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"Harmony in Diversity"

PORTLAND CITY CLUB BULLETIN

" Active Citizenship"

VOLUME IV

PORTLAND, OREGON, JULY 4, 1924

NUMBER 38

UNIFICATION OF RAILWAY TERMINAL FACILITIES

IN THE CITY OF PORTLAND

REPORT OF COMMITTEE ON TRANSPORTATION OF THE CITY CLUB OF PORTLAND, OREGON

The Port Development and Public Utilities Section of the City Club, after having made a thorough study of railway terminal facilities in the city of Portland, has prepared the following report, which will be submitted to the club for approval, Friday, July 11.

The following general policy was pursued by your Committee in accordance with item three of the "Principles Adopted by the Committee on Transportation:'

"That consolidation of the railroads within the city into a terminal system, owned in common by all the railroads, with representation of the city's interest and under unified management, is desirable as a means of economy, of prompt movement of traffic and of impartial handling of traffic interchanged between main line railroads.

The assembling of data and the investigation of conditions and facts relative to the subject of a belt line or unification of terminals has consumed more time than was at first anticipated. Furthermore, this work could only be done at such time as members of the sub-committee could spare from their regular duties. Immediately after the appointment, however, letters were written to those officials in an administrative capacity that have the handling of freight by the railroads as well as the port. During November and December 1923 communications were forwarded to the following, from whom information was obtained:

G. B. Hegardt, Chief Engineer and Secretary. Commission of Public Docks.

B. E. Palmer, Manager, Northern Pacific Terminal Co.

. D. Skinner, Traffic Manager, S. P. & S. Ry. Co.

A. S. Edmonds, Assistant Traffic Manager, Union Pacific System.

. H. Fogarty, Assistant General Freight Agent, Northern Pacific Ry. Co.

H. Mulchav, Assistant Freight Traffic Manager, Southern Pacific Co.

M. J. Buckley, Former General Superintendent, Union Pacific System.

S. C. Morris, Traffic Manager, Allen & Lewis. Fred Rasch, Secretary, Public Service Commission.

Robert G. Dieck, Consulting Engineer. Joseph N. Teal, Attorney.

In addition to receiving communications from the above setting forth their views relative to a belt line, conferences were held with: Hon. Joseph N. Teal, Attorney.

Fred Rasch, Secretary, Public Service Commission.

B. E. Palmer, Manager, Northern Pacific Ter-

minal Co.
Guy W. Talbot, President, Pacific Power & Light Co.

W. A. Curtin, Secretary, Traffic and Transportation Association.
J. H. Lothrop, Traffic Service Bureau.

From the replies received to our communications it is evident the officials of the railroad companies and the port bodies are not favorable to the development of a belt line railway, under municipal control, for the reason that they hold

Continued on page 2, column 2

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OSBORN MARRIES

Robert W. Osborn, retiring executive secretary, surprised his friends in the City Club at his fareweell meeting last Friday, by announcing that he would marry Miss Ruth B. Compton, Reed College librarian, the following evening.

The wedding ceremony was performed Saturday evening and Bob and his bride are now enjoying a honeymoon trip through the Canadian Rockies.

On July 28 he will take up his new work as Executive Assistant of the New York State Committee on Tuberculosis and Public Health, with headquarters at 105 East Twenty-second Street, New York.

He has the congratulations and best wishes of his City Club friends.

The next regular meeting of the City Club will be held Saturday, July 5, on the summit of Mt. Hood, with President Ludwig presiding. A large attendance is expected at this meeting.

TERMINAL REPORT Continued from page 1

that the city is now well supplied with traffic facilities for the interchange of freight, and further, from our conferences with officials and authorities who are conversant with the situation in the city, we are of the opinion that the development of the transportation facilities for the interchange of freight, whether it is undertaken by a belt line system or some other form of unification of existing facilities, is a subject of utmost importance to the city and port and is well deserving the most careful investigation to the end that a practical solution may be offered.

