate Bridge Series A Sinking Fund was established as at December 31, 1930, and there was placed into this fund the sum of \$100,655.40. As of December 31, 1931 the fund was increased to \$600,826.78. On March 1, 1932 \$300,000 of these bonds were retired leaving a balance of \$300,826.78 in the fund. As of December 31, 1932 there was paid into this fund the sum of \$353,306.52 so that it totaled \$654,133.30 at the close of the year. On March 1, 1933 there will mature \$400,000 par value of these bonds. After this payment there will remain the sum of \$254,133.30.

The assets of the Series A Sinking Fund are definitely

set aside in safe deposit boxes and separately accounted for. This fund is made up of Port Authority and New York and New Jersey Municipal bonds to the total of \$653,760.73 and cash \$372.57.

The resolution establishing and pledging the General Reserve Fund, reserves the right to the Port Authority, in its sole discretion, to use the monies therein to the fulfillment of various undertakings of the Port Authority including the making of payments into Sinking Funds.

*Series C*

While the resolution providing for the issuance of Series C bonds, provides that the first retirement of such bonds shall be on January 3, 1938, and that the amount of this retirement shall be placed into said sinking fund during the year succeeding January 3, 1937, the resolution also provides that bond interest shall be paid from the sinking fund provided that tolls and revenues remaining after the payment of operating expenses and maintenance charges are insufficient to provide for the payment of interest charges. Because of the fact that there was not sufficient revenue remaining to pay the entire amount of the interest charges, it was necessary to establish the New York-New Jersey Interstate Bridge Series C Sinking Fund, so that a portion of the interest charges could be paid therefrom. During the year there was placed into this fund, in cash and securities, the sum of \$1,000,000.

The assets of the Series C Sinking Fund are definitely set aside in safe deposit boxes and separately accounted for. This fund is made up of Port Authority and New York and New Jersey Municipal bonds to the total of \$716,423.43 and cash \$233,576.57.

*Series E*

In accordance with the provisions of the bond resolution the New York-New Jersey Interstate Tunnel Series E Sinking Fund was established prior to March 1, 1932. This fund consists of Port Authority Series E bonds amounting to \$503,347.11.

### **Investments**

There was being held, as of December 31, 1932, in accounts of the various facilities a total of \$11,107,856.13 of securities. This sum which was invested in Port Authority and New York and New Jersey Municipal bonds represents the cost of bonds purchased for sinking and reserve funds, and also for the purpose of employing to the best advantage the funds being held for construction payments.

These securities are held in the following accounts:

Holland Tunnel .....	\$1,785,404 98
George Washington Bridge.....	4,817,080 13
Arthur Kill Bridges.....	668,592 37
Bayonne Bridge .....	1,610,308 81
Inland Terminal No. 1.....	1,054,153 98
General Reserve Fund.....	1,172,315 86

Total .....\$11,107,856 13

### **Depositories**

On December 31, 1932 there was distributed among 168 banks in New York and New Jersey the sum of \$8,546,716.86. The decrease under last year's cash balance is due largely to contract payments for construction of Inland Terminal, and to the withdrawal of cash for investment.

Because of the policy of requiring adequate collateral to secure deposits, no loss has ever been sustained because of bank failures. It was felt, however, that a greater safeguard for deposits should be placed in effect, and during the year the form of collateral agreement and of depository bond was revised so that a speedy recovery of funds can be effected when a depository closes.

Market values of collateral placed with trust departments of banking institutions as security for deposits are checked currently to insure the maintenance of sufficient values to cover amount of deposit. Only those institutions having capital and surplus of at least \$1,000,000 are authorized to accept collateral in trust for the funds deposited. Deposits are limited to twenty per cent of the combined capital and surplus of the bank authorized to receive the deposit.

Since June 11, 1930, twenty-five banks, nine in New York and sixteen in New Jersey, in which Port Authority funds were placed on deposit, suspended payments, but in each case the protection afforded by carrying out the policy of the Port Authority proved sufficient, so that all deposits were repaid in full without court proceedings.

## SECTION IV—GENERAL

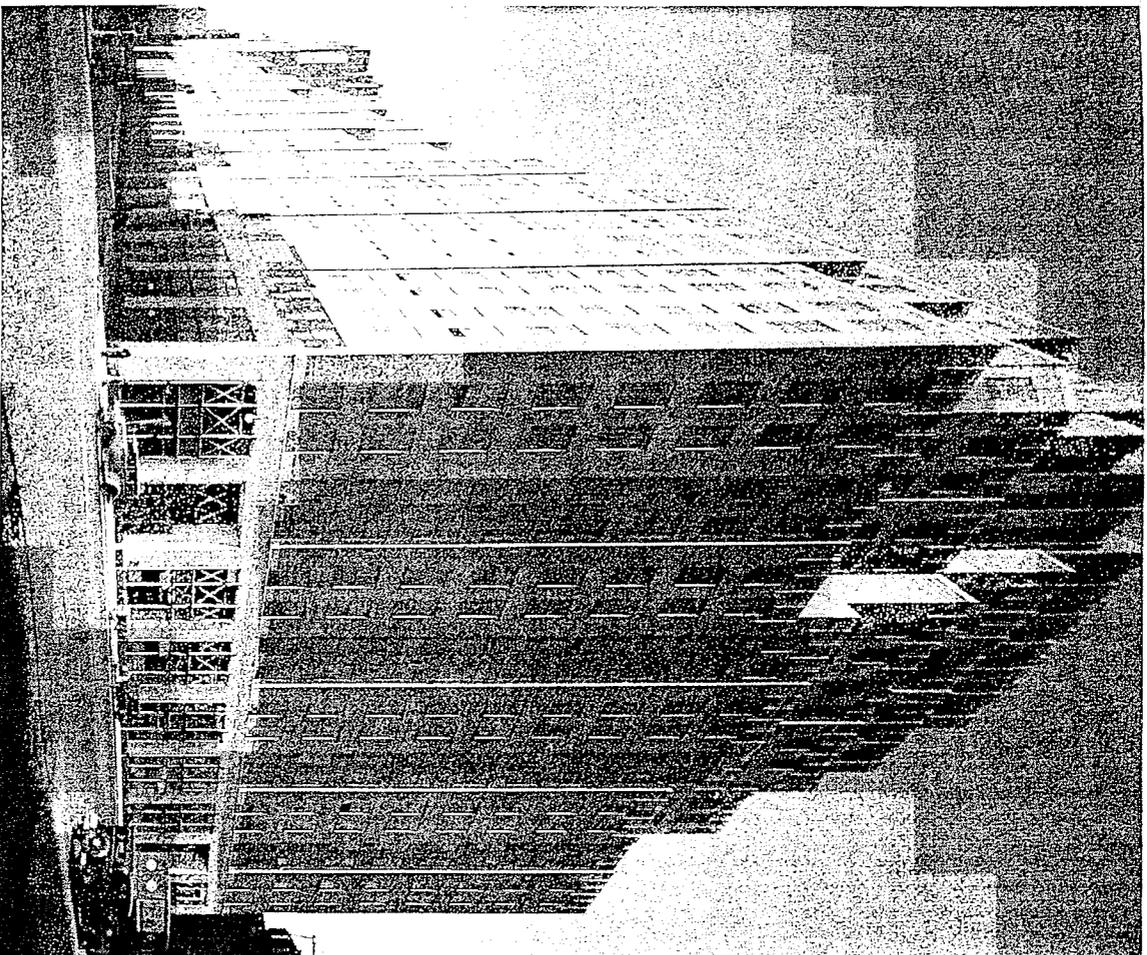
### Part 2—Real Estate

#### *Inland Terminal No. 1*

All the property required for the site of Inland Terminal No. 1 had been acquired prior to the beginning of the year. Although awards in condemnation for several parcels acquired by that method are still in litigation, and precise figures have not yet been determined, the total cost of real estate will be well within the original estimate of \$3,750,000.

Under date of July 30, 1930, an agreement was entered into with Brown, Wheelock, Harris & Company to act as general rental agents for the building, to aid the Port Authority in acquiring tenants. The terms of the agreement are such, however, that interested persons or prospective tenants have absolute freedom of choice as to whether they desire to negotiate directly with the Port Authority personnel, the rental agents, or any broker they prefer to have represent them.

In anticipation of the practical completion of the structure by the end of the year, renting activity was accelerated. Unusual interest has been manifested in this building. The public has been quick to recognize the opportunities which it affords for effecting economies in the distribution of merchandise. The generally depressed real estate market, with an abundance of cheap industrial space freely offered, and uncertainty as to future business conditions, tended to deter many prospective tenants from incurring at this time the necessary expense of removing to and setting up in a new location. Even in the face of these conditions, a number of tenants signed leases and entered into possession just as soon as it was possible to give them even limited elevator and other service in the building. The first two tenants to enter into possession of space in the upper floors of the building did so on November 28,



Port Authority Commerce Building, 111 Eighth Avenue, New York City

1932. Thereafter, tenants entered into possession from time to time as rapidly as their space could be made available.

Portions of the first floor having been made available for occupancy at an earlier date, the railroads began operations on October 3, 1932 in the area which they had leased for conducting the operation of Union Inland Freight Station No. 1.

On November 1, 1932 the new Gansevoort station of the United States Government Post Office was opened at the corner of Ninth Avenue and 15th Street, on the first floor.

Distributors and manufacturers maintaining offices, merchandise display rooms, stock rooms or manufacturing facilities, find in this modern building, with its unique equipment and unusual transportation facilities, an opportunity heretofore unavailable for consolidating all their activities under one roof and effecting economies in the conduct of business, particularly shipping and distribution.

