WATERBORNE TRADE

OF THE PACIFIC NORTHWEST

Supplement to

MONTHLY REVIEW

AUGUST, 1952

FEDERAL RESERVE BANK OF SAN FRANCISCO

CONTENTS

Prepared by William A. Hurst, Economist, and Lynn Mah, Research Assistant,
under the direction and review of officers
of the Research Department.

INTRODUCTION

THIS is the second of two articles on the waterborne trade of the Pacific Coast. The first was devoted to the waterborne trade of California ports.[1] The present article will be concerned with the Pacific Northwest. The usual definition of the Pacific Northwest includes the states of Oregon and Washington and all or parts of Idaho and Montana. Since this study is concerned primarily with waterborne trade, however, major attention will be devoted to the maritime states of Oregon and Washington.

Like California ports, the ports of the Pacific Northwest have been deeply concerned over the state of their shipping industry, particularly with the failure of their foreign trade to keep pace with the expanding national volume. The bustling activity of the war years was replaced by general lethargy on the waterfronts until the outbreak of the Korean War. Since then the tempo of shipping activity all along the Pacific Coast has increased, and the ports of the Pacific Northwest have received more than a proportionate share of the increase. In 1951, exports (excluding military shipments) from the Oregon customs district were three times the value of 1950's exports, while exports from the Washington district were double the 1950 level.[2]

The recent revival in foreign shipping activity, however, should not obscure the fact that during most of the post-World War II period the waterborne foreign trade of the Pacific Northwest did not keep abreast of that of the nation. Moreover, domestic waterborne trade is still below the level of prewar years. This relatively recent upsurge in trade has been in response to unusual demand conditions which are of uncertain duration, and it provides no reliable measure of the level at which the Pacific Northwest can maintain its waterborne trade under more normal conditions of purely commercial trading.

The purpose of this article will be to study some of the underlying trends in Pacific Northwest waterborne trade, the failure of the area to maintain its share of the nation's total foreign trade, and the possibilities for future expansion. The discussion will be concerned chiefly with waterborne commerce, both foreign and domestic, with some reference to foreign shipments of the Washington customs district by land and air carriers.[3]

The study will begin with a brief analysis of the economy of the Pacific Northwest with attention concentrated on those aspects which are directly related to present waterborne trade and its future development. An analysis of the trends of waterborne trade, both foreign and domestic, will follow. Under foreign trade, consideration will be given to the various types of trade—commercial, foreign aid, and military—with regard to their commodity composition and geographic distribution, and to those countries which are most important as trading partners of the Pacific Northwest. Under domestic trade, the trends in coastwise and intercoastal trade and trade with noncontiguous territories will be studied. In this section special attention will be given to trade with Alaska, which is of particular importance to the Puget Sound area.

Supplementing this general discussion of trends in foreign and domestic trade will be a section devoted to some of the more important indigenous problems of Pacific Northwest waterborne trade. The problems considered will be those which are subject to some control by local action, such as waterfront labor-management relations, the adequacy of waterfront facilities, and local rate structures.

Comparison with California ports

The ports of the Pacific Northwest have some characteristics in common with California ports, but there are also certain distinctive features. On the one hand, the Pacific Northwest ports, like those of California, have been confronted during recent years by a decrease in their shares of total United States foreign trade, difficulties in conducting trade with the Orient since the end of World War II, stagnation or actual declines in coastwise and intercoastal trade, complexities of rate structures, labor-management problems, lack of fully developed port promotion programs, and the problem of antiquated facilities.

On the other hand, several characteristics serve to set the Pacific Northwest apart and justify its separate treatment. In the first place, the Pacific Northwest economy lacks the diversification of its neighboring state to the south. Its economy is geared to the production of a few commodities, such as lumber and other forest products, grains, fruits, vegetables, and fishery products, with some refining and smelting of aluminum and copper. But few major fabricating and manufacturing industries are located in the Pacific Northwest, with the notable exception of the aircraft industry in the Seattle area. Secondly, foreign trade is not as well developed or as balanced in the Pacific Northwest as in California. Pacific Northwest ports are faced with a chronic excess of outbound over inbound shipments of foreign trade cargo. Since Pacific Northwest ports engage in little transshipment trade to and from points east of the Rockies, the origins and destinations of most of its exports and imports are centered in the Pacific Northwest itself. However, the capacity to produce basic commodities for export far exceeds the local demand for imports. During the post-World War II period, 1947-51, the total value of waterborne imports of the Pacific Northwest averaged only 44 percent of the

[1] "Waterborne Trade of California Ports," Supplement to *Monthly Review*, Federal Reserve Bank of San Francisco, May 1951.

[2] Unless otherwise specified, statistics cited in this study will be from the Bureau of the Census, United States Department of Commerce.

[3] Statistics of the Pacific Northwest's waterborne foreign trade cited in this article include all commercial vessel shipments laden or unladen at Pacific Northwest ports. Waterborne exports, in addition to including products originating in the Pacific Northwest, also include goods transshipped to the Pacific Northwest from other sections of the country for shipment abroad; and waterborne imports include goods destined for other parts of the nation in addition to goods which will remain in the Pacific Northwest.

value of waterborne exports. During the same period roughly two-thirds of United States exports and three-fourths of California exports were covered by imports. Thirdly, the Pacific Northwest—particularly Washington—is the major terminus for shipments to and from Alaska, with most of the United States trade with Alaska passing over the docks of Seattle. This injects into the picture additional factors which must be considered in a study of the present and future trade prospects of the Pacific Northwest.

THE PACIFIC NORTHWEST ECONOMY

THE Pacific Northwest economy is still a "young" economy in the sense that it is predominantly dependent upon extractive industries based on the land, sea, and forest. Agriculture, forestry, and fisheries are the main sources of income, and the major part of such manufacturing as has developed stems from the processing and manufacturing of the raw materials from these basic industries. It is the lack of diversification and the relatively small manufacturing capacity which most clearly distinguish the economy of the Pacific Northwest from that of California.

Many of the characteristics and problems of raw materials producing regions are evident in the Pacific Northwest. Its location at one of the geographical extremities of the nation places it far from the nation's centers of population and markets. Transportation costs, therefore, are of extreme importance. The Northwest possesses resources, however, which enable it, despite the distance disadvantage, to produce profitably raw materials and food products which are in high demand both in domestic and foreign markets. Its relatively isolated position has also been a handicap in the development of diversified large-scale manufacturing and in the sale of any surplus of manufactured items in the more populous sections of the nation. Furthermore, because of its relatively small population—the population of Oregon and Washington combined is only one-third that of California, the local market has not been large enough to justify the establishment of any extensive manufacturing capacity.

While the economy of the Northwest continues to display the characteristics of a "young" economy, there are evidences that basic changes are occurring. The development of a more diversified economy was greatly stimulated by the unusual demands of World War II, and this has continued during the postwar period although at a reduced rate. More recently, with the conflict in Korea and our large-scale rearmament program, it appears that unusual demand conditions will once more accelerate the economic development of the Northwest.

It has already been noted that the relatively isolated position of the Pacific Northwest in relation to the rest of the nation has had an important effect on the type of economy which has developed. Within the region, too, geography has played an important role in the course of economic development. Oregon and Washington are divided into two parts by the Cascade Mountains, the range which divides to form the Sierra and the Coastal Range upon reaching the California border. Approximately one-third of the area of Oregon and Washington lies on the Pacific side of the Cascades; the two-thirds on the eastern side of the mountains is part of a plains area extending eastward to the foothills of the Rocky Mountains. These two areas differ greatly in climate, topography, and economic development. On the Pacific side rainfall is abundant and there are areas of dense forestation; on the inland side rainfall is much lighter and irrigation is necessary to make much of the land productive. Most industrial and commercial development has taken place along the coastal area, and it is here that lumbering developed along with the related processing industries. The inland region, on the other hand, has been the area of much agricultural development; the flat topography of the region is particularly well suited to the production of grain. Thus, while future industrial development undoubtedly will take place, agriculture will continue to be important. Industrial development will in all probability take place primarily on the coastal slope, and there will be a movement away from a purely extractive economy. The remaining areas, however, will continue to depend upon the land for their products, with the possible exception of the area in the vicinity of Spokane.

A new factor which may have an important effect on future development in the Pacific Northwest is the recent discovery of large petroleum and gas reserves in western Canada. These reserves are rapidly being developed into producing fields, and present plans are to bring both gas and petroleum into the Pacific Northwest by pipeline. Also planned is the construction of refinery capacity in the Pacific Northwest to process Canadian crude. The availability of a new and nearby source of petroleum is extremely fortunate and timely. In the past the bulk of the petroleum demands of the region has been supplied by California producers. The ability of California to continue to supply the increasing demand in the Pacific Northwest, however, has been questioned in recent years. Those showing concern over this matter point out that California has had to import larger and larger amounts of foreign crude oil from such far away areas as Borneo and Sumatra in order to maintain output at recent levels.

The availability of natural gas for the first time, a large nearby supply of petroleum, and an estimated 40 percent of the nation's potential hydroelectric power should provide the Pacific Northwest with ample alternative power sources and thus a base for future economic development.

FOREIGN TRADE[1]

FROM the end of World War II through 1950 the foreign trade of the Pacific Northwest—like that of California—failed to keep pace with the rapidly expanding trade of the country as a whole. In 1951 total foreign trade of the Pacific Northwest amounted to $740 million, almost 3 percent of a national total of $26 billion. While the Pacific Northwest's share of the nation's foreign trade was about the same in 1951 as in 1938, between 1938 and 1950 it had declined to little more than 2 percent. The regional improvement in 1951 resulted from a larger gain in exports than occurred nationally. Actually the Pacific Northwest's share of United States exports closely paralleled the region's share of the nation's total trade over the period 1938-51, falling from over 3 percent in 1938 to about 2 percent in 1950 and returning to 3.2 percent last year. Imports, which are much less important than exports to the Pacific Northwest, rose moderately, however, from less than 2 percent in 1938 to 2.4 percent in 1950 and 2.3 percent in 1951.

While the value of total foreign trade in the Pacific Northwest was over five times as large in 1951 as before the war, in terms of shipping weight the foreign trade of the Pacific Northwest showed more modest gains. The shipping weight of Pacific Northwest waterborne foreign trade in 1951 was 112 percent above the 1938 level, compared with a 118 percent increase for the United States for the same period. The export tonnage of the Pacific Northwest increased 150 percent between 1938 and 1951, while the gain nationally was only 86 percent. In contrast, import tonnage rose only 44 percent in the Pacific Northwest compared with a national gain of 173 percent. As in the case of the increase in value, most of the increase in shipping weight of waterborne trade during the postwar period was the result of the exceptionally large expansion in exports during 1951. As recently as 1950, however, the shipping weight of Pacific Northwest exports was still 18 percent below the 1938 level.

The foreign trade of the United States has expanded relatively more than the value of total output, but this has not been true in the Pacific Northwest. It has been said that the increase in the foreign trade of the Pacific Northwest should have been greater during the postwar period in view of the economic development of the region. Such a view, while it has some merit, lacks significance unless consideration is given to the lines of activity in which output is expanding, the ability of the Pacific Northwest to produce a surplus for foreign export over regional and national demands, and the need for and ability to absorb increasing imports. Analysis of the economy of the region indicates that a significant part of the expansion of production has occurred in commodities for which there is a large domestic demand and which do not require large imports of raw materials.

The Pacific Northwest's share of Pacific Coast foreign trade

The figures given above indicate that concern over the ability of the Pacific Northwest to maintain its share of the nation's foreign trade has, at least for the time being, been mitigated to some extent. Foreign traders in the Northwest also can take some comfort in the fact that their region has fared well in comparison with the rest of the Pacific Coast. In terms of the value of total trade, the Pacific Northwest handled approximately 25 percent of the Pacific Coast's foreign trade in 1938; this share increased to about 35 percent in 1951. In terms of shipping weight, the region's share increased from 19 percent in 1938 to 33 percent in 1951, but this share has fluctuated considerably during the postwar years. The Pacific

[1] Over-all comparisons of the value of foreign trade with prewar years are based on trade by all methods of transportation (vessel, rail, truck, and air), since comparable prewar value figures for waterborne trade are not available. For value comparisons by commodity composition and country distribution, it has been necessary to use trade by all methods of transportation for prewar years and waterborne trade for postwar years. Shipping weight comparisons with prewar years, on the other hand, refer only to waterborne shipments, since shipping weight of trade by all methods is not available. For additional information concerning these two series and the problems of comparability, see the discussion of trade with Canada on page 13 and footnote 1, page 24.

WATERBORNE FOREIGN TRADE OF WASHINGTON AND OREGON

1938 and 1947-51

	Value in millions of dollars						Shipping weight in millions of pounds					
Exports:	1938[1]	1947	1948	1949	1950	1951[2]	1938	1947	1948	1949	1950	1951[2]
Washington	60.6	155.4	124.1	99.2	69.7	155.5	1,883.2	2,960.0	2,037.1	1,466.6	1,371.0	3,432.1
Oregon	32.0	156.7	63.0	69.6	76.1	237.4	2,022.1	4,495.9	1,397.8	1,473.2	1,850.9	6,322.0
Total	92.5	312.1	187.1	168.8	145.8	392.9	3,905.3	7,455.9	3,434.9	2,939.8	3,221.9	9,754.1
Pacific Coast[3]	374.3	944.7	633.3	740.1	666.2	1,104.4	26,359.1	20,685.4	13,846.4	13,558.2	14,508.7	29,710.2
United States[4]	3,094.4	11,026.3	8,887.2	8,474.8	7,053.5	10,088.3	124,571.2	248,636.6	176,623.2	143,729.2	124,912.0	231,148.2
Imports:												
Washington	54.3	51.6	65.9	62.9	85.9	97.8	1,930.3	1,730.0	2,425.6	2,593.8	3,116.4	2,803.1
Oregon	7.4	18.8	14.8	14.7	23.8	29.1	207.9	181.5	123.2	112.5	208.2	272.3
Total	61.7	70.4	80.7	77.6	109.7	126.9	2,138.2	1,911.5	2,548.8	2,706.3	3,324.6	3,075.4
Pacific Coast[3]	163.7	400.5	437.2	436.1	620.7	795.2	4,846.0	4,699.1	5,655.4	6,957.5	7,923.6	9,015.9
United States[4]	1,960.4	4,367.5	5,197.3	4,964.8	6,762.8	8,460.2	73,512.8	118,130.6	134,832.4	154,741.8	191,707.2	200,931.2

[1] United States Army Engineers, Annual Report, 1938.
[2] Preliminary.
[3] Includes the customs districts of San Diego, Los Angeles, San Francisco, Oregon, and Washington.
[4] Value figures for the United States for 1938 include trade by all types of transportation.
Note: Figures may not add to totals because of rounding.
Sources: United States Maritime Commission, Report No. 295, *Waterborne Foreign and Domestic Commerce of the United States;* United States Department of Commerce, *Foreign Commerce and Navigation;* Bureau of the Census, Report FT 972, *Waterborne Trade by United States Port;* United States Army Engineers, *Annual Report of Waterborne Commerce.*

Northwest's portion of the Pacific Coast's trade reached a peak of 37 percent in 1947 and declined to 27 percent in 1949 before again turning upward. These fluctuations are important because they reflect some of the primary reasons why the Northwest has been able to obtain an increased share of Pacific Coast trade in certain years. The reasons are related to the nature of world trade during the years following World War II and the nature of Pacific Northwest exports.

The nature of postwar world trade and its effect on Pacific Northwest trade

Postwar world trade has been characterized by two basic factors. First, the channels of foreign trade have been filled primarily with materials needed for reconstruction and development and large shipments of foodstuffs to feed hungry peoples in countries where production was inadequate. This demand for the most part relates directly to the effects of World War II. A vast job of reconstruction was necessary to restore production in war devastated areas. Development programs were essential because in many parts of the world standards of living that were already low were further reduced during the war years by the diversion of the world's resources to the conduct of war. It became essential to carry forward such development programs, too long delayed, if political and economic stability were to be realized. In the case of food shipments, it should be noted that in many countries agricultural production was far below prewar levels. The inadequacy of food production was made more acute by swollen populations, particularly in the Far East where a restoration of even more than prewar production was necessary.

The second primary characteristic of postwar trade has been the importance of United States foreign aid programs. At the end of the war, virtually the only country capable of producing the needed surplus of essential commodities was the United States. In addition, the countries requiring these imports were unable to pay for them either by drawing on reserves or by exports. Production was inadequate, and reserve balances had been depleted during the war. Not only was production insufficient to provide the exports necessary to finance the imports required to satisfy minimum domestic demands, but additional large imports were also needed for reconstruction purposes. Our various foreign aid programs made it possible to supply these essential imports and to maintain a volume of trade which otherwise would not have been possible. During the postwar period the value of United States exports has greatly exceeded the amount being paid for by our imports from the rest of the world. The gap has been filled primarily by dollar aid.

A world trade situation characterized by the problems just outlined has placed the Pacific Northwest in an advantageous position. The region is an important producer and exporter of food and raw materials. During the postwar period approximately three-fourths of the value of Pacific Northwest waterborne exports was accounted for by foodstuffs and lumber products, foodstuffs alone accounting for over half. Among food exports, wheat was by far the most important.