Probably every taxpayer or citizen who takes an active interest in the growth and development of the City of Portland has given this matter of the railroad terminal situation some serious thought. The construction of a belt line has periodically been suggested and advocated by officials and others, but as yet no definite action has resulted. Just recently this subject was presented to city officials, in connection with the vacation of certain streets in the terminal area in the northern portion of the city on the west side of the river. The problem of improving the service and reducing the cost of operation, and the interchange of freight, is an important one from the railroad standpoint: while the problem of reducing the loss of time with its various handicaps is an important item to the shipper; and the proper co-ordination of the rail transportation, terminals and their approaches is of great importance as a matter of proper city planning to the city and port authorities.

City Growth Must Be Met

At this time the proper co-ordination of the terminal facilities is a most important feature in connection with studies of street layouts and the solution of the traffic problem. The city is growing very rapidly in population which means a great expansion in its industrial, wholesale. warehouse and business activity. During this period of rapid growth into the metropolitan class it is well to plan with reasonably adequate provisions for the future. This means that the facilities of interchange of freight from the railroads to the trucks and ships is very essential. If, therefore, it develops that a belt line is the proper solution of the railway transportation for the city, or a properly co-ordinated and administered system of unification of the terminal facilities as they now exist, with certain minor changes and additions are essential to the development and growth of the city and the port, then the more speedily the plans are outlined and

all new development is made to fit into a coordinated plan, the more economical it will be for the taxpayer, the general public, the merchants, railroads and all concerned.

PRESENT FACILITIES

Northern Pacific Railroad.

Oregon Electric Railroad.

The City of Portland at the present time is served by the following railroads:

United Railways Company.
Spokane, Portland & Seattle Railroad.
Oregon-Washington R.R. & Navigation Lines.
Southern Pacific Railroad.
Northern Pacific Terminal Company.
Portland Railway, Light & Power Company.

All of these railway companies operate trains carrying freight as well as passengers, with the exception of the terminal company, whose activities are centered in the terminal area on the west side of the Willamette River. All of the passenger service entering the city by steam

trains is now consolidated and operated from the Union Depot under joint operating agreements. which were effected in 1922 at the time a large number of streets were vacated in the terminal area. The original Northern Pacific Terminal Company has been operating under an agreement between the Northern Pacific Railway Company, the Oregon-Washington Railroad & Navigation Company and the Southern Pacific Company, handling freight as well as passenger service. The agreements under which they are operating permit the entrance of the electric passenger trains of the Southern Pacific Company into the Union Depot, but the electrically operated passenger, as well as freight movements, of the Oregon Electric Railway, United Railways Company and the Portland Railway, Light & Power Company, operate their freight and passenger depots independently. The agreement under which the three original companies constructed the Union Depot and operate their freight interchange operations will expire in 1932, so that it is very important that some

expiration of the present agreement.

It is believed that, aside from the electrically operated trains of the interurban lines, the operation and management of the terminal facilities for passenger trains presents no intricate or insurmountable difficulties and that proper arrangements may be made where adequate passenger facilities will be provided and operated under some joint management if the right freight terminal situation and its operation and management are provided. One of the

solution of the terminal situation providing for

the interchange of freight as well as passenger

service should be formulated as soon as practical in order that it may be made effective before the

conditions under which the streets in the terminal area were vacated, agreed to by all of the railroad companies operating steam passenger trains, was to furnish proper passenger depot facilities either at the present site or in some new location.

It is confidently expected, therefore, in view of the recent development of break-up yards and terminal facilities near Guilds Lake, that the unified passenger terminal facilities will be provided as needed and that no serious complaints will result relative to that feature should the interchange of freight facilities be improved or solved either by a belt line system or a unification of present facilities. This report, therefore, will deal primarily with the conditions as they exist and with such proposed extensions, betterments and recommendations as will affect the freight service.

Shipping District Extended

The industrial, manufacturing, warehouse and shipping district in the city is largely concentrated along both banks of the Willamette River, containing approximately 29.00 miles of water front of which 6.75 miles have already been developed, extending from Municipal Terminal No. 4 on the east side and the West Oregon Lumber Company on the west side to practically the southern limits of the city. There is transmitted herewith one of the industrial maps of the city showing the location of the port facilities and principal industries, with rail connections, prepared by the Commission of Public Docks, marked Exhibit No. 1. A study of this map shows that the railroad lines are constructed on both sides of the river for its entire length within the limits above named with numerous sidings, spur tracks, yards, terminals and connections with port and depot facilities.

