WHAT'S AHEAD FOR THE DOUGLAS-FIR LUMBER INDUSTRY

Ву

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INTRODUCTION

One of the leading questions in the minds of foresters, loggers, and lumber manufacturers in the Douglas-fir region today concerns the future of the lumber industry as regards marketing its products. At the present time the principal market is in the Eastern United States. The principal competitor is the Southern pine region, and the principal problem is getting the product to that market at a low enough cost so that it may compete favorably.

In presenting this paper, the writer has drawn upon the information contained within the several references listed in the bibliography section of this report, and he has also drawn upon information presented in the classrooms of the School of Forestry, Oregon State College.

For the purpose of this report, the Douglas-fir region and the Pacific Northwest are used synonymously as are the Southern pine region and the South. The term "Eastern Markets" shall be used to include all lumber markets east of the Rocky Mountains.

PRESENT COMPETITIVE PICTURE OF DOUGLAS-FIR ON EASTERN MARKETS

At the present time the Douglas-fir lumber industry is enjoying a period of relative prosperity. Lumber requirements which were not met in the recent war years have resulted in high demands now. As a result of the high demand for lumber for homes, wood-using industries, and industrial reconversion and expansion, there has been a very marked change in the lumber industry of the Douglas-fir region.

One of the most significant results of the very high demand is high prices. Never before in the history of the lumber industry have prices been so high. Private individuals and business concerns have been so anxious to get lumber for their own individual building enterprises that sheer competitive bidding, as it were, has forced lumber prices upward.

Results of high prices are reflected in the very large number of small operators who have gone into the logging and sawmill business. The lumber market has become a seller's market, and lower grades of lumber are readily sold. Second-growth stands which should have been left to form the basis of future crops are being logged. Wherever there is available timber and a possible logging chance, one finds a logging operation.

Another significant result of the high prices for lumber is that at the present prices a great deal of lumber can be shipped east by rail or by water and still make a profit despite the high freight rates. In normal times, however, only the better grades of construction

and finish lumber can stand the transportation charges and still compete favorably on the eastern lumber markets.

Douglas-fir is now competing successfully with southern pine, its greatest competitor, on the eastern markets. Lumber grades which in normal times could not be marketed profitably in these markets are now being marketed. The question that remains is how long will these lower grades be able to compete successfully, and what will be the picture when these markets are no longer available for these lower grades. Will the lumber industry be able to dispose of these lower grades when the demand for them drops off?

III

FACTORS WHICH LIMIT THE USE OF DOUGLAS-FIR ON EASTERN MARKETS

If Douglas-fir were able to meet its southern pine competitor on an equal basis, it would have certain advantages. While old-growth timber still remains, Douglas-fir has the advantage of being able to produce more clears and timbers of bigger sizes. In addition, the strength-weight ratio of Douglas-fir is higher. However, not all lumber is bought and sold on the basis of its desirable qualities unless for specialized use; price enters into the picture. Douglas-fir must necessarily be priced higher for several reasons. It is therefore at a disadvantage in competition with southern pine.

Transportation Charges

Transportation charges are the greatest single reason for the higher price of Douglas-fir on eastern markets. In normal times, as stated before, only the product that is desired for special purposes, such as construction timbers, is purchased in spite of the necessarily

higher price. Other less desirable grades must be marketed either locally, in California, or in other far western markets.

At the present time transportation rates are undergoing changes. In July, 1947, the railroads asked for an increase of rates from 15 and 25 per cent with a maximum of 12 cents per 100 pounds. Again in September, they increased the proposal to 38 and 28 per cent with a maximum of 18 cents per 100 pounds.

At the old rate, for example, for timbers weighing 2500 pounds per 1,000 board feet moving to New York City where the rate was 92 cents per 100 pounds, the freight charges would be \$23.00 per 1,000 board feet. At the rate proposed in July, that is, a 12 cent increase, the freight charges would be 104 cents per 100 pounds, or \$26.00 per 1,000 board feet. If we use the September proposal, we find that the freight charges would be \$28.00 per 1,000 board feet.