One tenant occupying a quarter floor of approximately 36,000 gross square feet, who heretofore maintained an executive office at one point and manufacturing and distribution activities at another, disposed of its property and combined its operations in order to obtain the benefit of economies resulting therefrom. Another tenant, a shoe manufacturer, moved executive offices from Boston and distribution operations from another city in Massachusetts and combined the two in the building. These are typical of the trend in the process of changing conditions, causing executives to seek every possible economy in the conduct of business.

For industrial purposes, the building is being referred to as The Port Authority Commerce Building. It is anticipated that the general contractor will have completed his work about April 1, 1933, and shortly thereafter the Port Authority will move into new general offices on the fifteenth floor.

### ***George Washington Bridge***

Title was taken during the year, although contract for purchase had actually been signed during the preceding year, to a parcel of property on West 179th Street, improved by two 3-story and basement dwellings. This property was acquired as part of a site for a proposed building for housing machinery to ventilate the tunnels forming a part of the bridge approach.

Expenditures during the year for real estate on the New York side were \$46,236.60. The total to the end of the year was \$8,671,380.11.

No property was acquired on the New Jersey side during the year, although payment was made for an award in a condemnation proceeding instituted during the preceding year for a small parcel of property needed for the widening of Hudson Terrace. The proceeding was settled upon the payment of \$4,250. The minimum amount which the owner's representative indicated a willingness to accept prior to instituting the proceeding was \$6,000.

A small parcel of unimproved property on the westerly side of Lemoine Avenue, in the Borough of Fort Lee, was sold during the year for the sum of \$12,130. This was a parcel of surplus property not required because of a change in the plans of the bridge and/or approach after the acquisition of the property of which it formed a part. The proceeds from the sale of this parcel were a credit to the cost of property on the New Jersey side, the total net cost of which to the end of the year was \$1,037,585.97.

The combined expenditure to the end of the year for real estate in both New York and New Jersey, required for the George Washington Bridge, was \$9,708,966.08.

### ***Midtown Hudson Tunnel***

A long term contract was entered into during the year for the purchase of one parcel of property on the New York side, which was offered on advantageous terms.

Title was taken during the year to several parcels for which contracts were entered into during the preceding year. In one case, the seller refused to convey title under

the contract, and legal steps were taken to enforce compliance with the provisions of the contract of sale. The matter is now being litigated. In the meantime, the property has been sold under foreclosure proceedings to satisfy existing mortgages. The property was purchased at the foreclosure sale in order to protect the amount represented by the down payment at the signing of the contract. The only cost, after giving effect to the expenses incident to the foreclosure, was approximately the same as the amount recited in the contract.

Owing to uncertainty as to when work may actually begin upon the construction of the tunnel, acquisition of further property, except as indicated herein, has been deferred.

## SECTION IV—GENERAL

### Part 3—Insurance

The policy of protecting its property and operations through appropriate insurance, consistently followed by the Port Authority, through the belief that it has brought about additional confidence on the part of its bondholders, has been justified.

The special form of contracts providing multi-risk insurance, evolved originally for coverage on the Arthur Kill Bridges, and, with appropriate modifications, made applicable to the other vehicular crossings of the Port Authority, have been continued in force with reliable and selected underwriters in the following amounts of coverage:

Outerbridge Crossing .....	\$2,900,000
Goethals Bridge .....	1,600,000
Bayonne Bridge .....	5,250,000
George Washington Bridge.....	25,000,000
Holland Tunnel .....	30,000,000

Prior to December, 1930, policies had been written for a period of one year. The advantages of writing for a longer period were recognized and these policies were, therefore, renewed for a period of three years upon expiration, saving about \$34,750 in premiums.

Negotiations for reductions in rates resulted in a further saving of \$80,625.

The multi-risk insurance, purchased by the Port Authority in furtherance of its policy to fully protect its interests and those of its bondholders, covers on the five interstate vehicular crossings against some thirty to forty enumerated risks, including acts of God, acts of violence, sabotage, failure of the bridge structure, or neglects of third persons. This insurance also provides against loss for cost of removing the debris from the bed of the river in case of a collapse

and is extended by means of a "war risk rider" to cover against direct loss or damage resulting from measures or operations incident to war.

The amount of insurance carried is deemed sufficient, in case of damage or total loss, when proved, to restore the insured property to its condition immediately prior to the occurrence of such damage or loss.

The insuring clause in the multi-risk policy is applicable to the several structures as follows:

George Washington Bridge—anchorage, towers, tower foundations, cables and suspended structure.

Outerbridge Crossing—main span.

Goethals Bridge—main span.

Bayonne Bridge—main span and abutments.

Holland Tunnel—twin tubes under the Hudson River between the portals on the New York and New Jersey sides, including ventilation buildings.

Consideration having been given to the possible suspension of operations due to accident and resultant loss of revenue in connection with the operation of the Holland Tunnel, through which catastrophe revenues from this operation would be seriously affected, it was deemed desirable, in order to meet all financial requirements and protect the interests of the holders of Holland Tunnel Bonds, that the anticipated revenue from this operation be insured. A form of contract which insures gross revenue, estimated at \$7,000,000 per annum, was evolved and finally negotiated. This contract was written in a form which provides that should any emergency arise causing suspension of operations and resultant loss of revenue for any period in excess of two days, the insuring companies will adjust claims, based upon computed loss of revenue occurring during the period of inoperation, on the basis of 1/365th of \$7,000,000 for each day thereof.

Upon the opening of the Inland Terminal to the occupancy of the railroads for Union Inland Freight Station No. 1, the Port Authority insured against its liability for personal injuries resulting from its operation of the build-

ing, which coverage is extended as increased occupancy occurs. When the completed structure is formally accepted from the contractors the various risks incident to ownership and operation of a building of this type will be covered by appropriate insurance.

The Port Authority in its administration and operation carries insurance as enumerated:

- Multi-risk.
- Gross Revenue.
- Fidelity (Position Schedule Bond).
- Workmen's Compensation and Employers' Liability.
- Fire.
- Rent.
- Plate Glass.
- Hold-up and Burglary, incident to collection of operating revenue, etc.
- Depository, covering bank deposits.
- Public Liability, Property Damage, Fire, Theft and Collision on automotive equipment.
- General Public Liability.
- Elevator Liability.
- Inland Floater, covering equipment in the field.
- Marine, providing hull insurance on equipment when in service and fire when in storage.

## SECTION IV—GENERAL

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### Part 4—Medical

Although the George Washington Bridge and the Bayonne Bridge came into operation late in 1931, involving a considerable addition to the ranks of the operating employees, and although a number of men in this same class were placed in the Inland Terminal during the latter part of 1932, the Medical Department has continued to give strict attention to the general health of these employees and without increasing the payroll cost.

Particular attention is given to those employees whose duties necessitate their presence in the Holland Tunnel for a number of hours each day. This policy has been followed since the tunnel first came into operation. Tests conducted by the United States Bureau of Mines during the year indicate that this class of employee has not suffered any injurious effects because of the nature of the duties.

Cooperative work also was carried on with the United States Bureau of Mines in connection with the study of air leaving the Tunnel ventilation stacks.

## SECTION V—REPORTS AND STATISTICS

Table  
No.

- 1—General Balance Sheet
- 2—Analysis of Current Assets and Sinking Funds
- 3—Consolidated Income Account
- 4—Income Account—Holland Tunnel
- 5—Income Account—George Washington Bridge
- 6—Income Account—Arthur Kill Bridges
- 7—Income Account—Bayonne Bridge
- 8—Operating Revenue—Holland Tunnel
- 9—Operating Revenue—George Washington Bridge
- 10—Operating Revenue—Arthur Kill Bridges
- 11—Operating Revenue—Bayonne Bridge
- 12—Operating Expenses—Holland Tunnel
- 13—Operating Expenses—George Washington Bridge
- 14—Operating Expenses—Arthur Kill Bridges
- 15—Operating Expenses—Bayonne Bridge
- 16—Traffic Statistics—Holland Tunnel
- 17—Traffic Statistics—George Washington Bridge
- 18—Traffic Statistics—Arthur Kill Bridges
- 19—Traffic Statistics—Bayonne Bridge
- 20—Investment in Physical Property
- 21—Expenditures under Contracts for Construction of  
Inland Terminal No. 1
- 22—Expenditures for Effectuation of Comprehensive Plan
- 23—Funded Debt
- 24—State Advances in Aid of Construction of Interstate  
Bridges

**Table No. I**  
**General Balance Sheet as at December 31, 1932**

ASSETS

INVESTMENT IN PHYSICAL PROPERTY:

Arthur Kill Bridges:	
Tottenville—Perth Amboy .....	\$9,856,798 28
Howland Hook—Elizabeth .....	7,327,041 85
<b>Total Arthur Kill Bridges .....</b>	<b>\$17,183,840 13</b>
Bayonne Bridge .....	13,159,241 57
George Washington Bridge .....	55,844,064 28
Holland Tunnel .....	50,535,666 25
Midtown Hudson Tunnel .....	3,940,708 45
Inland Terminal No. 1 .....	13,040,941 76
<b>Total investment in physical property .....</b>	<b>\$153,704,462 44</b>

CURRENT ASSETS:

Cash in banks and on hand .....	\$7,360,533 06	
Investment in marketable bonds (at cost) ..	8,062,009 00	
Accrued interest receivable on investments ..	124,433 98	
Bills collectable and reimbursements in transit .....	25,616 68	
General reserve fund:		
Cash .....	\$1,015,684 59	
Investments in marketable bonds (at cost) and accrued interest thereon .....	1,188,218 35	2,203,902 94
Unexpended balances of amounts made available for comprehensive plan in hands of State Treasurers:		
State of New York .....	\$67,892 54	
State of New Jersey .....	55,472 99	123,365 53
<b>Total current assets .....</b>		<b>17,899,861 19</b>

UNMATURED BALANCES OF AMOUNTS MADE AVAILABLE TO AID IN CONSTRUCTION OF BRIDGES:

Treasury assets, per contra .....	\$400,000 00	
State of New Jersey .....	900,000 00	1,300,000 00

INVESTMENT IN SUBSIDIARY COMPANIES:

Capital stock .....		5,000 00
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SINKING FUND—SERIES A BONDS:

Cash .....	\$372 57	
Investments in marketable bonds (at cost) ..	653,760 73	654,133 30

SINKING FUND—SERIES C BONDS:

Cash .....	\$233,576 57	
Investments in marketable bonds (at cost) ..	716,423 43	950,000 00

SINKING FUND—SERIES E BONDS:

Investments in marketable bonds (at cost) ..		503,347 11
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CASH ON DEPOSIT WITH PAYING AGENTS FOR UNREDEEMED BONDS AND INTEREST COUPONS, PER CONTRA .....

