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THE PORT OF NEW YORK AUTHORITY

CREATED BY COMPACT BETWEEN THE STATES OF
NEW YORK AND NEW JERSEY AND RATIFIED BY CONGRESS

ANNUAL REPORT

1923

EUGENIUS H. OUTERBRIDGE,
Chairman

DE WITT VAN BUSKIRK,
Vice-Chairman

LEWIS H. POUNDS
JOHN F. GALVIN

FRANK R. FORD
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JANUARY NINETEENTH, NINETEEN TWENTY-FOUR

ALBANY
J. B. LYON COMPANY, PRINTERS
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THE PORT OF NEW YORK AUTHORITY

Commissioners

EUGENIUS H. OUTERBRIDGE, Chairman	DE WITT VAN BUSKIRK, Vice-Chairman
LEWIS H. POUNDS	FRANK R. FORD
JOHN F. GALVIN	JULIAN A. GREGORY

WILLIAM LEARY, Secretary
C. A. RUHLMANN, Assistant Secretary

Consultants

GEORGE W. GOETHALS, Consulting Engineer	JULIUS HENRY COHEN, Counsel
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Technical Staff

W. W. DRINKER, Chief Engineer	J. E. RAMSEY, Chief Statistician
BILLINGS WILSON, Assistant to Chief Engineer	E. C. CHURCH, Transportation Engineer
F. W. HERSEY, Marine Consultant	E. J. TSCHIMBKE, Chief Clerk

Director, Department of Information
H. B. BROUGHAM

NEW YORK, *January 19, 1924.*

To the Governor of the State of New York:

To the Governor of the State of New Jersey:

SIRS.—The Port of New York Authority submits herewith its report for the calendar year 1923 and its financial statement for the fiscal year July 1, 1922, to June 30, 1923.

The year 1923 has been pregnant with matters of vital interest to the Port of New York.

Some of these matters have been of an emergency character, originating elsewhere, but having important bearing on the principles involved in the Comprehensive Plan and affecting its accomplishment.

Important progress has been made in laying the foundation upon which to continue the effectuation of the Comprehensive Plan.

The First Step

In a postscript to the Progress Report submitted to your Excellencies, in February, 1923, you were advised that concurrent hearings by the Interstate Commerce Commission and the Port Authority in a proceeding to determine the present economic practicability of the first step suggested by the staff had been arranged for. The date was finally set for April 5th, and the hearing occupied April 5th, 6th and 7th, and was largely attended. The question presented was the unification of Marginal Belt Line No. 13. The railroads were represented by a committee of counsel, and in reply to the opening statement by counsel for the Port Authority, the carriers' counsel took a position in opposition to the proposals submitted by the counsel on behalf of the Port Authority staff for the consideration of the two Commissions sitting in the case. The Port Authority's counsel proceeded, therefore, with the technical staff as witnesses, to present exhibits and testimony to prove the practicability and economy of creating a real belt line to be composed of the four privately-owned connecting units and establishing thereon unified service.

The purpose of the concurrent hearings was to establish a single record based upon the studies and information which the staff of the Port Authority had developed over a period of seven months, thereby saving time and additional expense which would have accrued had the Interstate Commerce Commission been obliged to make an independent study with its own staff. The Interstate Commerce Commission possesses certain powers which the Port Authority does not possess; likewise, the Port Authority possesses powers not vested in the Interstate Commerce Commission, and it was likely that the powers of each might have to be invoked to carry out the mandate of the two States and of the Congress of the United States in effectuating the plan.

After the presentation of the exhibits and the evidence in behalf of the Port plan, an adjournment was taken to give the carriers full opportunity to study the record and prepare for cross examination and the submission of alternate proposals if they should so desire. The hearings were resumed on September 17th, and were carried through the 17th, 18th and 19th.

At the opening on the 17th of September, counsel for all of the carriers which had been in opposition in April, happily presented a statement signed by the Chairman of the Committee of Executives of all of the roads serving the Port of New York, and said that they were now prepared to cooperate with the Port Authority with respect to Belt Line No. 13; and presented a resolution expressing the opinion of the executives

“that all interested railroads join in having a study made for the construction of a belt line on the west side of the Bergen Hills from a point to be agreed upon on the south to a point to be agreed upon on the north for the interchange of freight traffic between these lines, and to be operated for that purpose.”

This refers to the New Jersey section of Belt Line No. 1, which, as a whole, the Port Authority originally termed the keystone of the arch of the Comprehensive Plan.

Speaking for the carriers, their counsel offered cooperation with our staff in surveying and determining the exact location and usage of this line and to aid in its construction.

Plans for Present Relief

Other features of the Comprehensive Plan for obtaining prompt relief from conditions of delay and expense heretofore existing were dependent both upon securing the facilities to be obtained by Belt Line 13 and Belt Line No. 1 under proper coordinated and unified service and upon proper cooperation by the carriers. Those features included —

Motor truck handling of freight from break-bulk platforms in New Jersey to inland or off-track universal freight stations and warehouses in Manhattan and New Jersey;

Store-door delivery and collection service from break-bulk points, and to and from such off-track freight stations and warehouses;

Consolidated car float and lighterage service from appropriate assembly terminals, approach to which would be furnished to all New Jersey carriers by the proposed belt lines; such consolidated service would affect a large part of the water movement of cars between carriers and private terminals, and lighterage cargo between terminals, steamships and industries.

Field studies relating to the volume and cost of these movements have been carried on for months and the information gathered assembled and classified. During the period of these investigations the staff has worked, as to some features, jointly with representatives assigned for that purpose by some of the carriers, and since September, when cooperation of the carriers was fully pledged, joint committees have been organized for the continued study of all of these features, and cooperating committees with representatives of the private terminals, steamship associations and private lighterage corporations, have been organized

in order that this work may be carried to completion as rapidly as possible. The study of the car float and light-erage problem alone involves the details of many separate movements.

Protecting the Port

The year 1923 developed a number of proceedings before the Interstate Commerce Commission, which have a vital bearing upon the interests of the Port and upon the principles involved in and affecting the accomplishment of the Comprehensive Plan. Among these are:

I. C. C. docket No. 12964, consolidation of railroads;

I. C. C. docket No. 14828, drayage allowances by carriers in terminal zones;

I. C. C. docket No. 11508, Hastings Commercial Club, relating to orders by the Interstate Commerce Commission for joint use of terminals by separate carriers in the public interest;

I. C. C. docket No. 15291, Traffic Association of South Atlantic Ports, for an extension of the Baltimore differential (which is two cents per hundred pounds against the Port of New York), to Southern ports.

In the judgment of the Commissioners these matters involved principles vital to the interests of the Port of New York, and according to the manner in which they were decided might be either helpful or adverse to the Port.

The Port Authority, therefore, decided to intervene to protect the Port's interest in these cases. No decision has been handed down as yet nor has a date been fixed for hearing the differential case.

Hoboken Shore Line Railroad

The whole capital stock of the Hoboken Shore Line Railroad was acquired during the war by the United States Government and vested in the War Department so as to provide adequate service to the embarkation terminal, formerly the piers of the Hamburg-American and North Ger-

man Lloyd steamship lines at Hoboken, which the government had seized.

The Hoboken piers by executive order were transferred shortly after the close of the war to the United States Shipping Board, to be used in the operation of government ships and generally in aid of an American Merchant Marine. The Hoboken Shore Line Railroad serving these piers, remained in the possession of the War Department.

The Comprehensive Plan adopted by Congress showed this railroad to be a part of Belt Line 13.

The fifth principle in the text of the Comprehensive Plan provided that "existing facilities shall, so far as practicable, be adapted as integral parts of the new system so as to avoid needless destruction of existing capital investment and reduce, so far as may be possible, the requirements for new capital, and endeavor should be made to obtain the consent of the states and local municipalities within the Port District for the coordination of their present and contemplated port and terminal facilities with the whole plan." This principle, of course, applied equally to Federal possessions not required for exclusive Federal use.

Both the Transportation Act and the Amended Shipping Act of Congress, passed in 1920, provided that in the disposition of any government properties of a terminal nature, the respective Federal agencies vested with title should confer with the appropriate local authorities, in order that their disposal might be such as to contribute best to the nation's interest in the improvement and cheapening of transportation and in the relation between rail and water movements.

The Secretary of War, under general directions and authority from Congress to dispose of surplus properties acquired for war purposes and not needed for government uses in time of peace, let it be known that he desired to dispose of this property.

One of the existing carriers whose lines terminated at Hoboken and other private interests entered into negotia-

tions with the War Department for the purchase of this road.

In view, however, of the expressed will of Congress, the Secretary of War did not accept private offers for this road, but advised the Port Authority of his desire to dispose of it and to cooperate with the Port Authority in carrying out the will of Congress in the effectuation of the Comprehensive Plan. Negotiations therefor have been pending with the Secretary of War which now promise to reach a successful conclusion. The delays that have occurred have been caused by many important details which were not easy of solution.

New York-New Jersey Commuter Traffic

Later in this report the problem of congestion of commuter passenger traffic between New York and New Jersey is more fully dealt with, the conclusion of the Port Authority being that it should and will cooperate with any agency which the two states may create for the solution of this problem; at this time, however, being under the direct mandate of the states to effectuate the Comprehensive Plan the Port Authority is unable to give to the commuter problem the extensive study and attention it deserves.

Belt Line No. 13

This was the most important item in the Commission's work during the year 1923, because it represented the first step in the effectuation of the Comprehensive Plan. Physically it is and has been for a long time a continuous line of rails extending from Edgewater to Bayonne. It is, however, owned in four units:

(1) The Erie Terminals Railroad, owned jointly by the Erie Railroad Company and the New York, Susquehanna & Western Railroad Company, and operated by the latter company; and the Weehawken Branch of the Erie Railroad, owned by the New Jersey Junction Railroad Company, but operated under lease by the Erie Railroad;

(2) The New Jersey Junction Railroad, owned by the New York Central Railroad Company, and operated by the West Shore Railroad Company;

(3) The National Docks Branch of the Lehigh Valley Railroad, owned and operated by the Lehigh Valley Railroad; and

(4) The Hoboken Manufacturers' Railroad (generally called "Hoboken Shore Line"), owned and operated by the War Department of the United States Government.

The summarized mileage of these sections embodied in Marginal Line No. 13 is as follows:

Eric Terminals Railroad.....	1.77 miles
New Jersey Junction Railroad.....	5.49 "
National Docks Branch (L. V. R. R.).....	8.43 "
Hoboken Manufacturers' Railroad.....	1.20 "
	<hr/>
Total.....	16.89 "
	<hr/> <hr/>

Each of these units has heretofore been operated by the proprietary owners or lessees as individual terminal units of their respective trunk line connections. Only during the war, under Federal administration, was it operated as a through belt line, but even then not under a single direction, or with a real unified service.

Nevertheless, by such degree of unification as was then applied, it carried a traffic which, measured by cars moved, was 100 per cent greater than that moved upon its rails under its individual ownership and operation before or after the period of government operation.

At the concurrent hearings in April the Port Authority staff testified that with proper but comparatively few physical improvements and with unification of service under a neutral director with adequate powers, it would have a capacity to handle 100 per cent more cars; further, that with an estimated expenditure of \$700,000 for the installation of a proper signal system and some additions to yards and interchange tracks it would be capable, with the

predicted increased tonnage, of effecting a saving of \$1,100,000 per annum on the tonnage to be moved.

It was admitted by the President of the New York Central Railroad in an examination under oath in that proceeding, that with the suggested changes the estimate of 100 per cent increased capacity was correct. No testimony was offered by the carriers to dispute the savings estimated by the staff. The carriers, however, stated that the physical changes could in their judgment be made at an expense of \$500,000, because they could allocate from their existing yards some of the interchange tracks which the Port Authority staff could not assume to be available, and therefore would have to be constructed at new expense.

The operation of these units as formerly conducted, led to much circuitous routing, with consequent delays in transit, long hauls and high charges upon the commodities. No tariffs comparable to Belt Line charges were filed by the individual carriers available to industries, piers or shippers on the respective segments for direct shipment between points on the different units of this line. With some exceptions the only tariffs filed by the several proprietary owners were for circuitous routings which would give each the longest practicable haul on their own lines, involving interchange with from two to three other roads, yardings at each interchange point and local rates or divisions to each. In some cases cars traveled 187.5 miles instead of a practicable distance from origin to destination of 42.5 miles, consuming five days en route; other shipments traveled 115 miles instead of a practicable distance between origin and destination of eight miles, four days being consumed en route. In other cases cars traveled 107 miles to go a practicable distance of 19 miles, 165 miles to go a practicable distance of 16.5 miles, 58 miles to go a practicable distance of but four miles. Instead of an ordinary switching charge for the direct movement, the freight tariffs on the cars by the circuitous routings ranged from \$35 to \$240 per car.

Graphic illustrations, by means of maps, were prepared and presented in evidence, giving also the details and

charges for these movements, and copies of several of these, together with a map of Belt Line No. 13, are appended to this report.

Considerable interchange of business was made over the rails of these units, chiefly between the Pennsylvania, Central Railroad of New Jersey and Lehigh Valley on the south and the West Shore Railroad on the north, under interchange agreements. The operations of the units, involving engines and crews of the different carriers, were at times involved, resulting in confusion and delays; and the line was often blocked for long periods of time by trains awaiting admission to different units at the convenience of the management of that particular unit; the result was constant congestion, delay and much light engine movement.

In preparing for the hearings in April, counsel for the Port Authority had prepared a brief in seven sections, referring to various phases of law and argument applying to the case and the evidence to be presented. Section 1 gave the history of the New York Harbor case (No. 8994, 47 I. C. C. 643, New Jersey v. New York), decided in favor of New York, but in which the Interstate Commerce Commission's opinion stressed the immediate necessity for the two States to adjust their separate interests, and for the states and the carriers to reorganize and coordinate terminal facilities;

Section 2, the power of Congress or its agencies to deal with railroads as public highways and the power of the States to make a compact with each other;

Section 3, relating to the Merchant Marine Act and the Transportation Act of 1920, bearing upon the powers of the Interstate Commerce Commission with respect to efficient and joint use of terminals, especially at ports;

Section 4, relating to power conferred upon the Interstate Commerce Commission to require the joint use of the facilities of one carrier by another carrier, upon certain conditions;

Section 5, giving extracts from official reports bearing upon the need for unification and joint operation of terminals in the public interest;

Section 6, quoting from the reports of Committees of Congress and the Secretary of War, recommending that Congress should give its consent to the compact between the States of New York and New Jersey, creating a single Port District and establishing the Port Authority; and

Section 7, defining "economically practicable" as that which is capable of execution, which would save waste, contribute to the effectuation of the Comprehensive Plan, and be in the public interest.