Exports of California ports, in contrast to those of the Pacific Northwest, were not so predominantly of an essential nature. During the prewar period, they included many semiluxury items which could be sacrificed in times of stringency and commodities that could be obtained from nondollar sources in order to conserve dollars for other products obtainable only from the United States. These conditions have enabled the Pacific Northwest to obtain a larger portion of the Pacific Coast's foreign trade since the war.

A further indication of the importance of this difference in the commodity composition of Pacific Northwest exports and those of California is the fact that the Pacific Northwest's share of total Pacific Coast trade fluctuated directly with changes in United States foreign economic aid. In 1947, when the Northwest's share of the Pacific Coast waterborne trade reached a postwar peak, foreign economic aid also was at its peak. In subsequent years, as programs of economic assistance were curtailed and production of food and basic materials increased abroad, its share decreased. With the advent of the Korean War in 1950, the Pacific Northwest's share increased again. This most recent increase reflected the increased world demand for basic materials in addition to larger grain exports to famine-threatened India and other Asian countries where food supplies have been restricted, either directly or indirectly, as a result of armed conflict and political unrest.

The importance of foreign aid shipments

Foreign aid shipments have obviously been of significant importance to the Pacific Northwest. However, the figures cited thus far do not include all foreign aid shipments. They include only regular commercial shipments and those shipments made under our various foreign aid programs on commercial vessels. They do not include the so-called "Department of Defense controlled cargoes," which consist of cargoes exported from the United States on United States flag vessels, such as Army or Navy transports and vessels chartered by the Department of Defense, excluding "military shipments" for use of our armed forces abroad. The foreign aid shipments transported on Department of Defense controlled vessels have not been included in the figures so far cited because no value figures are available. Data on shipping weight, however, are available for recent years and show that foreign aid shipments of this type are of considerable importance. The period covered by the available data is from 1948 to date. During this period, a peak of 5 billion pounds was shipped in 1949. The amount has since decreased as our special programs of foreign economic aid have been curtailed. Total shipments fell to 1.5 billion pounds in 1950 and amounted to only 930 million pounds in 1951.

That foreign aid shipments have been relatively important to the Pacific Northwest is indicated by the fact

that while in 1951 its ports handled only slightly more than 4 percent of the total tonnage of United States commercial waterborne exports, its share of Department of Defense controlled foreign aid shipments amounted to 12 percent of the national total. Similarly, in 1951 the Northwest ports handled, by weight, one-third of all commercial shipments of Pacific Coast waterborne exports but more than half of these special foreign aid shipments.

As previously indicated, the tonnage of Pacific Northwest waterborne exports was still below the prewar level as late as 1950, and it was not until 1951 that this situation was reversed. The inclusion of Department of Defense controlled foreign aid cargo, however, would more than offset this decline for the years 1948 through 1950, but such shipments played a minor role in the spectacular increase of 200 percent in export tonnage in 1951. The large increase in commercial exports in 1951 did include, however, large grain shipments to India under the loan authorized by the India Emergency Food Act of 1951.

Most Department of Defense foreign aid shipments have consisted of grain and other foodstuffs and lumber—essential goods which have bulked large in United States programs. The majority of the shipments from the Pacific Northwest have been destined for the Far East, with Japan by far the most important single recipient. While there were some direct shipments from Northwest ports to Europe, there have probably been additional shipments of the region's grain and lumber through East Coast ports. The amount of such additional shipments, however, cannot be determined because the statistics reveal only the port of lading and do not show the state of origin.

Military shipments from the Pacific Northwest

In appraising the importance of the waterborne traffic of the Pacific Northwest, a second qualification must be made to the regular foreign trade statistics. In addition to the Department of Defense controlled foreign aid cargoes which are excluded from the commercial statistics, there are the so-called "military cargoes." Military cargoes include all shipments on Department of Defense controlled vessels, including Army, Navy, and private ships under charter, that are for the use of our armed forces abroad. While no statistics are available on military shipments, they no doubt have been relatively important at particular times. The ports of the Pacific Northwest are of considerable military importance because of their geographic position. Those of the Puget Sound region are the closest United States ports to the Far East by the Great Circle route. Consequently, they were important cogs in our pursuit of the Pacific phase of World War II and also during the occupation period. With the advent of the Korean War, military shipments have assumed greater importance, particularly through the Port of Seattle, the port of embarkation for the Pacific Northwest.

FOREIGN AID SHIPMENTS[1] FROM THE PACIFIC NORTHWEST, 1948-51[2]

(Shipping weight in thousands of pounds)

	1948	1949	1950	1951
Washington	1,069,824	1,386,604	405,114	259,361
Oregon	1,479,040	3,701,249	1,113,558	670,727
Total	2,548,864	5,087,853	1,518,672	930,088

[1] "Foreign aid shipments" include only export shipments under special foreign aid programs (such as Government and Relief in Occupied Areas and the Economic Cooperation Administration) carried on vessels controlled by the United States Department of Defense (either U. S. Government vessels or vessels under charter to the Department of Defense). Any cargo under foreign aid programs not under the control of the Department of Defense is included in regular shipping statistics.

[2] Figures since July 1950 include "special category" exports, which are exports of strategic value not shown separately for national security reasons.

Source: United States Department of Commerce, Bureau of the Census, FT 976, *Department of Defense Controlled Cargo.*

Commodity Composition of Pacific Northwest Foreign Trade

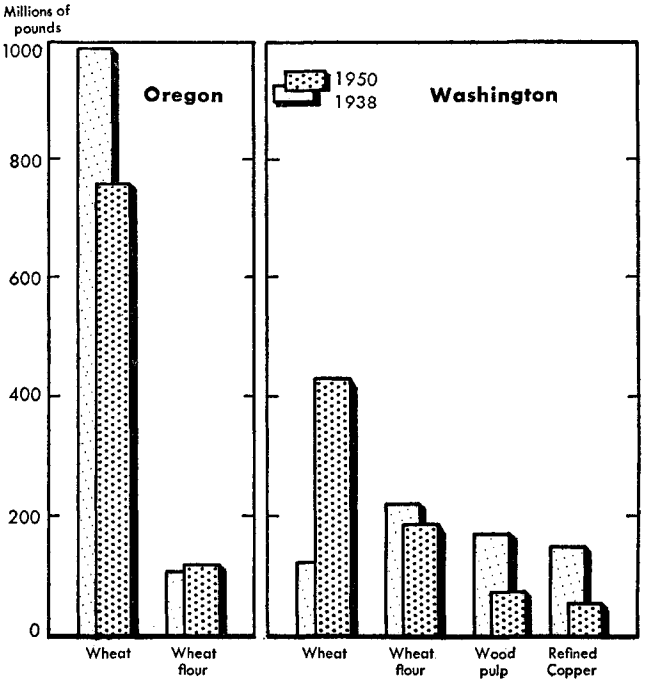
The Pacific Northwest is still predominantly a raw materials producing economy, and agricultural and forestry products dominate its exports. Wheat and lumber are by far the most important waterborne exports of the region. The principal imports consist of a large variety of manufactured items, green coffee, copper ores and concentrates, and, strangely enough, wood and paper products.

Exports

Food products dominate exports

Food products comprise the most important commodity group in the waterborne exports of the Pacific Northwest. Moreover, their importance has been increasing. In the years immediately preceding World War II, exports of food products accounted for slightly more than 40 percent of the value of total exports. By 1950 food exports had risen to over half of the total value and for the first half of 1951 accounted for nearly two-thirds.

PACIFIC NORTHWEST WATERBORNE EXPORTS OF SELECTED COMMODITIES, 1938 AND 1950



Source: United States Department of Commerce, Bureau of the Census.

While it is true that the large postwar food exports reflected unusual demand conditions as a result of worldwide food shortages, there are, nevertheless, indications that such exports will continue in large volume for some time to come.

Wheat is the most important Pacific Northwest export

Within the food group, exports of wheat are the most important. Wheat exports through the Oregon customs district, for example, amounted to two-thirds of the value of food exports during recent years, accounting for 33 percent of the value of all exports in 1950 and 59 percent in the first half of 1951.

Pacific Northwest (including Oregon, Washington, and northern Idaho) waterborne exports of wheat reached a high of 74.4 million bushels in the crop year ending June 30, 1951, an amount equal to 20 percent of total United States wheat exports during that time. This was the largest volume exported from Pacific Northwest ports since 1922 and was more than six times the 1935-39 average volume. Waterborne shipments during the 1951-52 crop year set new records when 117.7 million bushels were exported, representing 26 percent of total United States wheat exports.[1]

Wheat exports will probably continue in large volume until international conditions become more stabilized politically and economically. A large volume of wheat and flour is currently being exported under United States Department of Agriculture auspices and under the terms of the International Wheat Agreement.[2] The Department of Agriculture exports include shipments under the various programs of emergency relief and under the program of the Economic Cooperation Administration and accounted for two-thirds of all United States exports of wheat and wheat flour in the 1948-49 crop year. For the past two years, however, exports by the Department of Agriculture have declined as United States programs of foreign economic aid have tapered off. During the 1950-51 crop year United States Department of Agriculture exports accounted for slightly more than one-third of all United States exports of wheat and wheat flour.

International Wheat Agreement sales under the direction of the Commodity Credit Corporation, on the other hand, have moved primarily through commercial channels. At the end of the 1951-52 crop year United States sales under the Agreement were 254 million bushels compared with 248 million bushels in the 1950-51 crop year and 163 million bushels sold during the Agreement's first year of operation, 1949-50. The United States quota, or its guaranteed exports, for the crop year beginning July 1, 1952 is 253 million bushels.

Wheat flour exports in contrast to wheat grain exports have shown little gain during the postwar period. While the volume of wheat exports has expanded several fold over the prewar level, the volume of wheat flour exports from Washington declined 15 percent between 1938 and 1950 and increased only 11 percent in Oregon. Wheat flour production in the Pacific Northwest has been declining during the postwar period, and this decline has been reflected in exports of flour. In the 1951 crop year more wheat was used in the manufacture of flour in the region than in the previous year, but prior to 1951 the amount of wheat used in the manufacture of flour had been decreasing steadily since 1946.

In an effort to bolster wheat flour exports, Congress provided in the Economic Cooperation Act that at least 12.5 percent of all ECA-financed wheat exports had to be in the form of flour. This requirement, however, was repealed in the Act of 1950, when it was realized that it was working to the disadvantage of United States wheat producers. The ECA countries under the requirement were using their free dollars to purchase wheat elsewhere so that they could use their own milling facilities and thus mill more of the husk, use the by-products, and retain the milling revenue.

In general, even should the world return to more normal peacetime conditions, wheat and wheat flour exports — particularly wheat — should continue in substantial volume, although they will probably be below the peaks of recent years. In the Pacific Northwest, as in the nation as a whole, the future trend of wheat exports will be determined primarily by domestic demand which will affect the volume available for export, foreign trade policies here and abroad, and the level of world grain production.

Other food exports

The remainder of the Pacific Northwest's food exports are mainly accounted for by fruits and vegetables. Exports of fresh fruits and vegetables have gone primarily to Canada, such exports benefiting greatly from the recent reductions of Canadian restrictions against United States imports. The Pacific Northwest accounts for an important part of the 40 percent of total United States fruit exports which have been going to Canada in recent years.

Most of the Pacific Northwest's dried fruit exports have gone to Europe. As in the case of California, dried fruit exports have not regained their prewar importance. Dried fruits have been considered semiluxuries in the importing countries, and available dollars have been spent on more essential commodities. A future expansion of

[1] U. S. Department of Agriculture, Bureau of Agricultural Economics, Portland, Oregon: *Grain Stocks—July 1, 1952.*

[2] The International Wheat Agreement came into operation on August 1, 1949. The agreement is administered by the International Wheat Council composed of four wheat exporting countries (Australia, Canada, France, and the United States) and some 42 importing countries. The Agreement is designed to "overcome the serious hardship caused to producers and consumers by burdensome surpluses and critical shortages of wheat" and "to assure supplies of wheat to importing countries and markets for wheat to exporting countries at equitable and stable prices." At the request of the Wheat Council, exporting countries are obliged to sell a specified amount of wheat to importing members at the maximum price specified, and, on the other hand, importing countries agree to buy specified amounts at the minimum price. The Agreement comes into effect only when the market price of wheat is at either the maximum or minimum price. The Agreement has not altered the channels through which international trade in wheat has taken place. In the United States sales are carried out through regular commercial channels, but to enable wheat to be sold at the maximum price provided in the Agreement, export subsidies are paid to private exporters by the Commodity Credit Corporation. The subsidy rate varies with changes in the United States market price for wheat. Quotas and prices are determined by the Wheat Council for each crop year.

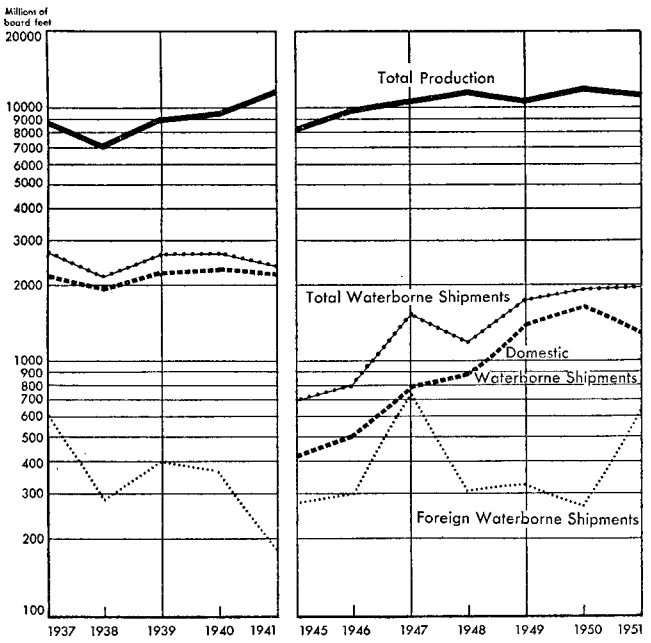
these exports, therefore, must await more prosperous conditions in Europe and some alleviation of present dollar stringencies.

A promising area of possible expansion is the export of frozen fruits and vegetables. Such exports, however, will also be considered semiluxuries and will be subject to the same difficulties as dried fruit exports. The development of this trade, nevertheless, does offer an opportunity for the expansion of foreign markets for fresh fruits and vegetables through the reduction of costs obtained by mass freezing and packaging.

Wood and paper products rank second among exports

The products of the Pacific Northwest's forests are the second most important commodity group in the region's waterborne foreign exports. The significant role of forest products follows naturally from the importance of the forest industry to the area. In both 1938 and 1950 exports of wood and paper products comprised about one-fifth or more of the total value of Pacific Northwest waterborne exports. The trends in Oregon and Washington were not the same, however, as production has been increasing in Oregon and decreasing in Washington. These basic changes have been reflected in the value of exports of the two states. Between 1938 and 1950 the value of Washington's exports of wood and paper products decreased from $13.5 million to $11.4 million, and their relative share of total exports decreased from 20 percent to 16 percent. In Oregon wood and paper products amounted to 22 percent of the value of total exports in 1938 and rose to 30 percent in 1950, the value increasing from $6.2 million to $23 million.

PACIFIC NORTHWEST PRODUCTION AND WATERBORNE SHIPMENTS OF LUMBER,[1] 1937-51[2]



[1] Softwood only.
[2] Data on waterborne shipments not available for 1942 through 1944.
Note: This chart is plotted on a logarithmic scale on which equal vertical distances represent equal percent changes rather than equal absolute amounts.
Sources: United States Department of Agriculture, Forest Service, *Lumber Production in the United States, 1799-1946;* Pacific Lumber Inspection Bureau, Inc.

Within the commodity group of wood and paper products, lumber is the most important single product. Other significant exports within the group are paper and paper board, shingles, plywood, and box shooks. Lumber exports for the three prewar years 1937-39 averaged 432 million board feet per year and for the postwar years 1946-51, 428 million board feet.

During the period following World War II lumber exports compared favorably with prewar years in spite of the effects of dollar shortages and quantitative restrictions on trade. United States foreign aid and the urgent need for lumber for construction succeeded in overcoming these postwar difficulties. Nevertheless, a declining part of total lumber production has been exported because of the high level of domestic demand and the fact that the foreign market is for all practical purposes a residual market. The lumber industry depends in the final analysis on the level of domestic activity, particularly in the construction industry and in other industrial uses. The volume of lumber exports depends upon the availablity of lumber after domestic demands are met. This does not necessarily mean, however, that lumber exports expand in times of slack domestic demand. On the contrary, lumber production is characteristically very flexible, and production is not maintained in the face of declines in domestic demand.