It may be stated in general that the freight movements in and out of the city may be concentrated at three points: 1st, the Southern Pacific Company from the south, with their break-up yards, shops and terminals at their location in Brooklyn; 2d, the Oregon-Washington Railroad & Navigation Company from the east, with their shops, yards and terminals east of the river in Albina; 3d, and the Spokane, Portland & Seattle Railway Company, Great Northern Railway Company and Northern Pacific Company from the north, east and west, with their break-up yards, sheds and facilities on the west side north of the present terminal. The Oregon-Washington Railroad & Navigation Company have two entrances into the cityone through Sullivan's Gulch along which industries and warehouses have already sprung

up, and the other along the northern boundary of the city along the Columbia Slough Road and through the peninsula by means of a tunnel to the east side of the Willamette River to Albina. The Spokane, Portland & Seattle Railway Company, Great Northern Railroad Company and Northern Pacific Company enter the city by way of the railroad bridge over the Columbia River from Vancouver, Washington, across the peninsula district by open cut and across the Willamette River by bridge to the west side where they are joined by the line from Astoria and the west and enter the Guilds Lake district and west side terminals from the north. From such investigations as have been made there does not seem to be any adequate provision made by any of the railroads for the make-up and break-up of freight trains and interchange with the other lines without considerable movement through the congested areas. It would appear, therefore, that it would be advisable if arrangements could be made for some additional facilities to those already existing for the makeup and break-up of trains into the peninsula district between Columbia Slough and Oregon Slough, which could be utilized by the Northern Pacific, Great Northern, Spokane, Portland & Seattle and Oregon-Washington Railroad & Navigation Companies. If this could be accomplished considerable movement of long trains through the congested districts could be obviated.

The installation of break-up yards and terminals which is in progress at this time in the Guilds Lake district will do much toward the relief of the congested switching in the terminal and in the center of the city, but due to the necessity of bringing all trains destined to the east side through the peninsula tunnel by way of the Oregon-Washington Railroad & Navigation Company, or through the west side district by way of the Northern Pacific, Great Northern or Spokane, Portland & Seattle Railway, could be greatly relieved and expedited if the major portion of this break-up and make-up of trains could be accomplished at some yard in the peninsula district and freight moved in the most direct line to the districts to which they may be consigned. At the present time the various interchange of cars from one railroad to another, and from one portion of the city to another can only be accomplished by a system of zone freight charges, and in many cases numerous delays due to the handling by the various railroad companies involved.

ZONES FOR INTERCHANGE OF FREIGHT AND CHARGES

As a matter of convenience and in order to fix charges while the railroads were under

Government control the city was divided into seven zones which are still maintained. Briefly these zones, which are shown on Exhibit No. 1, may be described as follows:

 All tracks west of the Willamette River between Jefferson Street on the south and Nicolai

Street on the north.

 All tracks except P. R. L. & P. Co. on the east side of the Willamette River west of East 16th Street and between East Clay Street on the south and Russell Street on the north.

 All tracks on the west side of the Willamette River south of Jefferson Street, to and includ-

ing Nebraska Street

 All tracks except P. R. L. & P. Co. on the east side of the Willamette River south of East Clay Street, to and including Sherrett Street.

 All tracks on the west side of the Willamette River north of Nicolai Street to the northern

boundary of Linnton.

b. All tracks on the east side of the Willamette River north of Russell Street, west of line drawn from the intersection of Russell Street and Williams Avenue, due north to city boundary, thence northwesterly to point of intersection of North Portland Harbor line and tracks of the Portland Railway, Light & Power Company.

 All tracks of the S. P. & S. Rv. and O.-W. R. & N. Co. east of East 16th Street to East

87th Street.