After the April hearings adjourned, when the attitude of the carriers in questioning both the public benefit and the power to bring about unification of services and joint use of terminals had been disclosed, the Port Authority caused Section 8 of the brief to be prepared, giving an exhaustive review of decisions rendered by the Supreme Court of the United States, by Federal and State courts, by State Railway and Public Service Commissions, and by the Interstate Commerce Commission, in support of, and declaring the need, especially in large centers, of the joint use of terminal facilities, the coordination of existing privately owned terminals and the general unification of services.

A large number of cases were quoted where either the carriers themselves had established and were operating under these principles, or where courts or other public authorities had compelled such facilities to be created and operated in the public interest. Copies of this brief were served upon all of the parties in interest and upon the Commissioners of the two bodies which had been sitting concurrently in the hearing. There were also quotations from briefs that had been filed in other important cases by the same counsel for the carriers who represented them at these concurrent hearings, which asserted the powers of Congress or its delegated agencies, and which were as strong in support of the duty of the Port Authority to proceed under the mandate of Congress to effectuate the Comprehensive Plan as though they had been written by our own advocate rather than by an adversary in this proceeding.

When the hearings were resumed in September, no cross examination of the witnesses who testified under examination of counsel for the Port Authority in the April hearings was undertaken by the carriers. They introduced no witnesses and presented no evidence in contravention of the testimony and exhibits forming the record of the April hearings, but happily declared themselves as bowing to an "overwhelming public opinion that traffic conditions in this Port must be radically improved as soon as possible." After reading a statement subscribed to by twelve executives of the roads they presented formal resolutions declaring their readiness to provide themselves the \$500,000 which they estimated would accomplish the necessary physical improvements for Belt Line No. 13; to provide a unified service over the line; to put its operations under a neutral director of traffic with adequate power, approachable by and accountable to all shippers or others for prompt and efficient handling of their traffic, and agreeing that the physical changes and operating plan should be worked out in cooperation with the staff of the Port Authority, subject to the approval of the Commissioners. Further, it was agreed that the Port Authority should have a representative as a liaison member of the operating committee, with notification of and participation in all meetings, and should have access at all times to the operations and accounting system, in order that it may be satisfied with the method and informed of the results of the operations.

Further, in order that shippers, industries and steamship lines served or to be served by this improved line might obtain the largest measure of benefit, some of the executives agreed, and expressed the opinion that all of the proprietary owners would soon agree, to reciprocal switching arrangements which would give to all industries and shippers the benefit of direct line haul shipments over any connecting line, whether located on the terminal of that particular line or not, thereby cutting out all circuitous routings, avoidable long hauls, and unnecessary cost of service.

Before the conclusion of the concurrent hearings counsel presented a study prepared between April and September by the staff of the Port Authority, for the physical changes, the new methods of operation and the traffic estimates, with operating costs and economies worked out in complete detail, relating to Belt Line 13.

Thus did a full publicity of the facts before competent public authorities and the pressure of an informed public opinion overcome obstacles which had previously delayed beginning the effectuation of the Comprehensive Plan. Patience, persistency and publicity when in the public interest are powerful influences and in the end are always likely to prevail.

Belt Line No. 1 — The Next Step

This was termed the keystone of the arch of the Comprehensive Plan. It is the middle belt line designed to connect all the roads in New Jersey and Staten Island with Brooklyn, Queens, the Bronx, and thence to New England. Large portions of this line are already in existence, but in several proprietary ownerships, and must be coordinated with unified service and reciprocal switching arrangements, similar to those under arrangement for Belt Line 13. Independent surveys conducted by the engineering committee of the carriers, for that portion of the line west of the Bergen Hills in New Jersey, substantially confirm the location as originally laid out by the Port Authority in the preparation of the Comprehensive Plan. Conferences between that engineering committee and the staff of the Port Authority are continuing. While this line exists, some extension must be built, involving important engineering determinations.

At the September hearings counsel for the carriers asked if the Port Authority would lend its aid in any condemnation proceedings that might be required for rights of way or other purposes and in financing new construction, if necessary. This aid was immediately pledged.

Plans for Present Relief

Subsequently to the description of this phase of the Comprehensive Plan incorporated in the Port Authority's report of December 21, 1921, the Erie Railroad proceeded to install for itself a system, as therein set forth, utilizing team-track platforms in New Jersey, and entered into a contract for the trucking of its merchandise freight (formerly handled by car floats to Manhattan pier stations), to inland freight stations on Manhattan Island. Operating its own ferryboats from Jersey City to Manhattan, it could provide satisfactory ferry service for this trucking system.

This plan provided two options to shippers and consignees:

(a) Freight to be received or delivered at the inland terminal station at the regular New York flat rate;

(b) Freight to be collected or delivered at their own warehouse or store-door; in this case to the New York flat rate is added the trucking charge for the service to and from a hypothetical pier station on West street, the railroad assuming the balance of the charge; rehandling of the merchandise at any point between the store-door and the railroad car is thus avoided.

This system is reported to be working with satisfaction to the railroad and to their customers. It is a matter of record in a proceeding before the Interstate Commerce Commission, I. C. C. docket No. 14828, known as the Drayage case, referred to later in this report, that the saving to the railroad, compared with former methods of operation, has averaged as nearly as ascertainable \$0.80 to \$1.60 per ton, while substantial benefits accrue to the shipper and consignee.

This example, so far as it goes, has apparently proved in principle the accuracy of the determinations made by the Port Authority. However, the full benefits, more especially to shippers and consignees, can accrue only when such inland terminals are universal stations, where freight to and from all railroads may be delivered and received,

and when a sufficient number of such terminals have been established under a proper zoning system. Then the length of truck hauls will be reduced, and a more efficient and larger load factor for trucks will be possible, both of which will result in a lower trucking charge and accomplish the important benefit of lessening the number of trucks which must use the streets.

Furthermore, increased benefits will be obtained when such inland universal terminal stations are built from designs specially prepared for the most economic handling of this class of business.

The Port Authority and its staff have in the past few months been giving very careful study and consideration to methods of providing an adequate number of such universal inland terminal stations, so designed as to be adaptable, when future needs require it, to underground approach for either electric railway or truck transportation. The accomplishment of this would carry out the principle enunciated in the text of the **Comprehensive Plan**, of freeing the water front of the car float and pier station occupancy, so that it may be available for ocean and coastwise vessels.

Consolidation of Railroad Lighterage and Car Float Service

Under existing methods of operation, every railroad serving the port has waterfront yards occupying a large amount of space, with float bridges to which cars are brought from the break-up yards, put upon the car floats, which are then towed to the pier stations of the same railroads on Manhattan Island or at other parts of the port, to float bridges of other roads, where the traffic is interchanged, and to the numerous private terminals. The aggregate space occupied on the New Jersey shore by these waterfront yards is approximately 50 per cent of the entire lineal frontage between Bayonne and Weehawken. Many of the piers at the most desirable locations on the Manhattan-Hudson River waterfront are entirely utilized for this freight service; the slips are filled with car floats, the contents of the cars are unloaded on the pier deck and the

cars are reloaded for west-bound movement from the street tailboard bulkhead. At many points in the harbor there are float-bridge stations and adjoining yards. This system is expensive and uneconomic in many ways, but the services are required until better methods, provided in the Comprehensive Plan, can supplant it. It frequently happens that these railroads have not sufficient cars for any one destination to load a car float completely, and it is a common sight to see car floats towed around the port far short of the capacity of the floats.

If there were one or more consolidated car float stations, easily reached by all the roads, where all cars bound for the same destination, irrespective of their original source, could be loaded on the floats, a much better load factor could be obtained, a reduced number of car floats would suffice, and a reduced number of tugboats would be needed. There would be a saving in the total expense, a reduction in the congestion which frequently obtains, especially in the Hudson and East rivers, and less capital investment in equipment would be required. The belt line systems in New Jersey, connecting all the roads, will make possible the approach to such consolidated car-float stations and bridges. A large amount of freight is, under existing methods of operation, also lightered by the various roads. In this operation cars from the break-up yards are taken to the waterfront yard, where the contents are loaded upon lighters, which are towed to the destination. This method largely obtains in the handling of export freight to foreign and coastwise steamers, the lighterage limits extending around most portions of the port so far provided with shipping piers.

This is a more expensive operation than floating the cars themselves; it involves more labor in the transfer of the commodities to and from the lighter; the lighterage units involved are much smaller and many more in number than in the case of car floats, and finally many lighters require the tugboat service. It frequently happens that many or all of the railroads have incoming freight bound for the

same steamship piers, and frequently the quantity which each road has to deliver is much less than the full capacity of the lighter. This results in a great many small or under-loaded lighters being separately moved to the steamship piers, where they congest the slips, and where they are often tied up for considerable periods. Much shifting is required in getting out the unloaded, and placing the loaded ones within reach of the ship's tackles, and returning them when discharged.

Consolidation of this business at appropriate points would substantially reduce the number of lighters, the number of tugs, the time lost in shifting, and prove of economic benefit to the rail carriers and the steamship operators. The consolidation of car floats and lighterage service would effect substantial savings. The mere pooling of equipment under one management would in itself result in substantial savings, and this step could be taken without awaiting the effectuation of the belt line systems in New Jersey and provision for consolidated car-float stations.

Railroad operating men have not generally been favorable to consolidating car float and lighterage operations, but it is believed this attitude has not been because of any doubt of the economy to be obtained, but rather because of a feeling that by equalizing the service of all, it would remove the strategic advantage that some may have felt they possessed through more favorable location, larger and better equipment, which their traffic officials have considered a competitive advantage in securing business.

We shall refer later on in this report to this individualistic competitive theory in terminal service, and the difficulties which it has imposed in bringing about agreement with the carriers on some of the fundamental principles involved in the Comprehensive Plan.

The Port Authority Commissioners have had to proceed in this matter, as in all others, to obtain proof of the economic advantage in the public interest of the consolidation of these services. It requires an extensive study of these different movements and the direct labor and overhead

expense involved in them. In order that the results may be convincing to all those in interest, the Port Authority, through negotiations with the carriers, the private terminals, and the steamship operators, has arranged for cooperating committees of each to work with the Port Authority staff in the studies now going on, so that the method and the accuracy of the work upon which conclusions must be based, will contemporaneously be known to all. This study will involve the separate consideration of 55,000 movements in the test period of 30 days and the results must be applied to a whole year's traffic which gives some indication of the complex nature and magnitude of this work.

Tunnels and Bridges

It has long been manifest that the ferry services between New Jersey and Manhattan, and likewise between New Jersey and Staten Island, are entirely inadequate for present requirements. Even for passenger service they are obsolete and inconvenient, as when passengers are landed on the New York side there are, in many cases, no surface or underground transportation lines to carry them where they want to go.

The conditions relating to ferry service for motor trucks or motor cars, with its interminable delays, are too well known to need more than casual reference here.

It is manifest, therefore, that the benefits to be obtained for present relief in freight transportation, described in a preceding section of this report, can not be realized until adequate means of crossing the river are provided. The Vehicular Tunnel now being built by the two States, the completion of which is set for the year 1926, will furnish the first relief. It has been asserted by students of traffic conditions, and is generally believed, that it will be saturated from the time it is opened for use, and that before additional facilities can be provided conditions similar to those now existing will again obtain. The construction of tunnels or bridges, including the preliminary studies, requires from three to five years or more before the completed facilities can be available.

On August 7 last your Excellencies handed the Port Authority a joint statement outlining your views as to further crossings of the Hudson River by tunnels or bridges, requesting us to investigate the matter and make a report to you, with suggested legislation, if any were necessary, in time to be submitted to the respective legislatures early in their sessions of 1924. At that date the whole time of our staff was occupied with the preparatory work necessary for the resumption of concurrent hearings with the Interstate Commerce Commission in September. As soon as those hearings closed the staff undertook this work, and as soon as they were able to present sufficient information to the Commissioners, a public hearing was called and invitations extended to all the municipalities, to the advisory council, to chambers of commerce, boards of trade, and civic societies, the carriers and the trucking interests, to attend and present such information or views as they might have bearing on this subject.

Subsequently, on December 21st, we submitted a report to your Excellencies, summarizing the testimony submitted at that hearing, and expressing the conclusions of the Commissioners. Since that report was forwarded further studies have been made of the effect upon motor truck or motor car mileage through concentration of trans-river traffic by providing a very large bridge at one point, or its diffusion by tunnels of aggregate equal capacity at several points.

The matter of motor truck mileage is a very important economic factor, but there is also a very compelling necessity for minimizing mileage as much as possible, in order to save congestion and wear and tear upon the streets. This study confirms the principle that diffusion alone can furnish relief and solve the difficult problems of congestion in the streets of Manhattan, especially in that part of the city south of Fifty-ninth street, with its narrowing lower end, with its many narrow streets, and with the already excessive amount of north and south traffic as compared to east and west movements. A graph illustrating this will be found at the back of this report; while it is self-explanatory, it is worth while calling attention to the fact that,

based upon five million tons per annum, which is less than the estimated amount of freight likely to be moved by motor truck under the plan for present relief, sixteen lines of traffic over a bridge at one point would exceed the aggregate mileage of four tunnels properly located, with four lines of traffic each (sixteen in all) by 2,310,000 miles, which, at an ascertained cost of \$1.00 per truck mile, would amount to \$2,310,000 per annum, which capitalized at six per cent, would equal the principal sum of \$38,500,000, or substantially the cost of one tunnel with four lines of traffic.

It is, of course, well recognized that for passenger motor car service an open-air bridge will always be more agreeable than a tunnel crossing. The limitations upon the movement of passenger motor vehicles need not be so great, either for economy of time or cost of operation or distance of approach, as is essential in providing for freight movements. Passenger vehicles move more rapidly, are much lighter in weight, less wearing upon pavements, and those who ride in them usually have a reasonable amount of time at their disposal. Furthermore, a very large percentage of the whole movement of such vehicles now obtains in the upper portions of the city, as many people prefer not to use their cars in the lower and more congested sections.

