

WORLD TRADE CENTER

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THE HUDSON & MANHATTAN  
WORLD TRADE CENTER  
PROJECT



The Port of New York Authority

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## INTRODUCTION

Under legislation to be introduced in the Legislatures of the States of New Jersey and New York, the Port Authority would be authorized to effectuate a single port development project which would include the present Hudson and Manhattan Railroad system, rehabilitated and improved, a World Trade Center on a site to include the Hudson and Manhattan's Hudson Terminal on the lower west side of Manhattan, transfer stations between the H&M and commuter railroad lines in a delineated area of New Jersey as well as necessary extensions of the H&M to such transfer stations, and the possible expansion of the Journal Square and Exchange Place stations of the H&M.

In the memorandum which follows, the component parts of this single project are described on the basis of studies made to date by the Port Authority. The material dealing with the H&M has been developed in close collaboration with the New Jersey State Division of Railroad Transportation so that what is here proposed is in conformity with the over-all program proposed by that Agency.

According to preliminary current estimates, the total cost of the project herein described will be substantially in excess of \$420 million. The World Trade Center must be a self-supporting operation, whereas it is estimated that the H&M will result in annual deficits of from \$7 to \$10 million.

## BACKGROUND OF THE PROPOSAL

In September of 1960, the Port Authority announced that, within the framework of financial limitations which would make it possible to continue marketing its bonds for all purposes authorized by the legislatures of the two States, it would be able to purchase and to rehabilitate the entire H&M system, including the existing Hudson and Manhattan Terminal facilities.

In March 1961, the Port Authority reported to the Governors of New Jersey and New York, and to the Mayor of the City of New York, that a World Trade Center on the east side of lower Manhattan would be feasible, but found that it could only be built successfully by a public agency. The State of New York, after consideration of the report, adopted legislation authorizing the Port Authority to attempt to develop a World Trade Center as proposed. However, viewing both proposals as achieving the single public purpose of benefiting the economy of the New York-New Jersey Port region, the State of New York combined this authorization with authority to the Port Authority to purchase and to rehabilitate the Hudson and Manhattan Railroad. In order for this authorization to be effective, the State of New Jersey would have had to adopt identical combined legislation.

Public statements of government leaders in New Jersey indicated their support for the proposal to purchase and rehabilitate the Hudson and Manhattan Railroad, but that they preferred to consider separately the World

Trade Center proposal since it was at that time a separate project. As a result, no joint legislation was enacted and decision on the two proposals remained unresolved throughout the year 1961.

Meanwhile the Port Authority continued to discuss with the State of New Jersey's Division of Railroad Transportation, various aspects of the H&M program with particular reference to the problem of improved connections between the H&M and the New Jersey commuter railroads.

The Port Authority also continued to review both proposals during the year. Particular attention was given to the economic feasibility of the renovation of the 53-year old H&M Terminal Buildings at 30 and 50 Church Street. The acquisition of these buildings, as part of the purchase of the H&M Railroad was essential because the Terminal facilities were incorporated in the lower floors of the buildings. However, the renovation of these old buildings, necessary to attract tenants, was not an economically justifiable project. The possibility of demolishing the buildings and of redeveloping the air rights over the terminal area was therefore explored. During this analysis, the possibility and desirability of locating the World Trade Center in the area over the Hudson Terminal facility occurred to the Port Authority's staff.

The World Trade Center and the Hudson and Manhattan Railroad are both of great importance to the welfare and prosperity of the Port District. The World Trade Center would directly enhance business and employment by stimulating the movement of cargo throughout the Port District. It would also help bolster the Port of New York's competitive position by making port operations more effective, efficient and economical.

The Hudson and Manhattan Railroad is a vital link in the Port District's transportation system. Although it carried over 31 million passengers in 1960, it is dangerously near a physical and financial breakdown, and prompt remedial measures are required. At the same time its usefulness and effectiveness, and the over-all strength of the New Jersey commuter railroads, will be greatly strengthened by improving the transfer facilities between the H&M and the New Jersey commuter railroads.

Merging of these two great projects would promote the unity of the Port District and enhance the welfare and prosperity of its people. The proposal to develop a single project encompassing the World Trade Center and the Hudson and Manhattan Railroad Terminal on the west side of Manhattan contemplates the razing of the Hudson and Manhattan terminal buildings at 30 and 50 Church Street; the transfer of the World Trade Center complex, previously proposed for a location on the east side of lower Manhattan to a site on the west side; and the construction, as part of the World Trade Center development, of completely new and modern H&M terminal facilities, including trackage realignment to increase allowable train speeds, platform expansion to increase train capacities, and greatly improved lobby and concourse facilities.

The proposal for the combined project has a number of distinct advantages over the earlier separate proposals to develop the World Trade Center and Hudson and Manhattan Railroad as individual projects. In the

first place, the west side consolidated plan through its single site and direct transit link to New Jersey dramatically signifies the bi-state interest in the effectuation of both portions of this important port development project.

Secondly, the joint project would represent a marked improvement over the original World Trade Center proposal in terms of available transportation facilities not only because of the immediate availability of the H&M, but also from the presence within, and immediately adjacent to, the site of a rare concentration of subways, bus lines and vehicular access facilities.

Moreover, since the major part of the acquisition cost of the west side site is represented by the H&M Buildings, the World Trade Center property which would have been acquired over and above the H&M property would be considerably reduced under the new plans. Of perhaps greater importance is the fact that the program will make possible the reconstruction of the H&M terminal and track layout to achieve improvements in the present antiquated layout which would have been impossible under the original plan.

In summary, therefore, the combination of these two facilities into a single project on one site will offer tremendous advantages over what would have been achieved by the two separate projects, each of which is vital for the continued health and growth of the New Jersey-New York metropolitan area. At the same time the expansion of the H&M program to include transfer stations and the improvements of its New Jersey stations will also be of significant regional benefit.