As a basis for fixing the charges for transferring freight cars from one zone to another a system of interterminal and intratermina switching has been fixed. These charges, as may be seen from the table below, vary from \$8.55 to \$14.00 per car.

While in some cases these rates appear to be high and exorbitant, it soon develops to anyone making an impartial investigation as to the movements that are necessary that the charge made under the schedule is a losing proposition to the carriers and is conducive to delays, and additional expense to the shipper. For instance, one statement made by an authoritative source gives the actual cost of \$12.00 for every car that is moved across the Railroad Bridge at Glisan Street. Furthermore, it develops that a large number of industries that ship by water, either local by river, or coastwise or trans-ocean, that the only charge received by the railroads in many cases is the switching charge of from \$8.55 to \$14.00, whereas the actual expense of assembling, distributing and segregating the cars often amounts to twice the charges that are collected.

Zone Charges Shown

The following charges per car between zones are now in force as far as interterminal and intraterminal switching is concerned:

Following charges per car between zones described:

Zones	1	2	3	4	5	6	7
1	\$8.55						
2	11.50	\$8.55					
3	11.50	14.00					
4	14.00	11.50	17.00	\$8.55			
5	11.50	14.00	14.00	17.00	\$8.55		
6	14.00	11.50	17.00	14.00	11.50	\$8.55	
7	14.00	11.50	17.00	14.00	14.00	14.00	\$8.55

The handling of freight cars into large terminal cities is becoming one of the large problems of the railroads, shippers and the general public. Some cities have established what are called "Belt Lines" for the purpose of handling this freight, making the transfers, and interchange, to and from the various railroad companies entering or operating within the city. We have learned that belt lines are successfully operated to a greater or less degree in various parts of the United States, such as New Orleans, Chicago, San Francisco, Norfolk, Va., and to a small extent Tacoma, Wash. It is interesting to note in Berkley and Norfolk, Va., as listed in Volume 44, Interstate Commerce Commission Decision No. 4611, rehearing, on Pages 459-460, that eight railroads entered into a contract to construct a belt line from Pinners Point, Va. to a connection with the Norfolk & Western Railway in Berkley, Va., for the mutual benefits of each in the interchange of business, each of the contracting companies subscribing for oneeighth of the capital stock, and each had one representative on the board of directors. belt line company, owned by several railroads, operated through a holding company, and a flat charge of \$1.50 was made in their respective tariffs for deliveries to industries located thereon. This belt line company has been in operation since 1898. A copy of Pages 459-460, Paragraph 3, of this decision is attached as Exhibit No. 5.

The Northern Pacific Terminal Company at this time supplies the local freight sheds and team tracks on the west side of the river from the Northern Pacific Railway, Oregon-Washington Railroad & Navigation Company and the Southern Pacific Company. It has been determined that the cost per ton for local lessthan-carload freight handled through the freighthouse costs on an average is about \$1.65 per ton, which can be roughly distributed to \$1.00 for trucking, 45c for clerical and 20c for switch-These figures are based on the business that the Terminal Company was doing in March 1923 when they received an average of 70 cars per day, forwarded 105, and transferred 13, or a total of 188 cars per day, or reduced to tons amounted to 300 tons received, 500 tons forwarded, and 150 tons transferred, or a total of 950 tons. This cost has been pointed out by Mr. B. E. Palmer, Superintendent of the Terminal Company, as equivalent to a charge for a haul of 150 miles.

Unification Has Advantages

The importance of the interchange of freight, and the charges relative thereto, in terminal cities to the railroads can be ascertained from the recent hearing in April 1924 before the Interstate Commerce Commission at Scattle, where it developed from the testimony and data submitted that the actual cost to the carriers varied in cases from \$20.00 to \$22.00 per car, with great loss to the railroad companies affected.