For this and other reasons it may well be that a bridge crossing at some point in the northerly part of the city would be very desirable. It would tend to draw away large numbers of passenger vehicles that must now come downtown in order to reach the ferries — at least, at Forty-second street, and even below — and to that extent, would relieve the streets of present congestion — and this is a valuable consideration. Furthermore, it would greatly facilitate through motor traffic from points north and east to points west and south, and vice versa. A bridge at such a northerly point would not meet with the objections by steamship operators that it would limit future extension of piers for large vessels or leave insufficient room for manoeuvring them.

A more complete reference to the subject of tunnels and bridges will be found in the report to your Excellencies

under date of December 21st, which is copied in the appendix.

Protecting the Interests of the Port

These are matters which were brought before the Interstate Commerce Commission, all of them involving questions of transportation. A number of cases have developed which, though originating elsewhere, have involved considerations vitally affecting the interests of the two States at large, and particularly of the Port District, and the principles involved in the Comprehensive Plan. There were four of such instances which developed during the year.

I. C. C. Docket No. 12964 — Consolidation of Railroads

The first to which we were obliged to give attention was I. C. C. Docket No. 12964, Consolidation of Railroads.

In 1920 Congress directed the Interstate Commerce Commission to make a study and report a tentative plan for grouping the railway systems of the country into a limited number of major systems, which should, so far as possible, be of comparatively equal strength, and which should preserve the element of competition in service, to the end that under a uniform system of rate-making all might be able to show net earnings adequate to establish their credit upon a basis that would enable them to finance from time to time the additions and improvements which would be required in furnishing an adequate national transportation system, and with a view to enabling economies to accrue through the elimination of so many separate corporate entities and the duplication of effort now existing in many places.

The Interstate Commerce Commission was directed, when such tentative plan had been prepared, to furnish a copy to the Governor of each State, in order that it might be examined and that all might have appropriate opportunity to determine its effect upon their respective interests, and to present their views at appropriate times at hearings to be set by the Commission.

The report of the Interstate Commerce Commission, with a proposed tentative plan, was issued in 1921, approximately at the same time that the Port Authority was preparing to present its Comprehensive Plan for the Port of New York to the Legislatures of the two States. It is necessary to call attention here especially to the fact that the Comprehensive Plan was adopted by the two States early in 1922, and by the Congress of the United States, and approved by the President July 1, 1922. This action of the Congress was therefore taken in the light of their full knowledge of their earlier action in directing the Interstate Commerce Commission to suggest a plan for consolidation of systems of railroads; and, under all precedents, can and should be regarded as a later expression of the will of Congress, so far as the transportation systems within the Port District are concerned.

In the summer of 1923 the Governor of New York referred this plan to the Port Authority with the request that it be studied with a view to determining whether it involved conditions that would be inimical to the interests of the State or of the Port. Our first studies were devoted to the question whether, in the new grouping proposed, there had been allocations of feeder lines, heretofore supplying traffic to east and west trunk lines, to north and south trunk lines, and therefore likely to divert traffic away from the Atlantic ports, and especially from the Port of New York.

While engaged in this examination, and in following the proceedings at the public hearings being given by the Interstate Commerce Commission, we found that the New York Central Railroad Company had applied for a change in the plan, requesting that the Central Railroad of New Jersey be allocated to it, together with the Catawissa Branch of the Reading Railroad, which, if granted, would enable the New York Central to control a new through route between New York and the west, from a point on its main line at Ashtabula, Ohio, a short distance east of Cleveland.

The Central Railroad of New Jersey having been considered by the Port Authority as essentially a terminal railroad, open to and exchanging with practically all the trunk lines on the New Jersey side of the port, and some of its terminals being specifically embraced in the Comprehensive Plan, this proposal drew sharp attention to the important fact that the consolidation question, so far as it related to all of the roads serving the Port of New York, would unavoidably have a vital bearing upon the effectuation of the Comprehensive Plan. It therefore became necessary for the Port Authority to intervene in this proceeding, which it did at the hearing in New York, June 25, 1923, by a motion requesting the Interstate Commerce Commission to exclude from consideration all such lines of railroad, belt lines and terminals as are embraced in the Comprehensive Plan for the development of New York. The presiding commissioner felt compelled to deny the motion at that time, on the ground that the hearings had specifically been called to hear argument on the consolidation program, as set forth in the tentative report, which had not reserved the terminal units within the Port area for separate consideration. He stated, however, that such motion might be renewed at the final hearings before the full commission, and briefs and oral argument then presented. This necessitated our then arguing against the application of the New York Central Railroad, and, in effect, against the allocation of the Central Railroad of New Jersey to any single consolidated system, except under limitations and conditions which would preserve unimpaired the principles of the Comprehensive Plan and the terminals and services of the Central Railroad of New Jersey to the extent that they might be a necessary part of that plan.

Attached to the tentative plan proposed by the Interstate Commerce Commission was a voluminous report prepared for them by Professor William Z. Ripley, of Harvard University, who had been retained by the Commission to make

a preliminary study and report to the Commission. In Professor Ripley's report, he stated,

"Another far-reaching assumption is vital to the success of this plan (consolidation of railroads). This has to do with the operation of terminals at great centers. * * * The subject technically is so involved, that it might well be made matter for a special investigation. Its bearing upon and relation to the subject of the division of through rates is as obvious as is its intimate connection with consolidation. The pending New York Central application to acquire the Chicago Junction Railway raises in itself almost all the possible aspects of terminal problems. Consolidation can never be effectively brought about without the adoption of a comprehensive policy as to terminal ownership, operation, or both. It is herein assumed that free access will be somehow provided, either under the present emergency powers as contained in section 1, paragraph 15-c, or by the adoption under a consolidation plan of permanent arrangements in all of the important centers. Possibly the assignment of terminal properties might take place by means of leases based upon valuation by the Commission and at a rate fixed by the Commission as reasonable. This would permit the terminal companies to remain under the joint control of the several participating railroads, rather than that entirely independent terminal companies, actually owning these facilities, should be set up. The important point, whatever the means adopted to this end, is that there should be unified operation and entirely free access to all participants alike. * * * A practically universal demand of shippers is that they be able freely to exercise their routing rights by the provision of open terminals, both at the point of shipment and at destination,"

and the Interstate Commerce Commission, in its opinion rendered in the New York Harbor case, 47 I. C. C. 643, at page 733, stated:

"It is necessary that the great terminals at the Port of New York be made practically one, and that the separate interests of the individual carriers, so long an insuperable obstacle to any constructive plan of terminal development, be subordinated to the public interest."

It must be remembered that the case was brought in 1917, and the decision rendered December 17, 1917.

It was upon the findings and admonitions given to the States of New York and New Jersey and to the carriers by the Interstate Commerce Commission in that case that the New York-New Jersey Port and Harbor Development Commission and the Port Authority which succeeded it, adopted the principles upon which the physical Comprehensive Plan was founded. Notwithstanding the Interstate Commerce Commission's own comprehensive analysis of conditions, and decision based thereon, in the New York Harbor case, and notwithstanding Professor Ripley's frequent references to the terminal question as a whole, and specifically to the terminal character of the Central Railroad of New Jersey, the consolidation plan, as formulated, made no reference to, and apparently took no note of the terminal situation in the New York Port District. As was stated at page 37 of the brief submitted in behalf of the Port Authority at final hearings in the consolidation case:

"How can the great terminals at New York be made practically one, if they are to be awarded severally and without qualification to the respective trunk line systems? How can the deplorable tendency to invest large sums in new terminals for their individual use be checked, if a valuable terminal property like that of the Central Railroad of New Jersey is to be awarded unconditionally to a powerful trunk line seeking it mainly for the purpose of strengthening its competitive advantage? How can freight tunnels under the North River, which the Interstate Commerce Commission says 'could be constructed at a cost small in comparison with resulting benefits', be intelligently planned in the interest of all the carriers and in the interest of the port and of the nation, unless they can be planned in contemplation of and in harmony with unified terminals on the New Jersey shore? How can the valuable water-front property be developed in the public interest, if it is awarded to private carrier corporations without restriction as to their development or use? To put these questions is to answer them."

In view of the fact that all these opinions and considerations found no place in the tentative plan for consolidations, it became necessary for the Port Authority to have prepared for final argument a brief which is a compendium bringing the law and the precedents down to date, illustrating the many places in the United States where the question of joint use and unification of terminal services has already been determined in the public interest, and where principles identical with those involved in the Comprehensive Plan have been well settled by decisions of State and Federal Courts, by the highest courts of equity, by the Supreme Court of the United States, by state railroad commissions, and by the Interstate Commerce Commission itself. It was deemed essential to have the record so complete and compelling that whatever the ultimate result, no charge could ever be brought that the Port Authority had not exhausted every argument that could be advanced for the protection of the Comprehensive Plan and of the Port District.

During the study of this subject and consideration of how the matter might be composed in the interest of the Port, the Commissioners necessarily had to consider what might happen if the Interstate Commerce Commission or the Congress of the United States should finally determine upon consolidations in disregard of the Port Authority's motion that the terminal units within the Port District should be separately treated. Many of the commercial organizations within the Port District adopted resolutions to be presented to the Interstate Commerce Commission, urging that the request of the New York Central Railroad be granted. The Port Authority believed that a far better solution could be arrived at, and that if the Central Railroad of New Jersey was not to be reserved, it should be so disposed of as to permit of the establishment of what would, in effect, be two new through trunk lines to the West, serving the interests of both the New York Central Railroad and the Baltimore & Ohio Railroad, thereby expanding the territories to and from which commerce of

this Port could flow. Conferences were held with the executives of each of these systems in an endeavor to bring about a complete amicable agreement prior to the final hearings in the consolidation case, in order that such agreement might be spread upon the record. Very considerable progress was made, but the time was too short in which to bring about a complete agreement satisfactory to all parties.

It was, therefore, necessary that the Port Authority secure a record in this case as to the extent to which the executives of the railroads involved were willing to go at this time and to urge that if the Central Railroad of New Jersey were allocated to either of these trunk line systems, it should be under such specific conditions and limitations as would furnish adequate service to each of them, and fully protect, in the New York terminal end, the principles of the Comprehensive Plan and the effectiveness of the Central Railroad of New Jersey terminals in connection therewith.

I. C. C. Docket No. 14828 — Drayage Allowance Case

This case originated in New England, and involved the propriety of an allowance by a public carrier, within a reasonable terminal zone, of drayage costs in bringing freight to the carrier's station. The petition filed asked for a decision that such allowances were discriminatory, and should not be permitted. If so decided, this would have directly affected the method of freight delivery now being employed by the Erie Railroad, already referred to in this report, and would have affected the whole principle involved in the method for present relief proposed in the Comprehensive Plan.

The principle involved in this case was no less threatening to the interests of the Port than that involved in the Consolidation case. It, therefore, became necessary for the Port Authority to intervene in this case. It was in this proceeding that testimony was brought out to the effect that the saving to the Erie Railroad in the motor truck

service from its New Jersey terminals to Manhattan, in the conduct of its inland operations, ranged from \$0.80 to \$1.60 per ton, and that substantial benefits accrued therefrom to shippers and consignees.

The Interstate Commerce Commission has not yet handed down its decision in the case.

I. C. C. Docket No. 11508 — Hastings (Minn.) Commercial Club and Others vs. Chicago, Milwaukee & St. Paul Railway Company and Chicago, Burlington & Quincy Railroad Company.

This case originated at Hastings, Minnesota, and was an application to the Interstate Commerce Commission to compel joint use of the Chicago, Milwaukee & St. Paul Railway Company's Hastings terminals by that road and the Chicago, Burlington & Quincy Railroad, in the public interest.

The Interstate Commerce Commission issued such an order. This case was unique in that both of the carriers involved objected to the petition. After the order was issued, the Chicago, Burlington & Quincy Railroad Company applied for a rehearing on the ground that the amount of compensation for such joint use demanded of it by the Chicago, Milwaukee & St. Paul Railway Company was excessive, and that it would operate at a substantial loss thereunder. The Commission reopened the case on this appeal but the examiner assigned to the case did not confine his report to the question of the compensation involved, and recommended that the Commission reverse its order, on the ground that the examiner did not himself consider that such joint use was in the public interest, and that Hastings was afforded reasonably adequate service by the Milwaukee Railway, and, therefore, that the Commission should now conclude that its previous finding on the ground of "public interest" was in error. While it appeared that the examiner in his report had disregarded the limitations of the scope of the hearing, the principle involved was one vital to the Port of New York, and to the effectuation of

the Comprehensive Plan, namely, that the joint use of terminal facilities, when required in the public interest, transcended the question of whether it was immediately to the financial benefit of the carrier, or otherwise. The argument has been advanced by some that the Congress did not intend, in the provisions of the Transportation Act, to give the Interstate Commerce Commission power to order joint use of facilities, even in the public interest, except upon application of one or more of the carriers involved, and especially not where both were in opposition thereto.

The Transportation Act itself does not seem to support such a contention, and in paragraph 4 of section 3 reads:

"4. If the Commission finds it to be in the public interest and to be practicable, without substantially impairing the ability of a carrier owning or entitled to the enjoyment of terminal facilities to handle its own business, it shall have power to require the use of any such terminal facilities, including main line track or tracks for a reasonable distance outside of such terminal of any carrier, by another carrier or other carriers on such terms and for such compensation as the carriers affected may agree upon, or in the event of a failure to agree, as the Commission may fix as just and reasonable for the use so required. * * *"

It was the duty of the Port Authority to support the contention that the power of the Interstate Commerce Commission was adequate to order such joint use wherever it was clearly in the public interest, subject to such compensation as might be agreed upon, or as it might determine to be adequate.

I. C. C. Docket No. 15291 — Complaint of the Traffic Association of the South Atlantic Ports Asking for Extension of the Baltimore Differential on Import Rates to Southern Ports.

Baltimore for many years has enjoyed a differential as compared to New York and New England ports. The general question of the differentials against the Port of New York on export rates has long been well understood, and New York and New England ports have been progressively

losing business formerly contributing to their prosperity, by reason of them.

Philadelphia, likewise, has enjoyed a differential on import rates as compared to New York and New England ports.

If the complaint should prevail, the import rate structure would appear as follows:

Philadelphia, two cents per hundred pounds under New York;

Baltimore, Norfolk, Newport News, Wilmington, N. C., Charleston, Savannah, and Jacksonville, all three cents per hundred pounds under New York.