## THE WORLD TRADE CENTER

On March 10, 1961, after a year's intensive study, the Port Authority submitted to the Governors of the States of New Jersey and New York and to the Mayor of the City of New York a report on a proposed World Trade Center to be located on a site on the East River below the Brooklyn Bridge in lower Manhattan. That proposal involved an investment of approximately \$355 million, assuming urban renewal assistance and a construction schedule beginning in 1962 and ending 1968. In proposing that the World Trade Center be relocated to the west side of lower Manhattan, the basic functional concept embodied in the original concept has been maintained.

As envisioned in the proposal, the World Trade Center would speed and stimulate commerce through the bi-state Port District. To achieve this, the World Trade Center would be an integrated facility of international trade, housing the offices of the many public and private agencies involved in the transportation of persons and property and in the administrative, governmental and marketing services, functions and activities connected to world commerce and port promotion and protection. The coordination in the Center of the various activities concerned with negotiating, financing, arranging for and clearing the movement of export-import cargo would make these operations more effective and economical.

The World Trade Center would simplify and expedite the processing of administrative and procedural matters, including the "paper work," for the movement of export and import cargo through the Port, resulting in savings in time and money as well as improved service. It would centralize and improve the trade information services now located in scattered areas of the Port, and provide a market place for United States products available for export through the Port. It would attract foreign buyers from around the world. Furthermore, it would provide an international market place for import products for United States buyers.

Thus, a central location would be established for agencies of the federal, state and local and foreign governments concerned with transportation and the Port's commerce, thereby making it possible for them to serve the region and the world trade community more effectively. It would simplify communication among the members of the world trade community in the Port, permitting them to identify more easily their common problems, to devise means of solving these problems and to implement programs to achieve solutions. In effect, this would stimulate the entry of the United States manufacturers into export activities by providing information on foreign markets, giving them exposure to buyers for these foreign markets, and offering assistance in identifying and using efficient procedures for their export trade operations through the Port.

Most importantly to our two States and to the many municipalities along the shores of this great harbor, such a World Trade Center in the Port of New York would have a direct benefit in increasing the amount of cargo moving across the docks in every area of the New Jersey-New York Port. This increase could be expected to result from the fact that the World Trade Center would further enhance the Port's ability to provide shippers with the most efficient possible service; attract more buyers and sellers to world trade, thus expanding the Port's trade; and bind more tightly to the Port the management offices controlling export and import operations of the United States and foreign firms, thus keeping them especially aware of the Port of New York and of the many advantages it offers.

The World Trade Center would enhance the position of the New Jersey-New York Port by bringing together into more efficient working relationships the participating segments of the Port's world trade community and by serving as a constructive symbol of the Port's leadership in handling international trade.

The proposal for a World Trade Center recognizes that the flow of foreign and domestic cargoes through the Port is the most important single economic factor in the prosperity of the New Jersey-New York Metropolitan Area. A study conducted by the Port Authority in 1956 indicated that some 430,000 jobs paying over \$2.1 billion in wages each year are provided by the movement of oceanborne cargo through the Port.

Equally important, each of the 430,000 Port jobs creates an economic condition equivalent to two additional jobs - or a total of 1,300,000 jobs, representing an annual income of \$6.3 billion. Considering the worker and his family, a total of 3,120,000 Port District residents of a total population of about 13,000,000 are directly or indirectly dependent for their livelihood upon the Port's waterborne commerce. Thus, the Port provides the livelihood of one out of every four persons who live in the Port District and provides more than 25% of the total wages earned annually in the Port District.

In addition, the availability of the unparalleled transportation facilities of the Port of New York has been of significant importance to the development of export manufacturing operations in the States of New Jersey and New York. Based on the latest available statistics, 14% of the total United States general cargo exports originate in the States of New Jersey and New York, thus making the bi-state area adjoining the Port the nation's leading export manufacturing center. Indeed, approximately 20% of the manufactured output of the State of New Jersey, valued at more than \$1 billion annually, goes into foreign markets. Approximately 140,000 New Jersey industrial workers are dependent upon this foreign trade for their income. The State of New York sends approximately 12% of its manufactured output valued at more than \$1.5 billion annually into foreign markets. Approximately 206,000 of New York's industrial workers are dependent upon this foreign trade for their income.

The volume of oceanborne general cargo, the most important income-generating segment of the Port's foreign trade, climbed to 13.7 million tons in 1960, or 4.9% above 1959. The growth of the Port's general cargo, however, did not keep abreast of the national expansion of general cargo in foreign trade. New York and northern New Jersey's share of United States oceanborne general cargo declined from 24.7% in 1959 to 23.2% in 1960. An even sharper decline is indicated for the first half of 1961. Data presently available for that period shows that the Port's share of United States waterborne foreign commerce dipped to an unprecedented low of 21.7%. The low percentage for the first half of 1961 continues a downward trend which has been evident since 1952, when the Port handled almost 33% of the total United States oceanborne general cargo in foreign trade.

