

Portland State University

PDXScholar

City Club of Portland

Oregon Sustainable Community Digital Library

10-15-1926

City Club of Portland Bulletin vol. 07, no. 03 (1926-10-15), supplement

City Club of Portland (Portland, Or.)

Follow this and additional works at: https://pdxscholar.library.pdx.edu/oscdl_cityclub



Part of the [Urban Studies Commons](#), and the [Urban Studies and Planning Commons](#)

Let us know how access to this document benefits you.

Recommended Citation

City Club of Portland (Portland, Or.), "City Club of Portland Bulletin vol. 07, no. 03 (1926-10-15), supplement" (1926). *City Club of Portland*. 77.

https://pdxscholar.library.pdx.edu/oscdl_cityclub/77

This Bulletin is brought to you for free and open access. It has been accepted for inclusion in City Club of Portland by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.

SUPPLEMENT TO

"Harmony in
Diversity"

PORTLAND CITY CLUB
BULLETIN

"Active
Citizenship"

VOLUME VII

PORTLAND, OREGON, OCTOBER 15, 1926

NUMBER 3

PORTLAND SHIPPING

A Report by
The Port Development and Public Utilities Section
of the
CITY CLUB OF PORTLAND

TABLE of CONTENTS

	PAGE
I. SUMMARY AND RECOMMENDATIONS.....	2
II. GENERAL DESCRIPTION OF PORTLAND.....	4
III. PORTLAND HARBOR.....	4
IV. PORT AND HARBOR FACILITIES.....	5
V. OWNERSHIP OF WATER FRONT.....	6
VI. STORAGE WAREHOUSES.....	6
VII. SHIPBUILDING AND REPAIR PLANTS.....	7
VIII. FACILITIES FOR RAIL AND WATER INTERCHANGE.....	7
IX. RAILROAD FACILITIES.....	7
X. WATER LINES.....	7
XI. RAIL FREIGHT RATES.....	8
XII. IMPORT AND EXPORT RATES.....	8
XIII. COMMERCE, TERRITORY TRIBUTARY, RATE RELATIONSHIP, ETC.....	9

Appendices

A. TRIPS AND DRAFTS OF VESSELS.....	10
B. OCEAN-GOING VESSEL CLASSIFICATION.....	10
C. SHIP SERVICE AT PORTLAND, APRIL, 1926.....	11

PORTLAND SHIPPING

I. SUMMARY and RECOMMENDATIONS

Portland is better situated than any other Pacific port for assembling of domestic products for export and for distribution inland of foreign manufactures, also for import of raw materials for their manufacture and for the distribution of the finished product in the United States by rail or by ship and abroad by ship. This great advantage comes about because of the port's position. In the first place being at the head of ship navigation on a waterway 113 miles from the Pacific Ocean qualifies it to become one of the great ports of the world, in accordance with the dictum of Virgil G. Bogue in a report for the port of Seattle made in 1894. Bogue said that the great ports were those which had the largest percentage of land within a radius of 150 miles, for this fact made them centers for economical assembling and distribution of cargo. A second advantage is revealed by reports of the weather bureau, which show that Portland has only half as many days of fog as have Puget Sound and San Francisco Bay. By being in fresh water while steaming up and down the Columbia and while lying at the dock, ships are much aided in freeing their hulls of marine growth. These points have weight with owners and masters, for the inland position aids them in obtaining

cargo, comparative freedom from fog lessens risk in navigation, and fresh water lessens cost of cleaning hulls. These advantages, except that regarding fog, are greater in proportion as the distance from the mouth of the Columbia is greater, therefore they operate in favor of Portland as against Longview and other ports on the Columbia below Portland.

Docks and railroad facilities at Portland are ample, as shown in the main body of this report. There is much available frontage for new docks, the harbor is being deepened to float ships of the deepest draft and widened at Swan Island to give room for ships to turn or anchor.

The character of ships, however, mostly freighters of low speed, and the present limitation of draft to thirty feet combine to make this principally a port for export of bulk commodities having relatively low value. Imports, being mostly of high value, are usually carried on fast liners to other ports.

Effort should be directed to improvement of the channel to the point where it can be navigated more safely at any stage of tide in any season of year by fast passenger vessels of the deepest draft and the greatest length and beam, and to the establishment of lines of that type, first to the Orient, then on other trade routes as

commerce develops. To this end, no effort should be spared for adoption by Congress of the project for a channel to the sea 35 feet deep and at least 500 feet wide.

Determined opposition should be offered to the construction of any bridge in or below Portland not high enough and of wide enough span to clear the largest ship that might enter the river at any stage of water at any time during the life of the bridge. In giving or withholding consent to the construction of a bridge the port should measure development in the future by that in the past. After comparing the present large fleet of ships with the low ebb to which our shipping declined during the war, we should use that as a gauge by which to measure the great progress to be expected during the hundred years that a bridge may stand. We should not permit a bridge that might prove a fence shutting out a ship of any size.

Attention should be directed immediately to increase of imports on the shipping lines we have, thus to correct the situation which makes this practically a one-way port. This requires establishment of industries that would consume a large tonnage of raw materials, such as would be carried on the freight vessels now in operation. From the shipping view-point alone this policy would go far to put freight lines on a paying basis, which would incline shipping companies to establish a fast passenger-cargo or passenger line here.

While striving thus to strengthen existing lines, and also to secure improvement of the channel and to prevent its obstruction by bridges, the port should persevere in the labor to secure establishment of a home-owned line of American passenger-cargo ships to the Orient, so well equipped with capital and ability that it might from time to time extend its operations to other trade routes.