It could be readily assumed that if differentials were extended so far, application would be immediately filed by all the Gulf ports for similar benefits. The Port Authority considered that this was but the opening wedge which, if successfully applied, would surely be followed by applications to have differentials apply also to export traffic, and that the inevitable result, if that were permitted, would be to further draw away trade which, otherwise, would normally flow into and through the Port of New York. The Port Authority immediately notified all the large commercial organizations in the Port District of the importance of this case; that it purposed intervening, and suggested that they give it immediate consideration with a view to individual or collective action in support of the Port Authority's intervention in opposition to the complaint.

That we were correct in assuming that it was only the entering wedge for a larger extension of such benefits, has been proved by the recent filing of another complaint, asking that the differentials be applied also to export rates. The extent to which the differentials heretofore prevailing have encouraged large investments of capital to provide special facilities at other ports for the handling of special commodities, and the extent to which the differentials and those facilities have diverted commerce formerly handled at the Port of New York, is not gen

erally appreciated or known. Many commodities, such as cotton, tobacco, coffee, refined petroleum, and sugar, in the handling of which this port was formerly pre-eminent, have been drawn away in increasing volume, until, as to most of them, New York now handles comparatively small quantities, while the volume handled at the ports enjoying the differentials has increased very materially, in some cases many hundreds per cent. Numerous attempts have been made in the past by proceedings brought before the Interstate Commerce Commission to have the former differentials abolished. They have all failed, notwithstanding the fact that the conditions because of which they were originally granted are believed to no longer obtain, and those ports would now be on an equal competitive basis without the differential in their favor. One of the strongest arguments put forward by the ports enjoying a differential, against its withdrawal, has been that very large vested interests and investments of capital have been created by reason of the differential, and it is alleged that its withdrawal would greatly depreciate, if not destroy, those investments.

It is vital to the interests of New York that this principle should not be extended, and, therefore, we have intervened in this case to protect the interests of the port.

Occurrences of this sort have made it necessary to watch closely all the proceedings brought before the Interstate Commerce Commission. In order that we may receive the earliest information of any which threaten the interests of this port, so that none may go by default, and that we may have the benefit of advice from those who have had special knowledge of and experience with the practices and decisions of the Interstate Commerce Commission, and methods of procedure before that body, we have found it advisable to retain associate counsel at Washington, who have had that experience and specialized in that field, and who have cooperated with our regular counsel in all Interstate Commerce Commission proceedings with which we have been concerned.

Commuter Passenger Traffic

The commuter passenger traffic between New Jersey, Westchester and Long Island points to business and other centers in Manhattan has reached the point of saturation on all available lines. The headway of trains on steam lines in the morning and evening rush hours being now at as frequent intervals as the service in the municipal subways of New York city, neither rails nor passenger terminals can accommodate any substantial increase of facilities. The trunk line carriers were the first to press this question upon the attention of the Port Authority, believing that it had an inseparable bearing upon the solution of the freight movement necessarily conducted over the same lines. Indeed, one of the arguments of the carriers for delay in agreeing with the Port Authority upon changes in existing methods of handling freight was based upon the assumption that if they could be relieved of this pressure of commuter passenger traffic their facilities for freight movement would be sufficiently increased to relieve congestion, with resulting economy, and perhaps make unnecessary some of the more comprehensive changes suggested in the Port Plan.

The Westchester Transit Commission and the North Jersey Transit Commission also presented this problem to the Port Authority. The appropriations at our disposal, the limited size of the staff that we could therefore maintain, and the specific mandate to effectuate the Comprehensive Plan as rapidly as possible, would not admit of our making the scientific and complete study which this problem would require to find a practical solution. We recognized, however, that it did have a very important bearing upon the freight terminal problem and was to some extent interlaced with it.

We therefore initiated conferences with these bodies and with the Transit Commission of New York, at which the views of the respective interests were developed and in consequence of which the preliminary traffic studies were undertaken. A recent tentative suggestion by the Transit

Commission of New York has been the outcome of the conferences thus started.

The North Jersey Transit Commission has just made its report to the Governor of New Jersey, in which it expresses its appreciation of such cooperation as the Port Authority has been able to give, and makes definite recommendations to the Legislature of that State to enable necessary studies of the whole problem to be carried on. It is of equally great importance to the people of Westchester and Long Island that solutions of this problem should be found, and it is probable that before practical relief can be afforded intolerable conditions will develop and the growth of these contiguous districts be checked while the people who must in any event travel will suffer increasing discomfort.

While the Port Authority is not seeking additional responsibilities, it will gladly cooperate to the extent of its ability and means with any agency which the two States may create for the solution of this problem.

Legal and Technical Staff

As will be observed in this report, the legal work has been unusually heavy during the year 1923, and this has unavoidably thrown also a great deal of extra work upon the engineering and technical staff. In addition to the mass of work required in the economic studies relating to the Comprehensive Plan, the technical staff has had to prepare large amounts of analytic and statistical matter for the counsel in practically all of the Interstate Commerce Commission cases in which the Port Authority has been concerned, or in support of which its members have had to prepare themselves as to the accuracy of this material and for cross examination; in addition, they have had to examine and check up the testimony of others where it related to engineering, accounting and statistical matters.

Educational Council

This council consists of representative men and women, most of them affiliated with active civic organizations, who

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give of their time and means to disseminating among other organizations and the public the important bearing of the port problem upon the conditions of living and doing business. Its work and activities in many ways have been most helpful.

Market and Food Studies

The Market Research Staff of the Port Authority, in cooperation with the Bureau of Agricultural Economics of the Department of Agriculture, Washington, D. C., has made numerous studies of terminal conditions as they affect costs of handling and marketing fruits and vegetables in the Port District, and two other market investigations are under way.

Graphs and exhibits in attractive form illustrating the movements and methods of distribution of food products from the railroad terminals to the retailer were shown at the annual Electrical Show and Marine Show, both of which were attended by a large number of visitors. The space at the Electrical Show and other assistance was given by the New York Edison Company, at whose invitation the exhibit was undertaken; some of our staff were in attendance to explain these matters to interested visitors.

All of the foregoing matters have required the continuous attention of the Commissioners, counsel and staff, during the year 1923.

The Chief Engineer

Since the sudden death on the 25th of January, 1923, of the Chief Engineer of the Port Authority, Benjamin Franklin Cresson, Jr., the senior staff officer under Mr. Cresson, W. W. Drinker, has served as Acting Chief Engineer until September 26th when he was appointed Chief Engineer.

Mr. Drinker had been associated as terminal engineer with the New York and New Jersey Port and Harbor Development Commission from its inception in 1917, being released by the Federal Regional Director of Railroads at the request of that Commission, and had served continu-

ously, being, after Mr. Cresson, the first member appointed to the engineering staff of that body; he was retained by the Port Authority when it was appointed because of his ability, experience and devotion to the work.

Conclusion

In the opening statement of this report we referred to the foundation having been laid upon which the rest of the structure of the Comprehensive Plan may proceed as rapidly as economically practicable, and as the means can be provided. In the past we have had to contend with complexities which made this the most stupendous problem probably obtaining at any port in the world. The situation has been largely clarified, but there will be many difficulties yet to be solved. As in the past, these will be caused both by physical conditions and the stubbornness of adherents to former customs.

The transportation systems of this country, from the beginning, have been built up upon the theory of individualistic control, development and advantage. The executives and managers have reached their positions after years of service, in which they have become imbued with that theory. Most of them, undoubtedly conscientiously, regard the public interest as necessarily interwoven with private interest, but they are primarily employed and appointed to devote their ability first to the promotion of the particular and private interest of the corporation which they serve. It is entirely human and there is a business obligation that that should be their first interest, and that their thought and efforts should be chiefly directed to promoting it. It is only in recent years that it has come to be recognized that the transportation systems of the country are public highways, and that the public interest must predominate in the principles which govern their policies and operation. The public interest, in turn, can be promoted and adequate service obtained only by assuring adequate compensation for the service, so that capital may be available for its extension and improvement as the growing

needs of commerce require. There should be nothing inconsistent in the practical operation of these two principles, nor conflict between the two interests but there will be inconsistency and conflict until the time has arrived when those who determine the policies of the transportation systems recognize that the public interest is at least equal to the private interest, and that there are circumstances where the former must predominate. It is generally recognized that private initiative, enterprise and efficiency in the construction and operation of such facilities is generally superior to public management in those fields, but just as private enterprise searches for the best ability to execute its will, and absorbs it in prosecuting its enterprises, so must those entrusted with conservation of the public interest seek the best ability and concentrate it in suitably organized form to watch and promote the public interest in the conduct of these great public service enterprises.

We have the honor to remain,

Respectfully,

The Port of
New York Authority

{ EUGENIUS H. OUTERBRIDGE,
DE WITT VAN BUSKIRK,
LEWIS H. POUNDS,
FRANK R. FORD,
JOHN F. GALVIN,
JULIAN A. GREGORY,

Commissioners.

**EXPENDITURES FOR THE FISCAL YEAR ENDED
JUNE 30, 1923**

Administrative Department:

Services and expense — Secretarial		
Staff	\$23,809 22	
Stenographic and clerical hire.	14,852 56	
Office rent	17,750 00	
Office supplies and equipment.	3,975 58	
Stationery and printing	11,311 68	
Miscellaneous expenses — Unclassified	4,598 89	
		\$76,297 93

Engineering Department:

Services and expenses — Engineering consultants		\$6,435 48	
Services and expenses — Engineering and statistical staff		82,434 76	
			88,870 24

Legal Department:

Services and expenses — Special counsel in I. C. C. matters.		\$12,905 45	
Services and expenses — Legal staff		13,449 36	
			26,354 81

Department of Information:

Services and expenses.		\$11,257 92	
			11,257 92

Grand total	\$202,780 90
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Reimbursement of \$265.15 was received from the sale of exhibits in Port Authority docket No. 1 (Belt Line No. 13). This sum was on hand in bank at the close of the calendar year. The sum of \$2,780.90 expended in excess of the amount appropriated by the two States was made available through an unexpended balance from the appropriation made by the State of New York for the previous fiscal year.

APPENDIX

[41]

REPORT ON VEHICULAR TUNNELS AND BRIDGES

December 21, 1923.

To the Governor of the State of New York:

To the Governor of the State of New Jersey:

Sirs.—On August 7th, 1923, your Excellencies issued a joint statement in which you stated in part —

“One of the results of the conference between the two Governors was that we favor the construction at the earliest possible moment of additional vehicular tunnels or bridges between the State of New York and the State of New Jersey, to be determined upon, constructed and financed by the Port Authority, and we stand ready to recommend to the Legislatures the passage of any additional legislation that will be helpful toward the accomplishment of this result.”

The Commissioners of the Port Authority and their technical staff were at that time actively engaged in preparations for the resumption of concurrent hearings with the Interstate Commerce Commission in an investigation relating to beginning the effectuation of the Comprehensive Plan, but proceeded to devote such time as was possible to preliminary studies of traffic conditions, present building costs and other material questions relating to transportation between the New York and New Jersey shores of the Hudson river as they might bear upon the question of the construction of tunnels or bridges and the most desirable locations therefor.

On December 5th, after due notice had been given in the public press and by direct communication to the municipalities, trade bodies and transportation interests within the port district, a public hearing on this subject was held.

Eighty persons attended, forty-eight organizations were represented and forty presented written or oral statements relating to the subject.

A list of the organizations and others who presented oral or written views is given in the Appendix.

The sentiment expressed at this hearing was, with one exception, that inter-state vehicular tunnels or bridges should be built

by the Port of New York Authority, and likewise, with one or two exceptions, was in favor of the construction of two or more vehicular tunnels, and for a bridge at some point north of West 125th street, Manhattan.

Bridges

The New Jersey Hudson River Bridge Association was adverse to the construction of either bridges or tunnels by the Port of New York Authority and specifically favored the construction of a bridge at 57th street, Manhattan, by private enterprise.

Three written statements were received prior to the hearing in favor of a bridge at 57th street, Manhattan, and one in favor of a bridge at or near Canal street, Manhattan. Two of the three favoring a bridge at 57th street were in favor of one or more tunnels in addition to the one now building. One disapproved the building of any more tunnels, arguing that the bridge proposed by the Hudson River Bridge Corporation would be sufficient for all purposes.

A study of all the views presented reveals a large majority in favor of additional vehicular tunnels and opposed to any bridges below 170th street.

There was, however, substantial approval for a highway bridge at a location suggested about West 178th street, Manhattan.

When formulating the Comprehensive Plan for the reorganization of the terminal freight systems of this port and for the future development of the port, the Commissioners of the Port Authority gave very careful consideration to the bridge proposed by the Hudson River Bridge Corporation for which it had a Federal charter and which it proposed should be located at West 57th street. The Commissioners were forced to conclude that the proposed bridge did not form an economic solution in relation to freight handling between New Jersey and Manhattan. Later on the Commissioners again had conferences with the projectors of this bridge and gave careful consideration to the proposals in relation to its facilities for highway traffic, for trunk line passenger trains and for rapid transit commuter service between New York and New Jersey.

In September last the Commissioners were asked by the Board of Army Engineers on Rivers and Harbors, to whom an application had been made by the Hudson River Bridge Corporation for a permit to construct their proposed bridge at West 57th street, to advise the Board of the Commissioners' opinion relating to this

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proposal. The Commissioners again gave careful consideration to this matter in all its bearings as relating to the Comprehensive Plan, navigation of the river, railroad passenger and highway facilities, and were compelled to advise the Board of Army Engineers on Rivers and Harbors that in the Commission's opinion —

“detailed plans and studies regarding approaches, requirements and methods of handling traffic, and concurrence with municipal officials, should be made and progressed to a much clearer and more definite state than has yet been done before final authority to construct such a bridge at that point is given.”

The solution of the problem of motor traffic, both for truck and passenger motors, appeared to the Commissioners, especially as relating to Manhattan, to lie in decentralization and distribution rather than in concentrating many lines of traffic at one point.

This principle, while especially applicable to vehicular traffic which had to use the city's streets, was also applicable to the concentration of trunk line passenger traffic which would in itself involve a large amount of street traffic by taxicabs and motors to carry passengers to and from such a union passenger station. Some leading railway executives expressed the opinion that the establishment of a union passenger station there would create a new point of congestion which in a few years would be likely to require new methods of relief to be devised.