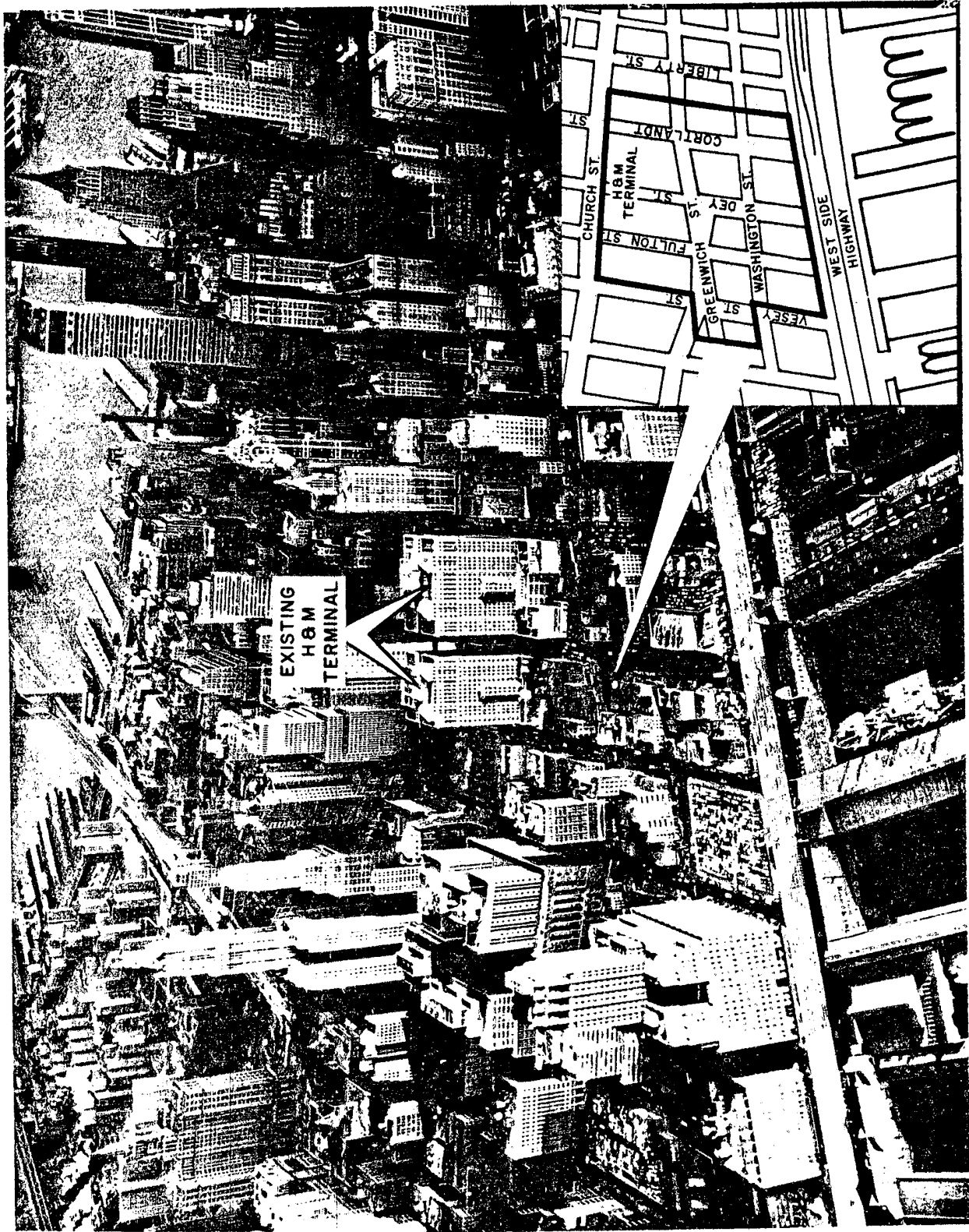
In recent years, a number of world trade centers have been established by ports in the United States and abroad. A center was established in New Orleans by the organization of "International House" in 1945 and its companion "International Trade Mart" in 1948. Since then, world trade centers have been established in San Diego, San Francisco, and Boston, and one will be opened in Houston in early 1962. The Port of Philadelphia is about to begin construction of an \$85 million waterfront development that will include many features of a world trade center. A world trade center also has been established in Rome, Italy.

It is of overwhelming importance to the entire metropolitan area of northern New Jersey and New York to do everything possible to maintain the pre-eminence of the Port of New York, to insure that increasing amounts of cargo in foreign trade continue to move through the Port, and to make every effort to preserve and enhance the Port's competitive position as the focal point for United States foreign trade.

The Port Authority now proposes that the World Trade Center be developed on the west side of lower Manhattan, together with a new, modern terminal for the Hudson and Manhattan Railroad.

According to first preliminary plans, the combined facility would occupy a site, including the H&M Buildings at 30 and 50 Church Street, within the area bounded generally by Church Street on the east, Liberty Street on the south, the Hudson River on the west and Barclay Street on the north. The tentative plans contemplate the area indicated on the photo and diagram on the following page. Preliminary sub-surface investigations show that rock is situated at a depth of 60 to 90 feet throughout the site. No serious difficulties in sub-surface construction are foreseen, although presence of subway tunnels through the site must be considered in the development of detailed architectural plans. The general area also is shown in the aerial photo on the following page.

Along the north side of the site is a 29-story building and the 16-story Federal Building. Saint Paul's Church and Cemetery abut the site on the northeast corner, providing an open vista from Park Row and City Hall through to the site.



SITE OF PROPOSED WORLD TRADE CENTER - H&M TERMINAL

As shown in the preliminary artist's conception on the following page, preliminary studies contemplate a multi-level Concourse which would extend from Church Street to the Hudson River, extending over the West Side Drive. Rising from the Concourse would be a complex which would include a World Trade Mart, a World Commerce Exchange and other appropriate structures. The World Trade Mart would be designed for display and foreign trade activities. The World Commerce Exchange and the other structures would provide space for offices of the United States Customs Service and other federal, state, local and foreign governmental agencies, customs brokers, freight forwarders, commercial transportation agencies, international banks, finance agencies and insurance firms. Within the Concourse, space would be provided for 1) appraiser's stores and examination areas for the United States Customs Service, 2) ticketing functions and lobbies for the H&M, 3) an enclosed plaza and lobbies to buildings, 4) consumer services, 5) building services, 6) vehicular access and truck backup, and such other facilities which need direct access from the street.