The Shipping Board having sold its trans-Pacific passenger-cargo line hitherto operated from Seattle to a San Francisco company with Seattle as its home port and with an option of calling at Portland for passengers only, however, there is no prospect of an American passenger line from Portland during the five years for which the contract with the Dollar company runs. The situation thus created by the Board, in spite of the efforts of a Portland and Seattle company to buy the passenger line at a higher price than the Dollars pay, gives Portland a moral claim to control of both freight lines now operated for the board, the Oregon Oriental line from Portland and the American Oriental line from Seattle, especially as the operating company at Seattle is controlled by the Dollars. In

justice to Portland and to the Columbia Pacific Shipping Company, its operating agent at this port, the agency for the Seattle freight line should be transferred to that company, which should be broadened to include Seattle capital.

Discrimination against the Oregon Oriental line in making rates at which it may obtain cargo is alleged by Capt. J. S. Bockwalter in a report from Kobe, Japan, dated March 18, 1926, to the Shipping Board, of which he is a representative on the Pacific coast. The only other member of the Shipping Board Conference at Shanghai is the Oregon Oriental's competitor, the American Oriental line, operating fast passenger ships from Seattle, since sold to the Dollar company, and this line refused to consent to the Oregon Oriental's meeting competition of other freight lines at North China ports. Appeal lies to the board's agent at Manila, who has often upheld the Oregon Oriental, but the delay involved caused loss of the traffic in question. Capt. Bockwalter reported similar conditions at Japanese ports, though the additional cargo is not secured by the Board's passenger lines but by foreign freight lines. The Oregon Oriental is "compelled to quote mail steamer freight rates" for its slower freight ships. At Dairen open rates prevail, and the Portland line "is receiving a full and fair share of cargo." In the South China service from Hongkong, the Oregon Oriental's competitors, the Blue Funnel and the American Oriental, "accept Portland cargo at direct Portland freight rates, transshipping the Portland cargo at Seattle and absorbing the cost of transshipment at Seattle and the rail freight cost from Seattle to Portland." This tends to nullify the rate differential between Portland and the Columbia basin. The other lines refuse to add a dollar to their Portland rate for this rail haul and transshipment charges. The Shipping Board has also liberally advertised its Seattle passenger service, but has denied such aid to the Portland service.

The Board should cease these various forms of discrimination against the Portland line, which are the sole cause of the losses which the board has suffered on its Portland operation and to which its members frequently advert to the injury of Portland's reputation as a port. No reasonable doubt exists that, if this discrimination should cease, if the two lines should be combined as proposed and, if the operating company were set free to compete for traffic, it would soon be on a paying basis, and that the Columbia Pacific company would buy both lines as a fair price.

Having been in effect deprived of passenger service under the American flag, by the contract which does not require the Dollar Company to

PORTLAND CITY CLUB BULLETIN

Published Weekly By

THE CITY CLUB

OF PORTLAND

Office of the Club 607 Oregon Building
Telephone Broadway 8079

Subscription Price \$1.00 per year

Entered as Second Class Matter, October 29, 1920, at the
postoffice at Portland, Oregon, under act of March 3, 1879

City Club dues are \$1.00 per month, payable semi-
annually on May 1st, and November 1st. There is no
initiation fee.

operate any of its ships to this port, but permits it to send them here if competition should arise. Portland is fully justified in making efforts to secure passenger-cargo service from some foreign line to compete with the Dollars and to bring to this port the traffic which would naturally come here if such service were given.

American-owned shipping lines from this port could be secured if Congress would enact a new shipping law granting American ship-owners an amount of government aid approximately equal to the amount by which their cost of operation, including overhead charges, exceeds that of like ships of the principal competing nation. This aid, if granted, would be given to all ship-owners, whether of liners or tramp ships, ready to contract to comply with the conditions, and preference should be given to lines owned in ports whence they operate. Such aid would expedite sale of the government's fleet to private owners, would cause retirement of the government from operation and would make ships a safe investment for those having the ability and judgment to operate them. Under these conditions private enterprise could establish fast passenger-cargo lines.

In order to make such a law possible, Portland should join other ports having like opportunities and like deficiencies in shipping service in opening the minds of the people in the back country to the benefits they would derive from an American merchant marine.

Portland should cultivate in the minds of the people throughout the Columbia basin the belief that the Columbia river and its main tributaries constitute a transportation route to the sea in which all have a common interest and which has no rival on the Pacific coast; that it should be developed and used as a whole by means of

railroads from the interior to Portland—ultimately of barge lines on a canalized river as described in detail in a former report of the City Club—and of ships from this port down the river and across the ocean to all foreign markets for products of the whole area west of the Rocky mountains and beyond.

II.

GENERAL DESCRIPTION of PORTLAND

Portland is one of the principal ports on the Pacific coast. It serves what is known as the Columbia River basin, comprising parts of Oregon, Washington, Idaho, Montana and Wyoming, with a total area of about 265,000 square miles. It is a region devoted mainly to agriculture, but is rich in natural resources, which have as yet been undeveloped except to a slight degree.

Portland is located on the Willamette river, with its business center thirteen miles from the confluence of the Willamette and Columbia rivers. The city is rapidly expanding, and has nearly crossed the peninsula between the two rivers. It is connected with Vancouver, Washington by a highway bridge, so that the port practically includes all of the territory at the confluence of the two rivers. The main part of the city is 113 miles from the ocean. It is distant 415 statute miles by water and 183 miles by rail from Seattle, Washington, and 749 miles by water and 772 miles by rail from San Francisco, California. Its distance from Chicago is 2253 miles.

The City of Portland covers about 66 square miles, of which five square miles are water. It includes Saint Johns, Albina, East Portland and Sellwood on the eastern side of the Willamette river, and Portland proper and the Linnton district on the western side.

The population of Portland was 258,288 in 1920 and is estimated to be about 350,000 in 1926. In population it is the fourth largest city on the Pacific coast.