Conferences with the North Jersey Rapid Transit Commission developed the fact that they did not believe that a bridge at 57th street would satisfactorily solve their problems.

The Committee on “The Plan of New York and Its Environs” of the Sage Foundation which, with an experienced and competent staff, has been devoting special study to traffic conditions and plans in the large metropolitan area covered in the purview of its work, presented a very important and thoughtful paper at the public hearing, giving forceful reasons why it opposed the construction of a bridge at 57th street and equally important and logical reasons why it favored the construction of a bridge for vehicular traffic at about 178th street, and it favored tunnels at points to be determined between the tunnel now under construction and its proposed location for a bridge.

The studies of the staff of the Port Authority indicate that a bridge pouring fourteen to sixteen lanes of traffic into Manhattan at 57th street would cause intolerable congestion of Manhattan's streets and that truck hauls resulting from the concentration of so many lines of traffic at one crossing of the river would be unduly long on both the New York and New Jersey sides.

The testimony offered regarding bridges, and especially that of the Committee on Plan of New York and Its Environs of the Russell Sage Foundation indicates that a bridge north of 125th street would serve a large amount of traffic between New Jersey, North Manhattan, Westchester, Bronx, Queens and New England territory.

The Commissioners recommend that preliminary engineering and traffic studies and plans should be promptly undertaken relating to this project, with similar studies relating to tunnels, as these proposed methods of communication are necessarily related in considering the question of which would first be most assuredly self-supporting.

Tunnels

The Comprehensive Plan adopted by the two states and by Congress included two tunnels tentatively located, the northerly one about West 47th street, Manhattan, the southerly one about Morris street, Manhattan, one block north of the Battery; to be ultimately occupied by an automatic electric railway service originating at appropriate transfer yards with the several trunk lines in New Jersey, the Manhattan ends to be connected by north and south tunnels serving twelve inland union terminal stations which were tentatively located, after a careful study of existing traffic conditions and street capacities, so as to create zones in that portion of the city which would as nearly as possible equalize the number of pickups and deliveries in each zone, shorten truck-hauls, lessen congestion on the streets and economize trucking costs.

The report accompanying the Comprehensive Plan also contained a suggestion for prompt relief, and stated —

“Prompt relief can be obtained as part of the evolutionary process of bringing about the ultimate completion of the whole (automatic electric system), and this can be done without abruptly disorganizing the industries and services upon which the city necessarily depends and without the destruction of large invested capital.”

This method of prompt relief provided for suitable transfer platforms at New Jersey terminals between freight cars and motor trucks and for an improved ferry service (until tunnels could be made available) to inland union stations.

Such inland union stations could and should be located and designed so as to be adaptable later on to the automatic electric or other complete underground system when the density and volume of traffic justifies the necessary expenditure for such an installation.

A similar but modified form of truck delivery between Jersey City and Manhattan to an inland terminal has been established and is in operation by one of the trunk line carriers and it has been testified to in a proceeding before the Interstate Commerce Commission that this has resulted in marked economies to the carriers and to the shippers and consignees. The saving in former costs shown was from 80 cents to \$1.60 per ton on the various classes of commodities to the railroad and a substantial amount per ton to consignees and shippers. These economies are effected not only in former direct costs but the method has tended to free the waterfront of a serious amount of congestion both on piers and on streets and the extension of this system is expected ultimately to save the carrier an additional large amount in rentals of city piers heretofore used for the delivery and receipt of freight and which are now entirely by-passed. This terminal is not a union station but serves only the one carrier and as that carrier operates its own ferries it provides facilities for prompt carriage of trucks, without ferry toll to the trucking company performing the service under contract with it. Most of the important carriers whose rails terminate on the New Jersey side of the Hudson operate their own ferries and there is no reason why they could not institute similar service.

It will be manifest, however, that the full benefit of this system of prompt relief can only be obtained for shippers, consignees and carriers alike by its becoming a standardized service to union terminals properly zoned.

The studies of the staff of the Port Authority indicate that the growth of the traffic would justify the completion of five river crossings, each of not less than four lines of traffic, by the year 1942, if it is to be assumed that by that time ferries would be abandoned.

The question of the most important and desirable locations and specific designs can only be determined by careful borings and physical studies and cooperation with municipal authorities in relation to portals, street approaches, etc.

Some doubt has been expressed as to the practicability of ventilating vehicular tunnels. This doubt, in the staff's opinion, is not justified as it believes that the tests for the Canal Street Tunnel demonstrated that ventilation can be accomplished successfully.

There has also been a doubt as to whether proper protection against fire risk could be had. With regard to the fire risk, it is believed that the provisions made by the Bridge and Tunnel Commissions to prevent the spread of fire are reasonably adequate, but could be improved by the insertion of water curtains at frequent intervals.

The ventilation question and the fire risk can both, however, be minimized by mechanical transportation of vehicles through tunnels, which would keep carbon monoxide and other gases from motor exhausts out of the tunnel and lessen the fire risk. It is possible that the power for the small amount of ventilation needed, together with the power required for mechanical transmission would be no greater under this system than the power required for ventilation without it. This system would also, if adopted, make practical the construction of a two-line tunnel instead of two two-line tunnels, and therefore tends toward better dispersion of traffic and cuts costs so that the immediate expenditures for relief would be materially lessened.

If the ventilation and fire protection contemplated for the Canal Street Tunnels prove to be inadequate, the investment in the tunnels is not lost, but additional moneys would have to be expended to install mechanical transmission and to make certain interior changes in order to provide the requisite headroom for such mechanical transmission.

With the rapid growth of the city's population and its consequent growth of business in necessary supplies, it is clear that the ferry service as now conducted cannot provide adequate transit on the river, at least without greatly increasing the waterfront occupancy on both sides for additional ferry slips, while one of the ends to be desired in the reorganization of port facilities is to free available river frontage as much as possible for coastwise and ocean steamships.

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It is difficult to determine the yearly increase in resident and transient population in the Port District, but it is known to be very large, and this growth necessarily increases the volume of products and commodities to be handled.

It takes several years to construct tunnels under the river, and the Commissioners recommend that preliminary engineering and traffic studies and plans for at least two additional vehicular tunnels should be promptly undertaken.

Since your Excellencies issued your statement of August 7th, there has been neither the time nor the means at the disposal of the Port Authority to carry the matter forward in such detail, although much information has been assembled.

If the Legislature should determine that this work should be done by the Port of New York Authority the engineering and traffic studies and negotiations with Municipal authorities necessary to reach final determinations would require additions to the present technical staff and special appropriations.

Whatever necessary sum might be appropriated by the Legislatures of the two states for this special work could properly be returned to the respective states with simple interest when financing for the construction of the tunnels has been arranged for.

Respectfully submitted,

E. H. OUTERBRIDGE,
Chairman.

Ratified and approved:

DE WITT VAN BUSKIRK,
LEWIS H. POUNDS,
JOHN F. GALVIN,
JULIAN A. GREGORY, } *Commissioners.*

**LIST OF ORGANIZATIONS AND OTHERS PRESENTING
ORAL OR WRITTEN VIEWS**

<i>Organization</i>	<i>Speaker</i>
Russell Sage Foundation (Plan of New York and Environs).....	Thomas Adams
N. Y. Chapter Am. Ass'n of Engrs....	F. Levis
N. Y. State Association.....	Robert Moses
Transit Commission	D. L. Turner, Con. Eng'r
Central Mercantile Ass'n.....	Joseph E. Kean
United Real Estate Owners' Ass'n....	Stewart Browne
Jersey City Chamber of Commerce....	Edwin E. Lord
Harlem Board of Commerce.....	C. E. Fuller
N. J. Hudson River Bridge Ass'n....	Fred T. Eckes
Harlem Board of Trade.....	J. W. Savage
West Harlem Business Men's Ass'n...	Alex Cumming
	Robert J. Egar
Hoboken Chamber of Commerce.....	J. Raymond Tiffany
Fourteenth St. Ass'n.....	H. Prescott Beach

Statements

Samuel Rea, Pres. Penn. R. R. Co.
 R. E. Loomis, Pres. L. V. R. R.
 A. H. Smith, Pres. N. Y. Central R. R.
 F. D. Underwood, Pres. Erie R. R.
 D. L. Turner, Con. Eng'r, Transit Commission
 Produce Exchange
 J. Spencer Smith, Pres. N. J. Board of Commerce and Navigation
 Palmer Campbell, Hoboken Land & Improvement Co.
 Jersey City Chamber of Commerce
 N. Y. Butchers' Dressed Beef Co.
 Joseph D. Holmes, Orange, N. J.
 North River Bridge Company
 34th Street Board of Trade
 Metropolitan Automobile Ass'n
 R. J. Talbot, Mayor, Bayonne, N. J.
 Central Mercantile Ass'n
 Fourteenth Street Ass'n
 Harlem Board of Commerce
 Hoboken Chamber of Commerce
 N. Y. State Ass'n
 The Barrett Company
 Committee on the Plan of N. Y. and Its Environs
 Louis F. Haffen, Con. Eng'r, Borough of the Bronx
 Alfred C. Bossom
 S. Wood McClave
 City Club of New York

ALI

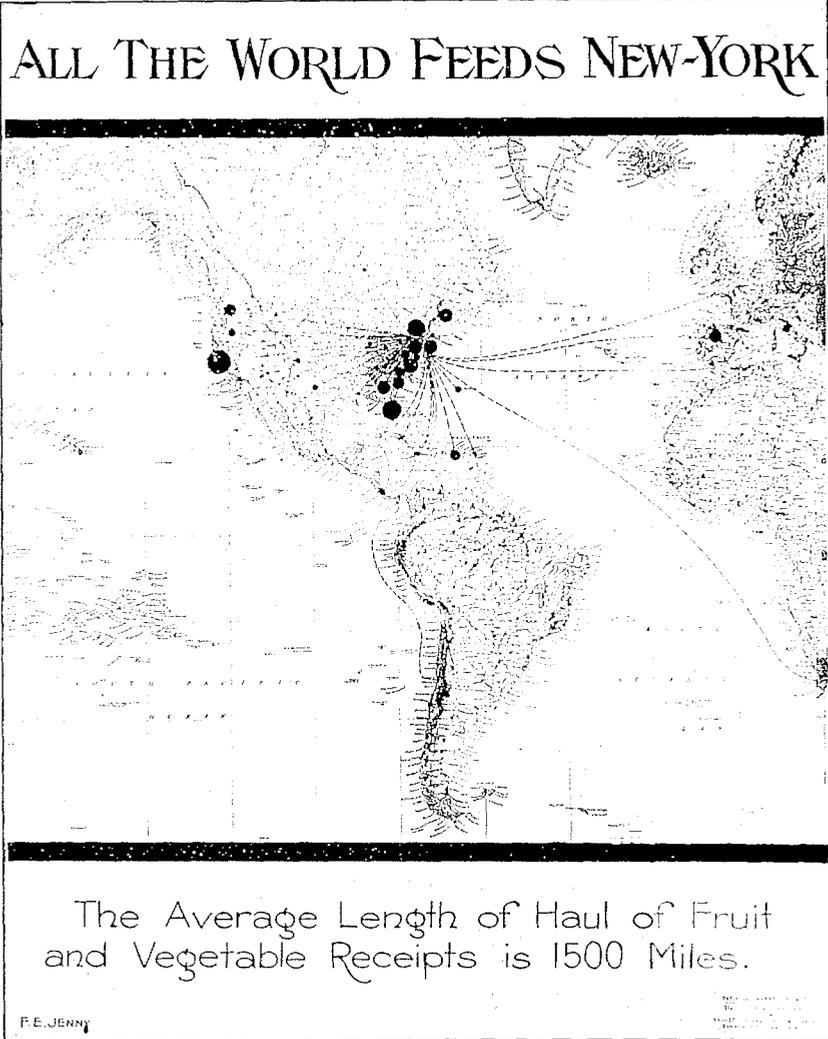
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F. E. JENI

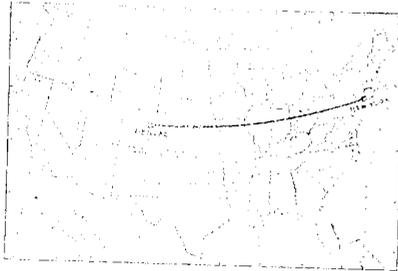
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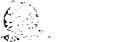
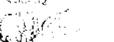


FEEDING PORT DISTRICT POPULATION



The Fresh Fruits and Vegetables Consumed in One Year Fill 140000-145000 Freight Cars - Enough to make a Train 2000 Miles Long, with the Engine in New York and the Caboose in Denver.