46,053 75

OTHER ASSETS:

Unexpired insurance premiums .....	\$153,305 64	
Unexpended balance of advances to New Jersey Highway Commission .....	213,217 96	
Mortgages on real property receivable .....	10,000 00	
Securities held as surety .....	5,000 00	
Sundry unadjusted debits .....	19,675 27	
<b>Total other assets .....</b>		<b>401,198 87</b>

**Total assets .....** \$175,464,056 66

**Table No. 1—Continued**

**LIABILITIES AND RESERVES**

**BONDED INDEBTEDNESS:**

New York-New Jersey Interstate Bridge bonds:	
Arthur Kill Bridges—Series A 4½%, 1933-1946, authorized	\$14,000,000 00
Retired	300,000 00
Outstanding	\$13,700,000 00
George Washington Bridge—Series B bonds:	
Authorized	\$60,000,000 00
Issued and outstanding:	
4%, Series 1936-1950	\$20,000,000 00
4½%, Series 1939-1953	30,000,000 00
Bayonne Bridge—Series C, 4% 1938-1953, authorized and outstanding	50,000,000 00
New York-New Jersey Interstate Tunnel bonds:	12,000,000 00
Holland Tunnel—Series E, 4¼% 1933-1960, authorized and outstanding	50,000,000 00
New York-New Jersey Terminal bonds:	
Inland Terminal No. 1—Series D, 4¼% 1936-1960, authorized and outstanding	16,000,000 00
Total bonded indebtedness	\$141,700,000 00

**CURRENT LIABILITIES:**

Notes payable	\$2,300,000 00	
Audited vouchers payable	40,695 86	
Mortgages payable and accrued interest	2,451,095 17	
Accrued interest on bonds	1,668,221 52	
Unredeemed tickets	51,394 38	
Accrued compensation insurance	5,809 32	
Surety and other deposits	7,850 00	
Total current liabilities		6,525,066 25

**TREASURY OBLIGATIONS—UNMATURED, PER CONTRA**

400,000 00

**SUBORDINATED LIABILITY FOR ADVANCES TO AID IN CONSTRUCTION OF BRIDGES AND FOR PRELIMINARY STUDIES AND SURVEYS:**

State of New York	\$9,299,840 17	
State of New Jersey	9,300,000 00	
		18,599,840 17

**UNPAID BOND INTEREST COUPONS, PER CONTRA**

46,053 75

**UNEXPENDED BALANCES OF APPROPRIATIONS—COMPREHENSIVE PLAN:**

State of New York	\$67,892 54	
State of New Jersey	55,472 99	
		123,365 53

**DEFERRED CREDITS:**

Accrued Depreciation	\$49,632 80	
Sundry Unadjusted Credits	37,036 31	
		86,669 11

APPROPRIATED RESERVE—MIDTOWN HUDSON TUNNEL	400,000 00
RESERVE—ARTHUR KILL BRIDGES	175,131 16
RESERVE (DEFICIT)*—BAYONNE BRIDGE	*104,812 87
RESERVE—GEORGE WASHINGTON BRIDGE	1,808,840 62
OPERATING RESERVE—HOLLAND TUNNEL	500,000 00
INSURANCE RESERVE—HOLLAND TUNNEL	100,000 00
GENERAL RESERVE	2,203,902 94
SINKING FUND RESERVE—SERIES E BONDS	1,500,000 00
INCOME APPLIED IN REDUCTION OF UNFUNDED DEBT—HOLLAND TUNNEL	1,400,000 00

Total liabilities and reserves \$175,464,056 66

Contracts awarded but not completed at December 31, 1932, as submitted to us, aggregated \$1,294,639 29

(\* ) Denotes deficit.

**CERTIFICATE OF AUDIT**

We have made an examination of the books of accounts and records of The Port of New York Authority for the year ended December 31, 1932.

We *Hereby Certify* that, in our opinion, the above General Balance Sheet, subject to the comments in our accompanying letter, correctly reflects the financial condition of The Port of New York Authority as at December 31, 1932.

New York, N. Y.  
February 15, 1933.

LAWRENCE SCUDDER & CO.,  
Accountants and Auditors.

**Table No. 2**  
**ANALYSIS OF CURRENT ASSETS AND SINKING FUNDS**  
**AS AT DECEMBER 31, 1932**

PROJECT	Total	Cash	Securities (at cost)	Interest receivable	Sinking funds	Other current assets
Holland Tunnel.....	\$4,048,075 04	\$2,215,532 42	\$1,282,057 87	\$26,492 55	\$503,347 11	\$20,645 09
George Washington Bridge.....	6,538,855 87	1,649,758 88	4,817,080 13	62,740 32	.....	9,276 54
Arthur Kill Bridges.....	1,103,159 90	425,914 59	14,831 64	7,918 87	654,133 30	361 50
Bayonne Bridge.....	2,268,373 67	401,254 06	893,885 38	22,808 90	950,000 00	425 33
Inland Terminal No. 1.....	3,219,947 84	2,152,043 67	1,054,153 98	4,473 34	.....	9,276 85
Midtown Hudson Tunnel.....	464,555 36	464,555 36	.....	.....	.....	.....
General Reserve Fund.....	2,203,902 94	1,015,684 59	1,172,315 86	15,902 49	.....	.....
Miscellaneous.....	51,629 59	51,474 08	.....	.....	.....	155 51
Grand total.....	\$19,898,500 21	\$8,376,217 65	\$9,234,324 86	\$140,336 47	\$2,107,480 41	\$40,140 82

**Table No. 3**  
**CONSOLIDATED INCOME ACCOUNT**

CALENDAR YEAR, 1932

INCOME FROM OPERATIONS:

<i>I. Gross income</i>	Amount
Tolls and other revenue.....	\$9,898,495 98
Other income .....	372,203 84
Gross income .....	\$10,270,699 82
<i>II. Deductions from gross income</i>	
Operating expenses .....	\$2,083,061 14
Interest on funded debt.....	4,474,375 02
Other income charges.....	54,257 40
Total deductions .....	\$6,611,693 56
Net income from operations.....	\$3,659,006 26

NET INCOME FROM CAPITAL ASSETS †:

Interest on bank balances.....	\$130,370 76
Interest on securities owned.....	233,011 72
Other income .....	10,620 37
Total .....	\$374,002 85
Grand total .....	\$4,033,009 11

DISPOSITION OF NET INCOME:

Reserve for sinking fund.....	\$1,500,000 00
Operating reserves .....	987,091 21
General reserve .....	1,171,915 05
Capital accounts .....	374,002 85
Total .....	\$4,033,009 11

† The net income reported under this heading was earned upon cash and other capital assets held to meet cost of construction and other purposes and the amounts reported have been appropriately credited to capital accounts.

**Table No. 4**  
**HOLLAND TUNNEL**

Income Account	Calendar year, 1932
<b>INCOME FROM OPERATIONS:</b>	
I. <i>Gross income</i>	
Tolls and other revenue.....	\$6,197,799 49
Other income .....	78,347 91
Gross income .....	\$6,276,147 40
II. <i>Deductions from gross income</i>	
Operating expenses .....	\$1,542,086 06
Interest on funded debt.....	2,125,000 00
Other income charges.....	3,984 38
Total deductions .....	\$3,671,070 44
Net income from operations.....	\$2,605,076 96
<b>DISPOSITION OF NET INCOME:</b>	
Reserve for sinking fund.....	\$1,500,000 00
General reserve.....	1,105,076 96
Total .....	\$2,605,076 96

**Table No. 5**  
**GEORGE WASHINGTON BRIDGE**

Income Account	Calendar year, 1932
<b>INCOME FROM OPERATIONS:</b>	
I. <i>Gross income</i>	
Tolls and other revenue.....	\$2,936,937 40
Other income .....	107,942 74
Gross income .....	\$3,044,880 14
II. <i>Deductions from gross income</i>	
Operating expenses .....	\$320,460 67
Interest on funded debt.....	1,370,625 02
Other income charges .....	49,217 91
Total deductions .....	\$1,740,303 60
Net income from operations.....	\$1,304,576 54
<b>NET INCOME FROM CAPITAL ASSETS †:</b>	
Interest on bank balances.....	\$38,663 23
Interest on securities owned.....	132,895 37
Other income .....	*2,771 53
Total .....	\$168,787 07
Grand total .....	\$1,473,363 61
<b>DISPOSITION OF NET INCOME:</b>	
Operating reserve .....	\$1,304,576 54
Capital account .....	168,787 07
Total .....	\$1,473,363 61

\* Denotes deficit.