The advantages of unification of all the terminals as far as it affects freight, and especially less-than-carload lots, is an important one to the railroad companies as far as economy is concerned. With this in mind the Terminal Company has under preparation at this time plans for the erection of a new multiple-story freighthouse for local freight, just west of the Broadway Bridge and north of Hoyt Street, which could very economically and promptly distribute all the local freight on the west side of the river from all the operating railroad companies. The joint use of a local freight-house such as is now contemplated would also be advantageous for joint consignment of less-than-carload freight by several railroads to the same points, and eliminate much clerical and overhead expense. This feature becomes much more effective and satisfactory under some system of unification of freight terminals. This plan would work in well with either a belt line system or a proper unification of the terminals under joint owner-

CONTEMPLATED EXTENSIONS AND IMPROVE-MENTS

It has been suggested on several occasions that the solution of the terminal yard problem for freight movements might be effected by building a double track railroad from the Southern Pacific main line at Clackamas Station to the eastern portion of the city near Montavilla at the head of Sullivan's Gulch, which might eliminate the grade separation project of the Southern Pacific on the east side. The advocates of this plan contend that the existing line of the Southern Pacific would be left undisturbed for the accommodation of industries only, and that the arrangement that would be available would be similar to that in Chicago with the inner and outer belt line systems established. The matter of an outer belt line for the City of Portland appears to the committee to be impracticable not only from the standpoint of topography and the location of industries, but of grades which would be excessive,

and also on account of the numerous grade separations that would have to be effected for safe and economical operation. Furthermore, any belt line that could be devised for this city should take into consideration the adequate service of the industrial areas which lie for the most part tributary to the Willamette River. Existing facilities appear to be ample for the establishment of what would be equivalent to a belt line system, with some slight additions and modifications. Some extensive improvements are necessary in the judgment of your committee.

The bridge approaches on the east side should be elevated so as to separate the grades of the east and west vehicular rapid traffic from the railroad tracks, which would parallel the river. At the present time the Southern Pacific Company is contemplating the enlargement of the freight yards in the vicinity of Brooklyn, and the elevation of their main line tracks for passenger trains from the city limits to the Railroad Bridge near Clisan Street. This track elevation is a large project affecting the elevation of the approaches to our trans-Willamette River bridge, and will cost several million dollars. This project is receiving the attention of the city authorities at this time and should be given very thorough consideration.

Connecting Link Is Needed

On the west side of the river there should be established a connecting link from Jefferson Street to Glisan Street in that area between Front Street and the Harbor Line. The Waterfront Development Project would adequately supply this link for a belt line and facilitate freight movements from the southern portion of the city to the terminal area in the north. Furthermore, the bridge approaches could be constructed high enough on the west side to separate the grades, permitting the east and west rapid traffic over the bridges to pass over the railroad tracks. Furthermore, the tracks of the interurban lines, which at the present time pass through the congested business district on the west side, could be removed to this area between Front Street and the Harbor Line and interurban terminals established there which would be more convenient and accessible to the business district than transferring all of the interurban electric passenger business to the terminals in the northern portion of the city. The construction of this Waterfront Development Project and the connection of railroad service along the waterfront to Jefferson Street would connect the United Railways and Southern Pacific which are now serving industries along the waterfront from Jefferson Street almost to the city limits.

Included with the Waterfront Development Project, the widening of Front Street is contemplated, forming a link in the traffic artery along the waterfront for heavy hauling. The consolidation of the terminals and the erection of a consolidated freight-house for local freight would eliminate the necessity of freight moving across Front Street north of Glisan Street to serve the Oregon-Washington Railroad & Navigation Company's freighthouse located at that point, and leave north Front Street from Glisan to Nicolai Street for the movement of freight in conjunction with deep water shipping and such inclustries as are located there at the present time.

When the development that is now under way, viz., the dredging of the channel to the west side of Swan Island, and when the fill is made in the Guilds Lake district, providing large areas for industrial and commercial purposes, it is held advisable that this area west of the proposed break-up yards and railroad terminals be platted with modern street layout alternately for railroad service and vehicular traffic.

In this same connection and as an integral part of the project it would seem proper if possible to make some better arrangement for the trackage of the United Railways now located on Nicolai Street. This street is on the 1924 program for improvement and the work will quite probably be completed this year, and when completed it is practically certain that a large portion of the vehicular traffic that now turns from Nicolai Street to the right past the old Forestry Building and thence to the main part of the city would continue on eastwardly along Nicolai Street. This probable increase in vehicular traffic makes desirable, if possible, the removal of the United Railways tracks from Nicolai Street.