III. PORTLAND HARBOR

The harbor of Portland is connected with the Pacific ocean by the Columbia and Willamette rivers. The inner harbor of the port is considered to be the Willamette river, from its confluence with the Columbia to the southern boundary of the city, about sixteen miles. The improved channel ends at the upper end of Ross Island, about two and one-half miles from the souther boundary, and has a width of 300 feet and a depth at low tide of thirty feet. Swan Island, nine miles above the Columbia, divides the Willamette into two channels, of which the east channel is the main channel, but the west

channel is now under improvement and will very soon be the main channel, as it is straighter and shorter than the east channel. It has been dredged to a depth of thirty-five feet for a width of 1550 feet. The channel is to be widened to 2000 feet as soon as arrangements are completed with the owners to fill Mock's bottom on the east side of the river with the additional material to be excavated. It is intended then to construct a mole from Swan Island to the east bank across the upper end of the east channel, thus converting that channel into a still water basin and giving the Port of Portland 100 acres of additional water frontage.

The channel across the ocean bar is protected by two jetties two miles apart and has a depth of forty-seven feet in a channel 2000 feet wide at low water, forty-six feet for a width of 2700 feet and forty-five feet for a width of 4500 feet.

This permits the deepest draft vessels afloat to enter the river. While the depth in the river channel is only 30 feet at low water the Columbia, is only for a few days annually at a zero stage, so it may be said that there is seldom less than 34 feet in the river channel at low water, and making allowance for the tide, a draft of 32 feet can be carried even at low stages of river.

The present condition of the channels is due to the improvements by the United States and the Port of Portland. The United States improves and maintains the channel in the Columbia river, and the Port of Portland in addition to assisting in this work is solely responsible for obtaining and maintaining the project channel in the Willamette river to the head of Ross Island, where the United States takes up the Willamette river improvement.

Prior to improvement the channel across the Columbia bar varied from 19 to 21 feet and was constantly shifting. Although improvement work began as early as 1880, the full benefit of the improvement at the ocean entrance was not reached until 1918 when the depth in the ocean bar increased to about 40 feet in a channel 6500 feet wide. This was the real beginning of Portland's advantage as a seaport.

The channel in the Columbia and Willamette rivers from Portland to the sea was obstructed by sand bars with depths from ten to 15 feet at low water. The river has been under improvement by the United States and the Port of Portland and much work has been done in overcoming these difficulties by construction of dykes and revetments. The project for permanent works for the improvement of the Columbia is about 90 per cent completed but in the channels the full project depths and widths have been secured by dredging.

The mouth of the Columbia river is 610 miles north of San Francisco Bay and 160 miles south of the Straits of Juan de Fuca. This places Portland about 600 miles farther from Atlantic ocean ports than San Francisco and about 300 miles nearer than Seattle. The distances to the Orient are about the same.

IV. PORT and HARBOR FACILITIES

There are about 85 wharves of importance in the harbor. These are classified as to use as follows:

General Cargo.....	16
Grain and Flour.....	11
Lumber.....	16
Oil Bunkering.....	4
Coal Bunkering.....	1
General Miscellaneous.....	37
Total.....	85

The wharves most used by ocean going steamers for general cargo except flour and grain, are municipal terminal No. 4, at St. Johns, municipal terminal No. 3, Albina Dock, Irving Dock, municipal terminal No. 2 and Supple's dock on the east side of the river, and Couch Street, Ainsworth (now McCormacks) North Bank docks, and municipal terminal No. 1 on the west side of the river.

Several of the wharves are used principally for handling grain and flour but some general cargo, both foreign and domestic, is handled. The municipal terminals operated by the Commission of Public Docks are well equipped to handle deep water commerce. They were constructed during the last ten years.

Terminal No. 4 is the first terminal in the lower harbor, and is located on the east side of the Willamette below St. Johns. This terminal is used mostly for foreign commerce, but there is also an interchange between foreign and inter-coastal vessels at this terminal. It is connected with the tracks of the Union Pacific system and by agreement with all other railroads entering Portland. All switching within the terminal area is handled by the Dock Commission.

Terminal No. 3 is located in St. Johns, at the foot of Philadelphia Street. It has a wharf with 560 feet water frontage and a lower deck about 100 feet in length for river steamers. It is connected with the tracks of the Union Pacific system and with other railroads under agreement with that system.

Terminal No. 2 is located on the east side of the river at the foot of east Washington street. It is a two level structure with 526 feet of water frontage. It is connected with the Southern Pacific system.

Terminal No. 1 has a water frontage of 1075 linear feet and is located on the west side of the

river at the foot of Sixteenth street. It is served by the tracks of the Northern Pacific system.

The Union Pacific dock has a frontage of 580 feet, located at the foot of Fremont street on the east side of the river. While the wharf is open to vessels in foreign, intercoastal and coastwise business, it is used principally for handling river traffic. The Albina dock adjoins this dock and is connected with the Southern Pacific railroad.

The Montgomery dock, a short distance above the Union Pacific dock, has a frontage of 550 feet. It is connected with the Oregon-Washington Railway and Navigation Company's tracks. It is used almost exclusively for the Luckenbach Steamship Company, for their intercoastal vessels.

Supple's dock at the foot of east Belmont street, consists of two wharves each with 128 feet of water frontage, with a slip between. It is connected with the tracks of the Portland Electric Power Company, and is used for handling general cargo and grain in domestic business.

Ainsworth dock is located on the west side of the river, at the foot of Irving street, and is owned by the Oregon-Washington Railway and Navigation Company. It is operated by that company as a terminal for the vessels of a subsidiary company, the San Francisco and Portland Steamship Company, and is not open to general public use. The wharf has a water frontage of 980 feet and is served by the Northern Pacific Railway tracks.