† The net income reported under this heading was earned upon cash and other capital assets held to meet cost of construction and other purposes and the amounts reported have been appropriately credited to capital account.

**Table No. 6**  
**ARTHUR KILL BRIDGES**

Income Account	Calendar year,
<b>INCOME FROM OPERATIONS:</b>	
I. <i>Gross income</i>	
Tolls and other revenue.....	1932 \$531,422 69
Other income .....	46,457 92
Gross income .....	\$577,880 61
II. <i>Deductions from gross income</i>	
Operating expenses .....	\$145,514 24
Interest on funded debt.....	618,750 00
Other income charges.....	888 54
Total deductions .....	\$765,152 78
Net income from operations.....	*\$187,272 17
<b>DISPOSITION OF NET INCOME:</b>	
Operating reserve .....	*\$187,272 17
Total .....	*\$187,272 17

**Table No. 7**  
**BAYONNE BRIDGE**

Income Account	Calendar year,
<b>INCOME FROM OPERATIONS:</b>	
I. <i>Gross income</i>	
Tolls and other revenue.....	1932 \$232,336 40
Other income .....	72,617 18
Gross income .....	\$304,953 58
II. <i>Deductions from gross income</i>	
Operating expenses .....	\$75,000 17
Interest on funded debt.....	360,000 00
Other income charges .....	166 57
Total deductions .....	\$435,166 74
Net income from operations.....	*\$130,213 16
<b>NET INCOME FROM CAPITAL ASSETS †:</b>	
Interest on bank balances.....	\$2,711 46
Interest on securities owned.....	14,155 12
Other income .....	11,880 47
Total .....	\$28,747 05
Grand total .....	*\$101,466 11
<b>DISPOSITION OF NET INCOME:</b>	
Operating reserve .....	*\$130,213 16
Capital account .....	28,747 05
Total .....	*\$101,466 11

\* Denotes deficit.

† The net income reported under this heading was earned upon cash and other capital assets held to meet cost of construction and other purposes and the amounts reported have been appropriately credited to capital account.

**Table No. 8**  
**HOLLAND TUNNEL**

CLASS	Calendar year, 1932	Calendar year, 1931	Increase or *Decrease	
			Amount	Per cent
Motorcycles .....	\$3,787 95	\$5,165 95	\$1,378 00	26.7
Automobiles .....	4,524,446 15	5,127,175 90	602,729 75	11.8
Buses .....	368,659 00	462,273 60	93,614 60	20.2
Trucks—up to 2 tons.....	535,545 90	544,221 20	8,675 30	1.6
Trucks—2 tons to 5 tons..	405,568 50	455,296 50	49,728 00	10.9
Trucks—5 tons to 10 tons..	264,744 75	286,237 50	21,542 75	7.5
Semi-trailers—5 tons to 10 tons .....	49,803 25	25,300 80	24,502 45	96.8
Semi-trailers—10 tons to 15 tons .....	25,165 50	16,837 50	8,328 00	49.2
Special .....	249 00	340 10	91 10	26.8
Miscellaneous .....	19,829 49	20,133 20	303 71	1.5
<b>Total operating revenue</b>	<b>\$6,197,799 49</b>	<b>\$6,943,032 25</b>	<b>\$745,232 76</b>	<b>10.7</b>

\* Decrease shown in italics.

NOTE.—Revenue is stated for full calendar year 1931 for comparative purposes. The revenue for January and February, 1931, was credited to the States of New York and New Jersey, the subsequent ten months revenue being included in the income account of the Port Authority.

**Table No. 9**  
**GEORGE WASHINGTON BRIDGE**

CLASS	Calendar year, 1932
Passenger automobiles .....	\$2,505,939 60
Motorcycles and bicycles .....	3,170 75
Trucks—up to 2 tons.....	75,956 00
Trucks—2 tons to 5 tons.....	37,060 50
Trucks—over 5 tons.....	27,295 00
Tractors and semi-trailers and 6 wheel trucks.....	21,678 75
Tractors and trailers or trucks and trailers.....	2,265 00
Buses .....	238,415 90
Other revenue .....	25,155 90
<b>Total operating revenue.....</b>	<b>\$2,936,937.40</b>

NOTE.—No figures are given for the year 1931 as the operation of the George Washington Bridge was not commenced until October 25th of that year.

**Table No. 10**  
**ARTHUR KILL BRIDGES**

**Operating Revenue**

CLASS	Calendar year, 1932	Calendar year, 1931	Increase or *Decrease	
			Amount	Per cent
Passenger automobiles . . . . .	\$421,486 64	\$544,234 79	\$122,748 15	22.6
Motorcycles and bicycles . . . . .	720 92	1,127 23	406 31	36.0
Trucks—up to 2 tons . . . . .	36,354 45	41,438 82	5,084 37	12.3
Trucks—2 tons to 5 tons . . . . .	17,938 55	22,222 59	4,284 04	19.3
Trucks—over 5 tons . . . . .	15,356 25	27,863 80	12,507 55	44.9
Tractors and semi-trailers and 6 wheel trucks . . . . .	3,491 84	4,531 34	1,039 50	22.9
Tractors and trailers or trucks and trailers . . . . .	316 68	124 25	192 43	154.9
Buses . . . . .	699 80	1,781 40	1,081 60	60.7
Passengers in vehicles† . . . . .		70,854 40	70,854 40	†
Other revenue‡ . . . . .	35,057 56	30,730 64	4,326 92	14.1
<b>Total operating revenue</b>	<b>\$531,422 69</b>	<b>\$744,909 26</b>	<b>\$213,486 57</b>	<b>28.7</b>

\* Decrease shown in italics.

† Toll charge for passengers in vehicles discontinued effective November 15, 1931.

‡ Includes \$19,873.55 revenue from operation of buses in 1931 and \$24,369.40 in 1932.

**Table No. 11**  
**BAYONNE BRIDGE**

**Operating Revenue**

CLASS	Calendar year, 1932
Passenger automobiles . . . . .	\$168,635 13
Motorcycles and bicycles . . . . .	273 23
Trucks—up to 2 tons . . . . .	17,794 96
Trucks—2 tons to 5 tons . . . . .	4,447 29
Trucks—over 5 tons . . . . .	2,569 25
Tractors and semi-trailers and 6 wheel trucks . . . . .	939 31
Tractors and trailers or trucks and trailers . . . . .	121 57
Buses . . . . .	36,513 60
Other revenue . . . . .	1,042 06
<b>Total operating revenue</b>	<b>\$232,336 40</b>

NOTE.—No figures are given for the year 1931 as the operation of the Bayonne Bridge was not commenced until November 15th of that year.

**Table No. 12**  
**HOLLAND TUNNEL**

**Comparison of Operating Expenses**

	Calendar year, 1932	Calendar year, 1931	Increase or decrease*
<b>I. Maintenance and operation:</b>			
301. Superintendence .....	\$161,807 15	\$174,483 88	\$12,676 73
302. Painting .....	18,163 17	13 12	18,150 05
303. Paving .....	1,316 39	493 79	822 60
304. Other maintenance— bridges and tunnels...	21,433 74	39,138 28	17,704 54
305. Maintenance of buildings and other structures..	27,369 16	17,400 54	9,968 62
306. Depreciation of equip- ment .....	32,966 43	4,150 52	28,815 91
307. Cleaning roadways, foot- walks and plazas.....	46,495 70	50,365 58	3,869 88
308. Cleaning buildings and grounds .....	40,089 66	39,235 80	853 86
309. Heating .....	15,043 68	15,779 33	735 65
310. Lighting .....	75,029 98	80,876 96	5,846 98
311. Power for ventilation...	123,801 13	132,819 83	9,018 70
312. Other ventilation ex- penses .....	165,038 13	171,828 72	6,790 59
313. Machinery and shop equipment .....	2,322 00	4,155 67	1,833 67
314. Small tools and supplies.	5,041 47	6,004 91	963 44
315. Automobiles, motorcycles and other vehicles....	43,527 28	54,057 11	10,529 83
316. Policing .....	430,193 53	474,495 01	44,301 48
317. Collecting tolls .....	112,666 81	125,721 34	13,054 53
318. Other operating em- ployees .....	3,134 39	3,298 85	163 96
319. Telephone and telegraph			
320. Other communication and signal expenses .....	5,271 53	5,755 92	484 39
321. Advertising .....	6,458 13	5,472 36	985 77
322. Insurance .....	92,709 72	63,392 74	29,316 98
323. Stationery and printing.	6,013 79	7,109 42	1,095 63
324. Injuries and damages...	2,826 96	9,712 41	6,885 45
325. Miscellaneous supplies and expenses .....	12,856 67	11,279 66	1,577 01
Total maintenance and operation....	<u>\$1,451,577 10</u>	<u>\$1,497,041 75</u>	<u>\$45,464 65</u>
<b>II. General expenses:</b>			
341. Administrative salaries and expenses .....	\$58,959 17	\$47,489 09	\$11,470 08
342. Legal salaries and ex- penses .....	11,464 75	7,383 65	4,081 10
343. Medical salaries and ex- penses .....	5,151 21	6,267 66	1,116 45
344. Office rental and ex- penses .....	9,624 63	4,054 49	5,570 14
345. Insurance .....			
346. Stationery and printing.	2,404 14	1,076 81	1,327 33
347. Other general expenses..	2,905 06	2,799 76	105 30
Total general ex- penses .....	<u>\$90,508 96</u>	<u>\$69,071 46</u>	<u>\$21,437 50</u>
Grand total ...	<u>\$1,542,086 06</u>	<u>\$1,566,113 21</u>	<u>\$24,027 15</u>

\* Decrease shown in italics.