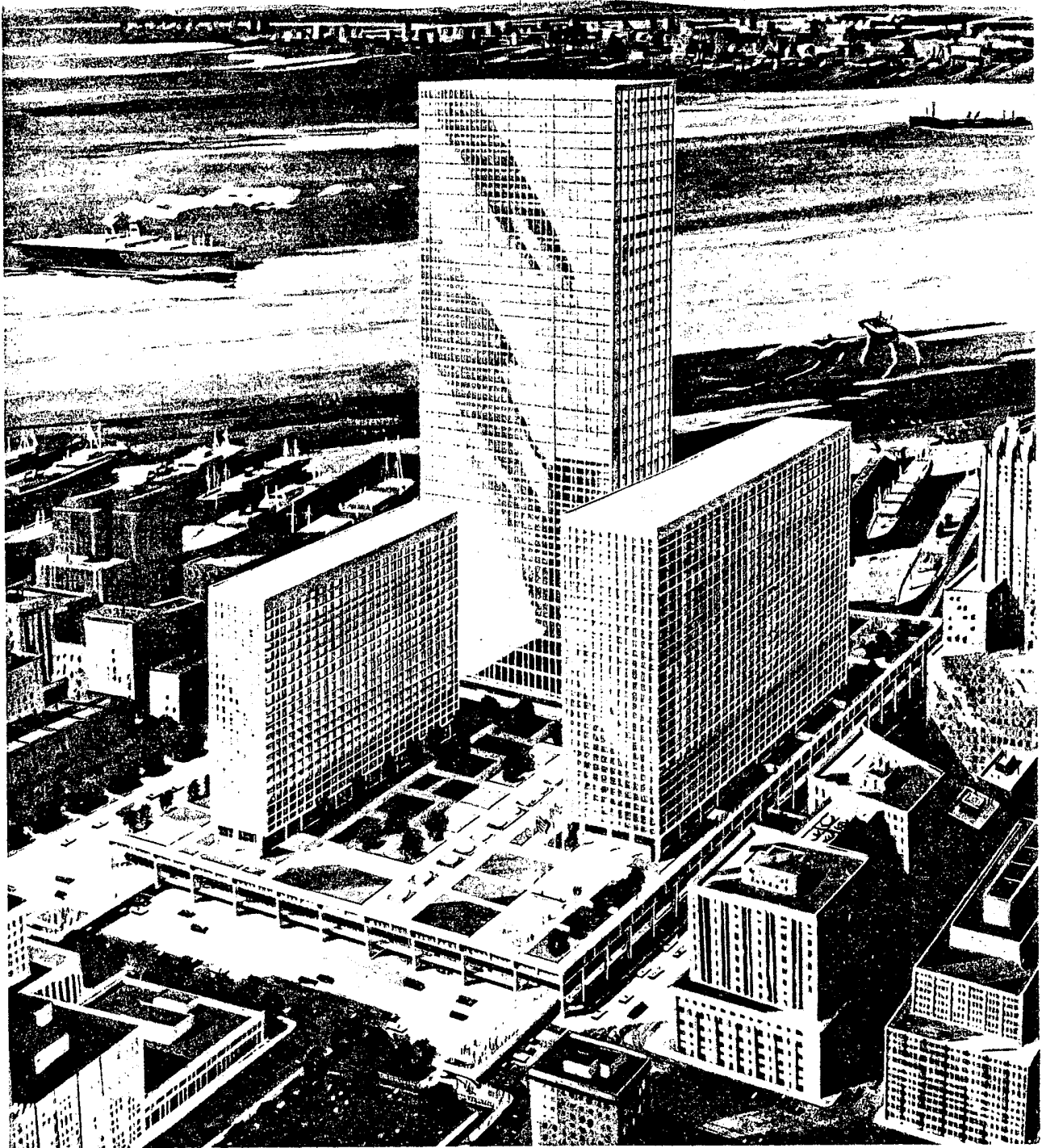
Vehicular access into the Concourse would be provided directly from West Street and Church Street. Pedestrian circulation would be one level above Church Street and access by means of pedestrian bridges would be provided from the east, north and south.

Future studies, more detailed in nature, may alter the elements of the complex and the details set forth above, but the basic functional concept of any final scheme would probably be similar in general character.

One change in the World Trade Center as it is now proposed is the omission of the securities exchange. In the original proposal of March 1961, provision was made for such a facility at the request of the New York Stock Exchange. This activity was considered to be appropriate, but not essential, to the concept of the World Trade Center. Stock Exchange officials, however, are now considering several alternate sites in lower Manhattan for enlarged Exchange facilities.

The World Trade Center would be served directly by an unusually excellent concentration of transportation facilities. The Center itself would include the lower Manhattan terminal facilities of the H&M Railroad which currently provides transportation between New York and New Jersey for 110,000 passengers daily.

In addition, the site is served directly by three subway lines, and easy access is available to other subway lines in lower Manhattan. The 7th Avenue-IRT crosses under Greenwich Street with a station at Cortlandt Street. The Hudson Terminal local station of the 8th Avenue-IND is directly accessible to the site and connects with the Chambers Street express stop on this line. The Cortlandt Street station of the Broadway-BMT is under the easterly edge of the site area. The Fulton Street station of the Lexington Avenue-IRT, the Broadway-Nassau station of the 8th Avenue-IND Express and the Fulton Street station of the Nassau Street-BMT line are all within close proximity to the site. Bus service is also available. The current plan would provide 2,000 parking spaces within the Center.