The North Bank wharf, on the west side of the river at the foot of Thurman street, is owned by the Spokane, Portland and Seattle Railway, which has leased it to the Admiral Line for operation of coastwise steamships.

The lumber wharves in the port are generally located at sawmills. There are, however, two wharves on the east side which are used for the receipt of rail consignments of lumber for water shipment. While probably more than one-third of the total tonnage of the grain and grain products shipped out of the Port of Portland passes over the municipal terminals and the North Bank dock, this trade is handled mostly at the wharves operated by the flour mills in the port and at wharves leased and operated by companies engaged in the grain exporting business.

The river traffic is handled at street ends and at landings on the west side of the Willamette river between the Burnside street and Hawthorne bridge. Nearly all of the wharves in the port have two docks to accommodate all classes of boats during high and low stages of the river.

In general it may be stated that the wharves

which handle ocean traffic are adequate for that business at the present time. The intercoastal trade which is now handled mostly at Municipal terminal No. 1 will probably need greater facilities as it increases.

V. OWNERSHIP of WATERFRONT

The City of Portland owns approximately 178 acres of waterfront property on both sides of the river, in addition to the street ends. This property is controlled by the Commission of Public Docks, and has been developed for water terminals as follows:

Municipal Terminal	Acres	Feet of
		Water Front
No. 1.....	11.85	1075
No. 2.....	3.64	526
No. 3.....	2.64	540
No. 4.....	160.00	2730
Total.....	178.13	4871

Water front property owned by the Port of Portland District and controlled by the Port of Portland Commission consists principally of Swan Island, which has a water frontage of 2000 feet, and of a section of the east bank of the river, where its two floating dry docks and repair ships are located. The Port of Portland provided a main channel on the west side of Swan Island filling in the lowlands on the west side of the channel with material dredged from the new channel. The Port has received in payment for the fills a tract of land from the owners having a frontage of about one mile on the channel. The remainder of the water frontage is owned by lumber companies, railroads, and private interests.

VI. STORAGE WAREHOUSES

The general commerce of the port now requires only a limited amount of storage space. Water shipments generally move quickly. Ample storage space is, however, available at terminals Nos. 1, 3 and 4, and the Southern Pacific wharf. Very little space is required for the storage of material in bulk and only a small amount of space has been provided.

Lumber requires only temporary storage on account of its quick movement. The storage of grain and flour is provided for by the grain elevators at flouring mills and at Terminal No. 4, where there is an elevator with a capacity of over a million bushels, and an unloading capacity of 120,000 bushels in eight hours from cars. Grain can be delivered to vessels at a rate of 30,000 bushels per hour. A storage warehouse for fruit and other perishables has also been provided at terminal No. 4 with cold storage capacity for 105,000 boxes of apples and adjoining it an air-cooled storage for 350,000 boxes

more. Other cold storage plants on the harbor bring the total capacity for apple storage at Portland up to 700,000 boxes.

VII. SHIPBUILDING and REPAIR PLANTS

There are two floating dry docks at Portland, both owned and operated by the Port of Portland Commission. One dock has a capacity of 10,000 tons and can accommodate vessels of 500 feet length. The second has a capacity of 15,000 tons and can accommodate vessels of 525 feet length.

There are six plants in the port where repairs of all kinds can be made to ships and their machinery. They are operated by the Albina Marine Iron Works, the Commercial Iron Works, the Helser Machine Works, Robert McIntosh, Smith & Watson Iron Works, Willamette Iron & Steel Works, who are bonded contractors. After a ship is lifted on the dry dock by the Port Commission, the owner lets the contract by competitive bidding and the contractor has the use of a complete machine shop at the dry dock, which has been installed by the Port. Repairs done by the Port Commission are limited to its own dredging fleet.

There are three shipyards at Portland. The Albina Marine Iron Works is equipped to build steel ships, the Peninsula Shipbuilding Co. to build wooden ships, the Portland Shipbuilding Co. to build river boats, barges and smaller craft.

VIII. FACILITIES FOR RAIL and WATER INTERCHANGE

All of the wharves are served by the rail lines entering Portland, so that the interchange of freight is usually direct between rail and water. The port district is divided into eight switching zones which cover the west side of the Willamette River from Willamette Slough to the head of Ross Island, and the east side from the North Portland harbor on the Columbia River opposite Vancouver, Washington, to the head of Ross Island.

Uniform rates, depending upon the commodity handled, prevail as between all shippers. The actual switching charge is in the form of published tariffs based on commodity and zone movement.

IX. RAILROAD FACILITIES

Four transcontinental railroad systems serve Portland, the Union Pacific, Southern Pacific, Northern Pacific, and Great Northern. There are also three local railroads, the Spokane, Portland and Seattle, the Oregon Electric, and the Portland Electric Power Company.

The Union Pacific system extends through eastern Oregon, eastern Washington and Idaho,

which are the main parts of Portland's immediate field of commerce, by means of the O.-W. R. & N. and Oregon Short Line tracks to connect with the main line at Granger, Wyo., whence it extends on eastward and by allied lines through the middle West to Chicago. Branches extend through the Palouse wheat belt, and into the Coeur d'Alene mining district and into northern, central and eastern Oregon. It extends to Seattle by use of the joint double track from Portland.

The Northern Pacific and Great Northern, which between them serve all of Washington and the Northwest as far east as Chicago, enter Portland over the joint track from Seattle and over the Spokane, Portland & Seattle (which they jointly own) from Spokane. The latter system continues to Astoria and the Oregon beach and has branches consisting of the United Railway into the coast range timber, the Oregon Electric up the Willamette valley to Eugene and the Oregon Trunk through central Oregon to Bend, whence it is to be extended to Klamath Falls.