NOTE.—Operating expenses are stated for full calendar year 1931 for comparative purposes. The operating expenses for January and February, 1931, were charged to the States of New York and New Jersey, the subsequent ten months operating expenses being included in the income account of the Port Authority.

**Table No. 13**  
**GEORGE WASHINGTON BRIDGE**  
**Operating Expenses**

	Calendar year, 1932
<b>I. Maintenance and operation:</b>	
301. Superintendence .....	\$47,800 80
302. Painting .....	611 77
303. Paving .....	.....
304. Other maintenance—bridges and tunnels.....	8,025 95
305. Maintenance of buildings and other structures..	5,381 54
306. Depreciation of equipment.....	6,181 17
307. Cleaning roadways, footwalks and plazas.....	4,017 34
308. Cleaning buildings and grounds.....	3,121 01
309. Heating .....	2,375 81
310. Lighting .....	22,632 97
311. Power for ventilation.....	.....
312. Other ventilation expenses.....	.....
313. Machinery and shop equipment.....	2,097 46
314. Small tools and supplies.....	1,123 16
315. Automobiles, motorcycles and other vehicles....	5,773 04
316. Policing .....	57,040 64
317. Collecting tolls .....	58,234 43
318. Other operating employees.....	.....
319. Telephone and telegraph.....	1,486 42
320. Other communication and signal expenses.....	155 69
321. Advertising .....	12,113 87
322. Insurance .....	31,169 67
323. Stationery and printing .....	1,950 29
324. Injuries and damages.....	346 01
325. Miscellaneous supplies and expenses.....	4,138 66
Total maintenance and operation.....	\$275,777 70
<b>II. General expenses:</b>	
341. Administrative salaries and expenses.....	\$30,107 89
342. Legal salaries and expenses.....	6,456 58
343. Medical salaries and expenses.....	578 67
344. Office rental and expenses.....	4,636 59
345. Insurance .....	.....
346. Stationery and printing.....	1,276 72
347. Other general expenses.....	1,626 52
Total general expenses.....	\$44,682 97
Grand total .....	\$320,460 67

NOTE.—No figures are given for the year 1931 as the operation of the George Washington Bridge was not commenced until October 25th of that year.

**Table No. 14**  
**ARTHUR KILL BRIDGES**

**Comparison of Operating Expenses**

	Calendar year, 1932	Calendar year, 1931	Increase or decrease*
<b>I. Maintenance and operation:</b>			
301. Superintendence .....	\$20,515 23	\$23,413 34	\$2,898 11
302. Painting .....	224 89	50 64	174 25
303. Paving .....	96 62		96 62
304. Other maintenance— bridges and tunnels...	3,542 69	2,655 95	886 74
305. Maintenance of buildings and other structures...	1,710 85	1,504 78	206 07
306. Depreciation of equip- ment .....	5,641 68	4,792 13	849 55
307. Cleaning roadways, foot- walks and plazas.....	782 53	1,456 08	673 55
308. Cleaning buildings and grounds .....	3,597 02	2,337 57	1,259 45
309. Heating .....	452 53	740 25	287 72
310. Lighting .....	14,528 94	15,014 76	485 82
311. Power for ventilation...			
312. Other ventilation ex- penses .....			
313. Machinery and shop equipment .....	309 59	124 00	185 59
314. Small tools and supplies.	351 86	94 29	257 57
315. Automobiles, motorcycles and other vehicles...	15,183 91	16,979 24	1,795 33
316. Policing .....	8,378 80	6,877 49	1,501 31
317. Collecting tolls .....	16,118 74	20,189 18	4,070 44
318. Other operating em- ployees .....	10,728 03	10,081 60	646 43
319. Telephone and telegraph.	1,141 89	1,329 72	187 83
320. Other communication and signal expenses .....	394 12	3 19	390 93
321. Advertising .....	5,093 07	3,305 29	1,787 78
322. Insurance .....	12,788 40	13,343 24	554 84
323. Stationery and printing.	1,405 39	2,424 37	1,018 98
324. Injuries and damages...	27 62	8 06	19 56
325. Miscellaneous supplies and expenses .....	3,201 87	1,646 66	1,555 21
<b>Total maintenance and operation†...</b>	<b>\$126,216 27</b>	<b>\$128,371 83</b>	<b>\$2,155 56</b>
<b>II. General expenses:</b>			
341. Administrative salaries and expenses.....	\$15,524 74	\$11,785 37	\$3,739 37
342. Legal salaries and ex- penses .....	1,658 01	1,005 18	652 83
343. Medical salaries and ex- penses .....	151 48	24 20	127 28
344. Office rental and ex- penses .....	1,292 83	704 01	588 82
345. Insurance .....			
346. Stationery and printing.	369 92	151 72	218 20
347. Other general expenses.	300 99	65 51	235 48
<b>Total general ex- penses .....</b>	<b>\$19,297 97</b>	<b>\$13,735 99</b>	<b>\$5,561 98</b>
<b>Grand total ...</b>	<b>\$145,514 24</b>	<b>\$142,107 82</b>	<b>\$3,406 42</b>

\* Decrease shown in italics.

† Includes \$28,873.80 covering the cost of operating buses in 1931 and \$28,117.00 in 1932.

**Table No. 15**  
**BAYONNE BRIDGE**  
**Operating Expenses**

	Calendar year, 1932
<b>I. Maintenance and operation:</b>	
301. Superintendence .....	\$12,827 93
302. Painting .....	6 48
303. Paving .....	.....
304. Other maintenance—bridges and tunnels.....	2,132 41
305. Maintenance of buildings and other structures...	303 93
306. Depreciation of equipment.....	4,032 96
307. Cleaning roadways, footwalks and plazas.....	554 11
308. Cleaning buildings and grounds.....	2,214 47
309. Heating .....	332 81
310. Lighting .....	8,695 37
311. Power for ventilation.....	.....
312. Other ventilation expenses.....	.....
313. Machinery and shop equipment.....	9 89
314. Small tools and supplies.....	90 39
315. Automobiles, motorcycles and other vehicles....	1,047 18
316. Policing .....	6,386 21
317. Collecting tolls .....	9,479 58
318. Other operating employees.....	.....
319. Telephone and telegraph .....	928 12
320. Other communication and signal expenses.....	158 62
321. Advertising .....	2,793 11
322. Insurance .....	8,195 14
323. Stationery and printing.....	791 55
324. Injuries and damages.....	.....
325. Miscellaneous supplies and expenses.....	1,336 93
Total maintenance and operation.....	\$62,317 19
<b>II. General expenses:</b>	
341. Administrative salaries and expenses.....	\$10,322 77
342. Legal salaries and expenses.....	744 22
343. Medical salaries and expenses.....	75 74
344. Office rental and expenses.....	721 81
345. Insurance .....	.....
346. Stationery and printing.....	184 95
347. Other general expenses.....	633 49
Total general expenses .....	\$12,682 98
Grand total .....	\$75,000 17

NOTE.—No figures are given for the year 1931 as the operation of the Bayonne Bridge was not commenced until November 15th of that year.

**Table No. 16**  
**HOLLAND TUNNEL**

**Traffic Statistics**

CLASS	Calendar year, 1932	Calendar year, 1931	Increase or *Decrease	
			Number	Per cent
Motorcycles .....	15,192	20,674	5,482	26.5
Automobiles .....	9,063,803	10,256,926	1,193,123	11.6
Buses .....	339,980	465,005	75,025	16.1
Trucks—up to 2 tons.....	1,072,437	1,088,608	16,171	1.5
Trucks—2 tons to 5 tons..	540,961	607,084	66,123	10.9
Trucks—5 tons to 10 tons.	264,770	286,292	21,522	7.5
Semi-trailers—5 tons to 10 tons .....	39,863	20,242	19,621	96.9
Semi-trailers—10 tons to 15 tons .....	16,779	11,225	5,554	49.5
Special .....	78	118	40	33.9
<b>Total traffic .....</b>	<b>11,403,863</b>	<b>12,756,174</b>	<b>1,352,311</b>	<b>10.6</b>

\* Decrease shown in *italics*.

**Table No. 17**  
**GEORGE WASHINGTON BRIDGE**

**Traffic Statistics**

CLASS	Calendar year, 1932
Passenger automobiles .....	5,011,380
Motorcycles and bicycles.....	12,683
Trucks—up to 2 tons.....	151,912
Trucks—2 tons to 5 tons.....	49,414
Trucks—over 5 tons.....	27,295
Tractors and semi-trailers and 6 wheel trucks.....	17,343
Tractors and trailers or trucks and trailers.....	1,510
Buses .....	238,409
<b>Total vehicles .....</b>	<b>5,509,946</b>
<b>Pedestrians .....</b>	<b>245,268</b>

NOTE.—No figures are given for the year 1931 as the operation of the George Washington Bridge was not commenced until October 25th of that year.

**Table No. 18**  
**ARTHUR KILL BRIDGES**

CLASS	Traffic Statistics		Increase or *Decrease	
	Calendar year, 1932	Calendar year, 1931	Number	Per cent
	Passenger automobiles . . . .	888,092	1,106,023	217,931
Motorcycles and bicycles..	2,910	4,505	1,595	35.4
Trucks—up to 2 tons.....	74,308	72,897	1,411	1.9
Trucks—2 tons to 5 tons..	25,601	30,457	4,856	15.9
Trucks—over 5 tons.....	17,829	30,464	12,635	41.5
Tractors and semi-trailers and 6 wheel trucks.....	3,216	4,122	906	22.0
Tractors and trailers or trucks and trailers.....	212	86	126	146.5
Buses .....	717	1,781	1,064	59.7
<b>Total vehicles .....</b>	<b>1,012,885</b>	<b>1,250,335</b>	<b>237,450</b>	<b>19.0</b>
Passengers in vehicles†....		1,417,088	1,417,088	†
Pedestrians .....	7,096	8,705	1,609	18.5

\* Decrease shown in *italics*.