In October, 1947, the Interstate Commerce Commission granted a temporary increase of 10 per cent, and in January, 1948, the Commission granted an additional increase of 10 per cent, bringing the present rate to 110 cents per 100 pounds. This increase would bring the shipping cost of 1,000 board feet of timbers weighing 2500 pounds to \$27.44 if the destination were New York City.

Southern railroads were also affected by the rate change proposal, but they still average some forty cents per 100 pounds lower than the Douglas-fir region. From Hattiesburg, Mississippi, for example, to New York City, for timbers weighing 2,500 pounds per 1,000 board feet

Information from a personal letter from K. C. Batchelder, Traffic Manager, West Coast Lumbermen's Association.

and a freight rate of 54 cents per 100 pounds, the freight charges would be \$13.50 per 1,000 board feet. Since this example is figured at the pre-July rate, the advantage enjoyed at that time by the southern pine over the Douglas-fir was \$9.50 per 1,000 board feet. Each increase since that time has been correspondingly the same for the southern railroads, and the southern pine advantage is still \$9.50 per 1,000 board feet.

According to a personal letter from the late W. G. Tilton of the West Coast Lumbermen's Association, lumber can be shipped to the eastern seaboard at a slightly lower cost by water. However, handling charges in unloading from the ship and reloading on freight cars for shipment inland, plus the railroad freight charge, limit the distance of the inland freight haul. Charges are on a cubic volume basis, but for convenience in estimating costs they have been set at \$25.00 per 1,000 board feet for shipment to New York City. Because lumber shipped by sea is more unprotected than that shipped by rail, only the common grades are shipped in this manner.

Southern Pine Competition

In addition to the freight rate advantage, the Southern pine region enjoys several other advantages over the Douglas-fir region.

One of the most obvious advantages is its labor. A comparison of the average hourly wage for logging and sawmill workers for October, 1946, shows that the average wage for the Southern pine region was 70 cents per hour. At the same time, the average wage for the Douglas-fir

[&]quot;Wages in Sawmills in the South", Monthly Labor Review, U. S. Bureau of Labor Statistics, Vol. 64, p. 1031 (June, 1947).

region was \$1.35 per hour. This advantage by the South can be lost, however, because of the increased labor union activity in that region.

The Southern pine region also has an advantage in the terrain on which its trees grow. The region is accessible in nearly all of its parts, and there is very little of the "rough" terrain which is the rule rather than the exception in the Douglas-fir region. Almost the entire Southern pine region is admirably suited to tractor logging, and tractors are rapidly replacing animals for yarding purposes. In addition to the ease of logging which the terrain affords, there is also a much better opportunity for intensive management of the forest stands. Thinnings can be made with relative ease, and they are readily marketed. Markets for these thinnings are nearby, and transportation to them is a minor problem. Developments in the Douglas-fir region which would allow for marketing this type of product may reduce this advantage.

The South is a region of rapid growth which, however, is not a clear-cut advantage since the Douglas-fir region is able to support very rapid growth in most of the timber stands. Nevertheless, the southern pines clear their boles at an earlier age than do the Douglasfir and associated species. This factor gives the southern pine the advantage of marketability at an earlier age and rotations of shorter durations. Douglas-fir, however, produces a larger and taller tree which is more useful as heavy construction timber than southern pine. Advantages of the Douglas-fir Region

The Douglas-fir region has the advantage of highly efficient

[&]quot;Postwar Development on The Pacific Coast," Monthly Labor Review, U. S. Bureau of Labor Statistics, Vol. 64, p. 621 (April, 1947).

logging and manufacturing methods which are of very considerable importance in reducing the advantage of the southern pine over Douglas-fir.