BELT LINE UNDER MUNICIPAL CONTROL

US.

Unification of Terminals

In the Proceedings of the Twelfth Annual Conference on City Planning, held in Cincinnati April 1920, appears a splendid article on the "Unification of Railroad Lines and Service in Cities." This report was prepared by a number of prominent engineers and city planning consultants. Inasmuch as this has an important bearing on the subject matter of this report, it has been appended hereto as Exhibit No. 3.

Reference is particularly made to paragraph five of this report in which it states that "Municipal ownership of intra-city lines is probably

not necessary provided there is unified control. Extension of existing terminal companies to include all lines within city limits is probably the most economical, quickest and easiest method of accomplishing unification in most cities." And again, paragraph nine, "Adequate train classification and freight yards must be provided in every city as part of its future plan as an adjunct of industrial development. vards should have long areas uninterrupted by grade crossings, preferably located on one side of, or on the outskirts of the city away from the probable extension of business and main traffic lines." And again, paragraph ten, "In cities which have water-borne carriers, whether coast or inland ports, railroad and water terminals should be considered as a single rather than a separate problem; co-ordination of facilities for both methods of transportation should be insisted upon in the interests of the public and of the carriers themselves."

Congestion Has Become Problem

The subject of the proper development of ports and railway terminal facilities in conjunction with approaches is becoming one of national importance. All the large cities of the country are involved in great congestion and are reaching forward for proper solution. The great trans-continental railway systems, including the network of roads reaching from one state to another, and the open sea, combine to create a great transportation system embracing the entire world. The City of Portland, therefore, being classed as an important industrial, commercial and railroad terminal city, as well as an important shipping port must be provided with proper facilities. The idea has been expressed on several occasions that moving trucks, trains and ships are valuable assets, but cargoes lying in sheds, on the docks, and in idle carriers, are decidedly liabilities. It becomes necessary, therefore, to have the transportation facilities so arranged that speed may be the essential factor in the arrival and the dispatch of a cargo, whether it is one from the railroads to the industry, from the railroads to the docks and ships, or whether it is one from any of the agencies that involve transportation of freight and passengers.

There appears to be a difference of opinion among the authorities as to whether or not unification of the transportation facilities, especially the railroads, will solve many of the problems incident to interchange of freight in the large terminal cities, or whether a belt line or some system of unification under municipal control is the proper solution of the problem. In some cities unification of the transportation facilities in the terminal under municipal con-

trol no doubt would seem desirable and preferable on account of municipal control over docks and certain rail facilities, and the approaches to the docks such as traffic arteries. Practically all authorities, however, agree that unification prevents duplication of equipment and operating costs, because several railroads doing the same thing at the same time work at a disadvantage and create a condition where it is almost impossible to fix responsibility for poor service, eliminate needless controversies and disagreements which arise relative to claims for loss of time, and damage.

Many of our large ports and terminal cities have made studies of this subject and are willing to pay enormous sums to eliminate congestion in traffic, and have learned that a seaport with smoothly operating terminal facilities by rail, as well as traffic arteries, enjoys great advantages over other ports and is assured of continued growth and prosperity.

Many Provisions Needed In Unification

In Portland we have the essential elements for industries, factories, wholesale distribution, and shipping. The development of our import trade especially for raw materials is essential in order to obtain return cargo for our ships and increase manufacturing for distribution to the trade territory. In order to properly and adequately handle the large export of lumber, wheat, wool, and the products incident thereto; to distribute as a wholesale point to the immense hinterland and trade territory; and to properly take care of all the immense freight and passenger traffic incident to a large terminal city. it is very essential that the following provisions be supplied in the terminal areas and under unified control:

- Sufficient main line tracks with grade separations.
- Classification and break-up yards conveniently located.
- Storage yards to accommodate freight cars destined to and originating from industrial plants and docks.
- Convenient and sufficient lengths of sidings.
 Engine terminals and repair facilities, including shops.
- 6. Freight and storage warehouses with sufficient capacity and with interchange facilities.
- Team tracks arranged for loading from or into trucks and cars.
- Proper facilities for the interchange of freight and combined shipments to other points, in less-than-carload lots.
- 9. The proper handling of the passenger traffic.