The Souther Pacific runs from San Francisco through California and western Oregon to Portland and well serves that section of Oregon with many branches, also giving connection with the East by way of the Central Pacific. It has just opened a new line from Eugene to Klamath Falls, which brings the latter city much nearer to Portland than to San Francisco, and has authority from the Interstate Commerce Commission to build other branches through southeastern Oregon that will connect with the Central Pacific and will greatly reduce its mileage from all Oregon points to the East.

These railroads drain the products of the Columbia river basin on the water grades of that river and its main tributaries into Portland, therefore are feeders of the Portland shipping lines. By interchange of service, cars of any one of these roads reach any dock or industry over another's tracks.

X. WATER LINES

There are now 54 steamship lines operating out of Portland, and regular service has been established to most of the important ports of the world.

There are now 12 steamship lines on the inter-coastal service, operating through the Panama Canal, and all of the important ports on the Atlantic and Gulf of Mexico are now reached from Portland.

The lower rates by water have helped in developing the markets on the Atlantic coast for western lumber products.

Steamers equipped with refrigerating facilities are being operated through the canal to the Atlantic Coast, as well as to Europe.

Regular lines are now in operation to China, Japan, Australia, New Zealand, Hawaii, the Philippine Islands, the west coast of Mexico, Central America, and the east coast of South America. In addition there is a tramp service to the various ports of the world. Most of the service is for freight only, although some lines operate both passenger and freight service.

There is appended to this report tabulations showing: trips and drafts of vessels for 1924, classification and tonnage in and out bound for 1924; and detail showing all service available as of February, 1926. A study of these tabulations will give one a very fair idea of the present importance of Portland's shipping, as well as the possibilities for the future under a wise aggressive policy.

XI. RAIL FREIGHT RATES

Owing to the competition with the ocean carriers, the railroads for many years maintained lower rates to and from Pacific Coast ports than from intermediate points.

Before the opening of the Panama Canal the routes for intercoastal trade were by water to Central America, across the Isthmus by rail, and thence by water to the Pacific Coast ports; through the Strait of Magellan; or around Cape Horn. The rates by these routes were lower than the rail rates between the two coasts, although the traffic was small. These routes have been practically abandoned for the intercoastal trade since opening of the canal and the service through the canal has resulted in a still lower water rate between the two coasts.

These rates, in addition to being lower than the all-rail rates from coast to coast were also lower than the rates from the Central Western to the Pacific Coast states. To meet this condition, the railroads reduced their coast to coast rates but not the rates from intermediate points.

During the World War, on June 30, 1917, the Interstate Commerce Commission decided that the coastal and intermediate rates should be maintained on the same level, and coastal differentials were discontinued.

Owing to the rapid increase of the intercoastal traffic through the canal after the war, the railroads attempted to lower the coastal rates. While the Interstate Commerce Commission granted the railroads some relief from the long and short haul clause, its decision of June 30, 1917 was upheld.

The practice of blanketing the rail rates on westbound commodities over the territory east

of the Missouri river has been maintained by the railroads for many years. These rates covered not only commodities to trans-Pacific points, but also many commodities intended for domestic consumption and more or less general import rates and east bound domestic class and commodity rates. This blanketing system has been modified and is used mostly in connection with export and import rates to and from the Pacific coast terminal points and with east bound domestic commodity rates.

XII. IMPORT and EXPORT RATES

For traffic moving through the Pacific Coast ports, the import and export rates are generally uniform for portions of this country east of Montana, Idaho, Utah and Arizona. While the transcontinental rates to and from the North Pacific coast ports are similar to those applying to California ports, the territorial groups to which the rates apply are not the same. There are commodity rates for import and export on transcontinental traffic, but no class rates for import and export traffic alone. Some commodities carried to the Pacific coast for foreign trade take either a domestic commodity or class rate when not in conflict with the import and export rates, which makes different territorial groupings.

The import and export rates generally include delivery to water carriers in case of exports and to rail in case of imports received or delivered to certain steamship lines.

To secure the benefits of import rates, the point of origin of the shipment must be furnished and its movement to final destination must occur within eighteen months from date of importation, and the goods must be in the package in which they were exported from the originating country and ocean charges must be prepaid to the port of entry. Imports on less than carload rates or on quantity rates must be marked in accordance with western classification.

Export Rates

Export commodity rates apply on shipments from one consignor forwarded at one time to one port and when the entire carload is delivered at one time to one ocean line and has not left the possession of the rail carrier prior to such delivery. Space reservations must be made and shipping permits and export bills of lading executed to show destination beyond the port. Diversion of traffic is not permitted. All charges must be prepaid to final destination.

For many commodities which move in the foreign trade of the Pacific Coast ports no specific import or export rates are quoted and these take either the domestic commodity or class rates for the commodities in question.

XIII. COMMERCE, TERRITORY TRIBUTORY, RATE RELATIONSHIP, ETC.

The following statistics of the commerce of Portland which were compiled by the United States Engineers and the Port of Portland, represent the commerce of Portland proper for the past thirteen years:

TONNAGE OF IMPORTS AND EXPORTS THROUGH PORTLAND, OREGON

Year	Domestic		Foreign		Total
	Imports	Exports	Imports	Exports	
1913.....	1,133,059	725,017	57,561	647,686	2,503,323
1914.....	990,422	634,142	65,317	582,974	2,272,855
1915.....	954,877	519,280	36,483	517,795	2,028,435
1916.....	1,133,534	413,695	33,404	117,930	1,598,563
1917.....	1,027,201	320,195	19,085	171,504	1,537,985
1918.....	1,107,637	177,323	16,869	227,980	1,529,809
1919.....	1,187,517	155,458	16,996	419,919	1,851,890
1920.....	1,316,759	165,875	58,415	863,462	2,404,511
1921.....	1,159,641	248,666	31,962	1,656,702	3,095,971
1922.....	1,456,019	434,132	63,442	1,299,516	3,252,109
1923.....	1,900,188	705,037	105,453	1,261,615	3,972,293
1924.....	1,967,718	904,429	109,273	1,396,937	4,378,357
1925.....	2,115,797	1,035,998	122,151	828,640	4,102,586

It will be noted that for 1925 the domestic imports were more than twice as great as the domestic exports, while in the case of the foreign commerce the imports were about fifteen per cent of the exports. The total tonnage was 4,102,586 tons, of which the domestic imports were fifty-one and one-half per cent, the domestic exports twenty-five per cent, the foreign imports three per cent, and the foreign exports twenty per cent.