ARTIST'S CONCEPT OF POSSIBLE DEVELOPMENT

A World Trade Center at the west side location now proposed, directly linked to New Jersey by means of the H&M, would be easily available to buyers and other business visitors whose journeys originate west of the Hudson River. The World Trade Center would thus offer greatly improved employment opportunities for New Jersey residents. Analysis of a Journey-to-Work Survey conducted in 1960 by the Downtown-Lower Manhattan Association demonstrates that ready access to the H&M results in an increased proportion of New Jersey employees. Whereas about 13% of the total employees in the entire downtown Manhattan area south of Chambers Street come from New Jersey, a study of the residences of employees of three of the largest companies located either in the Hudson Terminal Buildings or directly adjacent to them shows a proportion of New Jersey employees varying from 25% to 29%. It is very likely, therefore, that a considerably higher proportion of New Jersey employees would be represented in the 30,000 World Trade Center employees than is the case in the downtown area as a whole at present.

Most importantly, the World Trade Center in this location would completely achieve the basic purpose of the original proposal. It would provide an essential facility of commerce which would facilitate, expedite and promote the Port's foreign trade activities, improve the Port's position in world trade, and enhance business and employment in all parts of the Port District.

## THE HUDSON AND MANHATTAN

For more than 30 years, the Port Authority has been continuously engaged in studies of all aspects of terminal and transportation facilities and other facilities of commerce within the New York-New Jersey metropolitan area. Over that period of time, the Port Authority has searched particularly for solutions to commuter railroad problems in the form of physical plans which could adequately serve the commuting public and which, at the same time, could be developed on a self-supporting basis without burden to the general taxpayer. In addition to its own studies of the interstate transit and commuter railroad problems, the Port Authority participated in many joint surveys with the railroads and various public agencies.

Throughout this period, no significant solution to commuter railroad problems has been found by the Port Authority or by any other public agency, individual group or in fact the railroads themselves. It has been generally concluded by private and public studies that there are large and increasing deficits involved in rail transit operations, and that public financial assistance is required if a solution is to be found.

At the same time, there is now almost universal agreement that essential commuter railroad services must be maintained. In the last three years, great progress has been made in that, for the first time, there has been a clear recognition that rail transit is an essential public service and that public assistance to the Port District commuter railroads has been made available through constructive programs providing for tax relief and for new commuter cars for the New York railroads. In New Jersey a total of \$6,500,000 of State funds in the current fiscal year has been appropriated and allocated to the commuter railroads under annual service contracts which guarantee the continuation of essential railroad services.

The Hudson and Manhattan Railroad, an interstate trans-Hudson rail link, is experiencing most serious financial difficulties. Indeed, under the proposed plan of reorganization, it is doubtful whether the railroad could remain in operation for more than two years.

The Port Authority has long maintained that the H&M must be kept in operation. The railroad handles more than 30 million passengers annually. If it were to cease operations, trans-Hudson vehicular facilities would be incapable of handling the passenger load.

The H&M Railroad has been in bankruptcy since 1954. During this eight-year period, the financial status, the level of patronage, and the physical condition of the railroad and its equipment have continued to deteriorate in spite of a series of fare increases, the latest of which increased the basic fare to \$.30. Service on the H&M in recent years has been interrupted by numerous breakdowns caused by the failure of the signal systems, other track installations, and rolling stock. Much of the original plant and equipment provided in 1908 is still in service. While some essential maintenance improvements have been carried out, there exists a considerable

deficiency in maintenance which makes it impossible to maintain reliable service standards particularly during peak hours.

The railroad continues to lose money each year. Up until the last two or three years, the net revenue from the real estate operation in connection with the Hudson Terminal Buildings was sufficient to offset the railroad losses. However, because of the obsolete nature of the buildings, the level of tenancy has been falling off rapidly with the result that there has been a steady decline in real estate net revenues. The total net loss of the combined railroad and real estate operations in 1961, including unpaid interest was an estimated \$2,150,000.

The H&M is at present in the final stages of Court reorganization. Under the reorganization plan, which has been approved by recent decisions of the courts and the Interstate Commerce Commission, the railroad operation is being separated from the Hudson Terminal (i.e., the real estate) operation. As a result, it is quite evident that lack of operating capital and continuing losses in the railroad operation will force the railroad to suspend its operations in the very near future unless some drastic steps are taken. Its purchase and modernization by a public agency is essential if this vital transportation link is to be preserved.

In recognition of the importance of this trans-Hudson rail service and of the significance of the commuter railroad programs in both States, the Port Authority indicated on January 27, 1961, following a comprehensive study of all aspects of the H&M, that it was prepared to undertake the acquisition and modernization of the H&M Railroad following appropriate legislative authorization.

The proposal envisioned an extensive capital improvement program designed to bring the bankrupt H&M to proper standards of efficient and reliable service including the following major components:

1. Acquisition of the H&M properties at an estimated cost of \$20.5 million.

In the bankruptcy proceeding of the Hudson and Manhattan Railroad Company, the court approved a Securities and Exchange Commission finding that the value of all the assets of the company, including the Hudson Terminal Buildings, for the purpose of testing the feasibility and fairness of the Trustee's amended plan of reorganization was not in excess of \$20.5 million.

2. General rehabilitation of the H&M which would include:
  - (a) Replacement of the railroad's obsolete signal system with a modern installation that would permit safer and more reliable operation as well as a greater number of trains.

- (b) An entirely new, modern power distribution system which would eliminate the frequent and time-consuming delays now experienced by H&M commuters as a result of power failure.
  - (c) Major rehabilitations and refurbishing of the H&M passenger stations.
  - (d) Extensive track maintenance work which would assure a smoother and more pleasant ride.
  - (e) Substantial improvements to the present car storage yards and maintenance shops as well as the provision of an entirely new storage yard and maintenance facilities to handle the additional rolling stock.
  - (f) Replacement or rehabilitation of all drainage pumps and water discharge lines in the tunnels to eliminate shutdowns and delays caused by flooding conditions.
3. A complete replacement of the present fleet of old cars operated by the H&M, and the provision of new cars for the additional service that would be provided to handle the Jersey Central and Erie-Lackawanna ferry passengers. This would mean the provision of more than 250 modern, air-conditioned, comfortable and well-lighted rapid transit cars.