† Discontinued effective November 15, 1931.

**Table No. 19**  
**BAYONNE BRIDGE**

CLASS	Calendar year, 1932
Passenger automobiles .....	377,285
Motorcycles and bicycles.....	1,121
Trucks—up to 2 tons.....	37,263
Trucks—2 tons to 5 tons.....	6,671
Trucks—over 5 tons.....	3,028
Tractors and semi-trailers and 6 wheel trucks.....	895
Tractors and trailers or trucks and trailers.....	82
Buses .....	36,514
<b>Total vehicles .....</b>	<b>462,859</b>
<b>Pedestrians .....</b>	<b>20,136</b>

NOTE.—No figures are given for the year 1931 as the operation of the Bayonne Bridge was not commenced until November 15th of that year.

**Table No. 20**  
**INVESTMENT IN PHYSICAL PROPERTY**  
**To DECEMBER 31, 1932**

81

General Accounts	Total	George Washington Bridge	Bayonne Bridge	Arthur Kill Bridges	Inland Terminal	Midtown Hudson Tunnel	Holland Tunnel*
Engineering.....	\$6,576,472 86	\$3,232,946 40	\$1,085,584 15	\$1,126,752 80	\$458,600 56	\$672,588 95	\$.....
Investment in land.....	20,972,347 40	10,041,505 86	2,966,827 19	1,294,971 46	3,742,097 83	2,928,945 06	.....
Construction.....	61,506,418 34	33,487,442 41	7,636,610 73	13,042,955 31	7,309,399 37	30,010 52	.....
General expenditures.....	2,116,219 08	1,040,391 29	329,069 97	236,194 65	321,309 24	189,253 93	.....
Interest and income during construction.....	11,997,338 51	8,041,778 32	1,141,149 53	1,482,965 91	1,209,534 76	121,909 99	.....
Unclassified.....	50,535,666 25	.....	.....	.....	.....	.....	50,535,666 25*
Grand total.....	\$153,704,462 44	\$55,844,084 28	\$13,159,241 57	\$17,183,840 13	\$13,040,941 76	\$3,940,708 45	\$50,535,666 25*

\* The Holland Tunnel was acquired from the States of New York and New Jersey upon the basis of terms specified in laws enacted and it is not possible to classify the amount to the General Accounts.

**Table No. 21**  
**INLAND TERMINAL NO. 1**  
**Expenditures Under Construction Contracts**  
**JULY, 1930 TO DECEMBER, 1932, INCLUSIVE**

Contract reference	DESCRIPTION	BIDS RECEIVED				Engineer's estimate of contract items	EXPENDITURES			Remarks
		Number	High bid	Low bid	Accepted bid		Contract items	Contingent work	Contract items plus contingent work	
IT 1-3.....	Test borings.....	7	Bids made on	unit price basis	Low bid	\$4,000 00	\$3,190 07	.....	\$3,190 07	Complete
IT 1-4.....	Demolition.....	19	\$114,200 00	\$64,000 00	\$64,000 00	75,000 00	64,000 00	\$708 82	64,708 82	Complete
IT 1-5.....	Excavation and foundation.....	7	1,398,200 00	855,000 00	855,000 00	1,350,000 00	851,228 67	150,000 00	1,001,228 67	Complete
IT 1-6.....	Construction above foundation..	4	8,911,000 00	7,591,000 00	7,591,000 00	7,887,250 00	6,150,952 00	72,821 64	6,223,773 64	96.27% complete

NOTE — Engineer's estimate of contract items is arrived at on basis of estimated quantities at an assumed unit price for each contract item. Contractors' bids represent an aggregate estimated cost, based on fixed unit prices bid by the contractor and the engineer's estimate of quantities.

**Table No. 22**  
**EXPENDITURES FOR EFFECTUATION OF COMPREHEN-**  
**SIVE PLAN YEAR ENDED DECEMBER 31, 1932**

PROJECT	Amount
Belt Lines—General .....	\$ 1,630 59
Belt Line No. 1.....	22,200 68
Belt Line No. 13—General.....	1,097 68
Channels, Bridges and Anchorages.....	15,089 73
Food Distribution—Marketing Research Council.....	1,082 36
Food Receiving Terminals and Food Distribution.....	708 75
Development Work—Port District.....	93,403 06
I. C. C. and State Commission Cases.....	13,287 56
Inland Terminals and Movement of Freight by Motor Trucks	8,657 62
Jersey City Marine Terminal.....	5,500 00
Suburban Transit .....	13,470 75
Terminal Operations—General .....	5,644 73
Traffic Rates and Regulations.....	7,762 49
Brooklyn—New Jersey Ferry.....	39 35
Total .....	\$189,575 35

**Table No. 23**  
**FUNDED DEBT**  
**DECEMBER 31, 1932**

DESIGNATION	Series	Date of issue	Amount authorized	Amount issued	Rate	INTEREST		MATURITIES		Special provisions
						Date payable	Payable at	Date	Amount	
<i>New York-New Jersey Interstate Bridge</i> Construction of bridges across the Arthur Kill between Perth Amboy, N. J., and Tottenville, Staten Island, N. Y., Elizabeth, N. J., and Howland Hook, Staten Island, N. Y.	"A"	3/1/1926	\$14,000,000	\$14,000,000	4½%	March 1 and Sept. 1	National City Bank of New York	March 1 1932	\$300,000	Legal for investment of funds of the States of New York and New Jersey and their municipal subdivisions; also insurance companies and associations, savings banks, executors, administrators, guardians, trustees and all other fiduciaries of the two States. Free from New York and New Jersey taxes. Exempt from Federal Income Tax. Callable on any interest payment date on or after March 1, 1936, at 105 and accrued interest.
								1933	400,000	
								1934	500,000	
								1935	600,000	
								1936	700,000	
								1937	800,000	
								1938	900,000	
								1939	1,000,000	
								1940	1,000,000	
								1941	1,100,000	
								1942	1,200,000	
								1943	1,300,000	
								1944	1,300,000	
								1945	1,400,000	
								1946	1,500,000	
<i>New York-New Jersey Interstate Bridge</i> Construction of a bridge over the Hudson River between Fort Lee, N. J., and 178th Street, Manhattan, New York City.	"B"	12/1/1926	60,000,000	20,000,000	4%	June 1 and Dec. 1	National City Bank of New York	Dec. 1 1936	1,000,000	Legal for investment of funds of the States of New York and New Jersey and their municipal subdivisions; also insurance companies and associations, savings banks, executors, administrators, guardians, trustees and all other fiduciaries of the two States. Free from New York and New Jersey taxes. Exempt from Federal Income Tax. Callable on any interest payment date on or after December 1, 1936, at par and accrued interest.
								1937	1,000,000	
								1938	1,000,000	
								1939	1,000,000	
								1940	1,000,000	
								1941	1,000,000	
								1942	1,000,000	
								1943	1,500,000	
								1944	1,500,000	
								1945	1,500,000	
								1946	1,500,000	
								1947	1,500,000	
								1948	1,500,000	
								1949	2,000,000	
								1950	2,000,000	

**Table No. 23**  
**FUNDED DEBT (Continued)**  
 DECEMBER 31, 1932

DESIGNATION	Series	Date of issue	Amount authorized	Amount issued	Rate	INTEREST		MATURITIES		Special provisions
						Date payable	Payable at	Date	Amount	
<i>New York-New Jersey Interstate Bridge</i> Construction of a bridge over the Kill van Kull connecting Bayonne, N. J., and Port Richmond, Staten Island, N. Y.	" C "	1/3/1928	12,000,000	12,000,000	4%	Jan. 3 and July 3	Guaranty Trust Company	Jan. 3		Legal for all state and municipal officers and bodies, all banks, bankers, trust companies, savings banks, savings and loan associations, investment companies, insurance associations, administrators, executors, guardians, trustees and other fiduciaries, and may properly and legally be deposited with and received by any state or municipal officers or agencies for any purpose, for which bonds or other obligations of the two States may be deposited. Free from New York and New Jersey taxes. Exempt from Federal Income Tax. Callable on any interest payment date on or after January 3, 1938, at 103 and accrued interest.
								1938	300,000	
								1939	400,000	
								1940	400,000	
								1941	400,000	
								1942	500,000	
								1943	600,000	
								1944	700,000	
								1945	800,000	
								1946	900,000	
								1947	1,000,000	
								1948	1,000,000	
								1949	1,000,000	
								1950	1,000,000	
								1951	1,000,000	
								1952	1,000,000	
1953	1,000,000									
<i>New York-New Jersey Interstate Bridge</i> Construction of a bridge over the Hudson River between Fort Lee, N. J., and 178th Street, Manhattan, New York City.	" B "	11/1/1929	60,000,000	30,000,000	4½%	May 1 and Nov. 1	National City Bank of New York	Nov. 1		Legal for investment of funds of the States of New York and New Jersey and their municipal subdivisions; also insurance companies and associations, savings banks, executors, administrators, guardians, trustees, and all other fiduciaries of the two States. Free from New York and New Jersey taxes. Exempt from Federal Income Tax. Callable on any interest payment date on or after November 1, 1939, at 105 and accrued interest.
								1939	1,500,000	
								1940	1,500,000	
								1941	1,500,000	
								1942	1,500,000	
								1943	1,500,000	
								1944	1,500,000	
								1945	1,500,000	
								1946	2,250,000	
								1947	2,250,000	
								1948	2,250,000	
								1949	2,250,000	
								1950	2,250,000	
								1951	2,250,000	
								1952	3,000,000	
								1953	3,000,000	