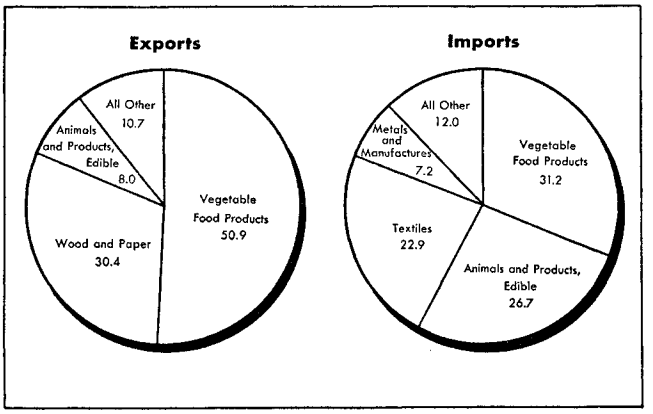
Other exports

In the most recent years exports of food and forestry products have accounted for approximately 85 percent of the value of the Pacific Northwest's waterborne foreign exports, with two commodities, wheat and lumber, accounting for two-thirds of the total in the first six months of 1951. Of the remaining 15 percent, there is no particular commodity or commodity group which stands out, with the exception of copper exports through the Washington customs district.

Exports of refined copper and copper manufactures amounted to $10.6 million in 1950 and accounted for 7 percent of the value of Pacific Northwest exports in that year. The importance of copper exports, however, has declined markedly since prewar years. In 1938 copper exports totaled $14.8 million, 15 percent of the total export value. Virtually all of the copper exported by the region has moved through the Washington customs district where the importance of copper exports has been much greater than for the region as a whole. Exports of copper and copper products accounted for roughly one-fourth of the exports of the Washington customs district in the years immediately preceding World War II but only 15 percent of the total value in 1950.

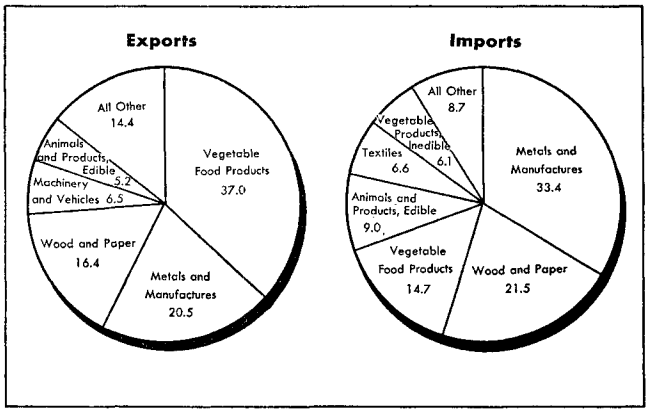
Production of refined copper in the Pacific Northwest has shown a long run decline primarily because of difficulties in obtaining suitable ores and has resulted in reduced exports of finished copper and its products. The

PERCENTAGE DISTRIBUTION OF OREGON WATERBORNE FOREIGN TRADE BY VALUE, BY COMMODITY GROUP, 1950



Source: United States Department of Commerce, Bureau of the Census.

PERCENTAGE DISTRIBUTION OF WASHINGTON WATERBORNE FOREIGN TRADE BY VALUE, BY COMMODITY GROUP, 1950



Source: United States Department of Commerce, Bureau of the Census.

copper refineries of the region, particularly the tidewater refinery at Tacoma, have faced increasing competition as refineries have been constructed abroad. In addition, an excise tax has been imposed on copper imports, including ores and crude copper imported for smelting or refining. This duty was suspended between April 30, 1947 and June 1950, and again since April 1, 1951 for the duration of the present national emergency or until February 15, 1953, whichever is earlier. During the periods in which it has been in effect, however, it has had an adverse effect on the Tacoma refinery, which depends primarily on foreign ores.

A further adverse factor, although probably one of short duration, is the fact that the imposition of price controls following the outbreak of conflict in Korea resulted in a domestic ceiling price on copper considerably below the world price. Only in recent months has this gap been narrowed. In addition, the ceiling price on copper products containing foreign ores has recently been raised after the termination of the agreement on copper exports between Chile and the United States. Effective July 1, 1952, primary users of refined foreign copper are permitted an adjustment in their prices of 80 percent of any increase in the cost of foreign copper above the ceiling price on domestic copper.

As a result of these two factors, there has been an increase in the importance of custom refining at Tacoma for foreign accounts. Under these conditions, copper ores and concentrates are imported under bond for refining and re-export, thus avoiding the difficulties of both the tax during periods when it was effective and the ceiling prices. It is doubtful, however, that such custom refining will be of continuing importance. Because of the transportation charges involved, it would only be under conditions of unusually strong demand that such re-exports of foreign copper might assume important proportions. Thus, in view of recent reductions in the price of copper abroad and barring the outbreak of new armed conflict, it is doubtful that such exports will assume more than modest levels, although some custom refining for foreign account will continue.

The overriding factor, however, in the future of copper exports will be the level of domestic demand. A continuation of the present high demand for copper in this country, stimulated by the rearmament program, will restrict the availability of copper for export.

Imports

In analyzing the commodity composition of Pacific Northwest waterborne foreign imports, it should be remembered that imports are far less important to the region's economy than exports. This preponderant importance of exports has existed throughout the history of the region. For the postwar years 1947-51 the total value of imports averaged less than half the value of exports and in 1951 amounted to only one-third the value of exports.

There is also a larger variety of commodities among the Pacific Northwest's imports in comparison to the export situation, where two commodities, lumber and wheat, account for a large part of the total value.

Metals and metal manufactures, the most important import commodity group

During 1950 imports of metals and metal manufactures totaled $30.3 million and were by far the most important import commodity group, accounting for roughly 28 percent of the value of total imports. Similar imports during 1938 and 1939 amounted to only $2 million in each year, about 5 percent of total imports.

Copper, consisting of ore, concentrates, and scrap, was the most important commodity within the metals and metal manufactures group, and it was also the most important single commodity imported by the region in 1950. Copper imports totaled $18.3 million in 1950, while they averaged less than $1 million annually in 1938 and 1939. The 1950 copper imports represented slightly less than 17 percent of the value of all imports. This large increase in imports of copper reflects the increasing dependence on foreign ores and crude copper of the Tacoma copper refinery which is now depending almost completely upon imports of foreign raw materials.

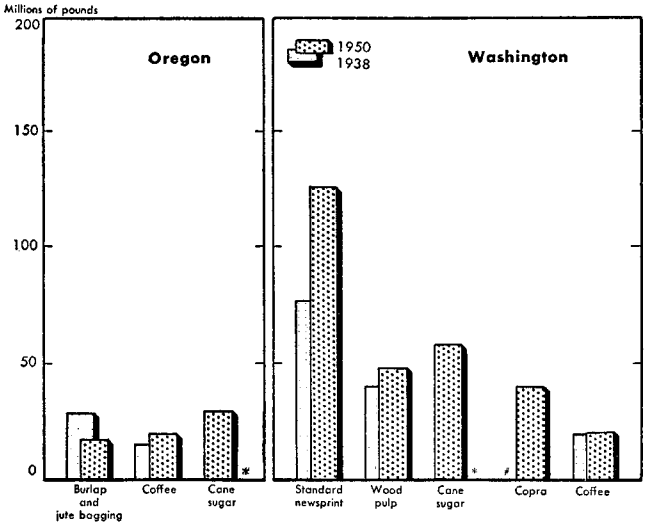
Imports of vegetable food products dominated by coffee

The second most important commodity group among the Northwest's waterborne imports is the vegetable foods and beverages classification. Thus foodstuffs, which are the leading export of the Pacific Northwest, also play an important role on the import side. Furthermore, just as food exports are dominated by a single commodity—wheat, food imports are similarly dominated by one commodity—coffee. The total value of Pacific Northwest imports of vegetable food products amounted to $20 million in 1950, and coffee imports accounted for more than three-quarters of this total. These 1950 figures represent rather significant changes from the prewar situation.

Vegetable food products as a group have approximately doubled in value over the prewar years 1938-39; they have declined somewhat in importance compared with other imports, however. While in 1938 this group led all other commodity groups and accounted for more than 25 percent of the total value of imports, its share had declined to 19 percent by 1950. At the same time, however, imports of coffee increased sevenfold in value. Increases in the value of coffee imports have offset a large part of the decrease in other vegetable food products, particularly sugar imports. Coffee imports are now the dominant import within the group in contrast to the prewar situation when they accounted for less than one-quarter of the value of vegetable food imports.

Coffee imports during the first half of 1951 continued to expand and exceeded the total for the entire year 1950 by a considerable margin. For this half-year period, coffee accounted for $19 million of total vegetable food imports of $21 million, and thus it appears that in 1951 vegetable food imports may have been the most important import commodity classification and coffee the most important import commodity.

PACIFIC NORTHWEST WATERBORNE IMPORTS OF SELECTED COMMODITIES, 1938 AND 1950



*No imports in 1950.
#No imports in 1938.
Source: United States Department of Commerce, Bureau of the Census.

Imports of wood and paper products

Although the forestry industry is the most important in the Pacific Northwest, the region still is an important importer of such products. A large part of these waterborne foreign imports of wood and paper products come from British Columbia and enter, for the most part, through the Washington customs district. In many respects British Columbia and the Pacific Northwest form a single economic unit, and the boundary between them has little economic meaning. In resources they are quite similar, and the industries of both are based largely upon agriculture, forestry, mining, and fishing. The close economic relationship between these two areas, lying on opposite sides of the United States-Canadian border, has been furthered by Canada's reduction of restrictions on United States imports and by the fact that United States imports of Canadian wood and paper products are almost all duty free. With these similarities and minimum restrictions on the flow of trade, it might logically be expected that some integration would take place. Furthermore, the depletion of virgin stands of timber in the Washington area has accelerated this development.

The value of imports of wood and paper products is considerably above the prewar value. From 1938 to 1939 they increased about 50 percent to a total of $12.5 million and in 1950 amounted to slightly under $19 million. In spite of the increase in value, however, the relative importance of wood and paper imports to total imports has decreased. While in 1939 such imports amounted to 29 percent of the total value of imports, in 1950 this share had declined to 17 percent.

Among the Pacific Northwest's imports of wood and paper products are logs, lumber, pulpwood, wood pulp, and newsprint. In 1950 the most important imports were logs and newsprint, which together accounted for two-thirds of the value of total imports in this commodity group.

Other imports

Two additional broad classifications of waterborne foreign imports should be mentioned—edible animal products and textile fibres and manufactures. Of these two, the first has shown an increase in relative importance during the postwar period, while the second has shown a decrease.

Imports of edible animal products, which in 1938 amounted to about $2 million, had increased to $14 million by 1950. At the same time, their importance in the total import picture increased from 5 percent of all imports in 1938 to 13 percent in 1950. Most important within this group were imports of canned fish and fresh and frozen fish for immediate consumption or for processing in Pacific Northwest canneries.

On the other hand, while textile fibers and textile manufactures increased in value from $7 million in 1938 to $11 million in 1950, their relative importance decreased from 18 percent of total imports to 10 percent. Because

of the needs of agriculture in the Northwest, vegetable fibers such as burlap and jute bagging were the most important products in this commodity group, such imports accounting for roughly half of the total value for the group in recent years. These imports, however, are below the prewar level and reflect in part the increase in bulk shipments of grain, with a consequent decrease in the need for bagging.

The Pacific Northwest's Trading Partners

The importance of trade with the Far East

The Pacific Northwest's most important trading partner is Asia, particularly the Far East, which includes Southern, Southeastern, and Eastern Asia. The Far East accounted for more than half of the total value of all Pacific Northwest foreign trade in 1938 and 1939. Its share of the region's trade, however, decreased somewhat in the postwar period, although it remained the most important trading area. In 1950 the Far East accounted for 35 percent of Pacific Northwest waterborne foreign commerce. This share increased to over 45 percent during the first half of 1951, reflecting in part the unusual demands associated with armed conflict in Asia and increasing rearmament.

The Far East has been both the chief market for Pacific Northwest exports and a major source of imports. This region has more than regained its prewar position of importance as a market for Pacific Northwest commodities. In 1938 about 35 percent of the Northwest's exports went to the Far East, with the share rising to 39 percent in 1950 and to 52 percent in the first half of 1951.

As a supplier of Pacific Northwest imports, however, the Far East has not recovered its prewar share. Before the war the Far East was the origin of over 40 percent of total imports and was by far the most important supplying area. In the last year or two, however, less than one-third of total imports came from the Far East, a slightly smaller share than that of the Latin American countries.

To a major extent the health of the Pacific Northwest's foreign waterborne trade is dependent upon economic conditions in the Far East. This dependence explains in large part why the Pacific Northwest's foreign trade lagged behind that of the nation in the earlier postwar years. It was not until the upsurge in trade with the Far East in the last year or two that the postwar growth in total Pacific Northwest foreign trade compared favorably with that of the nation. It should be remembered, however, that the recent expansion of shipments to the Far East reflects unusual demand conditions and that the Far East has not yet regained its prewar position as a supplier of Pacific Northwest imports.

Like California ports, the ports of the Pacific Northwest have been adversely affected by the difficulties of restoring trade with the Far East. The ravages of war, problems of reconstruction, dollar shortages and other foreign exchange problems, domestic political and economic unrest, and military activity have impeded the recovery of the nations of the Far East. Added to these difficulties is the fact that the emphasis of most of the United States foreign economic aid programs has been on Europe and not the Far East.[1]

While the problems of trade recovery with the Far East have generally affected all the Pacific Coast ports, the Pacific Northwest has had certain advantages over California. The Pacific Northwest exports mainly bulk cargoes, such as lumber and wheat, for which demand has been especially strong during the postwar years; and a large proportion of this demand has been satisfied through United States grants-in-aid to finance exports which otherwise would not have been possible.

Pacific Northwest ports, particularly those of the Puget Sound area, have an additional advantage in their trade with the Far East—a time and distance advantage over all other United States ports, including those of California. The Great Circle route up toward Alaska and down to Japan places the Northwest hundreds of miles closer than any other United States port. Shipments by air over this shorter route have also been found feasible, and thus a promising new field of expansion for Pacific Northwest-Far Eastern trade has been opened.

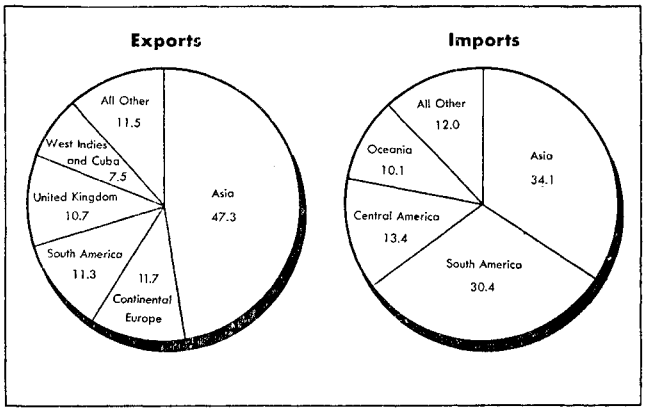
The future of Pacific Northwest-Far Eastern trade depends on several factors. Fundamentally, the prime prerequisite is the cessation of armed hostilities in the Orient and the restoration of economic and political stability. When this goal is attained, the nations of Asia will be in a better position to expand their production of exportable goods and to improve their standards of living and levels of national income, with a resultant increase in their ability to import. The Pacific Northwest should be able to share substantially in any increase in United States-Far Eastern trade and may be able to increase its share through the development of a transshipment trade to and from other sections of the United States by capitalizing on its proximity to the Orient. Through greater diversification the Pacific Northwest may be able to provide directly from its own economy more of the types of goods needed by the Far East while continuing the shipment of foodstuffs and forest products.

Trade with the Near East

Trade with the countries of the Near East has never been of particular importance, although it has expanded considerably in the postwar period. Postwar trade with the Near East in large part reflects increased private investment in such countries as Iran, Iraq, and Saudi Arabia. Development activities by American corporations, especially in the petroleum industry, have resulted in an expansion of lumber shipments to that area. Lumber shipments to the Near East, which were virtually nonexistent in the prewar period, reached a peak of 41.7 mil-

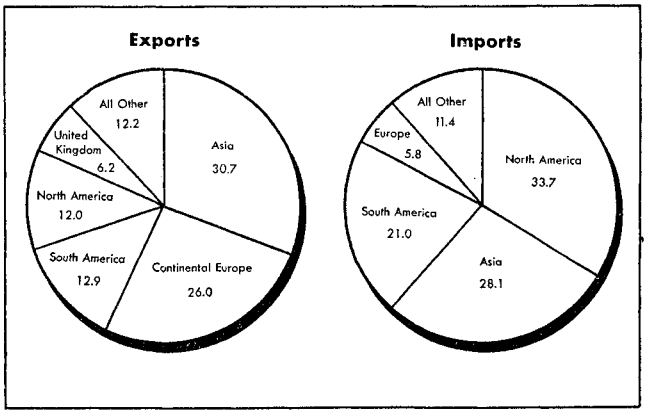
[1] For a more complete discussion of the problems of trade with the Far East see the Supplements to the *Monthly Review*, "Problems of Trade Recovery in Japan," October 1950 and "Waterborne Trade of California Ports," May 1951.

PERCENTAGE DISTRIBUTION OF OREGON WATERBORNE FOREIGN TRADE BY VALUE, BY TRADE AREA, 1950



Source: United States Department of Commerce, Bureau of the Census.