The proposal to combine the Port Authority's purchase of the H&M with a World Trade Center development in the area, which includes the present location of the Hudson Terminal Buildings, will permit a plan to effectuate considerable improvement and expansion of the track and platform layouts at Hudson Terminal as well as the complete modernization of Hudson Terminal itself.

The opportunities for improving the track and platform layouts of the H&M at Hudson Terminal as well as the rehabilitation of Hudson Terminal itself, are quite limited as long as the present Hudson Terminal Buildings remain in existence.

Under the plan by which the World Trade Center would be developed on a site including the Hudson Terminal property, it is contemplated that these 53-year-old buildings would be removed. It appears that their extensive rehabilitation would be unjustifiable. Moreover, this would make possible an over-all reconstruction program which would greatly improve the entire H&M-Hudson Terminal operation.

The existing Hudson Terminal facilities substantially handicap the operation of the H&M Railroad. Reconstruction of the Terminal would permit the improvement of the track layout and modification of the restrictive sharp curves so that increased operating capacities could be achieved. In addition, it would be possible to lengthen the platforms in order to permit the operation of longer trains with a resultant increase in capacity during peak hours.

In addition to these operating improvements, the World Trade Center would include a completely new and modern H&M station greatly superior to anything that could have been done by merely rehabilitating the present Terminal. The new Terminal would be attractively designed and would provide greatly improved access to and from the H&M tracks and better connections with both the New York City subway system and the surrounding area.

#### H&M - Journal Square Transportation Center

Preliminary review of the possibilities of developing a new H&M station in Journal Square indicates that a transportation center could be developed at that location, which would include not only a new H&M station but also a bus station, parking garage, and possibly the development of the air rights over the railroad property in the area between Hudson Boulevard and Summit Avenue to the east of Hudson Boulevard.

The H&M Joint Service, including the Journal Square station and the Pennsylvania Railroad freight tracks, are located in a deep rock cut through this section, approximately forty feet beneath the street level of Journal Square. It is believed that a multi-purpose transportation center could be developed as a most attractive architectural unit, which would be functionally efficient and which would spark the redevelopment and modernization of the Journal Square area. Such a project could also be coordinated with the City's urban renewal plans.

Basic to the development in this area, of course, is the location of the H&M trackage and the proposed new Journal Square station. The existing storage yards of the H&M Journal Square could be relocated to the west near Harrison and the present Journal Square station of the H&M replaced. By straightening the tracks under the Journal Square area, a considerably improved railroad operation would result. In addition, longer platforms would permit the use of longer trains and also better access for the 30,000 passengers who now use this station each day. A new H&M concourse could be constructed as part of the complex together with off-street parking facilities for 600 to 700 cars. This concourse would be served directly from Hudson Boulevard as well as adjacent areas in the Square.

In addition, a new bus station could be constructed to replace an existing bus terminal at Journal Square as well as the many bus loading and unloading platforms at the Journal Square bridge plaza. This new

bus station would greatly relieve traffic congestion through the Journal Square area caused by the more than 1,200 buses presently utilizing the streets each day in this area.

A development of the general type outlined could be the stimulus for a modern, attractive redevelopment of the entire surrounding area in this section of Jersey City. It unquestionably would ensure the continuance of Journal Square and the surrounding area as Hudson County's major business and commercial center.

At the request of Mayor Gangemi of Jersey City, that City's planning staff is currently working with the Port Authority planning staff to determine the feasibility of providing a facility of this general type in the vicinity of Exchange Place in Jersey City.

#### State Plans for Rail Consolidations

The State of New Jersey's Division of Rail Transportation has proposed a series of consolidations of various rail services designed both to improve service for rail commuters and to afford savings to the railroads. Most of these plans are dependent upon the provision of increased capacity and new rolling stock on the H&M and Joint Service. One of the most important of these would be the re-routing of the main line trains of the Jersey Central Railroad into Penn Station, Newark, via a connection with the Lehigh Valley Railroad at Aldene, east of Cranford. All Jersey Central passengers would come into Penn Station, Newark, where an easy transfer would be available either to the H&M or to the Pennsylvania main line to New York.

#### Transfer Stations and Extensions of H&M

To make similar service available to all other New Jersey commuter railroad passengers, the State Division of Rail Transportation and the Port Authority propose the construction of new transfer stations between all branches of the Erie-Lackawanna Railroad and the H&M or future H&M extensions. This plan for transfer facilities would involve the ultimate provision of interchanges at such new transfer stations, not only with the H&M, but also with the Pennsylvania Railroad. Thus, for the first time, passengers on all of the Erie-Lackawanna lines, except the Northern Branch, would be able to transfer either to the H&M to Jersey City, Hoboken, and lower Manhattan or to the uptown H&M branch, or to the Pennsylvania Railroad's fast main line service directly to Penn Station, New York. These direct interchanges with the Pennsylvania Railroad main line would have important advantages to the commuter which will be discussed later. Such a program can obviously only be developed in the closest possible cooperation between the State Division of Railroad Transportation, the railroads, and the Port Authority.

A major transfer station is proposed at Harrison, about one mile east of Penn Station, Newark, where transfer would be provided between the H&M, the Pennsylvania, and several branches of the Erie-Lackawanna Railroad. This transfer station would be the terminus for

service on the Morris and Essex Division serving Summit, Morristown and Dover, the Montclair Branch and the Greenwood Lake Branch which is proposed by the State to be connected physically with the Montclair Branch in Montclair. These trains would continue to stop at Newark, but would terminate at the Harrison Transfer, where easy transfer would be available to either the H&M or the Pennsylvania.