NET RECEIPTS IN 1921

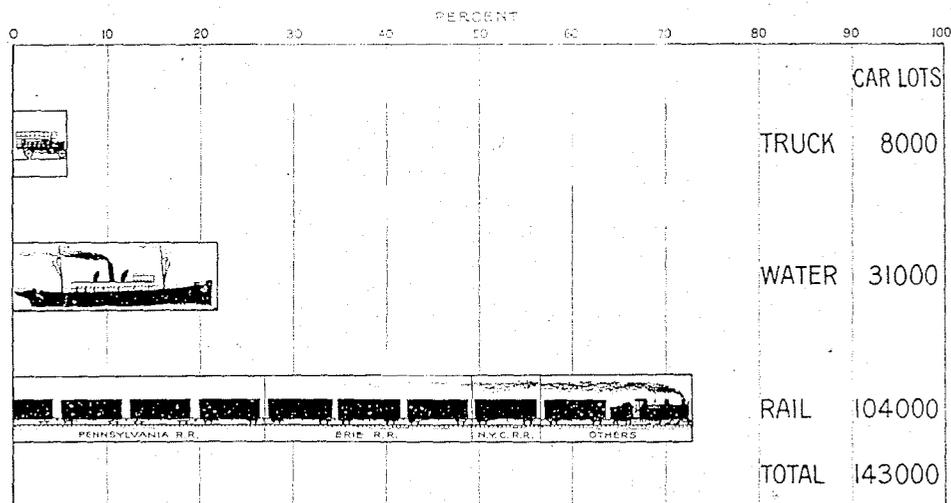
	Potatoes..... Carlots	22.974
	Bananas.....	13.348
	Apples.....	12.136
	Oranges.....	10.518
	Onions.....	8.162
	Grapes.....	6.801
	Cantaloupes.....	4.933
	Lettuce.....	4.915
	Peaches.....	4.217
	All Others.....	52.483

© 1921

THE UNITED STATES
DEPARTMENT OF AGRICULTURE
BUREAU OF MARKET INFORMATION

OVER 70% OF THE FRUITS AND VEGETABLES ARE RAIL-HANDLED

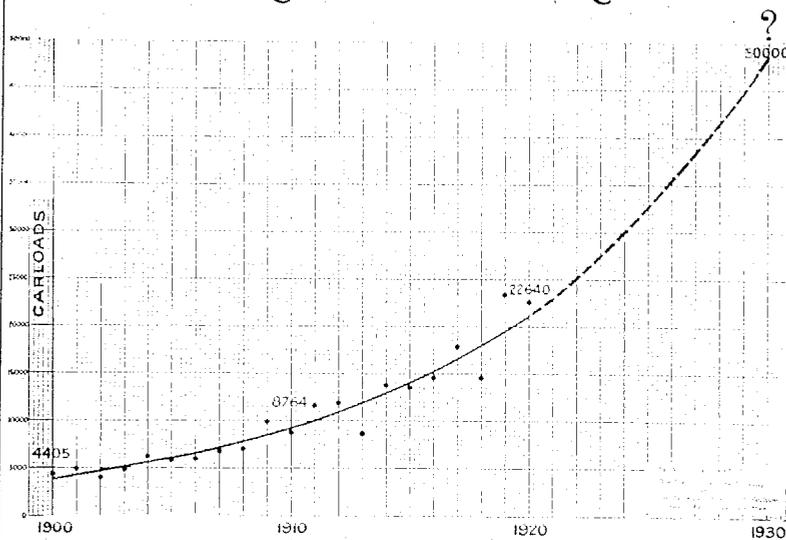
RAILROAD TERMINALS ARE IMPORTANT LINKS
IN THE MARKET SYSTEM



P. E. JENNY

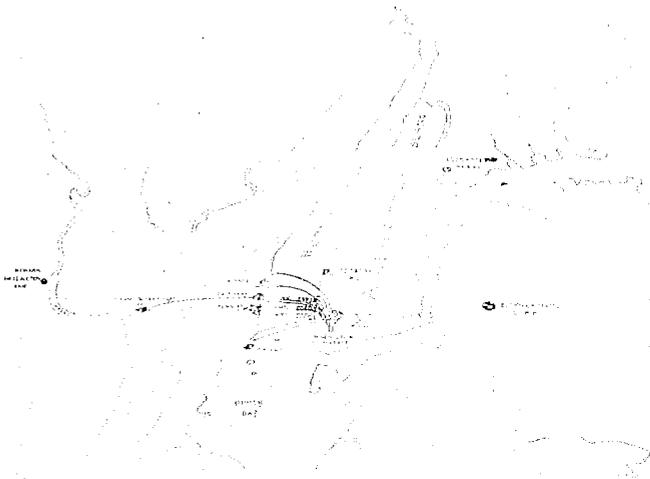
REGIONAL MARKET STUDIES
The Dept. of the State, Albany
and the
United States Department of Agriculture
Bureau of Agricultural Economics

PRESENT FACILITIES ARE TAXED TO CAPACITY AND THE TRAFFIC IS GROWING



The Long-Haul Fruit Traffic of the Erie Railroad, delivered at Manhattan Piers, has grown from 4405 Cars in 1900 to 22640 Cars in 1920. At this rate 50 000 Cars may be expected in 1930.

* THE FUNNEL *

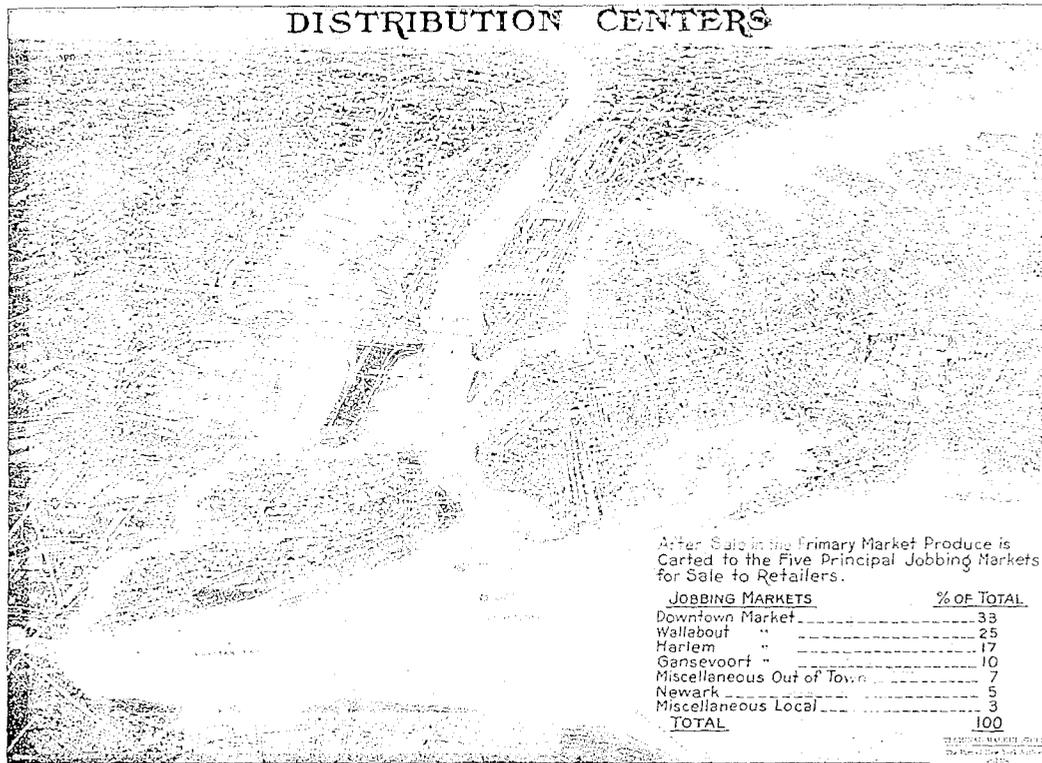


85% of the Rail Receipts pour into a Small Strip on the Lower West Side of Manhattan Island.

This Concentration Meets the Demand of the Trade for a Centralized Market but Results in an Excessive Trucking In and Out of a Heavily Congested Area.

TERMINAL BASIN STUDY
The Port of New York & New Jersey
1964
Prepared by the Department of Agriculture
Transportation Administration

DISTRIBUTION CENTERS



After Sale in the Primary Market Produce is
Carted to the Five Principal Jobbing Markets
for Sale to Retailers.

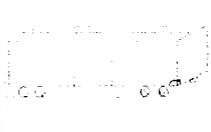
JOBING MARKETS	% OF TOTAL
Downtown Market	33
Wallabout "	25
Harlem "	17
Gasnevooft "	10
Miscellaneous Out of Town	7
Newark	5
Miscellaneous Local	3
TOTAL	100

STATISTICAL MAPS OF THE
CITY OF NEW YORK
1910
THE NEW YORK PUBLIC LIBRARY
ASTOR LENOX TILDEN FOUNDATION
125 WEST 47TH STREET
NEW YORK

F. E. JENNY

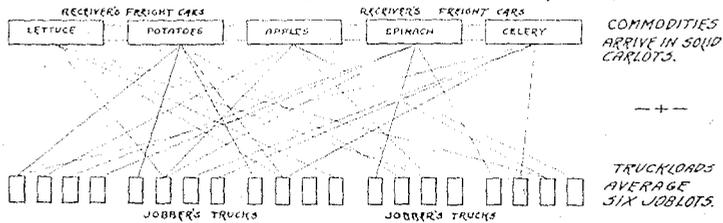
A CHARACTERISTIC OF THE PRODUCE TRADE

SMALL-UNIT, WIDE-VARIETY BUYING

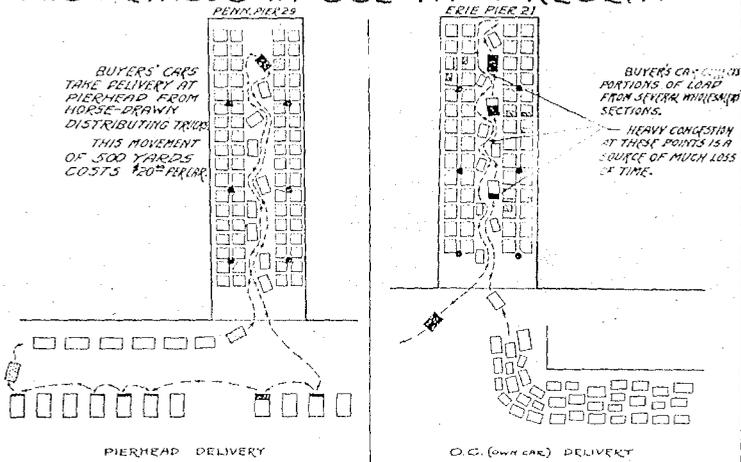
	A Wholesaler Receives a Car of 320 Crates of Lettuce	
		A Jobber ordinarily Buys 20 Crates or $\frac{1}{16}$ of a Car.
		Most Retailers Purchase One Box or $\frac{1}{320}$ of a Car.
		Mrs. Consumer Buys One Head or $\frac{1}{7680}$ of a Car.

Everybody Wants a Little of Everything and not Much of Anything.

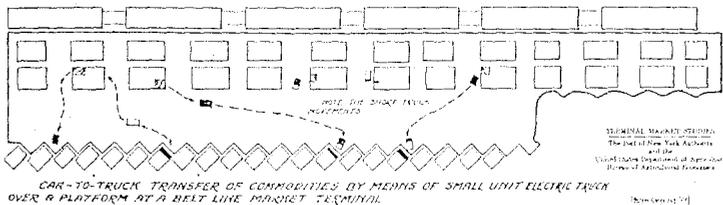
THE CONSOLIDATION PROBLEM



TWO METHODS IN USE AT PRESENT

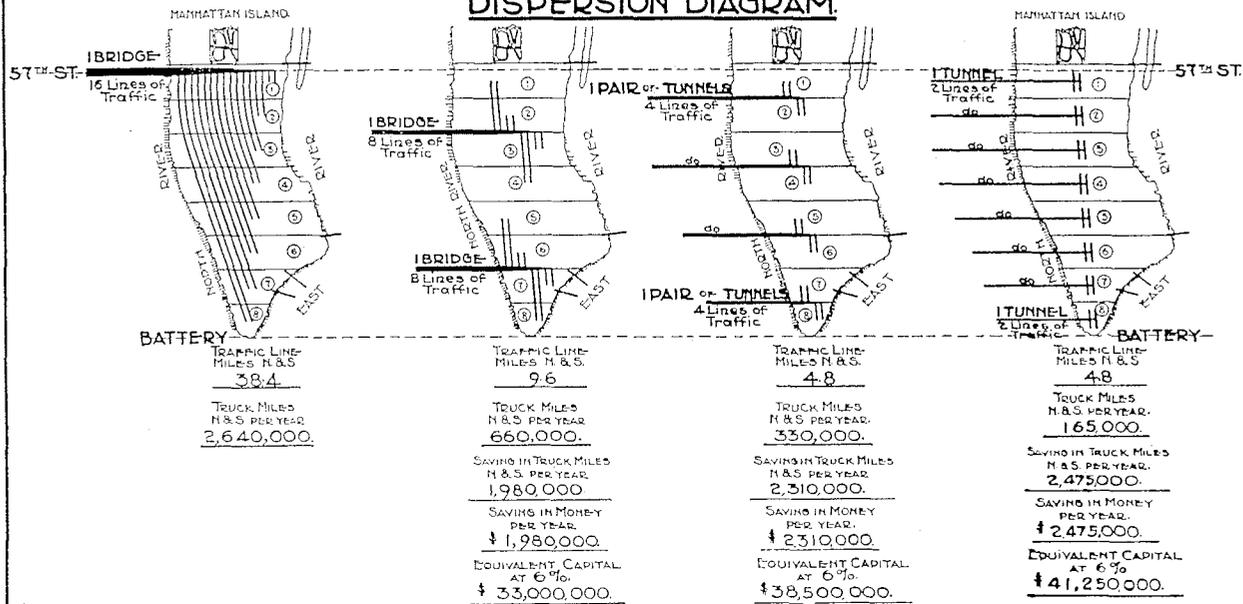


ONE BETTER METHOD



MAY 1931

DISPERSION DIAGRAM.



NOTES: — Heavy lines indicate traffic lines.
 500,000 tons per year is the potential motor truck freight traffic between the New Jersey railroads and Manhattan Island south of 59th St.
 1100,000 trips would be required to carry the traffic in 5 ton trucks.
 \$100 per truck mile is the cost of 5 ton trucks in motion in heavy traffic.
 1,000,000 vehicles per year is the present North River ferry traffic.
 Figures shown do not include mileage or cost on the New Jersey side.
 Zones shown are zones of equal traffic density south of 59th St on Manhattan Island, and are assumed to be .06 miles in width, measured North and South.
 It is assumed for analytic purposes that the crossings shown on each diagram are the only North River crossings.
 Zone numbers are shown enclosed in circles — thus ①

H & O
A.C.M.

EXHIBIT NO. 5
PORT OF NEW YORK AUTHORITY
NEW JERSEY INNER BELT LINE
MARGINAL RAILROAD NO. 13
 DECEMBER 30, 1922.