PERCENTAGE DISTRIBUTION OF WASHINGTON WATERBORNE FOREIGN TRADE BY VALUE, BY TRADE AREA, 1950



Source: United States Department of Commerce, Bureau of the Census.

lion board feet in 1950, over 15 percent of the Pacific Northwest's exports of lumber in that year. Such shipments, however, were down sharply in 1951 to 7.4 million board feet as major construction projects were either completed or curtailed. Postwar trade with the Near East, Turkey in particular, also expanded as a result of United States programs of economic and military aid. The value of total Pacific Northwest trade with the Near East, which amounted to less than $200,000 per year in 1938 and 1939, reached a total of $1.7 million in 1950.

Pacific Northwest trade with Western Europe

Because of the importance to the Pacific Northwest economy of wheat and lumber, which are also essential imports in Western Europe, trade with this area is substantial in volume and value. The importance of the Western European market to the Pacific Northwest is indicated by the fact that its share of the value of total exports is exceeded only by the Far East. On the import side, however, Western Europe plays a relatively minor role.

Western Europe's share of the Northwest's exports declined from 44 percent in 1938, when her share exceeded that of the Far East, to 30 percent or less in 1950 and 1951. The value of $43 million in 1938 was approximately the same as in 1950, while between those years the total value of the Northwest's exports expanded substantially. Imports from Western Europe, on the other hand, increased from $4.1 million in 1938 to $10.5 million in 1950, though its share of total Northwest imports decreased from 11 percent to 10 percent.

The decline in the relative importance of Western Europe as a market for Pacific Northwest exports has been largely the result of a reduction in shipments to the United Kingdom, historically the most important European market. The value of exports to the United Kingdom declined from $20 million in 1938 to $13 million in 1950, while that area's share of total Northwest exports declined from 20 percent to 9 percent. This rather drastic reduction resulted from the serious balance of payments difficulties which the United Kingdom has had since the end of World War II. Because of her serious dollar shortage, the United Kingdom has made every effort to obtain imports from nondollar sources, in order to conserve dollars obtained through United States foreign aid and from exports to the United States for the purchase from the United States of essential products which cannot be obtained elsewhere.

In contrast to the United Kingdom, the other countries of Western Europe have increased the value of their imports from the Pacific Northwest. This increase has occurred even though these countries, too, have been faced with postwar balance of payments problems, although perhaps not so severe as those of the United Kingdom. Exports to the Scandinavian countries, for example, showed a small value increase from slightly under $3 million in 1938 to slightly over $4 million in 1950, their share of total Northwest exports remaining about the same in the two years. Exports to all other Western European countries increased in value from $20 million to $26 million.

Lumber shipments to Western Europe from the Pacific Northwest have been maintained at reasonably high levels in terms of physical volume. Lumber shipments to the United Kingdom and Belgium, which averaged 74 million board feet in the prewar years 1937-39, amounted to 80 million board feet in 1949, but were down to 56 million board feet in 1950. However, 1951 was a banner year, with lumber shipments to these two countries expanding to a record level of 379 million board feet. This volume can hardly be expected to continue because the conditions which gave rise to the expansion were unusual. They were a reflection of a more favorable exchange position up to mid-1951 as well as fears as to the continuing availability of United States lumber if the Korean War should spread. Since then these fears have moderated to a considerable extent, and the European exchange position, particularly in the United Kingdom, has deteriorated.

Shipments of lumber and wheat during the postwar period have been made possible to a major extent by ECA and other foreign aid programs. Europe's reserve position, especially that of the United Kingdom, through

most of this period would otherwise have made possible only shipments much smaller than those actually realized. The dollar shortage has also contributed largely to the decline of fruit and vegetable exports to Western Europe, since such products are considered less essential and have received less benefit from the various economic aid programs. Any expansion in fruit and vegetable exports will depend largely on the availability of foreign exchange over and above that necessary for more essential civilian imports and for expanding defense and military expenditures.

Decreasing United States foreign economic aid and increasing military expenditures by the nations of Western Europe will have a direct effect on Pacific Northwest-Western European trade. If dollar exchange is not readily available, Europe may be forced to turn to other sources of supply to a larger extent, with a consequent decline in Pacific Northwest shipments. A factor which will have an important bearing upon this is the future of trade between Eastern and Western Europe.

The Soviet Union is currently embarked on a program to increase trade between the "iron curtain" countries and the "free" world, with particular emphasis on East-West trade in Europe. In addition, there have been several agreements covering trade in specified commodities between Western European countries and the Soviet-dominated countries. For example, two agreements were negotiated in July and September 1951 by the United Kingdom and the Soviet Union whereby the latter agreed to ship timber and grain in specified amounts for pounds sterling; such shipments, however, were made contingent on the Soviet Union's ability to obtain rubber from the sterling area. If, in spite of the difficulties involved, there is an expansion of East-West trade in Europe, it can have an adverse effect on the Pacific Northwest's shipments of wheat and lumber to Europe.

Increasing importance of trade with Latin America

The Pacific Northwest's postwar waterborne trade with Latin American has expanded more than with any other area and has been characterized by an import balance in recent years. The largest part of the increase since prewar in total trade with Latin America has occurred on the import side. Imports in 1950 were valued at approximately $34 million, over ten times the 1938-39 level. As a result of this increase, Latin America became in 1950 the most important supplier of Pacific Northwest imports, accounting for 31 percent of the total. Although exports to Latin America expanded less than imports, they nevertheless showed a significant gain and in 1950 amounted to $30 million, about six times the prewar level.

While trade with Latin America has made very favorable gains, it is restricted commodity-wise on both the export and import sides. A major share of the increase in imports from Latin America can be accounted for by increased coffee and copper ore imports. Exports to Latin America, on the other hand, have consisted largely of forest and agricultural products.

Postwar trade with Latin American countries, although at a high level, has been subject to considerable fluctuation. These countries have alternately experienced periods of exchange difficulties and periods in which their exchange situation was very favorable. Immediately following World War II the exchange position of most Latin American countries was relatively strong because of reserves built up during the war, but this led to a high level of imports which in turn brought about exchange difficulties as reserves of dollars and gold were drawn down rapidly. Increasing exchange difficulties brought about an increase in restrictions against dollar imports and hence a reduction in such imports. More recently, following the outbreak of the Korean War, the Latin American countries again had a growth in reserves as a result of the increase in demand and consequent price increases for many of their exports. Because of this improved exchange position, restrictions against United States imports were relaxed, and for a second postwar period imports from the United States were large. It now appears that a reverse trend is again developing as a result of a reduction in exchange earnings as the post-Korea demands moderate, particularly in the United States. Furthermore many Latin American countries are now well stocked with United States goods owing to their large purchases made in the months following the outbreak of war in Korea, and some reduction might normally be expected. While these fluctuations have had a general effect on United States-Latin American trade, they have closely influenced the Pacific Northwest's trade with Latin America.

Chile and Peru are both sources of copper ores and crude copper for the Tacoma refinery. Such imports, although they have increased markedly, have nevertheless been subject to varying influences. Postwar strikes in the South American copper mines and the development of copper refineries in South America have tended to decrease the flow of copper ores to the Northwest. On the other hand, a continuing high level of demand for refined copper, greatly intensified by the Korean War and the increased demands for copper for stockpiling and defense purposes, has tended to increase imports of South American ores.

In spite of the somewhat erratic behavior of Pacific Northwest-Latin American trade, the underlying postwar trend has been upward, and there appears to be ample opportunity for further expansion. Wheat and wheat products of the Pacific Northwest may be able to gain new markets in Latin America because improved standards of living resulting from programs of economic development now underway should increase the demand for such foods. Argentina has been the traditional supplier of wheat to South America; but the postwar reduction of grain acreage in Argentina, adverse climatic conditions, increased domestic requirements, and the high-price policies of the Argentina Trade Promotion Institute, a government monopoly, have resulted in a smaller volume of exports. The Northwest has benefited from the

failure of Argentina to supply its traditional markets in South America; this advantage may prove to be a temporary one, however.

Moreover, in many Latin American countries there are plans for the expansion of wheat acreage and the encouragement of flour milling through import restrictions on flour. These restrictions may have an adverse effect on the Northwest's exports. Even now Brazilian flour mills are providing competition for North American mills. The over-all increase in the consumption of wheat and wheat flour, however, will probably continue to exceed domestic production in these countries for some time to come. The countries of Central America and Mexico will most probably provide the largest markets because there Argentina has not been an important supplier in the past and consumption has been increasing substantially in those areas.

Lumber and paper products from the Pacific Northwest, as well as wheat, should be able to take advantage of the availability of cheaper transportation to the west coast of South and Central America because of the absence of canal tolls. The high demand for and strategic value of copper should maintain imports of copper concentrates from South America, and the present high levels of consumption should assure continued imports of coffee.

During the postwar period the Pacific Northwest has obtained an opening wedge in the Latin American trade, which previously was relatively unimportant to the region. This trade probably can be expanded further by increasing the variety of goods interchanged by the two areas. Not only would this increase the total flow of trade but it would tend to eliminate some of the wide fluctuations which usually accompany a trade dependent on a few basic commodities. While this statement might be applied generally to Pacific Northwest foreign trade, it is particularly apparent in the region's trade with Latin America.

Washington's trade with Canada

As mentioned previously, the Pacific Northwest and western Canada, with their similar topography, resources, climate, and industries, form in a sense a single economic unit with a political boundary separating the two areas. Trade with Canada, moreover, consists in large part of an interchange of commodities which are produced in both areas but whose domestic production in one of the areas is insufficient to satisfy its total demand. For example, among Washington's most important imports from Canada have been animals and animal products, wood and paper products, and copper ores, all of which are produced in important quantities in both areas. Specialized agricultural products make up most of the remainder of the trade.

Trade with Canada is important, however, only to the border state of Washington. The waterborne trade of Oregon with Canada consists of less than one percent of Oregon's total foreign trade. Washington's trade with Canada presents certain difficulties for this study, however. Our primary concern is with the waterborne trade of the Pacific Northwest. Shipments by vessel cover virtually all of the foreign trade of the region with the exception of one country—Canada. In assessing the importance of trade with Canada, concern solely with waterborne trade would not present the complete picture and would obscure the fact that there has been a change in the importance of the types of carriers used in this trade in the postwar period compared with the prewar period, land carriers having assumed a much more important role in recent years. The problem, however, is not simply one of a choice of statistics which show foreign trade by vessel or statistics covering all types of carriers.

COMPARISON OF WASHINGTON'S WATERBORNE TRADE AND TRADE BY ALL METHODS OF TRANSPORTATION, 1947-51

(in millions of dollars)

	1947	1948	1949	1950	1951[1]
Waterborne trade					
Exports	155.4	124.1	99.2	69.7	155.5
Imports	51.6	65.9	62.9	85.9	97.8
Total	207.0	190.0	162.1	155.6	253.3
All methods of transportation					
Exports	224.7	185.6	147.1	116.3	246.4
Imports	101.1	146.7	141.0	185.0	220.1
Total	325.8	332.3	288.1	301.3	466.5

[1] Preliminary.

Sources: United States Department of Commerce, Bureau of the Census, FT 972, *Waterborne Trade by United States Port*; FT 970, *Foreign Trade by Customs District; Quarterly Summary of Foreign Commerce.*

The United States Department of Commerce releases two types of foreign trade statistics, one covering waterborne foreign trade and the other covering foreign trade by all methods of transportation, including vessel, rail, truck, and air. Comparisons, however, are made difficult by the fact that the two series differ in the manner in which exports and imports are accredited to the various customs districts.[1] In spite of this shortcoming in the statistics, it will be assumed that the difference between Washington's waterborne trade with Canada and trade by all methods of transportation represents land and air shipments to and from Canada. Unfortunately the Department of Commerce series on waterborne foreign trade is available only for the postwar years so that no comparison with trade by all methods of transportation in prewar years is possible.

In 1950 Washington's waterborne imports from Canada amounted to $28.8 million, over one-third of that district's total waterborne imports. Canada was more important than any other country or trade area as a supplier of Washington's imports. Canada's share in the waterborne imports of the Pacific Northwest as a whole was approximately 27 percent of the total; this share was

[1] For waterborne trade statistics, exports are credited to the customs district in which the cargoes are laden on shipboard while imports are credited to the customs district of unlading. Thus, shipments which are transshipped through a particular customs district from or to other parts of the country are included in the waterborne trade of that district. In the case of foreign trade by all methods of transportation, exports are credited to the customs district from which the goods leave the country (except for vessel and air shipments, which are credited to the district of lading) and thus include also goods transshipped from other parts of the country. Imports, however, are credited to the customs district in which the goods enter warehouses or are made available for immediate consumption. This credited district may be different from the district through which the goods entered the country.

greater than that of Asia or Western Europe and was exceeded only by Latin America. If imports from Canada by land and air carriers are included, which are roughly estimated at $95 million, Canada's first position in Washington's imports becomes even more obvious.

On the export side Canada does not play such an important role in Washington's trade. Waterborne exports to Canada in 1950 were valued at slightly less than $9 million, less than one-third of the value of waterborne imports. Canada's share of the total waterborne exports of the Pacific Northwest was only 6 percent. However, if exports of roughly $45 million by carriers other than water are added, Canada's share of the total exports of Washington becomes the largest of any country or trade area; and, for the Pacific Northwest as a whole, Canada's share is exceeded only by Asia.

Prospects for a continuing growth of trade with Canada appear to be excellent. The development of this trade had been delayed previously by the depression of the 1930's and the system of imperial preference which followed. Also, during the early years of the postwar period Canada's balance of payments difficulties tended to retard the development of trade. Improvement in Canada's exchange position by 1950, however, permitted the relaxation of restrictions against dollar imports. The continued close political and economic ties between the United States and Canada and the fact that Canada is now America's most important trading partner strengthen the belief that trade with Canada will continue strong in the future. Trade with Canada through the Washington customs district, one of the major points for interchange of goods between Canada and the United States, should follow a similar course of development. Recent discoveries of petroleum and natural gas in western Canada, for which there is a ready market in the Northwest, should add to import value. One final factor which indicates a further growth of trade with Canada is the continuing high level of United States private investment in Canadian industry. From 1945 through 1951 United States private investment in Canada increased by over $2.2 billion to a total of $7.2 billion.

Waterborne foreign trade with all other areas

The Pacific Northwest's foreign trade with the countries and trade areas discussed thus far accounts for practically all of the total. Trade with the remaining major trade areas — Australia and Oceania, and Africa — has increased but still amounts to a minor part of the total. In value terms trade with these areas is over four times as large as prewar and their share of the Pacific Northwest's total trade has more than doubled. Nevertheless, in 1950 this share was less than 5 percent and amounted to less than $11 million.

In spite of the present relative unimportance of these trading areas to the Northwest, possibilities for expansion appear to be good. Trade with Africa can be expected to increase as current programs of economic development are carried forward. Australia and New Zealand and the islands of the Pacific are all within the Pacific Basin and thus are a part of the natural trading area of the Pacific Northwest. The present closer economic and political ties between Australia, New Zealand, and the United States indicate a future growth of trade. Similarly, the greater interest of the United States in the islands of the Pacific, not only from a military point of view but also from the standpoint of their economic development, should mean increased trade, although here the possibilities are limited by a sparse population which is widely scattered over the Central and South Pacific.

Intransit trade

There is one additional type of waterborne foreign trade which, although relatively unimportant in the commerce of the Pacific Northwest, forms an integral part of the foreign trade of most nations — intransit trade. Intransit trade covers merchandise which comes into the United States from a foreign country and is shipped to other foreign countries without being entered as an import.

The intransit trade of the Pacific Northwest averaged 109 million pounds and less than $6 million from 1946 through 1951. The peak year was 1948 when 555 million pounds valued at slightly under $8 million were handled by the Northwest. The low year in terms of value was 1946 with less than $3 million, while 1949 was the low year in terms of weight with 36 million pounds.

Oregon handles somewhat less than one-fifth of the total intransit trade of the Pacific Northwest; the remaining four-fifths moves through the ports of the Washington customs district, primarily through Seattle.

Washington's intransit trade has been bolstered by the establishment of Foreign Trade Zone Number 6 at Seattle, which opened on September 1, 1949. A foreign trade zone is, in effect, a free trade area set up within a port to facilitate the transshipment of merchandise from one foreign country to another or its eventual entry as an import into our country without the necessity of entering the goods in bonded warehouses where considerable time and expense would be involved. Foreign trade is further facilitated by permitting certain types of light manufacturing, processing, packaging, and exhibiting to be carried on within the zone. There are at present six foreign trade zones in the United States—New York, New Orleans, San Francisco, Los Angeles, San Antonio, and Seattle.

During the fiscal year ended June 30, 1951, the Seattle zone handled some 267 different types of commodities from 32 countries amounting to 14,139 long tons of merchandise valued at $6,349,742.[1]

While the Seattle foreign trade zone, as well as those at other ports, should contribute to an increase in foreign trade, there has been one serious drawback. Each of the

[1] Foreign-Trade Zone Board, *Report to Congress for the Fiscal Year Ending June 30, 1951*, Washington, D. C., March 17, 1952.

foreign trade zones must pay the salaries of the customs inspectors assigned to its zone. This large item of expense —more than one-third of total expenses—makes it difficult for the zones to operate on a profitable basis. During the most recent fiscal year, all of the foreign trade zones except New York operated in the red. Upon the recommendation of the Secretary of Commerce, the Foreign-Trade Zone Board is, at time of writing, considering this burden of expense, and it is generally believed that some relief may be given in the near future.