At the Harrison Transfer, Erie-Lackawanna passengers would board H&M trains for Hudson Terminal or 33rd Street. Some local Pennsylvania trains could stop at this station, and thus accommodate passengers to Penn Station, New York. More passengers on these Pennsylvania trains leave the trains at Newark than board the trains at that point, so that capacity is presumed to be available to New York.

The provision of this transfer station could be accomplished with little difficulty, since it would consist primarily of station construction with a minimum of major track relocations or extensions.

As a second stage of the program, a similar transfer station could be provided in the Secaucus area. Trains of the Erie-Lackawanna's Bergen County lines, including the Boonton Branch, the New Jersey and New York Railroad and the Bergen County Branch could terminate at the point where these rail lines now pass under the Pennsylvania Railroad. An H&M extension could be built from Hoboken out along the present Erie-Lackawanna tracks to this point, and a transfer station between the Erie-Lackawanna and the Pennsylvania and H&M could be constructed at this location.

Such a transfer station, in addition to providing an easier transfer to the H&M than is presently available in Hoboken, would also offer advantages to Bergen County commuters to midtown New York by providing, for the first time, a direct rail ride, with only one transfer, from most rail stations in Bergen County to Penn Station, New York.

At such a stage of the program also, another transfer station could be constructed in the vicinity of Bergen Junction in Jersey City in order to provide a direct interchange for the Northern Branch passengers with the H&M. This would afford a considerable improvement in the service currently available to these passengers, who now have access to the H&M only by a switch-back arrangement into the Hoboken station.

Both the Secaucus and the Bergen Junction transfer stations could be served by an extension of the H&M from Hoboken along Erie-Lackawanna trackage to a point in Secaucus adjacent to the area where these tracks at present pass under the Pennsylvania Railroad tracks. This extension would necessitate the reconstruction of the present H&M track layout in Hoboken to eliminate the stub-end operation of the H&M at the Erie-Lackawanna Terminal. A new Hoboken-H&M station would be constructed a few blocks west of the Hudson River in the vicinity of

Observer Highway to handle the local Hoboken H&M passengers, and new H&M tracks could be extended to a junction with the Erie-Lackawanna tracks just east of that railroad's tunnels through the Palisades. H&M trains would then operate on the tracks now used by the Erie-Lackawanna commuter trains through the Palisades tunnels to the new transfer station at Bergen Junction and thence to a termination at the new Secaucus transfer station. Such service would be provided to connect with all commuter railroad trains, and additional local service to Hoboken would be provided by trains terminating at Hoboken. The Erie-Lackawanna Railroad has advised the State Division of Rail Transportation that they would continue to operate their long-haul service from Buffalo and Chicago into the present Hoboken Terminal of that railroad.

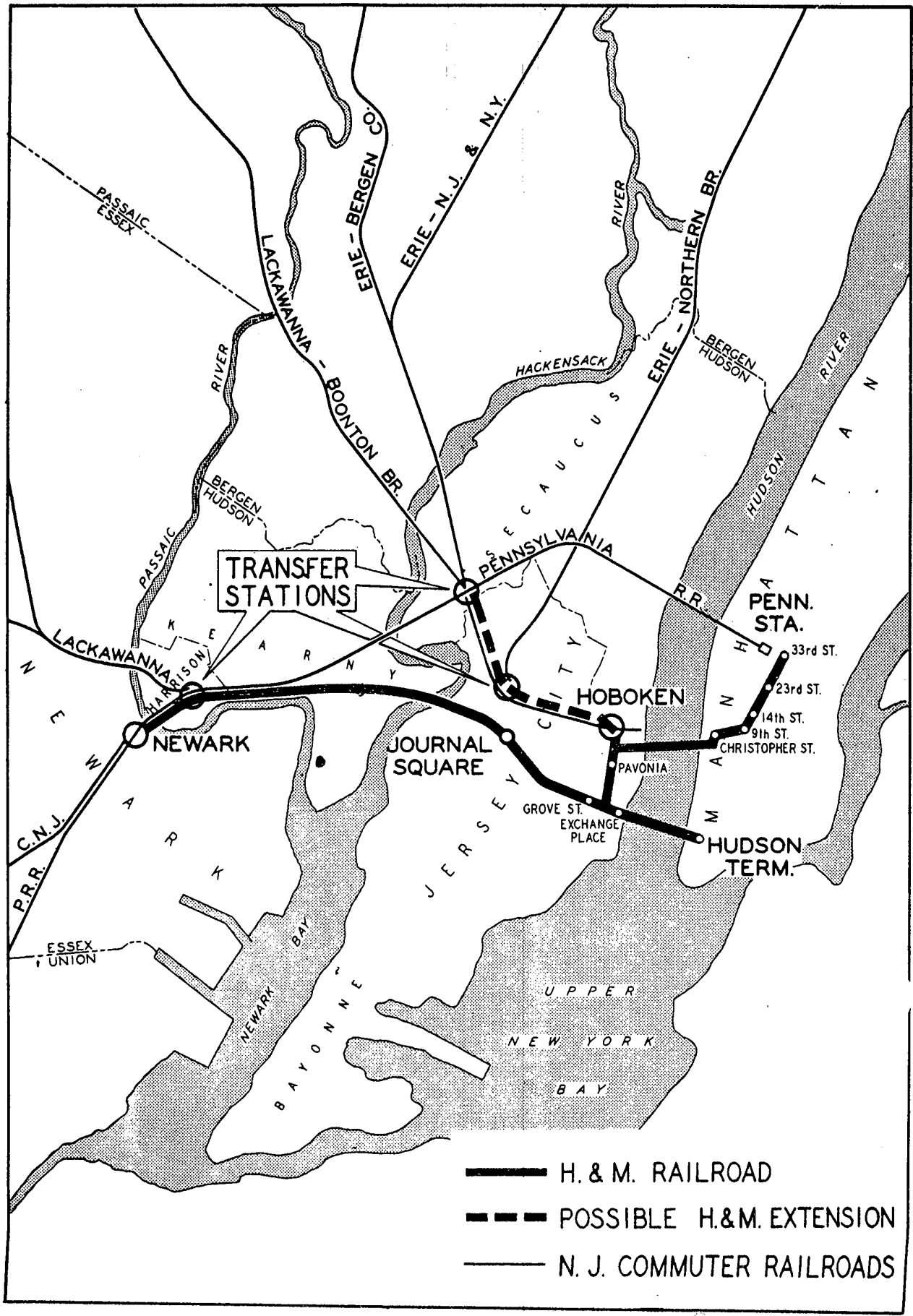
The general functional arrangement and location of these transfer stations is shown on the map on the following page.