Volumes per acre are high, and volumes logged per man-day are considerably higher in the Douglas-fir region because of the heavy mechanization of the logging methods. Mr. Ralph W. Marquis, Forest Economist for the U. S. Forest Service, states in a personal letter to the writer that this efficiency in logging and in manufacturing is one of the principal reasons why the Douglas-fir region has been able to compete successfully. He further states, however, that the Pacific Northwest could lose this advantage.

The other advantage of Douglas-fir over southern pine is the quality of the product. As has been stated before, Douglas-fir has been able to compete on eastern markets as construction and special use lumber despite the necessarily higher price. Quality, then, has been one of the primary factors which has kept Douglas-fir on the competitive market.

Mr. Marquis states that a complete series of tests for quality of second-growth Douglas-fir is being conducted at the Forest Products Laboratory, Madison, Wisconsin. However, results of these tests have not yet been published. Mr. Tilton, in his letter, stated that "The grades of construction and special-use lumber from second-growth timber are ordinarily as high or higher than from old-growth timber". No definite conclusions can be reached on this matter, however, until the results of the tests at the Forest Products Laboratory are made known.

PRESENT FOREST RESOURCE SITUATION IN THE DOUGLAS-FIR REGION

With the demand for lumber very high during the recent war years and with the demand also very high in the postwar period, the old-growth stands of timber in the Douglas-fir region are being depleted at an alarming rate.

The present stand in the Douglas-fir region, according to the latest figures available, is 117,222,000,000 cubic feet. With an estimated annual growth of 1,024,000,000 cubic feet and an estimated annual drain of 2,150,000,000 cubic feet, it is apparent that the drain is greatly in excess of the growth. However, since about thirty-five per cent of the total area within the Douglas-fir region is in virgin stands, an increase in the growth rate can be expected as the old-growth stands are cut off. The increase will not be as large as one might expect, however, because much of the area previously logged and now in a reproducing and growing state is on the better sites. A good percentage of the old-growth stand that is left is on the poorer and more inaccessible sites. Therefore, the reproduction which will come after logging the present old-growth stands will not produce wood as fast as the second-growth stands on the better sites which were logged first.

Much more serious, perhaps, than the growth versus drain situation is the depletion of many fine second-growth stands during the recent

[&]quot;Gaging The Timber Resources of The United States," Report Number 1 from A Reappraisal of The Forest Situation, U. S. Department of Agriculture, Forest Service, pp. 50-56 (1946).

years of high demand for logs. These are the stands which should have been left to form the basis for future cuts. When the present old-growth stands are cut out, there may be a serious shortage of logs as the result of the present practice of cutting in second-growth stands. Then, in order to maintain full log production, it may be necessary to log the species which are now considered as undesirable and to log the younger age classes of Douglas-fir which are now considered uneconomical to log. Development of better utilization practices, however, may change this picture considerably.

V

DEVELOPMENT OF BETTER UTILIZATION PRACTICES

The need for a more complete utilization of the timber stands in the Douglas-fir region has been felt for some time. The research work of the Oregon Forest Products Laboratory at Oregon State College and the many research experiments being carried out by private concerns is directed toward a more complete utilization of our timber resources.

Today, on a typical Douglas-fir logging show, 67 cubic feet per 1,000 board feet or about forty per cent of the total cubic volume of the stand is left on the ground as slashing. Seventy cubic feet per 1,000 board feet or about forty-two per cent of those logs which reach the mill is wasted or burned as mill fuel. If all of the waste material could be utilized, the drain on the timber resources of the region

[&]quot;Wood Waste in The United States," Report Number 4 from A Reappraisal of the Forest Situation, U. S. Department of Agriculture, Forest Service, p. 7 (1947).

² Ibid., p. 11.

would be materially reduced and the competitive advantage of Douglas-fir would be strengthened. Mr. Marquis states in his letter:

"A more complete utilization of woods and mill waste can, as adjuncts of lumber manufacture, improve the competitive position of Douglas-fir lumber through a reduction in manufacturing costs. Today, in a typical sawmill operation, the lumber produced from a tree must pay the cost of logging and transporting a much greater volume of wood."