DOMESTIC TRADE[1]

Domestic waterborne trade of the Pacific Northwest may be divided into three types: intercoastal, which consists of trade carried by water between the Pacific Coast and the Atlantic and Gulf Coasts; coastwise, which includes shipments between ports on the Pacific Coast; and noncontiguous, which is trade with overseas territories of the United States, including Alaska, Hawaii, Puerto Rico, the Panama Canal Zone, and various island possessions.

Unfortunately data on the value of domestic waterborne trade are not available, and our analysis can be based on shipping weight only. In terms of shipping weight domestic waterborne trade is more important to the Northwest than foreign waterborne trade. In 1950, for example, domestic trade accounted for approximately 85 percent of the total tonnage of waterborne commerce of the region.

The Pacific Coast in general has suffered from a long run decline in domestic waterborne trade. Alternative forms of transportation that are faster and provide more frequent service have displaced water transportation in many cases. This decline, however, has not applied equally to all types of domestic commerce. While both intercoastal and coastwise trade have fallen off, the decline has been much more serious in the intercoastal service. Noncontiguous trade, on the other hand, has shown an upward trend. In addition, those ports which handle general cargo shipments predominantly have suffered more from the decline than have those ports where bulk shipments are important.

The ports of the Pacific Northwest have not been immune from the effects of this decline although they have suffered less, possibly, than some of the California ports. Nevertheless, the total domestic waterborne trade of the Northwest has decreased from the peak of 22.6 million short tons in 1928 to 17.2 million short tons in 1950. While there was some recovery in the late 1930's from the low levels of the depression years, the peaks of earlier years were not approached.

Of primary concern in this study are the changes in domestic waterborne trade which have taken place since 1938 and 1939. Brief reference, however, should be made to earlier years because of rather significant changes in

[1] Total domestic waterborne trade statistics for the postwar years through 1950 are from reports of the United States Corps of Army Engineers, while prewar figures were obtained from reports of the United States Maritime Commission. No breakdown of total domestic waterborne trade by type—coastwise, intercoastal, and noncontiguous—however, is available for the postwar years, with the exception of 1949 when a special report was tabulated by the Army Engineers. Alaskan trade figures for 1949 and 1950 are also furnished by the Army Engineers. Volume figures (in board feet) for lumber shipments are from the reports of the Pacific Lumber Inspection Bureau.

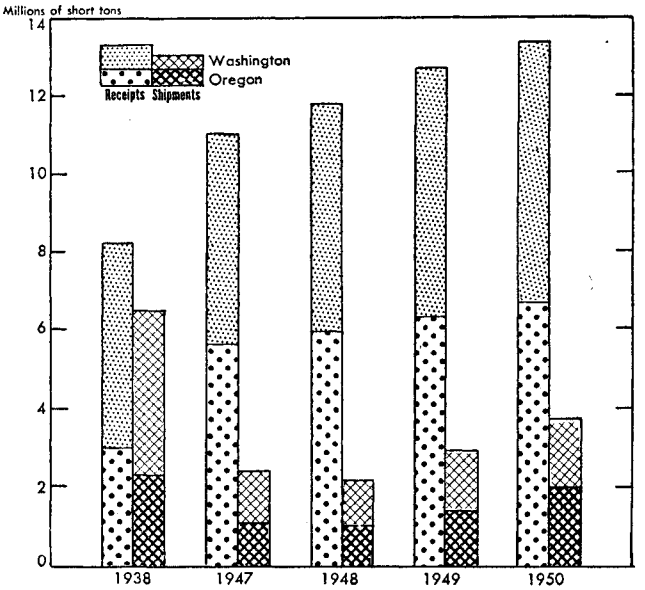
TOTAL DOMESTIC TRADE OF THE PACIFIC NORTHWEST
(in thousands of short tons)

	Outbound				Inbound			
	1928	1938	1949	1950	1928	1938	1949	1950
Coastwise ..	4,276	3,863	954	*	14,422	7,811	12,199	*
Intercoastal	2,435	2,081	1,588	*	604	460	389	*
Non-contiguous	517	721	743	*	395	439	484	*
Total	7,228	6,665	3,285	3,760	15,421	8,710	13,072	13,396

*Not available.
Sources: United States Maritime Commission, Report No. 295, *Waterborne Foreign and Domestic Commerce of the United States;* United States Army Engineers, Annual Report, Part 2, *Commercial Statistics* and unpublished machine tabulation sheets.

the movements of inbound shipments compared to outbound shipments. The decline in Pacific Northwest domestic trade between the late 1920's and the outbreak of World War II was confined almost entirely to inbound shipments. In 1938 total inbound shipments were only 55 percent of the 1928 level. In the postwar period, however, the trend in inbound shipments has reversed and by 1950 inbound shipments were almost 60 percent above the 1938 volume. On the other hand, outbound shipments in the domestic trade have shown an almost opposite trend. From 1928 to 1938 outbound shipments declined less than 7 percent. During the postwar period, however, outbound shipments declined sharply and in 1950 were less than 60 percent of 1938. This sharply divergent trend

DOMESTIC WATERBORNE COMMERCE OF THE PACIFIC NORTHWEST,[1] 1938-50



[1] Includes intercoastal, coastwise, and noncontiguous trade.
Source: United States Army Engineers, Annual Report, Part 2: *Commercial Statistics.*

between inbound and outbound shipments in the two periods can be explained largely in terms of two commodities. Outbound shipments in 1938 were only slightly below the 1928 level largely because lumber shipments had been maintained. In the postwar period, on the other hand, it was a decline in lumber shipments which accounted for most of the decline in outbound shipments, while increased petroleum shipments from California were primarily responsible for the growth in inbound tonnage.

The decline in domestic waterborne trade is commonly attributed to a number of factors, most of which reflect poorer service and insufficient savings to justify the inconveniences. A recent poll of shippers and receivers of intercoastal cargo indicated the following reasons for not using intercoastal water service (listed in order of frequency): (1) length of transit time; (2) insufficient savings in freight charges to justify its use; (3) criticism of burdensome incidental charges such as wharfage and insurance added to the basic freight rates; (4) too infrequent service; (5) frequent loss or damage to shipments; and (6) unstable labor conditions.[1] This list reflects virtually all the major arguments which have been used by shippers of goods against the use of water transportation in the coastwise as well as the intercoastal service. The ship operators, too, are well aware of their competitive disadvantages. There have been efforts to overcome these disadvantages, and some progress has been made toward better waterfront labor-management relations and improved methods of handling and packaging water shipments. There must be further progress, however, if domestic waterborne trade is to stage a real revival.

[1] Pacific Coast Association of Port Authorities, Committee on Coastwise and Intercoastal Business, "Report of Shipper Sub-Committee."

Coastwise waterborne trade

In 1949 coastwise waterborne trade of the Pacific Northwest was the most important segment of domestic waterborne trade, accounting for 72 percent of the total. The 1949 level represents a 13 percent increase over 1938. This increase, however, obscures certain basic changes which have had an adverse effect on coastwise trade.

The postwar increase in coastwise tonnage has been entirely the result of a large increase in inbound shipments of bulk petroleum products, which has offset a serious decline in outbound coastwise trade. Inbound coastwise shipments in 1949 were 56 percent over the 1938 volume. Of the total tonnage received in 1949, nonmetallic minerals accounted for over 99 percent.

Outbound shipments, in contrast, have declined more than 75 percent since prewar years. Lumber, the most important commodity in outbound coastwise trade, was almost entirely responsible for this decrease. Lumber shipments from the Pacific Northwest in the coastwise trade decreased 66 percent between 1938 and 1949. While there was some improvement in 1950 and 1951, they were still less than half the 1938 level.

Competition from rail and truck carriers has been most severe in the outbound coastwise trade, particularly in general cargo but also in lumber shipments. There is a smaller freight cost differential between land and water

DOMESTIC COMMERCE OF THE PACIFIC NORTHWEST, 1949

(in short tons)

	Receipts						Shipments					
	Intercoastal			Coastwise	Non-contiguous	Total domestic	Intercoastal			Coastwise	Non-contiguous	Total domestic
Oregon District:	Atlantic	Gulf	Total				Atlantic	Gulf	Total			
Animals and products, edible	109	10	119	14,851	—	14,970	30,138	—	30,138	—	1,372	31,510
Animals and products, inedible	389	626	1,015	64	—	1,079	99	—	99	16	26	141
Vegetable food products	4,997	4,239	9,236	5,557	21,359	36,152	29,438	2,746	32,184	784	21,942	54,910
Vegetable products, inedible	1,465	50	1,515	286	—	1,801	3,965	327	4,292	1,255	25	5,572
Textile fibers and manufactures	5,745	209	5,954	197	366	6,517	1,881	43	1,924	22	36	1,982
Wood and paper	6,027	1,078	7,105	34,141	472	41,718	795,969	55,486	851,455	643,961	65,339	1,560,755
Nonmetallic minerals	7,981	35,596	43,577	6,193,411	—	6,236,988	54	—	54	55,974	1,355	57,383
Metals and manufactures	47,093	7,232	54,325	455	27	54,807	1,270	95	1,365	3,961	34,037	39,363
Machinery and vehicles	2,446	—	2,446	3,189	1,431	7,066	601	173	774	31	4,729	5,534
Chemicals and related products	5,704	117	5,821	150	—	5,971	104	—	104	2,236	5,538	7,878
Miscellaneous	9,007	768	9,775	33,152	3,892	46,819	2,917	51	2,968	63	9,261	12,292
Total Oregon District	90,963	49,925	140,888	6,285,453	27,547	6,453,888	866,436	58,921	925,357	708,303	143,660	1,777,320
Washington District:												
Animals and products, edible	182	35	217	160	145,890	146,267	14,275	36	14,311	175	22,715	37,201
Animals and products, inedible	386	401	787	35	6,794	7,616	208	17	225	82	70	377
Vegetable food products	5,451	4,885	10,336	7,046	29,412	46,794	16,466	1,606	18,072	328	104,376	122,776
Vegetable products, inedible	1,151	138	1,289	247	139	1,675	54	121	175	13	1,348	1,536
Textile fibers and manufactures	7,146	78	7,224	204	219	7,647	595	15	610	187	2,810	3,607
Wood and paper	9,297	8,036	17,333	28,717	94,472	140,522	605,675	3,811	609,486	167,272	113,960	890,718
Nonmetallic minerals	8,497	88,249	96,746	5,857,661	123,461	6,077,868	606	40	646	38,500	110,643	149,789
Metals and manufactures	64,707	16,869	81,576	3,099	19,783	104,458	8,060	2,529	10,589	2,830	58,818	72,237
Machinery and vehicles	4,835	8	4,843	8,748	16,712	30,303	1,887	143	2,030	3,438	44,980	50,448
Chemicals and related products	13,074	139	13,213	1,759	100	15,072	3,974	—	3,974	31,987	10,233	46,194
Miscellaneous	13,980	321	14,301	5,389	19,501	39,191	2,554	155	2,709	1,025	129,061	132,795
Total Washington District	128,706	119,159	247,865	5,913,065	456,483	6,617,413	654,354	8,473	662,827	245,837	599,014	1,507,678
Total Oregon and Washington Districts	219,669	169,084	388,753	12,198,518	484,030	13,460,054	1,520,790	67,394	1,588,184	954,140	742,674	3,284,998

Source: United States Army Engineers, Division Engineer, South Pacific Division.

transport on the coastwise run than in intercoastal trade because of the shorter distances involved. In the case of lumber this has been accentuated by the shifting of production south from Washington into Oregon which has had the effect of shortening the distance to the large California market. An important part of the total cost of water shipments consists of relatively high handling charges which must be incurred in loading and unloading regardless of the distance the cargo will travel. Thus the shorter the haul the more these charges work to the disadvantage of water carriers. This fact, plus the large demand for lumber in California for housing construction, high lumber prices, and short supplies during part of the postwar period, has resulted in an increasing resort to rail and truck carriers which offer faster and more frequent deliveries at only slightly higher cost. In the intercoastal trade the longer distances involved have offset some of the disadvantages of water shipments of lumber, and the lower basic cost of transportation has been a more effective competitive advantage.

Intercoastal waterborne trade

Among the components of total domestic trade, intercoastal waterborne trade has declined the most since prewar years. Outbound intercoastal shipments declined 24 percent between 1938 and 1949, and inbound shipments were down 15 percent.

Wood and paper products are the dominant commodity group in the outbound intercoastal trade, making up 92 percent of the total in 1949. Lumber shipments, which were down considerably in the coastwise trade, actually increased in the intercoastal trade from 793 million board feet in 1938 to 1,021 million board feet in 1949 though they declined to about the prewar level in 1951. The only other commodity groups of importance were edible animal products and vegetable food products which together amounted to only 6 percent of the total.

Inbound intercoastal shipments are relatively small, amounting to less than one-fourth the volume of outbound shipments in 1949. Most important among the commodities received were nonmetallic minerals (mainly petroleum products) and metals and manufactures (mostly steel). These two commodity groups, which were of about equal importance, accounted for over 70 percent of total receipts.

Noncontiguous trade

The trade of the Pacific Northwest with noncontiguous United States territories and possessions has, along with coastwise trade, shown a gain in tonnage over prewar years. This gain included increases of 10 percent in inbound shipments and 3 percent in outbound shipments. Most of the increase was accounted for by the 68 percent growth in the noncontiguous trade of the ports of the Oregon customs district, as the volume of trade of the Washington district remained at about the 1938 level.

Even though the ports of the Oregon customs district were responsible for the postwar increase in noncontiguous trade, this trade is still much more important to the Washington district. The noncontiguous trade of the Washington customs district amounted to 14 percent of

WATERBORNE LUMBER SHIPMENTS FROM WASHINGTON AND OREGON, 1937-39 AND 1949-51

(in millions of board feet)

	Washington						Oregon					
	1937	1938	1939	1949	1950	1951	1937	1938	1939	1949	1950	1951
Total	1,787.7	1,176.1	1,463.6	767.5	766.0	764.2	931.7	1,006.8	1,183.3	965.8	1,149.2	1,167.9
Domestic	1,425.3	1,023.0	1,200.2	651.5	683.1	544.5	684.2	875.3	1,044.5	759.9	962.9	750.3
Alaska	17.1	12.4	15.3	9.9	8.0	15.9	*	0.9	0.1	0.7	0.6	3.8
Atlantic Coast	740.6	518.1	680.0	575.3	553.3	448.2	233.7	275.1	397.8	446.1	501.2	367.8
California	568.5	429.3	432.5	50.9	85.6	55.9	417.2	562.4	597.8	287.1	415.4	337.0
Hawaii	64.5	46.5	46.9	8.2	24.4	12.3	23.1	26.5	26.0	18.3	34.9	31.9
Panama Canal Zone	11.3	6.8	14.4	0.8	0.7	1.0	1.5	2.6	12.5	2.3	4.5	2.2
Philippines	12.7	3.1	2.4	..	..	..	1.1	0.5	0.6	..	..	..
Puerto Rico	10.6	7.0	8.7	5.8	11.0	9.7	7.3	7.2	9.3	5.5	6.3	3.8
Other	..	..	..	0.6	..	1.5	0.3	..	..	..	..	3.7
Export	362.4	153.1	263.4	115.9	82.9	219.6	247.5	131.5	138.8	205.8[1]	186.3	417.6
Africa	13.7	8.5	13.0	13.7	3.3	12.0	12.4	4.5	6.9	46.5	27.8	61.7
Australia	5.5	*	4.6	8.6	11.2	20.7	7.7	..	2.3	38.4	24.2	19.6
Belgium	13.8	10.5	7.8	1.5	0.4	1.8	3.5	4.2	6.1	6.3	2.2	80.8
China	99.9	28.9	58.4	1.5	3.0	1.9	57.6	27.7	25.3	5.6	6.7	4.0
Egypt, Palestine and Arabia	..	..	..	8.6	22.3	4.2	..	..	..	7.5	19.4	3.2
Japan[2]	128.0	21.7	42.3	14.8	3.4	6.4	50.3	9.1	6.0	16.0	3.6	10.5
South America	28.7	41.1	55.0	2.8	5.1	5.0	81.4	47.6	34.1	24.5	24.8	42.3
South Sea Islands	0.8	1.2	1.5	11.1	16.4	4.8	0.4	0.6	..	9.9	13.4	3.1
United Kingdom	41.7	19.8	58.7	43.0	9.4	144.1	10.2	12.4	34.7	29.4	44.2	151.9
Other	30.3	21.4	22.1	10.3	8.4	18.7	24.0	25.4	23.4	21.7	20.0	40.5
Exports as % of total	20	13	18	15	11	29	27	13	12	21	16	36

*Less than 50,000 board feet.
[1] Includes 1.4 million board feet from California.
[2] Includes Korea.
Note: Figures may not add to totals because of rounding.
Source: Pacific Lumber Inspection Bureau, *Waterborne Shipments of Lumber*. These figures are furnished to the Pacific Lumber Inspection Bureau by producers on a voluntary basis and are not exact. However, check comparisons by the Bureau indicate that the figures represent approximately 90 percent of the domestic shipments and 95 percent of the export shipments.

its total domestic waterborne trade while that of the Oregon district amounted to less than 3 percent of its total.