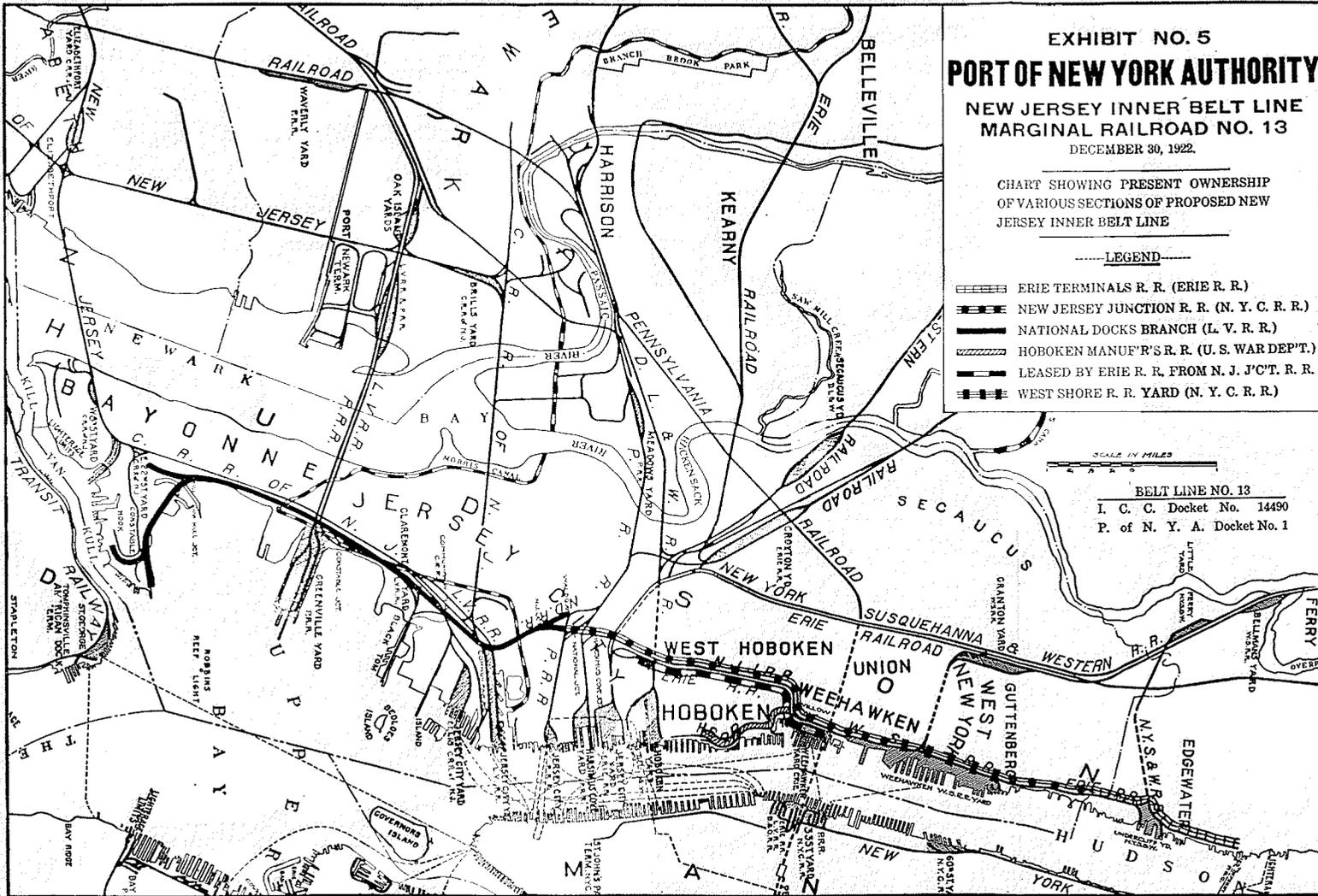
CHART SHOWING PRESENT OWNERSHIP
 OF VARIOUS SECTIONS OF PROPOSED NEW
 JERSEY INNER BELT LINE

— LEGEND —

-  ERIE TERMINALS R. R. (ERIE R. R.)
-  NEW JERSEY JUNCTION R. R. (N. Y. C. R. R.)
-  NATIONAL DOCKS BRANCH (L. V. R. R.)
-  HOBOKEN MANUF.'S R. R. (U. S. WAR DEPT.)
-  LEASED BY ERIE R. R. FROM N. J. J'C'T. R. R.
-  WEST SHORE R. R. YARD (N. Y. C. R. R.)

SCALE IN MILES
 0 1 2 3 4

BELT LINE NO. 13
 I. C. C. Docket No. 14490
 P. of N. Y. A. Docket No. 1



Supplement to Exhibit No. 10

SHIPMENT: From Undercliff, N. J. To Bayonne, N. J.

CHARGES: \$135.00 KIND OF SHIPMENT: Carload

ORIGINATING R. R.: N. Y. S. & W. WAY BILL: { No. E 504
Date 9/12/22

DELIVERING R. R.: Lehigh Valley DATE OF DELIVERY: 9/16/22

WEIGHT: 60,040 lbs. RATE: (5th Class) 22.5c. cwt.

COMMODITY: Linseed Oil CAR NUMBER: A. D. L. X.-822

COMPARISON OF PRESENT MOVEMENT WITH MOVEMENT VIA PROPOSED UNIFIED BELT LINE

	PRESENT	BELT LINE
ROUTING:	N. Y. S. & W. to Sparta Jct. L. & H. to Easton L. V. to Bayonne	Belt Line to Bayonne
YARDED EN ROUTE AT	Little Ferry Sparta Jct. Easton Oak Island Claremont	Belt Line Yard Belt Line Yard
DISTANCE AND PROPORTION OF REVENUE		
N. Y. S. & W. R. R.	56 Miles \$	Belt Line 13.5 Miles
L. & H. R. R.	43.5 Miles	
L. V. R. R.	80 Miles	
	179.5 Miles \$135.00	
TIME EN ROUTE:	4 Days	
REMARKS:	Tariff—ICC-16365	

EXHIBIT NO. 10

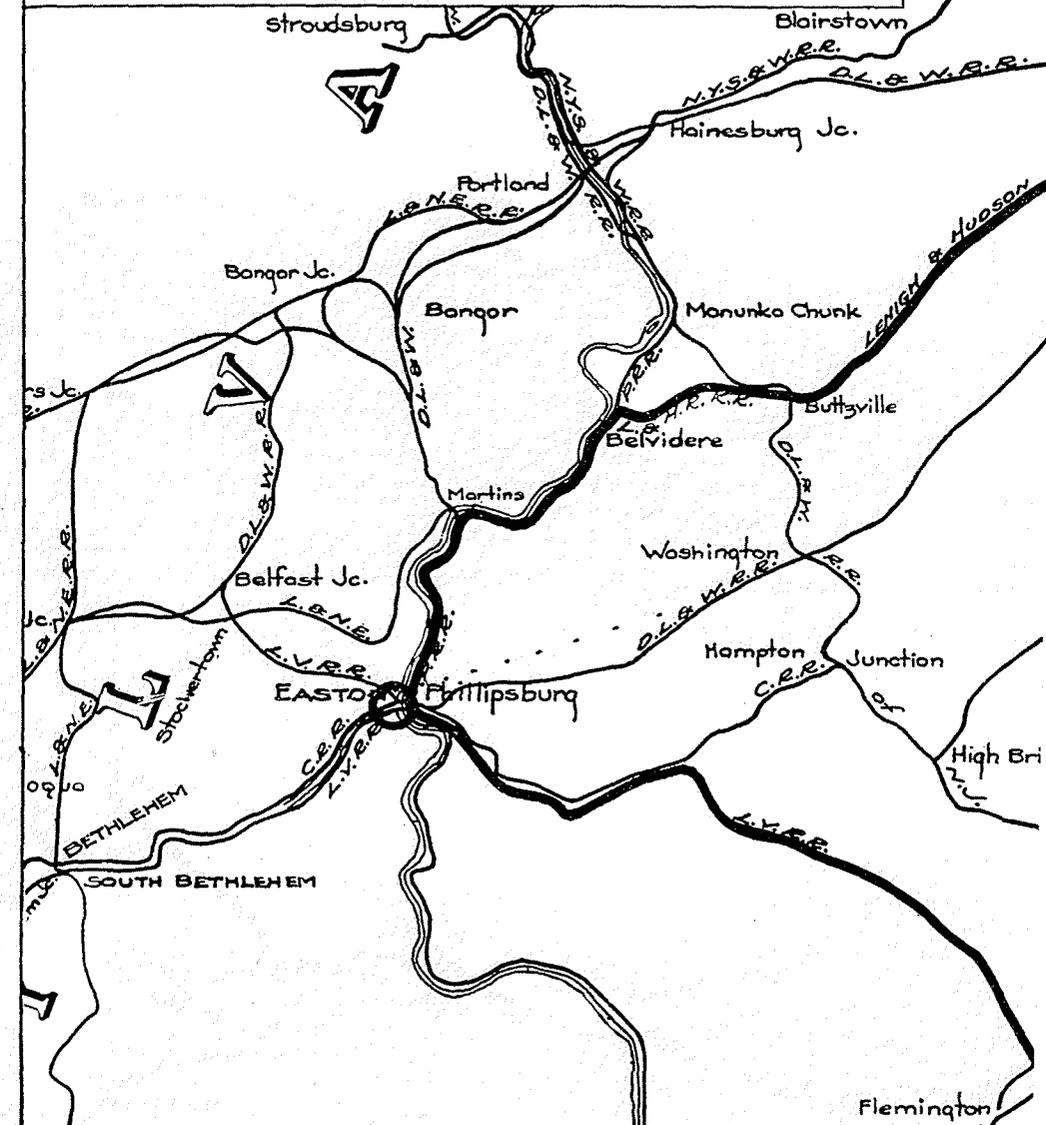
DECEMBER 30, 1922.

PORT OF NEW YORK AUTHORITY
NEW JERSEY INNER BELT LINE
MARGINAL RAILROAD NO. 13

CHART ILLUSTRATING PRESENT ROUTING PRACTICES TO AND FROM POINTS IN PROPOSED NEW JERSEY INNER BELT LINE TERRITORY

LEGEND

— PRESENT PRACTICE
● PROPOSED PRACTICE
○ POINT OF YARDING OR INTERCHANGE



Supplement No. 1 to Exhibit No. 12

SHIPMENT: From Hoboken, N. J. To Bayonne, N. J.
 CHARGES: \$92.42 KIND OF SHIPMENT: Carload
 ORIGINATING R. R.: D. L. & W. WAY BILL: { No. D. L. 1654
 & W. Date 10/10/22
 DELIVERING R. R.: C. N. J. DATE OF DELIVERY: 10/14/22
 WEIGHT: 63,740 lbs. RATE: (5th Class) 14½c. cwt.
 COMMODITY: Coconut Oil CAR NUMBER: A. L. X. 772

COMPARISON OF PRESENT MOVEMENT WITH MOVEMENT VIA PROPOSED UNIFIED BELT LINE

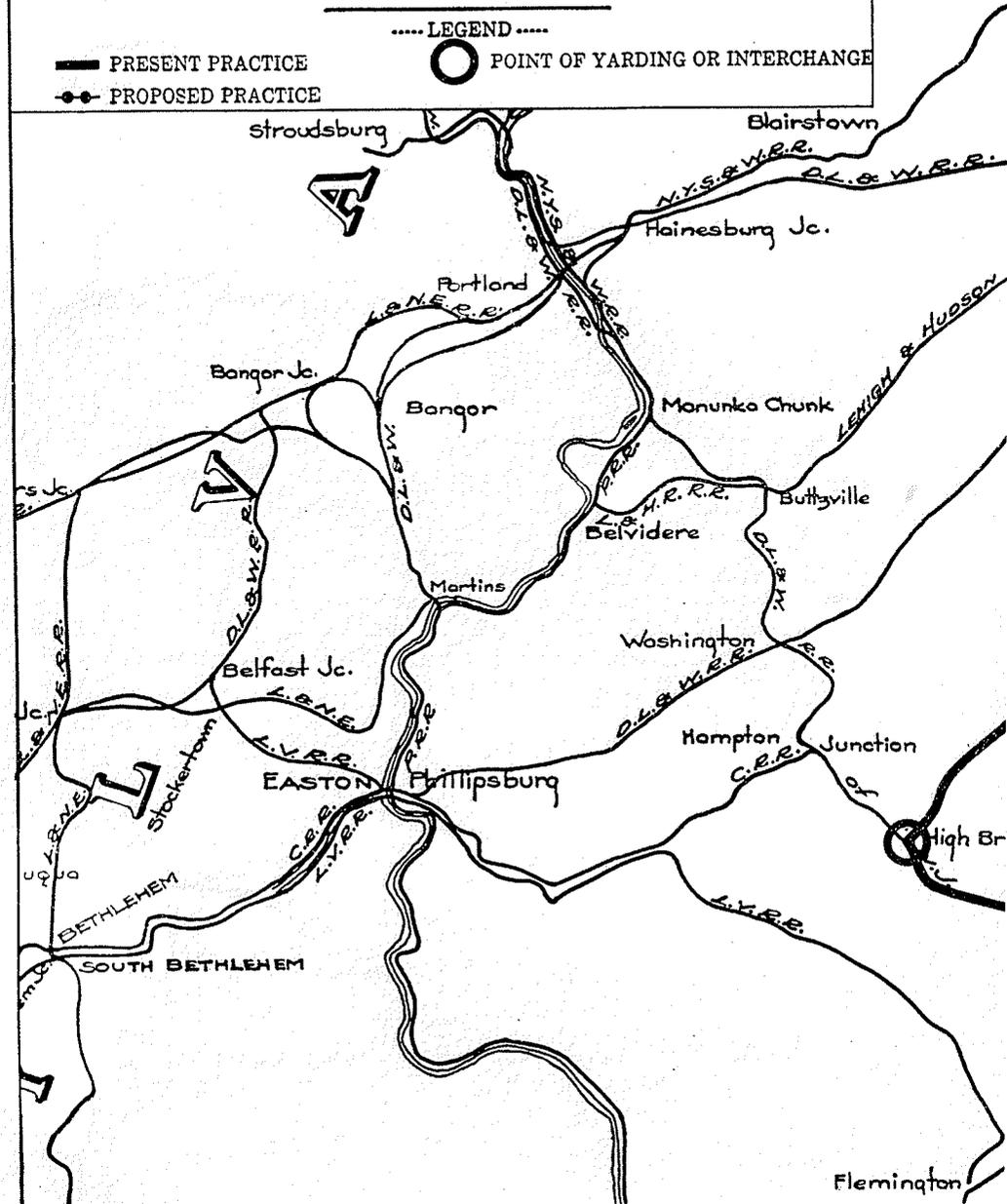
	PRESENT	BELT LINE
ROUTING:	D. L. & W. to Lake Jct. C. N. J. to Bayonne via High Bridge	D. L. & W. (switching) Belt Line to Communipaw. C. N. J. to destination.
YARDED EN ROUTE AT	Secaucus Lake Junction High Bridge Elizabethport	Belt Line Yard Communipaw
DISTANCE AND PROPORTION OF REVENUE		
D. L. & W. R. R.	43 Miles	D. L. & W. 1 Mile
C. N. J.	72 Miles	Belt Line 3 Miles
	115 Miles	C. N. J. 4 Miles
	\$ 92.42	8 Miles
TIME EN ROUTE	4 Days	
REMARKS:	Tariff — ICC C-16268	