Undoubtedly, if the material now wasted could be marketed profitable, the costs attributed to lumber and log production would be much lower.

In addition to the full utilization of the timber that is logged, there is a distinct need of utilizing the unfavored species which are not ordinarily logged. If these species were utilized more fully, the life of the old-growth stands might be further extended toward the time when the second-growth stands are ready to cut.

Another utilization factor which might change the picture considerably would be the development of lumber remanufacturing industries on the West Coast. At the present time, a good deal of lumber is shipped to the eastern part of the United States, remanufactured into doors, window casings, and other specialty products, and then shipped back to the West Coast consumer. The price the West Coast consumer pays includes not only the freight from West to East and return on the lumber used in the product but also he must pay the freight from West to East on the material wasted in the remanufacturing process. If these products were manufactured on the West Coast, the West Coast consumer would not have to pay the freight of the product to the East and return, and the Eastern consumer would not have to pay the freight on the material wasted in manufacture. In this case, the remanufacturer on the West Coast would have a decided advantage over the remanufacturer in the Eastern United States.

POPULATION INCREASE IN THE WEST

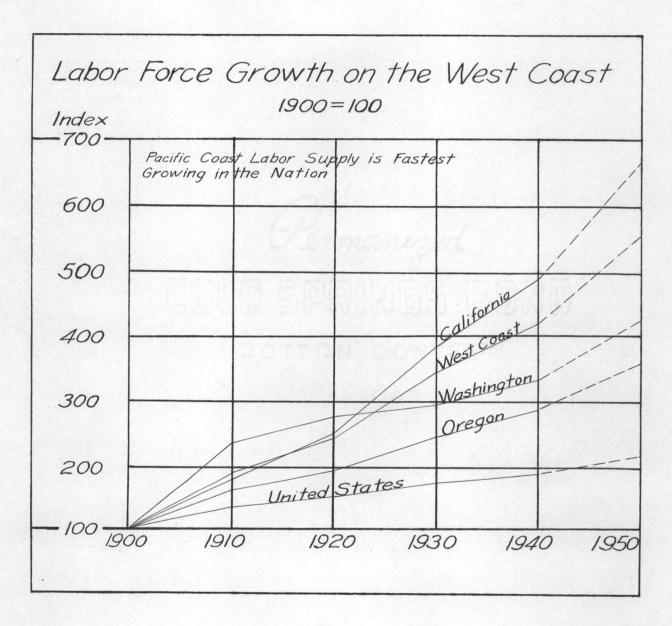
In comparison with the rest of the United States, most of the West Coast has been settled for only a relatively few years. About one hundred years ago, a few Spanish Dons and missionaries in California and a handful of trappers and traders in the Pacific Northwest represented the total encroachment of civilization upon the West Coast.

On January 23, 1848, James W. Marshall was operating a small saw-mill for Captain John Sutter of Sacramento. The mill was located on the banks of the South Fork of the American River at what is now Coloma, California. While inspecting the tailrace of the sawmill on that historic morning, Marshall picked up a few grains of gold, and when the news leaked out, one of the greatest gold rushes in history began. This gold rush launched the West Coast upon a period of population increase which even now shows no signs of abatement.

During the recent war years, populations on the West Coast increased a great deal. Industrial development for the production of war materials was largely responsible for this increase. In back of this industrial development, however, was the wealth of natural resources, such as hydroelectric power, minerals, and timber, which are to be found in abundance in different localities on the Pacific Coast and in neighboring states.

While no complete information as to the total increase in the population on the West Coast during this decade will be available until the 1950 Census, estimates have been made by the U. S. Bureau of the Census and by the U. S. Bureau of Labor Statistics. These

Chart Showing Labor Force Increase
On The West Coast



[&]quot;Postwar Development on The Pacific Coast," p. 571.

estimates indicate a very marked increase in the West Coast population during and following the war years. In 1944, the Bureau of the Census sampled the population of the city of Los Angeles and recorded the following data:

Population of City of Los Angeles

	1940	1944
Male	1,429,532	1,518,825
Female	1,486,871	1,838,14
Total	2,916,403	3,356,969

These figures indicate an increase of 440,566 persons or 15.3 per cent over 1940, and, since members of the armed forces were not included in the sampling, the figures do not give a true picture of the increase.