The noncontiguous trade of the Pacific Northwest is carried on primarily with the territories of Alaska and Hawaii. The Alaskan trade is of dominant importance to Washington, particularly the port of Seattle. In the case of the Oregon ports, trade with Hawaii accounts for the major part of their noncontiguous trade while the Alaskan trade is of minor importance.

Trade with Alaska

Trade between Pacific Northwest ports and Alaska has always accounted for the major portion of the trade between the United States and Alaska. Until recently, however, there was very little direct trade with Alaska from Pacific Coast ports other than the Washington ports, with the exception of petroleum shipments from California. In 1949 and 1950 Washington handled approximately half of all United States outbound shipments to Alaska. General cargoes destined for Alaska from other parts of the United States have customarily been shipped to Seattle by regular coastwise, intercoastal, or land carriers where they were transferred to vessels plying the Alaskan trade. Thus, Seattle became the terminus for the Alaskan trade. Washington, in addition, handles virtually all of the inbound waterborne traffic from Alaska. In both 1949 and 1950 nearly 99 percent of the tonnage of Alaska's exports to the United States entered through the ports of Washington, over 80 percent of this total crossing the docks of Seattle.

Oregon's share of the Alaskan trade is not significant, amounting to less than 3 percent in 1949 and 1950. California's ports, however, supplied over 40 percent of Alaska's domestic imports in both years.

Shipments from the Pacific Northwest to Alaska consist largely of foodstuffs, consumer goods, and construction materials. A substantial increase in the tonnage of these shipments has taken place in the postwar period. For example, shipments from the port of Seattle to Alaska increased from 330,000 short tons in 1936 to 438,000 tons in 1949 and 504,000 tons in 1950. There have also been substantial military shipments which do not appear in the official statistics.

Shipments from Alaska to the Northwest, however, have decreased from the prewar level. In 1936 shipments from Alaska landed at the port of Seattle amounted to 338,000 tons. By 1949 this total was 330,000 tons but it declined substantially in 1950 to 164,000 tons. This relatively large decrease in 1950 was caused primarily by a reduction in shipments of canned salmon as a result of the very small Alaskan pack. Some improvement, however, was shown in 1951 because of an increase in the canned salmon pack in Alaska.

Canned salmon has been by far the most important commodity shipped from Alaska to the Northwest, comprising on the average more than 50 percent by value of total shipments. In spite of continued light runs of salmon in recent years, the salmon industry is still the most important industry in Alaska.

PACIFIC COAST TRADE WITH ALASKA, 1949-50

(in short tons)

	1949		1950	
Army Engineers District	To Alaska	From Alaska	To Alaska	From Alaska
Los Angeles	121,000	41	104,516	2,419
San Francisco	474,289	785	343,215	173
Portland	46,332	78	22,411	262
Seattle	492,343	414,226	558,351	193,970
Unclassified	18,116	—	5,410	—
Total	1,152,080	415,130	1,033,903	196,824

Source: Division Engineer, South Pacific Division, Department of the Army.

Other important commodities among Alaskan shipments to the Northwest have been fur skins, gold and silver-bearing ores, and copper ore, until 1938 when developed copper resources in Alaska were exhausted.

The recent increases in outbound shipments to Alaska reflect the rapid development of the territory. This development in large part has been the result of the strategic and military value of Alaska. The 1950 census showed an Alaska population of 128,643, an increase of 77 percent over 1940. As a result of the increasing population and the construction of military facilities, a large volume of lumber and other construction materials has been shipped out of Seattle and other Pacific Northwest ports to Alaska. While Department of Defense expenditures in Alaska will probably continue to be of considerable importance, long run development of the territory and, therefore, of trade with the Pacific Northwest must rest on basic economic growth.

Commercial fishing is still the most important activity in Alaska, providing employment for about 30,000 persons and indirectly for many others. This employment is seasonal, however, and is limited, for the most part, to the summer months. Furthermore, income from the fishing industry goes mainly to residents in continental United States who go to Alaska for only part of the year. Alaska has attempted to foster the canning industry at home rather than shipping a part of its catch to the Pacific Northwest for canning or other processing. In order to encourage the development of additional canning facilities in Alaska, the territorial government has imposed a tax on the income of those fisheries which derive their product from Alaskan waters for canning or processing elsewhere.

Another major resource of Alaska is its forests. Most of Alaska's immense resources of timber is not suitable for construction lumber, but it provides excellent material for the production of pulp. Before the war a considerable volume of logs was shipped from Alaskan forests to Pacific Northwest mills. Since the war, however, this movement has virtually stopped, and Alaska prefers to develop her forest resources within the territory. As a result of this policy, a contract was signed in July 1951 between the United States Forest Service and a new Alaskan firm backed by a Northwest paper and pulp man-

ufacturer and a major East Coast rayon manufacturer, providing for the sale of 1.5 million cubic feet of timber in the Tongass forest for the manufacture of pulp. When this mill goes into operation it will have a capacity of over 300 tons of pulp per day which should add materially to the trade between Alaska and the Northwest. Construction has commenced and completion is scheduled for 1954.

Alaska's remaining known resources are primarily mineral in nature and are largely undeveloped or, as in the case of petroleum, being held as strategic reserves. Plans are underway, however, for at least one large metal reduction plant to be constructed in Alaska.

On the other hand the market for Pacific Northwest vegetables in Alaska may be lost in the future or at least greatly reduced. There is, for example, a market for two or three thousand pounds of vegetables per week in the city of Nome alone. Most of this produce is shipped from Seattle at a cost of 22 cents per pound. Present plans call for the encouragement of vegetable farming in Alaska which will be able to supply this market at shipping costs of four to nine cents per pound.

Over the years Alaska's major problem has been one of transportation. Alaska is almost wholly dependent on the continental United States for most of her manufactured goods, foodstuffs, and raw materials, and, in turn, must sell most of her products in American markets. In addition, by a provision of the Merchant Marine Act of 1920, foreign vessels are prohibited from participating in the trade between Alaska and the continental United States, thus making Alaska completely dependent upon the American merchant marine. As a result, Alaska has been extremely vulnerable to maritime strikes on the Pacific Coast. Although there has been considerable improvement during the postwar period in labor-management relations in the maritime industry, when these strikes do occur they work particular hardship on residents of Alaska. In addition to protests against this vulnerability because of possible work stoppages, residents of Alaska have also complained that the monopoly of their waterborne trade by American carriers has resulted in discriminatory freight rates and inadequate shipping services and facilities.

In spite of these problems, however, the immediate prospects for an expansion of trade between the Pacific Northwest and Alaska are favorable. Defense needs initiated during the war and continued during the postwar period should provide an important market for some time as well as a basis for the support of further increases in Alaska's population. The increasing interest in the development of Alaska's resources should also contribute to a greater volume of trade.

Trade with Hawaii

Pacific Northwest trade with Hawaii differs from that with Alaska in that it has been less extensive and more specialized. Wheat products and lumber constitute the major shipments to Hawaii, while pineapple, sugar, and miscellaneous commodities are shipped from Hawaii to the Northwest.

In the postwar period over 40 percent of the noncontiguous trade of the Oregon customs district has been with Hawaii. The Washington customs district, on the other hand, is dependent upon Hawaii for less than 15 percent of its noncontiguous trade, although the total volume handled is larger than that of the Oregon district. In 1949 Washington's total trade with Hawaii amounted to more than 140,000 short tons while that of Oregon was approximately 70,000 short tons. The trend, however, has favored the ports of the Oregon district. For example, while the tonnage of the trade of the port of Seattle with Hawaii is only slightly above the prewar level, that of the port of Portland has more than doubled.

The Pacific Northwest's trade with Hawaii is characterized by a large excess of shipments over receipts, the tonnage of shipments amounting to over three times that of receipts in recent years. This outbound balance reflects in large part the importance of lumber shipments in this trade. In 1950 lumber shipments from the Pacific Northwest to Hawaii amounted to over 59 million board feet. Although this figure is below the prewar level the decrease was due to a decrease in shipments from Washington; those of Oregon have increased.

The future of Pacific Northwest trade with Hawaii would appear to be good. The value of Hawaii's trade with the United States has shown a large increase since the war. Total United States trade with Hawaii increased from a little over $200 million in 1938 to $569 million in 1947, an increase of 184 percent. The Pacific Northwest's participation in this increase, however, has been limited by the lack of an extensive transcontinental transshipment trade through its ports and by the relatively small local market for the specialized products of Hawaii. The market for Pacific Northwest lumber and foodstuffs, on the other hand, should continue strong as the economy of the islands continues to develop.

SOME SPECIAL FACTORS AFFECTING PACIFIC NORTHWEST TRADE

THUS far this study has been concerned primarily with general problems which have had an effect on the waterborne trade of the Pacific Northwest. They are general in the sense that they reflect either factors that are more or less inherent in the economies of the Pacific Northwest states or trends in the flow of trade which have developed on the national or international scene. They have for the most part been long run problems, and many cannot be solved directly by action of Pacific Northwest ports acting individually. There are, however, additional problems of lesser magnitude which are more amenable to local action. Relatively speaking these problems are

of a short run nature. They include such things as labor-management relations, port promotion, rate structures, and port administration.

Labor-management relations

The maintenance of peaceful labor-management relations in the ports of the Pacific Northwest has posed problems almost as perplexing as those confronting California's ports. The problems involved are essentially the same, although there are some additional factors which may be mentioned in the case of the Pacific Northwest.

The first successful union organization among unlicensed seamen on the Pacific Coast was started in the coastwise lumber trade in the 1880's, while licensed seamen and longshoremen organized a decade later. By 1919 and 1921, however, following several unsuccessful strikes, concerted action by the employer groups resulted in a weakening of union strength. Collective bargaining was not resumed between employers and port labor until 1933. Shortly thereafter strikes in 1934 and 1936-37 affected all Pacific Coast ports. Work stoppages in 1946 and 1948 again crippled shipping in all Pacific Coast ports except Tacoma. Strikes have in most cases occurred at the same time on the Atlantic, Gulf, and Pacific Coasts, but the work stoppages on the Pacific Coast have been more severe and prolonged in most instances and thus have occasioned greater concern on the part of interested groups.

In general, collective bargaining on the Pacific Coast has been on a coastwide basis. Agreements are ordinarily negotiated between the union and the organized employer groups. A single contract covers the entire coast, although disputes are usually handled on the port level. The pattern of collective coastwide bargaining has been the result of a long series of negotiations between employers and labor and disputes among the rival labor unions. There remain, however, some areas of friction. For example, the independent International Longshoremen's and Warehousemen's Union now controls the collective bargaining process for all longshoremen along the Pacific Coast, with the exception of Tacoma where the American Federation of Labor's International Longshoremen's Association is in control. The International Longshoremen's Association, with headquarters and most of its strength on the East Coast, formerly was the dominant union on the Pacific Coast and has made attempts to regain its former position. Another source of friction, especially in Washington, has been the effort of the International Longshoremen's and Warehousemen's Union to extend its operations beyond purely dock work. Opposed to this expansion has been a non-maritime union, the American Federation of Labor's Teamsters' Union, which in retaliation has attempted unsuccessfully to extend its control over dock work.

Nor have the management groups been without internal difficulties. Recently the coastwide bargaining pattern set on the Pacific Coast by the Pacific Maritime Association for all employers was challenged by a major steamship company which refused to adhere to an industry-wide agreement and withdrew from the association.

The relative harmony along the waterfronts of the Pacific Coast in 1949 and 1950, however, indicates that peace is attainable, but its continuance will depend on the attitudes of labor and management. Labor-management cooperation since the war has been fairly well maintained; the difficulties have rather been the result of intra-group strife both on the labor and management sides. However, such difficulties must be resolved and labor peace maintained if the waterborne trade of the Pacific Coast is to be maintained and a healthy growth realized.

Port promotion in the Pacific Northwest

A comprehensive and aggressive port promotion program in and of itself will not be effective in attracting shippers to use the facilities of any port. But a well-integrated port promotion program in conjunction with modern facilities, a favorable rate structure, and peaceful labor-management relations can be of great benefit.

Port promotion among the ports of the Pacific Northwest has lagged behind ports in other parts of the country, particularly those of the Gulf Coast. In recent years, however, such programs have been undertaken in the Pacific Northwest as well as in California. Port promotion in the Northwest, however, has not been on a large scale. Of the numerous ports in the area, only three can undertake an extensive program of this type — Seattle, Tacoma, and Portland, all general cargo ports. The other ports deal mainly in specialized commodities, and the restricted nature of their trade precludes any effective action.

Seattle seems to have succeeded in developing the most intensive and widespread campaign to attract foreign and domestic shippers, with emphasis placed on trade with the Far East. In line with this, a Japanese Trade Fair was held in June 1951 as a part of a long-range international promotional program. Plans for additional facilities for the use of traders, consuls, and shippers are also in the offing.

Since there is little conflict of interest between California and Pacific Northwest ports because of differences in economic resources, there is much to be gained by a program for coastwide promotion and cooperation in a general program which would prove beneficial to all Pacific Coast ports.

The rate structure in the Pacific Northwest

With slight variations, the rate structure applicable to California ports is the same as that for the ports of the Pacific Northwest. The rail rates in force for commodities moving in international trade fall into several groups: rates applying on through bills of lading (for exports), domestic class rates, and commodity rates. These classifications govern the rates applied to shipments to and from Pacific Northwest ports. Rail rates are divided into "local" and "transcontinental" rates. Exports from points

east of the Rockies may take advantage of the lower rates to Pacific Coast ports of lading. "Local" traffic, on the other hand, includes all other shipments and are subject to the higher domestic rates. The application of these higher domestic rates to shipments of products produced in the West and shipped to seaboard for export has long been a source of bitter complaint.

The ocean rate, the other major component of the rate structure, is determined by conferences composed of steamship operators, generally on the basis of differentials in relation to the distances involved from various ports of the United States.[1]

Another element in the rate structure is handling and other terminal costs. Handling costs form an important part of shipping costs and have been criticized as one of the factors which place the Pacific Coast at a disadvantage in soliciting traffic. Until May 1950 the Pacific Northwest had suffered some disadvantage in relation to California ports in the matter of handling costs, but after that time equalization of handling charges among Pacific Coast ports on shipments to the Orient removed a major part of this inequality. Some further progress in rationalizing the rate structure was made in 1950 when the steamship companies and rail carriers agreed to absorb handling charges on transcontinental import and export traffic, excepting shipments from Hawaii and cargoes requiring off-shore loading. Under this arrangement all major expense items are combined in a single bill to the shipper. This move has alleviated the inconveniences involved in the charges previously in effect by reducing the complexity of cost determination to the individual shipper.

In the case of rates applicable to the coastwise and intercoastal trades, the basic problems are related to the competitive structure of rates permitted under Interstate Commerce Commission rulings which affect both rail and domestic water carriers. It is commonly claimed by water carriers that in the case of coastwise shipping on the Pacific Coast the competitive rail rates permitted by the ICC are noncompensatory on certain important commodities and thus provide unfair competition for water carriers. In the case of intercoastal shipments it is similarly contended that the competitive rail rates are so low that it has not been possible for water carriers to raise rates sufficiently to cover greatly increased costs of labor, fuel, supplies, and vessel replacement. Water carriers have had to hold their rates below the competitive rail levels in order to make their service, which is much slower, attractive to shippers.

This subject is very complex and highly controversial and space does not permit a complete discussion. There has, however, been one recent development which is directly related to the problem and of particular interest to the waterborne trade of the Pacific Northwest. In April 1952 the ICC granted a general 15 percent increase to all domestic carriers, both rail and water. There are, however, certain commodities which were not given the full increase. Among these commodities are several which are of particular importance in the domestic trade of the Pacific Northwest: fresh fruits and vegetables, canned and preserved food products, lumber, and grain and grain products. All of these commodities except grain were limited to rate increases of 12 cents per hundred pounds; the rate on grain went up 12 percent. It has been claimed that the nature of this ruling will have a particularly adverse effect on the intercoastal carriers operating to and from the Pacific Northwest. Two of the commodities mentioned, lumber and canned goods, are the most important commodities in eastbound intercoastal trade, and canned goods are important in the westbound traffic. Because of the necessity of holding water rates below rail rates, intercoastal carriers will be unable to benefit significantly from this increase. As might be expected, this recent rate decision has brought charges by domestic water carriers that in the selection of commodities selected for "hold downs" there has been direct discrimination against intercoastal carriers, particularly those serving the Pacific Northwest.

Port administration

Many of the problems with which ports must contend are directly related to the various types of port administration. Such problems as modernization of facilities and the types of services offered at various ports reflect the form of port administration employed and the powers assigned to the responsible authorities. Of particular importance, not only in the Pacific Northwest but in most port areas of the nation, has been the problem of inadequate port facilities. Because of the increase over prewar years in the average size of vessels, many berthing facilities have become outmoded. Other changes in the types of vessels have also resulted in the need for improved cargo handling facilities, in particular those capable of handling bulk cargoes. As a result those ports of the nation which have gone ahead with modernization programs have gained traffic at the expense of less progressive ports.