A study of the records of the commerce of Portland, compiled by the Port of Portland, shows that of the total of 122,151 tons of foreign imports for 1925 the most important was cement, with 25,386 tons, or twenty-one per cent; copra, second, with 18,497 tons, or fifteen per cent; iron and steel, third, with 12,922 tons or about ten per cent and oils fourth with 12,475 or another ten per cent. These four comprised approximately fifty-six per cent of the total foreign imports.

Of the foreign exports of 828,640 tons, lumber leads with 446,268 tons or fifty-four per cent; wheat is second, with 217,448 tons or twenty-six per cent; flour third, with 67,055 tons or eight per cent; and apples fourth with 24,673 tons or about three per cent. These four items comprised approximately ninety-six per cent of the total tonnage.

Portland is the largest wheat shipping port of the Pacific coast and one of the largest in the United States.

The intercoastal receipts amounted to 231,144 tons in 1925, of which iron and steel led with 52,321 tons or twenty-two and one-half per cent; miscellaneous supplies second with 34,704 tons, or fifteen per cent; plumbing supplies third with 31,675 tons, or fourteen per cent; tin plate fourth, with 17,776 tons, or seven per cent, and sulphur fifth, with 16,152 tons or seven per cent. These five items comprised sixty-five and one-half per cent of the total receipts.

The intercoastal shipments amounted to 391,097 tons of which lumber led with 259,498 tons or sixty-six per cent; flour, second with 31,032 tons, or eight per cent; copper third, with 15,934 tons or four per cent; canned goods fourth, with 14,302 tons or three and one-half per cent; and prunes fifth, with 11,603 tons or three per cent. These five items comprised

eighty-four and one-half per cent of the total shipments.

Of the 828,640 tons of foreign exports from Portland for the year 1925, 224,139 tons, or twenty-seven per cent, went to the United Kingdom; 258,171 tons, or thirty-one per cent, to Japan; 107,987 tons, or thirteen per cent, to China; and 78,458 tons, or nine per cent, to Australia.

Compared with the foreign exports, the foreign imports were 14.7 per cent of the exports. This makes practically a one-way traffic.

The receipts in the intercoastal trade for 1925 were 132,144 tons or fifty-nine per cent of the shipments of 391,097 tons, leaving forty-one per cent delivered at other ports to balance the load.

Nearly all of the steamship lines in the foreign trade include the more important Pacific coast ports in their schedules, and are not dependent upon one port. Some have regular service while others have irregular and tramp service. Wheat is the principal cargo available at Portland for European ports, and affects the shipping service on account of the seasonal nature of its movement. Lumber exports are mostly to the Orient, and affect lines operating freight service only.

The fast combination passenger and freight companies between the Pacific coast and the Orient have their terminals at San Francisco and Seattle so that Portland does not enjoy an equal share of the movement of through shipments of general cargo between the interior and eastern manufacturing districts and the Orient. Vessels plying from foreign ports call at Portland principally for grain, lumber and flour. During the years 1917 to 1921 these three commodities constituted 94.4 per cent of the exports of Portland. In 1922 they amounted to 95.9 per cent, in 1924 to about 95 per cent and in 1925 to over 88 per cent of the foreign export commerce of the port.

No large foreign import trade has, as yet, been developed through Portland but there has been a steady increase. In 1922 imports amounted to 73,000 tons, as compared with exports of 1,267,000 tons, and in 1924 amounted to 109,274 tons as compared with 1,396,937 tons of exports. In 1925 imports amounted to 122,161 tons as compared to 828,640 tons of foreign exports.

The principal commodities in the import trade in 1921 were copra, vegetable oils, coal, paper, wood pulp and glass. Out of 29,700 tons import of these items, 20,996 tons came from the Orient and 7,614 tons came from the United Kingdom and Europe. In 1924 the principle commodities were copra, vegetable oil, beans and bean cake, linseed, cement, and coal and amounted to 58,905 tons of which 6,562 tons came from the Orient and 1,589 tons from the United Kingdom and Europe. Exports to the United Kingdom and Europe in 1921 amounted to 832,989 tons and in 1925 to 294,088 tons.

Due to the low rail rates from the Columbia Basin, the great wheat producing district, Portland is the principal wheat shipping port of the Pacific coast, exports of wheat from year to year far exceeding those from all other Pacific ports combined.

The territory served by Portland for import and export commerce lies at present mostly west of the Rocky Mountains, though small quantities of imports pass through Portland to points east of the Rockies. Most of the imports are consumed in the immediate vicinity of Portland.

The territory for export traffic served by Portland is much more extensive than the import

territory, and though most of the traffic originates in the Columbia Basin, shipments have been made from states as far east as Ohio, New York, Pennsylvania, and West Virginia.

In comparison with other Pacific coast ports it is understood that the through business of Portland is smaller than that of Seattle, Tacoma and San Francisco, but much larger than that of Los Angeles and San Diego.

As all of the important Pacific coast ports have transcontinental rates for imports and exports, Portland is in a position to compete with them for through business on a shipping service basis and efficiency and economy in handling traffic. Portland has, however, an advantage in rates from the grain and lumber producing areas west of the Rocky Mountains, and especially on grain from the Columbia Basin. Vessels to the United Kingdom and Europe handle grain in bulk, while those to the Orient take most of their grain in sacks.