The adoption of this plan would give practically all New Jersey commuter railroad passengers the option of taking the high-speed Pennsylvania main line trains to mid-Manhattan or the modern, air-conditioned H&M trains to Hudson Terminal or the uptown H&M stations. The flexibility and consequent convenience of trans-Hudson railroad commuter services would thereby be significantly improved.

Construction of these transfer stations would also make it possible to implement plans of the New Jersey Division of Rail Transportation to eliminate duplicate rail routings, effecting savings to the railroads through various consolidations and eliminations without sacrificing service.

The reduction in route miles accomplished by such consolidations and abandonments indicates that increased operating efficiency and substantial cost reductions would be achieved. Although about 100 miles, or approximately one-fourth of the more than 400 route miles currently used by the commuter railroads in northern New Jersey would be eliminated under the plans of the State Division of Railroad Transportation, there would be no significant reduction in the commutation services provided. As a matter of fact, under this plan, substantial numbers of passengers would be given better service than is presently available.

It is estimated that the above-described program for transfer stations between the H&M and the New Jersey commuter railroads would cost somewhere in the vicinity of \$35 million. Although much more careful analysis of the operating results would be necessary before any definite figures could be developed, on the basis of very preliminary estimates, it is believed that the program would increase the deficits beyond the \$5 million anticipated last year from the acquisition, improvement and operation of the existing H&M to total deficits of from \$7 to \$10 million. Such deficits could ultimately be met within the limitations set forth in the proposed bi-state legislation. This assumes the cooperation of all agencies of government - Federal, State and local - and of the railroads themselves.



### Service Advantages to Commuters

The physical changes included in the H&M Transfer Station plan would bring about certain changes in this passenger distribution and would afford definite improvements in commuter service for many of the passengers. For example, it takes fifteen minutes via the Pennsylvania to travel between Penn Station, Newark and Penn Station, New York. The same trip via the Joint Service and the H&M to 33rd Street takes about twice as long. The commuter from Westfield to mid-Manhattan now takes 67 minutes to travel from the CNJ station at Westfield via the ferry and the New York City subway to 33rd Street and Sixth Avenue in Manhattan. The ability to transfer to the Pennsylvania Railroad at Penn Station, Newark, would enable him to reduce this time to forty-six minutes. Similarly, the Summit commuter who now takes forty-eight minutes from the Summit Station to 33rd Street via the Erie-Lackawanna and the H&M, would under the plan be able to transfer to the Pennsylvania at Harrison and thus reduce his commuting time to thirty-seven minutes. Both estimates take into account the fact that the Pennsylvania main line service would involve slightly longer travel time than at present because of the stops required at the new transfer stations.

A significant improvement would also be provided by a Secaucus Meadows transfer station for railroad commuters originating in Bergen and Passaic Counties who presently must travel via Hoboken and the uptown branch of the H&M if they are commuting to midtown areas. The possibility of transferring at a Secaucus station directly to Pennsylvania trains into Penn Station, New York, would provide a substantial decrease in commutation time for this group of passengers. For instance, the fifty-one minute commuting time from the Ridgewood station on the Erie Mainline via the H&M to 33rd Street, New York, would be cut to thirty-six minutes by a transfer at Secaucus to the Pennsylvania and thence into Penn Station, New York.

These travel time advantages via the Pennsylvania would be highly significant. In addition, the opportunity to use Penn Station in New York would be of considerable advantage for commuters having to transfer to the New York City subway since the IND - 8th Avenue with its service to the 5th Avenue - 53rd Street area is readily accessible within Penn Station itself, as is the IRT - 7th Avenue with its service to Times Square and thence via the shuttle to the Grand Central area.

For the commuter destined to lower Manhattan, travel times under this plan would be at least equivalent to and in some cases less than the existing service. The Westfield commuter working, for example, in the Church Street-Fulton Street area presently using the CNJ and its trans-Hudson ferry service takes about 52 minutes for his trip, including walking time from the ferry terminal. Under this plan, the total elapsed time of his trip would be about 49 minutes. The Summit commuter destined to the same downtown area presently takes about forty-four minutes for his trip against an estimated forty-one minutes under this plan. The Ridgewood resident, presently traveling forty-seven minutes to the Hudson Terminal area would require about the same time under this plan.

The reductions in commuting times resulting from the availability of the new transfer stations might also attract substantial numbers of additional commuters to the railroads from other modes of transportation. For example, patronage on the Bergen County branch lines of the Erie-Lackawanna might increase as a result of the new direct connections with the Pennsylvania Railroad. However, past transit experience dictates conservatism in predicting traffic increases of any great magnitude.