**Table No. 23**  
**FUNDED DEBT (Continued)**

DECEMBER 31, 1932

DESIGNATION	Series	Date of issue	Amount authorized	Amount issued	Rate	INTEREST		MATURITIES		Special provisions
						Date payable	Payable at	Date	Amount	
68 <i>New York-New Jersey Terminal</i> Construction of a union freight terminal at West 15th Street, West 16th Street, Eighth Avenue and Ninth Avenue, New York City, N. Y.	" D "	3/1/1931	\$16,000,000	\$16,000,000	4¼%	March 1 and Sept. 1	City Bank Farmers Trust Company	March 1	\$300,000	Legal for all state and municipal officers and bodies, all banks, bankers, trust companies, savings banks, savings associations, and building and loan associations, investment companies, insurance companies and associations, administrators, executors, guardians, trustees and other fiduciaries in New York and New Jersey, and may properly and legally be deposited with and received by any state or municipal officer or agency in New Jersey and by any municipal officer or agency in New York, for any purpose for which the deposit of state bonds or other state obligations is now or may hereafter be authorized. Free from New York and New Jersey taxes. Exempt from Federal Income Tax. Callable on any interest payment date on or after March 1, 1941, at 105 and accrued interest.
								1936	300,000	
								1937	300,000	
								1938	300,000	
								1939	300,000	
								1940	300,000	
								1941	400,000	
								1942	400,000	
								1943	400,000	
								1944	400,000	
								1945	400,000	
								1946	400,000	
								1947	500,000	
								1948	500,000	
								1949	500,000	
								1950	500,000	
								1951	500,000	
								1952	500,000	
								1953	500,000	
								1954	600,000	
1955	600,000									
1956	600,000									
1957	600,000									
1958	600,000									
1959	600,000									
1960	5,000,000									

**Table No. 23**  
**FUNDED DEBT (Continued)**  
**DECEMBER 31, 1932**

DESIGNATION	Series	Date of issue	Amount authorized	Amount issued	Rate	INTEREST		MATURITIES		Special provisions
						Date payable	Payable at	Date	Amount	
<i>New York-New Jersey Interstate Tunnel</i> For repayment to the State of New York and the State of New Jersey of amounts expended in the construction of the Holland Tunnel.	" E "	3/1/1931	50,000,000	50,000,000	4¼%	March 1 and Sept. 1	City Bank Farmers Trust Company	March 1		Legal for all state and municipal officers and bodies, all banks, bankers, trust companies, savings banks, savings and loan associations, investment companies, insurance companies and associations, administrators, executors, guardians, trustees and other fiduciaries in New York and New Jersey, and may properly and legally be deposited with and received by municipal officers or agencies in the States of New York and New Jersey for any purpose for which the deposit of state bonds or other state obligations is now or may hereafter be authorized. Free from New York and New Jersey taxes. Exempt from Federal Income Tax. Callable on any interest payment date on or after March 1, 1941, at 105 and accrued interest.
								1933	1,000,000	
								1934	1,000,000	
								1935	1,000,000	
								1936	1,000,000	
								1937	1,000,000	
								1938	1,000,000	
								1939	1,000,000	
								1940	1,000,000	
								1941	1,000,000	
								1942	1,000,000	
								1943	2,000,000	
								1944	2,000,000	
								1945	2,000,000	
								1946	2,000,000	
								1947	2,000,000	
								1948	2,000,000	
								1949	2,000,000	
								1950	2,000,000	
								1951	2,000,000	
								1952	2,000,000	
								1953	2,500,000	
								1954	2,500,000	
								1955	2,500,000	
								1956	2,500,000	
								1957	2,500,000	
								1958	2,500,000	
								1959	2,500,000	
1960	2,500,000									

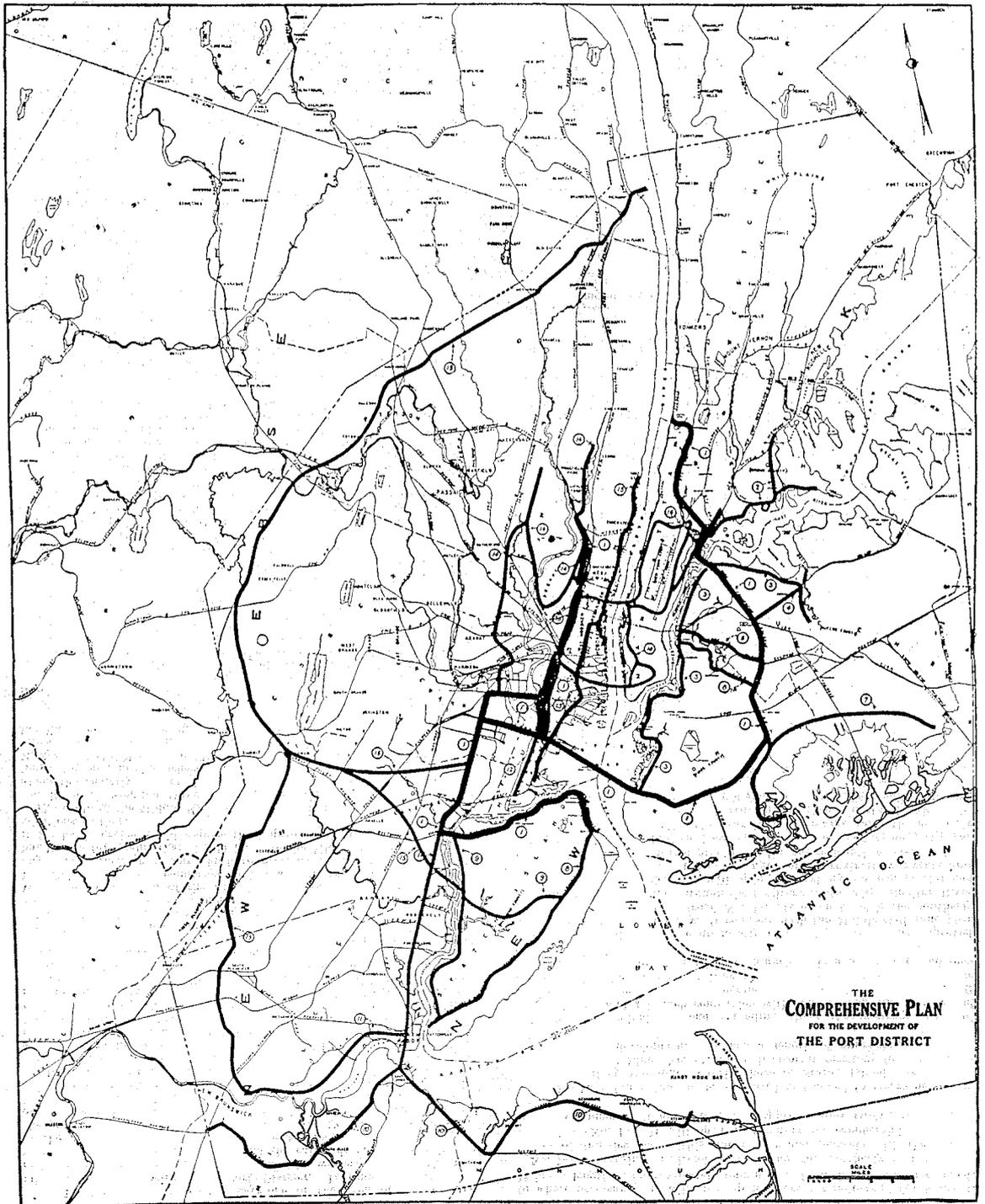
96

Table No. 24

**STATUS OF ADVANCES FROM THE STATES OF NEW YORK AND NEW JERSEY IN AID OF CONSTRUCTION OF INTERSTATE BRIDGES AS OF DECEMBER 31, 1932**

	Arthur Kill Bridges	George Washington Bridge	Bayonne Bridge	Total
<b>State of New York:</b>				
Amounts pledged.....	\$2,000,000.00	\$5,000,000.00	\$2,000,000.00	\$9,000,000.00
Amounts paid.....	2,000,000.00	5,000,000.00	2,000,000.00	9,000,000.00
Balance, December 31, 1932.....				
<b>State of New Jersey:</b>				
Amounts pledged.....	\$2,000,000.00	\$5,000,000.00	\$2,000,000.00	\$9,000,000.00
Amounts paid.....	2,000,000.00	4,500,000.00	1,600,000.00	8,100,000.00
Balance, December 31, 1932.....		\$500,000.00	\$400,000.00	\$900,000.00
<b>Both States:</b>				
Amounts pledged.....	\$4,000,000.00	\$10,000,000.00	\$4,000,000.00	\$18,000,000.00
Amounts paid.....	4,000,000.00	9,500,000.00	3,600,000.00	17,100,000.00
Balance, December 31, 1932.....		\$500,000.00	\$400,000.00	\$900,000.00

NOTE.—The above statement is in agreement with the books as of December 31, 1932; however, the balance of \$400,000 due by the State of New Jersey on account of the Bayonne Bridge was paid on January 10, 1933.



# Description of the Comprehensive Plan

No. 1—Middle Belt Line—the keystone of the arch of railroad terminal coordination within the Port District. It connects New Jersey and Staten Island and the railroads on the westerly side of the port with Brooklyn, Queens, the Bronx and the railroads on the easterly side of the port. This connection is the most direct, the shortest and the cheapest of any brought to the attention of the Commissioners for study or consideration. This line connects with the New York Central Railroad in the Bronx; with the New York, New Haven and Hartford Railroad in the Bronx; with the Long Island Railroad in Queens and Brooklyn; with the Baltimore and Ohio Railroad near Elizabethport and in Staten Island; with the Central Railroad Company of New Jersey at Elizabethport and at points in Newark and Jersey City; with the Pennsylvania Railroad in Newark and Jersey City; with the Lehigh Valley Railroad in Newark and Jersey City; with the Delaware, Lackawanna and Western Railroad in Jersey City and the Secaucus Meadows; with the Erie Railroad in Jersey City and the Secaucus Meadows; with the New York, Susquehanna and Western Railroad in North Bergen; with the New York, Ontario and Western and the West Shore Railroads on the Westerly side of the Palisades above the Weehawken tunnel.