Ocean rates are the same from all of the Pacific ports to foreign ports for regular service, but this does not apply to tramp service. The rates for regular intercoastal service to Atlantic, Gulf and Pacific ports are also the same to all North Pacific ports.

APPENDICES

Appendix A.

TRIPS AND DRAFTS OF VESSELS YEAR 1924

Draft in Feet	TRIPS INBOUND			TRIPS OUTBOUND		
	Steamers	Motor Vessels	Sail Vessels	Steamers	Motor Vessels	Sail Vessels
31 to 32				1		
30 to 31				1		
29 to 30	2			10		
28 to 29	38			11	9	
27 to 28	32	7		19	14	
26 to 27	48	3		75	2	
25 to 26	42	3		69	1	
20 to 25	250	85	2	490	68	1
15 to 20	692	49	3	505	34	
10 to 15	112	3	1	50		
*2 to 10	5,967	2,169		5,967	2,169	
Totals.....	7,319	2,319	6	7,198	2,297	1

*Includes coasting and inland vessels.

Appendix B

OCEAN-GOING VESSEL CLASSIFICATION YEAR 1924 HARBOR OF PORTLAND

Classes of Vessels	American Number	Foreign Number	Total Number	Total Net Registered Tonnage
(1)—Arrivals (Trips):—				
Steam.....	1,099	118	1,217	3,892,636
Motor.....	140	10	150	227,202
Sail.....		5	5	10,070
Total.....	1,239	133	1,372	3,929,900
(2) Departures:—				
Steam.....	993	238	1,231	3,712,767
Motor.....	115	13	128	140,005
Sail.....		2	2	1,694
Total.....	1,108	253	1,361	3,854,466
Total—(Arrivals and Departures).....	2,347	386	2,733	7,784,374

Appendix C
TABULATION SHOWING SHIP SERVICE AT PORTLAND AS OF APRIL, 1926

Company Name and Ports Served	Number Boats	Size of Ships (Net Tons)		Class of Service	Schedule
		Max.	Min.		
HAWAIIAN ISLANDS					
OCEANIC S. S. Co.— Honolulu, Hilo.....	2	6,000	6,000	Freight	Monthly
Summary.....	2	6,000	6,000	Freight	
COASTWISE SERVICE					
ADMIRAL LINE— San Francisco, San Diego, Los Angeles.....	4	1,450	1,144	Frt. & Pass.	Twice Week
McCORMICK S. S. LINE— San Francisco, Oakland, Los Angeles.....	5	2,154	1,090	Frt. & Pass.	Twice Week
NELSON S. S. Co.— Marshfield, Eureka, San Francisco.....	3	828	498	Frt. & Pass.	Weekly
PACIFIC S. S. Co.— San Francisco, Oakland, Los Angeles..... (Connects with Panama Pacific Line at San Francisco for North Atlantic ports.)				Freight	On Cargo Off's.
NESPACH BROS. FR.T. LINE— Newport, Toledo, Waldport, Kernville, Alsea Bay.....				Freight	Fortnightly
YAQUINA BAY NAVIGATION Co.— Newport, Waldport, Kernville, Toledo.....				Freight	Fortnightly
Summary.....	12	2,154	498	Frt. & Pass.	
NORTH ATLANTIC INTERCOASTAL SERVICE					
AMERICAN HAWAIIAN S. S. Co.— New York, Philadelphia, Boston, Charleston.....	10	5,077	3,545	Freight	20 days Charleston, 10 days Others.
ARGONAUT LINE— New York, Baltimore, Boston, Providence, Philadelphia, Portland, Me.....	6	4,380		Freight	Fortnightly
ISTHMIAN LINE— New York, Baltimore.....	10	6,105	3,450	Freight	Fortnightly
ARROW LINE— New York, Baltimore.....	12	Average	4,500	Freight	Weekly
LUCKENBACH S. S. Co.— Boston, New York, Philadelphia, Galveston, Houston, Mobile, New Orleans.....	16	8,063		Pass. & Frt.	Weekly
MUNSON-McCORMICK LINE— Baltimore, Boston, New York, Jacksonville.....	4		2,845	Freight	Fortnightly
PANAMA PACIFIC LINE— (Connects at San Francisco with Pacific S. S. Co. coastwise service.)					
TRANS-MARINE Co.— Port Newark, New York.....					Occasionally
UNITED AMERICAN LINES— Savanna, Baltimore, New York, Jacksonville.....	8	4,826	2,445	Freight	10-13 days
QUAKER LINE— Philadelphia.....	8	3,841	3,058	Freight	Fortnightly
Summary.....	74	8,063	2,445	Frt. & Pass.	
GULF AND SOUTH ATLANTIC PORTS					
LUCKENBACH S. S. LINE— Galveston, New Orleans, Mobile.....	3	5,064		Freight	Fortnightly
PACIFIC CARIBBEAN GULF LINE— Mobile, New Orleans, Tampico.....	11			Freight	Monthly
Summary.....	14	5,064		Freight	
AUSTRALIAN SERVICE					
GENERAL S. S. CORP.— Melbourne, Sydney, Brisbane, Adelaide.....	7	Average	9,000	Freight	Monthly
PACIFIC AUSTRALIA LINE— Auckland, Wellington, Sydney, Lyttleton, Melbourne, Dunedin.....	5			Freight	Monthly
Summary.....	12	Average	9,000	Freight	
UNITED KINGDOM AND EUROPEAN SERVICE					
BLUE STAR LINE— London, Glasgow, Liverpool, Southampton.....	2			Freight	Monthly
FURNESS LINE— London, Liverpool, Manchester, Glasgow, Havre, Belfast.....	7			Freight	Fortnightly
HARRISON DIRECT LINE— London, Liverpool.....				Freight	Occasionally
WALLEM & Co.— Antwerp, Hamburg, Rotterdam.....				Freight	Occasionally
ISTHMIAN LINE— London, Liverpool, Avonmouth.....	4	Average	3,450	Freight	Fortnightly
NORTH PACIFIC COAST LINE.—(Joint Service, Holland American Line and Royal Mail Steam Packet Co.) Hamburg, Rotterdam, Antwerp, Glasgow, Liverpool, London, Southampton, Havre.....	19	5,993	4,097	Pass. & Frt.	8 days