Port administration among the various Pacific Northwest ports shows much less variety than that shown among California ports. With the exception of Portland, almost all the major Pacific Northwest ports are organized in a similar fashion.

All ports in the Washington customs district are organized under the terms of the Port District Act of 1911. Aside from the general powers exercised by the Federal, state, and municipal governments over shipping and the harbor, each port administration constitutes a municipal corporation practically independent of state or municipal control. The municipal corporation is a port commission with defined powers over the port district, which may be either coextensive with a county or may cover less or more than one county. The members of the commission, usually three in number, are elected by the voters of the

[1] For a discussion of the determination of ocean freight rates see "Waterborne Trade of California Ports," Supplement to *Monthly Review*, May 1951, pages 7-8.

county for varying terms—with staggered elections so that one commissioner is elected every year or every other year. The commission controls all property belonging to the corporation and is empowered to levy annual taxes to cover bonded indebtedness, to issue general and local improvement bonds (with limitations), to provide port facilities, and to determine terminal rates and charges.

In the Oregon customs district all ports except Portland are organized along lines similar to those in Washington. Port districts are established within which port commissions act as independent municipal corporations. The commissioners are elected annually by the voters of the district and exercise powers similar to those outlined for Washington port commissions.

The Port of Portland, on the other hand, has a somewhat different set-up. The Port of Portland Commission, a municipal corporation, is composed of nine members appointed for four-year terms by the Governor and subject to a two-thirds vote of approval by the state Senate. The Port of Portland Commission maintains and operates the major share of waterfront property. Much of the remainder is owned by the City of Portland which maintains a city department—the five-man Commission of Public Docks appointed by the mayor—to supervise and operate the city properties. The Commission of Public Docks also is empowered to fix rates for all municipal terminals and docks.

Some description of the accomplishments of the Tacoma port administration will serve as an example of what can be done by such an authority. In March of this year work was commenced on the dredging of a new channel and the construction of a drawbridge at the Port of Tacoma. This project marks the culmination of years of effort on the part of the Tacoma Port Commission. The new 3,500-foot channel, with a 30-foot depth, will add a mile and a half of waterfront to the port and 100 acres of tidewater plant sites. The project is scheduled for completion in 1953, and already five new plants have acquired sites on the new waterway including two chemical plants, a boat yard, and a concrete plant. This new project, coinciding with the completion of the City of Tacoma's $146 million Cowlitz River hydroelectric project which will provide additional industrial power, augurs well for the future development of the port.

The Tacoma Port Commission is a separate municipal corporation formed in 1918 and follows the pattern of other port authorities in the Northwest. Other projects of the commission have been a cold storage plant, the capacity of which has been doubled recently, and grain elevators, which now have a capacity of 1.5 million bushels following a major addition made in 1951. Over 7.5 million bushels of wheat were loaded at the port's elevators in 1951 for export to foreign countries. The Tacoma progress is an excellent example of the manner in which an aggressive port authority can contribute to port development and the growth of waterborne trade. Other Pacific Northwest ports can credit their port administrations with similar progress although Tacoma is perhaps an outstanding case.

TRADE PROSPECTS OF THE PACIFIC NORTHWEST

Past trends and recent developments in the pattern and nature of domestic and foreign trade should provide some insight into the future of waterborne trade in the Pacific Northwest. The entire Pacific Coast should play an important role in waterborne commerce because of its proximity to the Orient and other trans-Pacific areas and its excellent coastline and harbors. The postwar changes in the volume and value of United States trade, moreover, indicate further increases in which the Pacific Coast states, and specifically the Pacific Northwest, should be able to share. Certain factors, however, both domestic and international, will be especially significant in determining the future of United States waterborne commerce and the share of the Pacific Northwest in that total.

Since the war, Oregon's total domestic trade has increased somewhat, mostly because of larger petroleum receipts, since the tonnage of shipments from Oregon ports has dropped. Washington's domestic trade, on the other hand, has declined from the immediate prewar period with the major share of the decline taking place in outbound tonnage.

No definite trend, however, is evident in the total volume of Pacific Northwest foreign trade since the end of World War II. After a sharp drop from 1947 to 1948, Oregon's foreign trade began to turn upward slightly. Washington's trade, meanwhile, has remained fairly constant at a level slightly below 1947. The region's exports and imports through 1950 followed the national trend, with exports declining from the peaks reached in 1947 and imports gradually increasing. The outbreak of the Korean conflict in 1950 upset this trend. During 1951, as a result of the unusual demand conditions in a rearming world, both exports and imports expanded rapidly in the nation and the Northwest alike, with exports showing by far the largest increase. In both Oregon and Washington the volume of foreign trade in 1951 exceeded the previous postwar high of 1947 by a considerable margin and the prewar level by an even greater margin.

The future trend of Pacific Northwest waterborne commerce will be determined in large measure by developments on the national and international scene, developments over which the region has little control. The future of their trade, however, will also depend upon other factors, such as careful planning of the future economic development of the region, the maintenance of peaceful labor-management relations in the shipping industry, and the pursuit of active port development and port promo-

tion programs. These are within the realm of local action and will assume increasing importance when the world's commerce returns to more normal commercial channels.

Compared with many other regions of the nation the Northwest is still a "young" economy and its period of greatest expansion probably still lies in the future. The two most important industries in the Pacific Northwest are agriculture and lumber—both extractive industries. The predominance of these two fields in the Pacific Northwest economy is reflected in the statistics of foreign and domestic commerce which show a similar lack of diversification. This lack of diversification has many disadvantages as far as waterborne trade is concerned, particularly foreign trade. Dependence upon a few exports of an agricultural and raw material nature subjects the economy to wide swings in the volume of trade in response to changing demands and at the same time limits the geographical distribution of the region's trade. On the other side of the balance of trade, a lack of diversification limits the market for imports, particularly raw materials.

The introduction of more general manufacturing and the conservation of the natural resources of the area, a process already underway, are prerequisite to the long run development of the economy and its trade. Present manufacturing devoted to the processing of raw materials produced in the region could be further expanded as could the conversion of waste materials into by-products. The development of additional new industry, on the other hand, is made particularly feasible in the Northwest because of the large potential power supply.

With further economic development it would be reasonable to expect that the present imbalance of trade, that is the large excess of exports over imports, would be reduced. The present large export balance has been supported by the unusual conditions of postwar world trade. Under more normal conditions it is doubtful if such a volume of exports could be maintained in view of the specialized nature of exports and the limited market available for imports in the Pacific Northwest.

At the present time foreign trade is much less important to the Northwest than domestic trade; nevertheless it appears that the best opportunity for an expansion of waterborne trade in the future lies in the foreign trade area. Coastwise and intercoastal water carriers have been facing increasing competition from land carriers and have been fighting a losing battle up to this point. During the postwar period the volume of this domestic waterborne trade has been maintained largely by an increase in petroleum shipments which has offset losses elsewhere. Such petroleum shipments, however, will probably decrease as the petroleum reserves of nearby western Canada are developed. While all possible efforts should be made by water carriers to improve their service, possibilities for expansion appear to be very limited. Foreign trade, on the other hand, offers much better prospects in view of the increasing dependence of this nation upon foreign trade and the advantageous geographical location of the Northwest. The development of markets in the Northwest for imports and markets abroad for an increasing variety of their exports should move hand in hand with the economic development of the region.

In the past decade the economic expansion of the Pacific Northwest has been exceedingly rapid. This expansion, however, has been largely the result of wartime demands and the unsettled international situation following the war. At the end of World War II there was considerable doubt as to whether the Northwest could consolidate and retain the expansion which took place during the war. These fears, however, proved to be unfounded and during the postwar years which preceded Korea the Northwest appeared to be digesting its wartime gains successfully. The aluminum industry, for example, owed its development entirely to World War II and it was rather generally expected that production would have to be drastically curtailed with the return of peace. Such, however, did not prove to be the case and civilian demands were successfully developed to replace military demand.

With the advent of the Korean War and our large-scale rearmament program it appears that the Northwest has again embarked on a period of expansion, the immediate course of which will be dictated by military demands. This second dose of military demand poses certain dangers for the Pacific Northwest. While fears of downward adjustments following World War II did not materialize, the period of quasi-peace was an extremely short one and now with new military demands the pattern of development may be diverted still further from that which might have taken place under more normal conditions.

The unusual demand conditions of the postwar world have been reflected in the foreign trade of the Pacific Northwest. The world food shortage which followed the war and the demand for materials for reconstruction, particularly lumber, still were large factors in the demand for Pacific Northwest exports when the new demands coincident to the Korean conflict were added. This continuing high level of demand for traditional exports should not obscure the need for a greater diversification of exports and markets which will be needed if foreign trade is to be maintained or expanded under more normal conditions of commercial demand. Efforts also should be made to exploit the Pacific Northwest's proximity to the Orient by developing a more extensive transshipment trade with interior sections of the nation.

APPENDIX A

FOREIGN TRADE OF THE OREGON CUSTOMS DISTRICT[1]

THE Oregon customs district includes the ports situated within the State of Oregon itself—e.g., Portland, Astoria, and Coos Bay—and two ports in Washington located along the Columbia River—Longview and Vancouver, Washington. With the exception of Coos Bay harbor, all of these ports are fresh-water ports on the banks of the Columbia and Willamette Rivers and provide the only deep-water harbors between San Francisco and Cape Flattery to the north.

The area embraced by the Oregon customs district has had a long and colorful history. The Oregon coast was first sighted in 1542 when Cabrillo and his chief commander, Bartolome Ferrelo, sailed northward from California in the search for the Northwest Passage. Other Spanish and English explorers continued the search. In 1578 Sir Francis Drake reached the Northwest coast and named the land New Albion. But the Columbia River, around which Oregon's commerce has centered, was not discovered until 1788 when Captain Robert Gray, an American from Boston, entered the mouth of the Columbia River and sailed up the river for some distance. Further exploration by Lewis and Clark in 1804 and 1805 established the fact that the river did not provide an east-west passageway across the North American continent. But the discovery of two new and promising economic resources—furs and timber—paved the way for the economic development of the area. A trading post was founded in 1811 at Astoria. Portland was founded in 1845, and the territory became a state in 1859.

Direction of trade

Since 1938 Asia has ranked among the first three export markets of the Oregon customs district. In 1939 and 1950 Asia was Oregon's principal export market. The chief products shipped have been lumber and other forest products and wheat and wheat flour—mainly to China, Japan, and the Philippines. Before the war Japan took a large volume of metal scrap, a movement that has not been resumed since that time.

The United Kingdom and continental Europe are the other major areas to which Oregon's exports are shipped, but their share of export value fell sharply from 1938-39 to 1950. The principal cargoes to Europe consist of wheat and wheat flour, lumber, and fruit.

South America, meanwhile, has become increasingly important in Oregon's export trade. In 1950 she was the third largest market for Oregon's exports, with lumber and wheat the most important products.

For the first six months of 1951, Asia accounted for almost two-thirds of Oregon's total exports because of increased military and economic activity in the Orient following the outbreak of the Korean conflict. As a result, the share of other major export markets in total export value fell in the period January-June 1951, compared with the same period in the previous year, although actual value figures had increased.

Although imports are much less important than exports in Oregon's trade, Asia is also the principal source of imports. Her share in Oregon's trade, however, dropped by almost one-half from 1938-39 to 1950. Part of the decline can be explained by the failure of the Asian nations to regain their prewar volume of exports and by the shift toward bulk shipments—such as wheat and flour—which has eliminated a large part of the jute imports

[1] The data presented in Appendices A and B are derived from two sources. Statistics for 1938 and 1939 by all methods of transportation were obtained from the United States Department of Commerce's *Foreign Commerce and Navigation*, while the current machine tabulation code sheets of the Bureau of the Census provided the vessel shipment figures for 1950 and January-June 1951 (Reports FT 752 and 352 of the Bureau of the Census).

For the Oregon customs district, the use of the two types of statistics makes little difference in comparability since the majority of Oregon's foreign trade originates or is destined to points in the state. In the case of Washington, on the other hand, the two types of statistics create a rather large discrepancy and reduce the value of any comparisons between 1938-39 and 1950-51 figures. Trade with Canada accounts for the major share of the difference, with transshipment trade responsible for the remainder. As a result, Canada's share in Washington's total trade in 1950 may be said to be larger than the percentages indicate, while the share of other countries is somewhat smaller.

January-June 1950 and January-June 1951 statistics are shown separately so that some measure of the changes in foreign trade caused by the outbreak of war in Korea is possible.

VALUE AND DISTRIBUTION OF OREGON CUSTOMS DISTRICT EXPORT TRADE, BY TRADE AREA

(in millions of dollars)

	1938		1939		1950		January-June 1950		January-June 1951	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Canada	*	0.1	*	*	0.3	0.4	0.2	0.6	0.6	0.6
Central America	0.7	2.4	0.7	2.3	2.0	2.6	0.7	2.2	1.0	0.9
West Indies and Cuba	0.1	0.3	0.1	0.4	5.7	7.5	2.9	9.5	2.1	2.0
South America	1.2	4.2	1.1	3.5	8.5	11.3	3.2	10.3	7.9	7.4
Scandinavia	1.1	3.9	0.7	2.3	1.6	2.1	0.9	3.1	0.4	0.3
United Kingdom and Ireland	9.3	32.1	10.7	35.2	8.9	10.7	5.1	16.5	10.5	9.9
Continental Europe	9.8	33.9	4.9	16.3	8.1	11.7	4.3	14.0	12.7	12.0
Asia	5.9	20.4	11.4	37.5	35.8	47.3	11.4	36.8	64.4	60.7
Oceania	0.1	0.2	0.1	0.3	2.2	2.9	0.7	2.2	2.1	2.0
Africa	0.7	2.5	0.7	2.2	2.6	3.5	1.5	4.8	4.5	4.2
Total	29.0	100.0	30.4	100.0	75.7	100.0	30.9	100.0	106.1	100.0

*Less than $50,000 or 0.05 percent.

Note: Figures may not add to totals because of rounding.

Sources: United States Department of Commerce, *Foreign Commerce and Navigation;* Bureau of the Census, FT 752, *Waterborne Exports by Port of Lading.*

VALUE AND DISTRIBUTION OF OREGON CUSTOMS DISTRICT IMPORT TRADE, BY TRADE AREA

(in millions of dollars)

	1938		1939		1950		January-June 1950		January-June 1951	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Canada	0.1	0.7	0.1	0.8	0.1	0.4	*	0.2	0.1	0.7
Central America	0.3	3.5	0.3	3.7	3.2	13.4	2.0	18.9	0.9	5.9
West Indies and Cuba	*	*	*	*	*	0.1	—	—	—	—
South America	1.1	14.8	1.4	17.0	7.2	30.4	3.1	29.7	4.4	29.8
Scandinavia	0.2	2.1	0.2	2.3	0.8	3.2	0.3	2.8	0.8	5.7
United Kingdom and Ireland	0.4	5.6	0.4	4.4	0.8	5.0	0.4	3.6	0.4	3.0
Continental Europe	0.9	12.2	0.6	7.1	1.2	3.2	0.3	3.1	2.2	15.2
Asia	4.4	59.6	5.3	63.6	8.1	34.1	2.9	28.2	5.8	39.7
Oceania	0.1	1.2	0.1	0.9	2.4	10.1	1.4	13.3	—	—
Africa	*	0.3	*	0.2	*	0.1	*	0.2	—	—
Total	7.4	100.0	8.3	100.0	23.7	100.0	10.4	100.0	14.7	100.0

*Less than $50,000 or 0.05 percent.
Note: Figures may not add to totals because of rounding.
Sources: United States Department of Commerce, *Foreign Commerce and Navigation;* Bureau of the Census, FT 352, *Waterborne Imports by Port of Unlading.*

from the Orient ordinarily used in the manufacture of bags.

South America and continental Europe, and Central America and Oceania since the war, are the other sources of Oregon's small volume of imports. South and Central America's shares rose sharply from 1938 to 1950, while continental Europe's share fell during the same period because of the decline of imports of specialized manufactured products.

In January-June 1951, Asia and continental Europe improved their relative shares of import value, while South America's share was maintained, compared with the same period in 1950. Central America's share, however, fell sharply and there were no imports from Oceania.

Commodity composition of trade

Products of the forest and agriculture have always dominated Oregon's export trade. The vegetable food products group is the major commodity group, followed by wood and paper products. Wheat and wheat flour constitute the bulk of vegetable food exports, and lumber accounts for more than half of Oregon's exports of forest products. From 1938 to 1950 the few changes that occurred in the composition of Oregon's exports consisted of shifts between the two principal categories of vegetable food products and wood and paper products.

In January-June 1951 exports of vegetable food products rose phenomenally to 72 percent of total export value, compared with 45 percent for the same period a year earlier. Wheat exports to India probably accounted for much of the increase.

Oregon's imports show somewhat greater variety than her exports, although the vegetable food products group again is the leading commodity group by value. Textile fibers and manufactures and inedible vegetable products constitute other major imports. In addition, edible animal products, principally fish and fish products from Japan, were important in 1950.