Its length is approximately sixty-one and one-half miles, of which approximately fifty-one and one-half miles have already been built. Additional tracks to those already built will have to be added. There remains only approximately ten miles of entirely new line to be built. With the construction of the tunnel and approaches from Greenville to Bay Ridge freight can commence to flow without the necessity of building any other trackage except short connections at the tunnel ends. To handle the full traffic that should traverse the Middle Belt Line or utilize it for local service would require the improvement of existing tracks and additions to them.

The route to the Middle Belt Line is as follows: Connecting at the Hudson River at Spuyten Duyvel running easterly and southerly generally along the easterly side of the Harlem River, utilizing existing lines and improving and adding where necessary, to a connection with Hell Gate Bridge and the New Haven Railroad, a distance of approximately seven miles; thence continuing in a general southerly direction, utilizing existing lines and improving and adding where necessary to a point near Bay Ridge, a distance of approximately eighteen and one-half miles; thence by a new two-track tunnel under New York Bay in a westerly direction to a portal in the Greenville yard of the Pennsylvania Railroad in Jersey City, a distance of approximately five miles, to a connection with the tracks of the Pennsylvania and Lehigh Valley Railroads; thence in a generally northerly direction along the easterly side of Newark Bay and the Hackensack River at the westerly foot of the Palisades, utilizing existing tracks and improving and adding where necessary, making connections with the Jersey Central, Pennsylvania, Lehigh Valley, Delaware, Lackawanna and Western, Erie, New York, Susquehanna and Western, New York, Ontario and Western, and West Shore railroads, a distance of approximately ten miles. From the Greenville portal of the Bay tunnel and from the line along the easterly side of Newark Bay by the bridges of the Central Railroad of New Jersey (crossing the Hackensack and Passaic Rivers) and of the Pennsylvania and Lehigh Valley Railroads (crossing Newark Bay) to the line of the Central Railroad of New Jersey running along the westerly side of Newark Bay and thence southerly along this line to a connection with the Baltimore and Ohio Railroad south of Elizabethport, utilizing existing lines and improving and adding where necessary, a distance of approximately 12 miles; thence in an easterly direction crossing the Arthur Kill, utilizing existing lines and improving and adding where necessary, along the northerly and easterly shores of Staten Island to the city piers and to a connection, if the City of New York consent thereto, with the tunnel under the Narrows to Brooklyn provided for under legislation as a municipal project—a distance of approximately nine miles.

No. 2—A marginal railroad in the Bronx extending along the shore of the East River and Westchester Creek connecting with the Middle Belt Line (No. 1), and with the New York, New Haven and Hartford Railroad in the vicinity of Westchester. This is a new line and will open up territory for commercial and industrial development. Its length is approximately eight miles.

No. 3—A marginal railroad in Queens and Brooklyn extending along Flushing Creek, Flushing Bay, the East River and upper New York Bay. It connects with the Middle Belt line (No. 1), by lines No. 4, No. 5, No. 6 and directly at the southerly end at Bay Ridge. It utilizes certain existing lines of the Brooklyn Eastern District, Jay Street, New York Dock and Bush Terminal companies. Existing lines will be utilized and improved and added to and new lines will be built where lines do not now exist. This railroad will open up territory for commercial and industrial development. It has a length of approximately nineteen and one-half miles, of which approximately four miles now exist and about fifteen and one-half miles will be new.

No. 4—An existing line to be improved and added to where necessary. It connects the Middle Belt Line (No. 1) with the marginal railroad No. 3 near its northeasterly end. It has a length of approximately two and one-half miles.

No. 5—An existing line to be improved and added to where necessary. It connects the Middle Belt Line (No. 1), with the marginal railroad No. 3, in Long Island City. It has a length of approximately four miles.

No. 6—A portion of this line exists and a portion is new. It connects the Middle Belt Line (No. 1) with the marginal railroad No. 3 in the Greenpoint section of Brooklyn. The existing portion to be improved and added

to where necessary. It will open up territory for industrial development. It has a length of approximately four miles, of which two miles now exist.

No. 7—A marginal railroad surrounding the northerly and westerly shores of Jamaica Bay. This line is new and connects with the Middle Belt Line (No. 1). It will open up territory for commercial and industrial development. It has a length of approximately twelve and one-half miles.

No. 8—An existing line, to be improved and added to where necessary. It extends along the southeasterly shore of Staten Island. It connects with Middle Belt Line (No. 1), and will open up territory for commercial and industrial development. It has a length of approximately twelve miles.

No. 9—A marginal railroad extending along the westerly shore of Staten Island and a branch connection with No. 8. This line is new and will open up territory for commercial and industrial development. It connects with the Middle Belt Line (No. 1), and with a branch from the Outer Belt Line (No. 15); with its branch it is about fifteen and one-quarter miles long.

No. 10—This line is made up mostly of existing lines, to be improved and added to where necessary. It connects with the Middle Belt Line (No. 1) by way of marginal railroad No. 11. It extends along the southerly shore of Raritan Bay and through the territory south of the Raritan River reaching New Brunswick. It will open up territory for commercial and industrial development. It has a length of approximately twenty-nine and one-half miles, of which practically the entire length exists.

No. 11—A marginal railroad extending from a connection with the proposed Outer Belt Line (No. 15) near New Brunswick along the northerly shore of the Raritan River to Perth Amboy, thence northerly along the westerly side of the Arthur Kill to a connection with the Middle Belt Line (No. 1) south of Elizabethport. The portion of this line which exists to be improved and added to where necessary. This line will open up territory for commercial and industrial development. It has a length of approximately fifteen and one-quarter miles, of which about nine and one-half miles now exist.

No. 12—A marginal railroad extending along the easterly shore of Newark Bay and the Hackensack River and connects with the Middle Belt Line (No. 1). This line which does not now exist will open up territory for commercial and industrial development. It has a length of approximately seven miles.

No. 13—A marginal railroad extending along the westerly side of the Hudson River and the Upper New York Bay, is made up mostly of existing lines—the Erie Terminals, New Jersey Junction, Hoboken Shore and National Docks Railroad. This line is now operated as a belt line approximately sixteen and one-half miles in length and, serving the New Jersey water front, has opened up territory for commercial and industrial development. It will be connected with the Middle Belt Line (No. 1).

No. 14—A marginal railroad connecting with the Middle Belt Line (No. 1), and extending through the Hackensack and Secaucus Meadows. It will open up territory for commercial and industrial development. It is a new line and has a length of approximately twenty-three miles.

No. 15—The Outer Belt Line, extending around the westerly limits of the Port District beyond the congested section. Its northerly terminus is on the Hudson River at Piermont above the harbor congestion and it connects by marginal railroads at the southerly end with the harbor waters below the congested section. By spurs it connects with the Middle Belt Line (No. 1), on the westerly shore of Newark Bay and with the marginal railroad on the westerly shore of Staten Island (No. 9). It will have great value in that it will afford military protection to the Port District. It will serve as an interchange between the railroads beyond the congestion and will open up territory for industrial development. It has a length of approximately seventy-one miles which is all new construction.

16.—Union freight stations located at focal points throughout the Port district, as a solution of the problems of freight handling and distribution for L-C-L shipments. The overhead rights of these terminals will be utilized as space for commercial purposes. The stations will be served by motorized equipment operating to and from railheads. The first unit, Union Inland Freight Station No. 1, located in the block bounded by 16th and 16th streets and 8th and 9th Avenues in Manhattan, was opened for the handling of L-C-L freight October 3, 1932.

No. 17—By authorization of the States of New York and New Jersey, the Port Authority has constructed four interstate bridges, has acquired the Holland Tunnel, and has been directed to proceed with the construction of an additional trans-Hudson tunnel from the midtown section of Manhattan to Weehawken, New Jersey. Three of the four Port Authority bridges connect Staten Island with New Jersey, as follows: Outerbridge Crossing, between Perth Amboy, N. J., and Totenville, S. I.; Goethals Bridge, between Elizabeth, N. J., and Howland Hook, S. I.; and the Bayonne Bridge, between Port Richmond, S. I. and Bayonne, N. J. The two former bridges were opened to traffic on June 29, 1928, and the Bayonne Bridge, November 15, 1931. The fourth bridge, George Washington Bridge, spanning the Hudson River between Fort Lee, N. J., and Fort Washington, New York City, was opened to traffic October 25, 1931. The Holland Tunnel, between Jersey City and Manhattan, has been in operation since November 13, 1927. It was acquired by the Port Authority March 1, 1931.

THE PORT OF NEW YORK AUTHORITY.



387.1

P83A

1932

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~~C-85-65~~

**PAMPHLET BINDERS**

THIS IS NO. 15

FOR SELECTED TOGOL IN ALL COUNTRIES

YEAR	THICKNESS	WIDTH	LENGTH
1927	10	10	10
1928	10	10	10
1929	10	10	10
1930	10	10	10
1931	10	10	10
1932	10	10	10

Other sizes made to order.

MADE & BOUND BY  
**LIBRARY BUREAU**  
DIVISION OF REMINGTON RAND INC.  
1000 Broadway, New York, N.Y.