Appendix C.—Continued
TABULATION SHOWING SHIP SERVICE AT PORTLAND AS OF APRIL, 1926

Company Name and Ports Served	Number Boats	Size of Ships (Net Tons)		Class of Service	Schedule
		Max.	Min.		
UNITED AMERICAN LINES— Liverpool, Glasgow, London, Hull, Antwerp, Hamburg, Bremen.....	8				7-14 days
NAVIGAZIONE LIGURIA— Triestina, Trieste, Genoa, Naples; Italian, Spanish, French and Greek ports in Mediterranean.....	6	12,000		Frt. & Pass.	Monthly
COMPAGNIE GENERALE TRANS ATLANTIQUE— Havre, Bordeaux, Antwerp, Hamburg (Jamaica to transfer to W. India and South American ports).....	16	10,000	10,000	Freight	Fortnightly
JOHNSON LINE— Oslo, Gottenburg, Hamburg, Antwerp.....	6			Pass. & Frt.	Monthly
EAST ASIATIC CO.— Hamburg, Hull, Copenhagen, Gothenburg.....	9	13,160	9,812		Monthly
NORWAY PACIFIC LINE— Dublin, Antwerp, Bergen, Oslo and others where offered.....	4	4,493	2,969	Pass. & Frt.	6 weeks
Summary.....	81	13,160	2,969	Pass. & Frt.	
WEST COAST SOUTH AMERICA					
GENERAL S. S. CORP.— Guayaquil, Callao, Mollendo, Arica, Antofagasta, Valparaiso and other ports.....	5	8,800	8,800	Freight	Three weeks
GRACE LINE— Talara, Parta, Salaverry, Huacho, Callao, Mollendo, Arica, Antofagasta, Iquique, Valparaiso and others.....	6	3,636	737	Freight	Occasionally
LATIN AMERICAN LINE— Buenaventura, Callao, Mollendo, Guayaquil, Arica, Antofagasta, Valparaiso and other Mexican and Central American ports.....	4	7,500	3,298	Freight	When cargo off.
PAN-PACIFIC LINE— Paite, Callao, Mollendo, Arica, Iquique, Antofagasta, Valparaiso and others.....	3	10,000	3,500	Freight	Monthly
TOYO KISEN KAISHA— Manzanillo, Balboa, Callao, Mollendo, Arica, Iquique, Valparaiso, Pisco.....	5	6,269	4,767	Frt. & Pass.	Occasionally
Summary.....	23	10,000	737	Frt. & Pass.	
EAST COAST SOUTH AMERICA					
PACIFIC ARGENTINE BRAZIL LINE— Ponce, San Juan, Curacao, Rio de Janeiro, Santos, Bahia, Montevideo, Buenos Aires.....	5	Average	3,700	Freight	Monthly
WESTFAL LARSEN CO.— Bohio, Buenos Aires, Santos, Montevideo, Rio de Janeiro.....	3				Fortnightly
Summary.....	8	Average	3,700	Freight	
WEST INDIA SERVICE					
PACIFIC CARRIBEAN GULF LINE— New Orleans, Mobile, Tampico, Vera Cruz.....	2			Freight	Monthly
PACIFIC ARGENTINE BRAZIL LINE— Ponce, San Juan.....	2	Average	3,700	Freight	Monthly
COMPAGNIE GENERALE TRANSATLANTIQUE— Puntarenas, Cartagena, Cayenne, Paramaribo, Georgetown, Champerico, Amapala, Acapulco, Manzillo, Mazatlan, Corinto and West India ports, if offered.....	6	10,000	10,000	Freight	1-2 weeks
Summary.....	10	10,000	3,700	Freight	
TRANS-PACIFIC SERVICE					
DOLLAR S. S. CO.....					Occasionally
GENERAL S. S. CORP.— Yokohama, Shanghai, Hongkong.....					Occasionally
MITSUI & COMPANY— Kobe, Yokohama, Osaka, Moji, Nagoya, Dairen, Shanghai, Taku Bar.....	8	8,982	6,981		3-4 weeks
TATSUUMA KISEN— Yokohama, Kobe, Osaka, Nagoya.....		8,000		Freight	Monthly
OREGON ORIENTAL LINE— Yokohama, Kobe, Shanghai, Tsingtao, Taku Bar, Dairen, Manila.....	10	4,518	3,343	Freight	Fortnightly
K LINE— Kobe, Yokohama, Moji, Nagoya, Osaka.....					Occasionally
TATSUUMA KISEN KABUSHIKI KAISHA— Yokohama, Osaka, Nagoya, Kobe, Shanghai, Hong- kong.....	6				Monthly
TOYO KISEN KAISHA— Honolulu, Kobe, Yokohama, Moji, Shanghai, Hong- kong via South America.....	5	6,269	4,767	Pass. & Frt.	Monthly
YAMASHITA CO., INC.— Yokohama, Nagoya, Kobe, Osaka.....	3			Freight	
Summary.....	32	8,000	3,343	Frt. & Pass.	
GRAND SUMMARY—(Less duplications).....	233	13,160	498	Frt. & Pass.	

NOTE:—Several Companies have fleets of ships, from which other boats, in addition to those listed above, will be sent to Portland when cargo is available.