 Sometime ago the committee of fifteen, appointed by the Mayor to investigate and report on the Swan Island Project, which included the widening of the channel of the river and providing industrial sites, investigated also the matter of the railroad and terminal facilities of

this city. That portion of their report dealing with a belt line is transmitted herewith as Exhibit No. 4, and may prove of interest at this time. The committee of fifteen concluded in favor of a belt line to be handled by a central agency, preferably municipal in character, although their report admitted that it might be productive in certain respects of too great confusion for successful municipal administration. They recommend that the line should be financed by bond issue and come under the direct control of the port authorities as an essential element of port activities, and recommend further, that the charge for switching service should be determined literally and be uniform throughout the system, thus eliminating the zone switching charges which are now in effect.

In connection with the development of the present terminals, the separation of grades by providing viaducts over the railroads near the river is contemplated. The railroad companies have agreed to construct viaducts over the main portion of the railway terminals in the northern portion of the city between Glisan and Nicolai Streets. Thus it will be seen that when the contemplated Waterfront Development Project shall have been realized, completing the link of railroad transportation along the west side of the river from a point near the southern edge of the city limits to the northerly limit of the city; with grades separated from the bridge approaches over the river; viaducts over the railroad terminals from the wholesale and business district to Front Street; and with the facilities already provided on the east side of the river, there should be no necessity for the construction of other lines under municipal con-We have the facilities available with tracks already constructed; with industrial areas located adjacent to these railroad lines and the river; and with the docks conveniently located to trunk arteries and railroads. In our opinion all that would be required would be the proper unification of the railroad facilities under one control to adequately solve the interchange of freight.

Conclusion

Your committee therefore, after giving this subject considerable thought and study, has come to the conclusion that the unification of the terminals in Portland under one control and management is very essential and should be accomplished in the very near future. This would require only a limited amount of new capital investment. This could be accomplished with a minimum amount of new construction and would not involve the municipality in additional general expense. For a long time the Northern Pacific Terminal Company has been

successfully operating as a terminal company, the stock being owned by the Northern Pacific, Oregon-Washington Railroad & Navigation Company and the Southern Pacific railroad companies. It seems, therefore, quite feasible that a terminal company could be organized, with all of the railroads operating in the City of Portland as joint owners. The present facilities could be acquired either by purchase or lease arrangements from the railroad companies now owning the various facilities, to the end that the terminal company could operate with all the unified facilities.

The matter of zone charges, or of a uniform basic charge for switching within the city limits, is a subject that could be given further thought and consideration subsequent to the unification of all the facilities. The flat charge for the interchange of freight within the city limits has certain advantages to the shipper, and if properly adjusted would work no hardship on the railroad companies or the terminal company.

Your committee therefore recommends against a belt line system such as is ordinarily suggested, with an inner and outer line for the interchange of freight, under municipal control, but recommends that the present facilities for the interchange of freight be unified and such new extensions and additions as are absolutely necessary be provided, all under one agency owned or controlled by the railroad companies themselves and operated and maintained as a terminal company, with such adjustments of the charges as may be subsequently determined upon either under a modified zone system or on a flat charge per car within the city limits.

Respectfully submitted,
O. Laurgaard, Chairman
Ranald M. Hopkins
Leonard A. Andrus
Sub-Committee.

Enclosed with the original copy of the report the committee submitted the following exhibits: Exhibit I. Map showing principle switching zones on lines of railroads.

Exhibit II. Description of switching zones on lines of railroads.

Exhibit III. Discussion of "Unification of Railroad Lines and Service in Cities," from Proceedings of the Twelfth National Conference on City Planning.

Exhibit IV. Discussion of Belt Line problem from report of Committee of Fifteen.

Exhibit V. Interstate Commerce Commission Decisions.

Approved by the Board of Governors, June 2nd, 1924.