EXHIBIT NO. 12

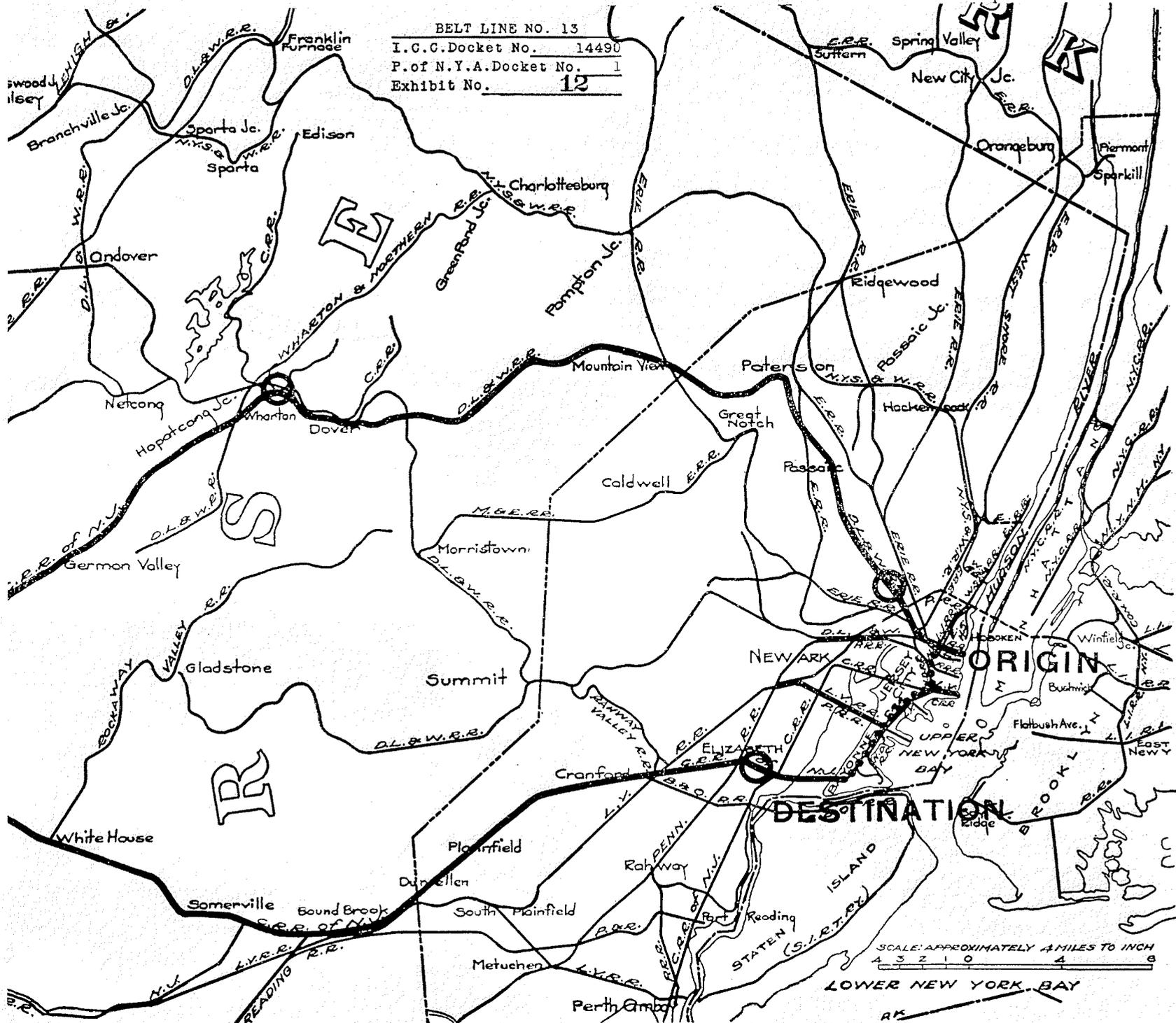
DECEMBER 30, 1922

PORT OF NEW YORK AUTHORITY
 NEW JERSEY INNER BELT LINE
 MARGINAL RAILROAD NO. 13

CHART ILLUSTRATING PRESENT ROUTING PRACTICES TO AND FROM POINTS IN PROPOSED NEW JERSEY INNER BELT LINE TERRITORY



BELT LINE NO. 13
 I.C.C. Docket No. 14490
 P. of N.Y.A. Docket No. 1
 Exhibit No. 12



SCALE: APPROXIMATELY 1 MILES TO INCH
 4 3 2 1 0 1 2 3 4

LOWER NEW YORK BAY

**PORT OF NEW YORK AUTHORITY
NEW JERSEY INNER BELT LINE
MARGINAL RAILROAD NO. 13**

CHART ILLUSTRATING PRESENT ROUTING PRACTICES TO AND FROM
POINTS IN PROPOSED NEW JERSEY INNER BELT LINE TERRITORY

Supplement to Exhibit No. 15

SHIPMENT: From National Docks, J. C. To Jersey City, N. J.

CHARGES: \$34.80 KIND OF SHIPMENT: Carload

ORIGINATING R. R.: Lehigh Valley WAY BILL: { No. LV 20
Date 5/6/22

DELIVERING R. R.: Penna. R. R. DATE OF DELIVERY: 5/10/22

WEIGHT: 24,000 lbs. RATE: (5th Class) 14½c. cwt.

COMMODITY: Compressor and Parts CAR NUMBER: L. V. 11957

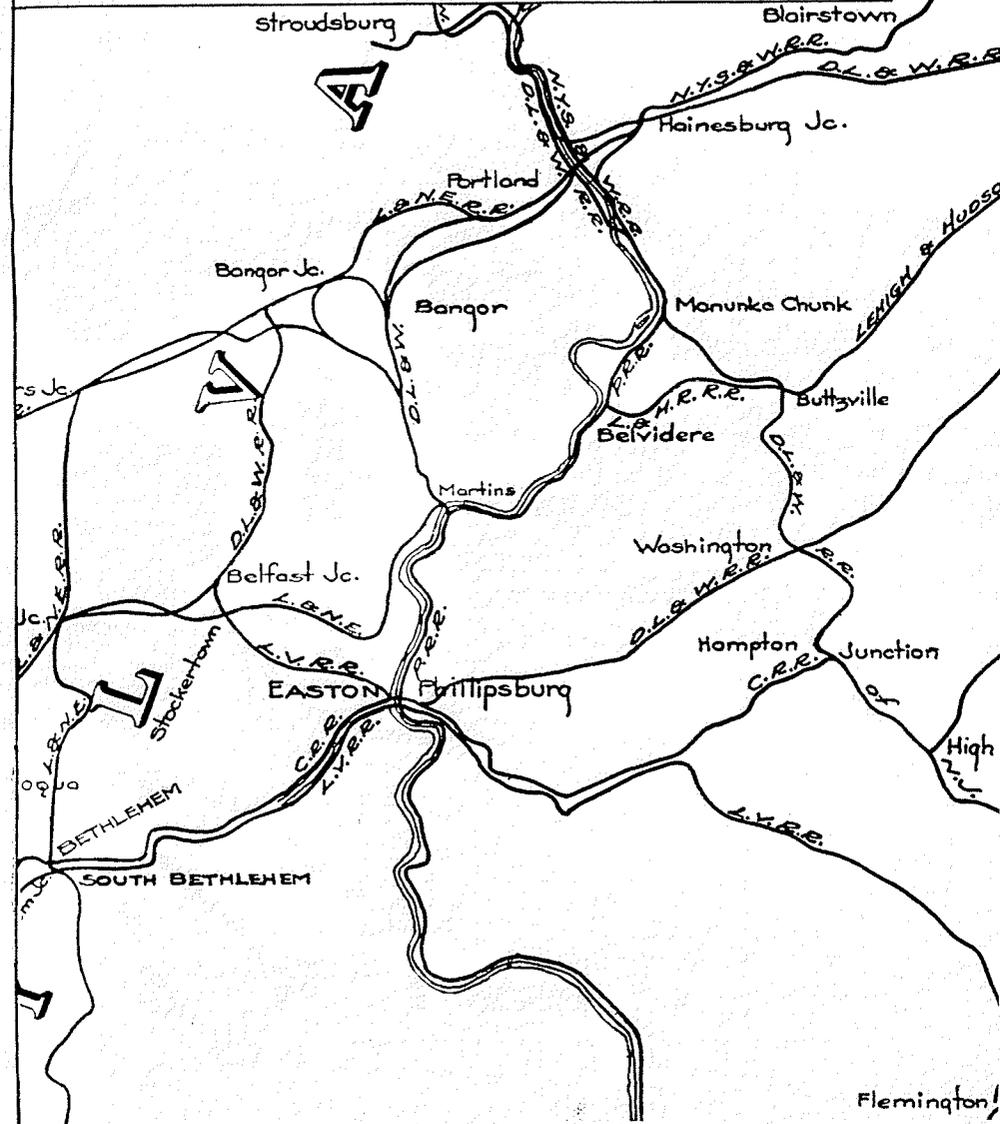
**COMPARISON OF PRESENT MOVEMENT WITH MOVEMENT VIA
PROPOSED BELT LINE**

	PRESENT	BELT LINE
ROUTING:	L. V. National Docks to Metuchen P. R. R. to Jersey City	L. V. (switching) National Docks Belt Line to Harsimus Cove Jct. (Newark Ave.) J. C. P. R. R. to destination
YARDED EN ROUTE AT	Claremont South Plainfield Metuchen Waverly Meadows	Belt Line Yard
DISTANCE AND PROPORTION OF REVENUE		
LEHIGH VALLEY R. R.	32 Miles \$	L. V. 1 Mile
PENNA. R. R.	26 Miles	Belt Line 2 Miles
	58 Miles \$34.80	Penna. R. R. 1 Mile
TIME EN ROUTE:	4 Days	Miles
REMARKS:	Tariff—I. C. C. A-3782	

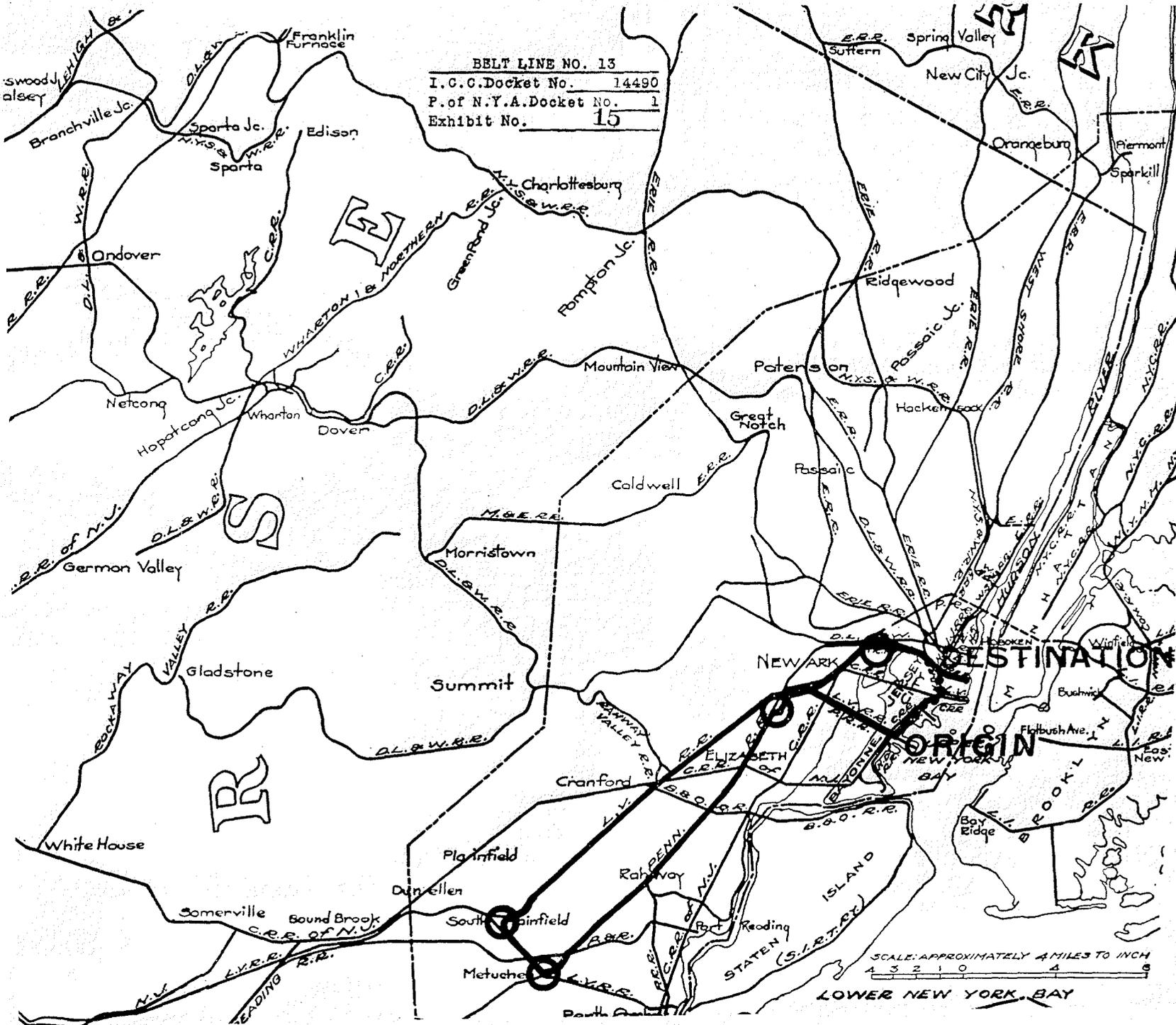
LEGEND

— PRESENT PRACTICE
●● PROPOSED PRACTICE

○ POINT OF YARDING OR INTERCHANGE



BELT LINE NO. 13
I.C.C. Docket No. 14490
P. of N.Y.A. Docket No. 1
Exhibit No. 15



SCALE: APPROXIMATELY 4 MILES TO INCH
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LOWER NEW YORK BAY

387.1

P83A 1923

4/11/23