Coffee imports increased from 37 percent of vegetable food imports by value in 1938 to 95 percent in 1950, while their volume increased from 16 million pounds in 1938

VALUE AND DISTRIBUTION OF OREGON CUSTOMS DISTRICT EXPORT TRADE, BY COMMODITY GROUP

(in millions of dollars)

	1938		1939		1950		January-June 1950		January-June 1951	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Animals and animal products, edible	0.9	3.0	0.7	2.2	6.0	8.0	3.3	10.6	3.7	3.5
Animals and animal products, inedible	*	0.1	*	0.1	1.6	2.0	0.5	1.5	1.1	1.0
Vegetable food products and beverages	20.1	69.4	19.4	63.8	38.5	50.9	14.0	45.2	76.4	72.0
Wheat	12.1	41.7	9.9	32.4	24.6	32.6	7.5	24.3	62.3	58.8
Wheat flour	1.9	6.4	4.5	14.8	5.4	7.1	2.7	8.7	5.6	5.3
Vegetable products, inedible, except fibers and wood	0.2	0.6	0.1	0.2	0.8	1.1	0.4	1.2	0.5	0.5
Textile fibers and manufactures	*	*	0.1	0.2	0.5	0.7	0.4	1.1	0.2	0.2
Wood and paper	6.2	21.5	7.3	24.0	23.0	30.4	9.4	30.4	21.2	19.9
Lumber	4.2	14.5	5.2	17.2	13.3	17.6	4.6	14.8	15.7	14.8
Nonmetallic minerals	*	0.1	*	0.1	0.2	0.3	0.1	0.4	0.2	0.1
Metals and manufactures, except machinery and vehicles	1.3	4.6	2.7	8.7	1.1	1.5	0.6	1.9	0.6	0.6
Machinery and vehicles	0.1	0.5	0.2	0.6	2.6	3.4	1.6	5.2	1.4	1.3
Chemicals and related products	*	*	*	*	0.8	1.0	0.5	1.5	0.6	0.6
Miscellaneous	*	0.2	*	0.1	0.5	0.7	0.3	1.0	0.3	0.3
Total	29.0	100.0	30.4	100.0	75.7	100.0	30.9	100.0	106.1	100.0

*Less than $50,000 or 0.05 percent.
Note: Figures may not add to totals because of rounding.
Sources: United States Department of Commerce, *Foreign Commerce and Navigation;* Bureau of the Census, FT 752, *Waterborne Exports.*

VALUE AND DISTRIBUTION OF OREGON CUSTOMS DISTRICT IMPORT TRADE, BY COMMODITY GROUP

(in millions of dollars)

	1938		1939		1950		January-June 1950		January-June 1951	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Animals and animal products, edible	0.2	2.8	0.3	3.1	6.3	26.7	1.2	11.4	1.8	12.0
Animals and animal products, inedible	0.1	1.6	0.2	2.2	0.1	0.6	0.1	0.7	*	0.2
Vegetable food products and beverages	2.7	36.3	2.7	32.3	7.4	31.2	3.8	36.0	3.3	22.6
Coffee, raw or green	1.0	14.2	1.0	11.9	7.0	29.4	3.6	34.4	3.0	20.3
Vegetable products, inedible, except fibers and wood	1.4	18.6	1.5	18.4	1.1	4.7	1.0	9.9	2.5	17.0
Textile fibers and manufactures	1.9	25.9	2.4	29.4	5.4	22.9	3.4	32.3	2.5	17.0
Vegetable fibers and manufactures	1.7	23.4	2.2	26.2	3.5	14.9	1.7	16.1	1.4	9.5
Wood and paper	0.1	1.2	0.1	1.0	0.3	1.1	0.1	0.9	0.3	2.2
Nonmetallic minerals	0.1	1.8	0.1	1.8	0.2	1.0	0.1	0.5	0.2	1.5
Metals and manufactures, except machinery and vehicles	0.4	4.9	0.7	7.9	1.7	7.2	0.4	3.5	2.7	18.2
Iron and steel mill products	n.a.	—	n.a.	—	0.9	3.6	0.1	1.2	2.2	15.2
Machinery and vehicles	*	0.7	*	0.5	0.3	1.4	0.1	1.1	0.3	2.0
Chemicals and related products	0.4	4.8	0.2	2.6	0.7	2.8	0.3	3.3	0.9	6.3
Miscellaneous	0.1	1.4	0.1	0.8	0.1	0.4	*	0.4	0.2	1.0
Total	7.4	100.0	8.3	100.0	23.7	100.0	10.4	100.0	14.7	100.0

*Less than $50,000 or 0.05 percent.
n.a.—not available.
Note: Figures may not add to totals because of rounding.
Sources: United States Department of Commerce, *Foreign Commerce and Navigation;* Bureau of the Census, FT 352, *Waterborne Imports.*

to 20 million pounds in 1950. Imports of vegetable fibers, on the other hand, have dropped because of the increased use of bulk shipping mentioned above.

In the first six months of 1951 Oregon's import trade increased only slightly, compared with 1950, and contributed further to the imbalance in Oregon's trade since exports rose sharply. The relative importance of vegetable food products and textile fibers and manufactures declined, while imports of metals and manufactures rose substantially.

APPENDIX B

FOREIGN TRADE OF THE WASHINGTON CUSTOMS DISTRICT[1]

THE Washington customs district covers the entire state of Washington and includes the major ports of Seattle and Tacoma and other ports situated on Puget Sound and along the Washington coastline, with the exception of those ports on the Columbia River which are included in the Oregon customs district.

The area now comprising the state of Washington remained unexplored and undeveloped for some time after the discovery of the Oregon territory. Early in 1592 a Greek pilot sailing under the name of Juan de Fuca claimed to have entered an inlet in the area of Puget Sound. In 1778 Captain James Cook passed the strait as he sailed up the Northwest coast as far as Nootka Sound on the west side of Vancouver Island. But it was not until 1787 that Captain Charles William Barkley, an Englishman, found and named Juan de Fuca Strait. Puget Sound, however, was not discovered and explored until 1792 when Captain George Vancouver entered its waters. Seattle was founded in 1852 and Tacoma in 1868, near the site of the Hudson Bay Company's trading post at Nisqually. Washington became a state in 1889. In 1897 the discovery of gold in Alaska and the Yukon Territory

[1] See footnote on page 24.

VALUE AND DISTRIBUTION OF WASHINGTON CUSTOMS DISTRICT EXPORT TRADE, BY TRADE AREA

(in millions of dollars)

	1938		1939		1950		January-June 1950		January-June 1951	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Canada	14.3	20.6	15.3	19.6	8.3	12.0	4.1	13.5	6.8	8.9
Central America	0.7	1.1	1.2	1.5	3.8	5.4	1.3	4.5	2.9	3.8
West Indies and Cuba	0.1	0.1	0.1	0.1	0.9	1.3	0.4	1.3	0.2	0.2
South America	1.7	2.5	2.7	3.5	9.0	12.9	2.9	9.6	9.1	11.9
Scandinavia	1.7	2.5	1.7	2.1	2.5	3.6	1.7	5.7	0.5	0.7
United Kingdom and Ireland	10.5	15.1	11.6	14.8	4.3	6.2	2.9	9.6	6.6	8.7
Continental Europe	10.6	15.4	10.1	12.9	18.1	26.0	8.3	27.5	17.8	23.4
Asia	28.1	40.7	33.9	43.3	21.3	30.7	7.9	26.3	30.4	39.9
Oceania	0.8	1.2	0.9	1.2	0.3	0.4	0.1	0.2	0.3	0.4
Africa	0.5	0.8	0.8	1.0	1.1	1.5	0.5	1.8	1.6	2.1
Total	69.1	100.0	78.3	100.0	69.5	100.0	30.1	100.0	76.3	100.0

Note: Figures may not add to totals because of rounding.
Sources: United States Department of Commerce, *Foreign Commerce and Navigation;* Bureau of the Census, FT 752, *Waterborne Exports by Port of Lading.*

VALUE AND DISTRIBUTION OF WASHINGTON CUSTOMS DISTRICT IMPORT TRADE, BY TRADE AREA

(in millions of dollars)

	1938		1939		1950		January-June 1950		January-June 1951	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Canada	12.7	43.3	17.6	51.0	28.8	33.7	12.7	34.3	12.1	20.5
Central America	0.6	2.0	0.6	1.7	4.0	4.7	2.5	6.8	1.9	3.2
West Indies and Cuba	*	0.1	*	0.1	1.1	1.3	1.1	2.9	0.1	0.2
South America	1.7	5.7	1.3	3.9	18.0	21.0	7.2	19.4	21.9	37.1
Scandinavia	0.6	2.2	0.4	1.1	0.5	0.6	0.2	0.5	0.5	0.9
United Kingdom and Ireland	0.9	3.2	0.9	2.5	2.2	2.5	0.8	2.1	3.5	6.0
Continental Europe	1.1	3.9	0.9	2.8	5.0	5.8	2.4	6.4	1.9	3.1
Asia	11.4	39.0	12.5	36.4	24.0	28.1	9.2	24.7	15.2	25.8
Oceania	0.1	0.5	0.2	0.4	1.9	2.2	1.0	2.7	1.9	3.0
Africa	*	0.1	*	0.1	0.1	0.1	0.1	0.2	0.1	0.2
Total	29.3	100.0	34.5	100.0	85.6	100.0	37.0	100.0	59.1	100.0

*Less than $50,000 or 0.05 percent.
Note: Figures may not add to totals because of rounding.
Sources: United States Department of Commerce, *Foreign Commerce and Navigation;* Bureau of the Census, FT 352, *Waterborne Imports by Port of Unlading.*

marked the turning point in Seattle's transformation into a thriving commercial center.

Direction of trade

Like the other customs districts along the Pacific Coast, Washington's leading export market is Asia. Washington's total export value in 1950, however, was only fractionally above the 1938 figure although earlier postwar years showed substantial improvement. But by January-June 1951 Washington's exports exceeded the 1950 total, and Asia's share equaled the prewar level both percentagewise and by value.

The other major export markets of the Washington customs district are Canada, the United Kingdom and Ireland, continental Europe, and South America. Trade with Canada accounts for roughly one-fifth of Washington's export trade if land shipments are included in the 1950 figures. Trade with the United Kingdom and Ireland fell from 1938 to 1950, while trade with Europe and South America improved over the same period. Shipments of grains, foodstuffs, and lumber predominate in the outbound movement. For the first six months of 1951 all export markets registered sizable gains over the first half of 1950 since total export value had more than doubled, but relative shares remained about the same.

On the import side Canada is the chief source of Washington's foreign imports, while Asia is the other major supplier. Principal commodities imported from the Orient include fish and fish products and vegetable products.

Since the war South America has also become important in Washington's import trade. Imports of coffee and copper ores have been responsible for much of the improvement.

Imports in January-June 1951 were also above the level for the entire year 1950. South America's share of import value increased, Asia's share remained fairly constant, and Canada's share fell quite sharply, compared with the same period in the previous year. Copper ore and coffee imports reached new high levels and explain much of the increase.

Commodity composition of trade

In 1950 vegetable food products and beverages led all commodity groups in total export value, compared with 1938-39 when vegetable food products placed second be-

VALUE AND DISTRIBUTION OF WASHINGTON CUSTOMS DISTRICT EXPORT TRADE, BY COMMODITY GROUP

(in millions of dollars)

	1938		1939		1950		January-June 1950		January-June 1951	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Animals and animal products, edible	6.7	9.7	6.1	7.9	3.6	5.2	1.9	6.4	1.6	2.1
Animals and animal products, inedible	2.5	3.6	1.7	2.2	2.5	3.7	0.7	2.3	1.8	2.3
Vegetable food products and beverages	15.5	22.5	16.7	21.5	25.7	37.0	10.0	33.2	33.0	43.3
Wheat flour	4.4	6.3	5.1	6.5	12.8	18.4	4.8	15.9	23.3	30.5
Vegetable products, inedible, except fibers and wood	0.9	1.3	0.7	0.8	2.2	3.2	1.0	3.4	4.8	6.4
Textile fibers and manufactures	0.4	0.5	0.6	0.8	0.6	0.9	0.4	1.2	1.1	1.4
Wood and paper	13.5	19.6	14.9	19.1	11.4	16.4	4.3	14.4	18.0	23.6
Lumber	3.9	5.6	6.9	8.8	3.4	4.9	1.3	4.2	6.5	8.6
Nonmetallic minerals	1.5	2.2	1.4	1.7	1.5	2.1	0.9	2.9	0.6	0.8
Metals and manufactures, except machinery and vehicles	17.8	25.9	25.4	32.6	14.2	20.5	7.1	23.7	10.4	13.7
Copper and manufactures	14.8	21.4	18.9	24.2	10.6	15.3	6.2	20.6	7.6	10.0
Machinery and vehicles	6.8	9.9	6.6	8.5	4.6	6.5	2.2	7.4	3.0	4.0
Chemicals and related products	1.3	2.0	2.2	2.8	1.9	2.8	0.9	3.1	1.2	1.5
Miscellaneous	2.0	2.8	1.6	2.1	1.2	1.7	0.6	2.0	0.7	0.9
Total	68.9	100.0	78.0	100.0	69.5	100.0	30.1	100.0	76.3	100.0

Note: Figures may not add to totals because of rounding.
Sources: United States Department of Commerce, *Foreign Commerce and Navigation;* Bureau of the Census, FT 752, *Waterborne Exports.*

VALUE AND DISTRIBUTION OF WASHINGTON CUSTOMS DISTRICT IMPORT TRADE, BY COMMODITY GROUP

(in millions of dollars)

	1938		1939		1950		January-June 1950		January-June 1951	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
Animals and animal products, edible	1.6	5.5	2.2	6.5	7.7	9.0	2.1	5.8	2.3	3.9
Animals and animal products, inedible	1.4	4.6	1.5	4.4	1.9	2.2	0.7	1.9	0.7	1.1
Vegetable food products and beverages	6.5	22.2	6.4	18.4	12.6	14.7	4.6	12.5	17.3	29.4
Coffee, raw or green	1.5	5.0	1.2	3.4	8.7	10.2	2.8	7.6	15.9	26.9
Vegetable products, inedible, except fibers and wood	1.3	4.3	1.0	3.0	5.2	6.1	1.3	3.6	4.2	7.1
Copra	—	—	—	—	3.5	4.1	0.4	1.1	3.1	5.3
Textile fibers and manufactures	4.8	16.4	5.6	16.1	5.6	6.6	2.5	6.7	4.6	7.8
Vegetable fibers and manufactures	0.5	1.8	0.5	1.4	2.8	3.3	0.9	2.6	2.7	4.6
Wood and paper	8.4	28.7	12.4	35.9	18.4	21.5	7.8	21.1	9.7	16.5
Logs	1.6	5.6	2.3	6.6	5.8	6.8	2.4	6.6	2.8	4.7
Lumber	3.6	12.3	5.8	16.7	1.4	1.7	0.6	1.7	1.9	3.2
Pulpwood	0.1	0.2	0.1	0.4	1.6	1.9	0.7	1.9	0.9	1.6
Wood pulp	0.8	2.7	1.3	3.8	2.0	2.3	0.4	1.0	0.9	1.5
Standard newsprint	1.7	5.9	2.3	6.5	6.6	7.7	3.4	9.1	2.6	4.4
Nonmetallic minerals	1.2	4.1	1.4	4.0	1.5	1.8	0.7	1.9	0.9	1.6
Metals and manufactures, except machinery and vehicles	1.6	5.4	1.3	3.8	28.6	33.4	15.7	42.5	16.3	27.6
Copper ore, scrap	1.0	3.4	0.6	1.6	18.3	21.3	10.8	29.1	12.1	20.4
Machinery and vehicles	0.4	1.2	0.1	0.3	1.4	1.6	0.5	1.4	1.2	2.0
Chemicals and related products	1.4	4.9	1.8	5.2	1.3	1.5	0.4	1.1	0.9	1.5
Miscellaneous	0.8	2.7	0.8	2.4	1.4	1.6	0.6	1.5	0.9	1.5
Total	29.3	100.0	34.5	100.0	85.6	100.0	37.0	100.0	59.1	100.0

Sources: United States Department of Commerce, *Foreign Commerce and Navigation;* Bureau of the Census, FT 352, *Waterborne Imports.*

hind metals and manufactures. Wheat and wheat flour have been the principal commodities exported in this group. In 1950 metals and manufactures occupied second place in export value. Copper ingots and bars produced in Washington smelters and refineries formed the major proportion of metal exports.

The miscellaneous wood and paper products group, among which lumber was most important, was the only other important export group. A large share of these forest products were destined for the Asian countries and Europe.

During the first half of 1951 vegetable food products and wood and paper products increased their shares compared with a year earlier. Exports of metals and manufactures, however, declined.

Wood and paper imports led all other imports in 1938, followed by vegetable food products and textile fibers. In 1950 the positions were changed somewhat as metals and manufactures led with 33 percent, followed by wood and paper products and vegetable food products. If shipments by land from Canada are included in Washington's import trade, however, wood and paper products again become the principal commodity group.

In January-June 1951 vegetable food products, metals and manufactures, and wood and paper products led all commodity groups in that order. A fivefold increase in coffee imports from the same period a year earlier was responsible for the leading role of vegetable food imports. This gain was achieved mainly at the expense of metals and wood imports, but the share of other commodity groups also suffered.