Another estimate by the Bureau of the Census for the State of California as a whole shows that between 1940 and 1946 the population increased by 32.6 per cent.

The Bureau of Labor Statistics, U. S. Department of Labor, estimates that between 1940 and 1945, the labor force in the three Pacific Coast States increased by 1,591,000 to a total of 5,859,000 workers, an increase of 38.3 per cent.

This great population increase should have a pronounced affect upon the future of the lumber industry in the Douglas-fir region.

In 1944, 12,000,000,000 cubic feet of all timber, including 50,000,000,000

[&]quot;A Chapter in Population Sampling," U.S. Bureau of the Census, U.S. Government Printing Office, Washington, D.C. (1944).

^{2&}quot;State Shows Large Population Increase," The Sacramento Union, March 18, 1948, p. 5, col. 4.

Monthly Labor Review, Postwar Development on The Pacific Coast, p. 563.

board feet of saw timber, was cut from the forests of the United States. Potential timber requirements for the United States during the period of 1950 to 1955, add up to 15,000,000,000 cubic feet annually. It is estimated that by 1950 there will be 150,000,000 people in the United States. This means that the per capita utilization will amount to about one hundred and three cubic feet.

As the West Coast grows in population, so does its requirements for timber products. More and more of the output of Douglas-fir sawmills can be marketed on the West Coast, and these mills should be less and less dependent upon the Eastern lumber markets for their existence.

[&]quot;Gaging The Timber Resources of the United States," p. 1.

[&]quot;Potential Requirements for Timber Products in the United States,"
Report Number 2 from A Reappraisal of The Forest Situation, U. S.
Department of Agriculture, Forest Service, p. 6 (1946).

³ Ibid., p. 8

VII

CONCLUSIONS

The freight rates which Douglas-fir products must pay in order to enter into competition upon eastern markets are the industry's greatest single competitive disadvantage at the present time. An adjustment of these freight rates would be advantageous to the Douglas-fir lumber industry in the future.

The advantages which the Southern pine region now has over the Douglas-fir region may be reduced considerably as the result of future developments in the Pacific Northwest. These developments should allow for more intensive forest management through the marketing of material which is now uneconomical to market. The labor cost advantage which the South now has may be reduced considerably through union activity which is only now gaining a foothold in that region.

The advantage of the Douglas-fir region in its intensive mechanization may be lost to increased mechanization of logging and milling operations in the South. The quality of the product, however, is one advantage the Douglas-fir region may never lose.

The depletion rate of the Douglas-fir region is very high, and the drain is greatly in excess of the growth. However, with the development of higher utilization, the growth-drain situation may be somewhat more equalized in the future. Better utilization should also reduce the cost of logging and milling per unit cut and increase the competitive advantage of Douglas-fir.

Finally, the rapidly growing population of the West Coast

should furnish a market which could relieve the competitive pressure on the Douglas-fir lumber industry.

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ADDENDIZ

APPENDIX

* * * *

CHICAGO CONFERENCE
FREIGHT TRAFFIC MANAGERS
TRANSCONTINENTAL RAIL LINES

AND

WEST COAST LUMBER INDUSTRY

* * * * * * * * * *

EXHIBITS CONCERNING COMPETITIVE

LUMBER RATE RELATIONSHIPS

EX PARTE 166

AUGUST 7, 1947

DISTRIBUTION OF LUMBER BY RAIL FROM OREGON AND VASHINGTON YEAR 1946

New England Territory	Number of Cars	Weight 1000 Lbs.	Percent of Total
Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont	2,674 272 3,024 161 725 107	196,882 19,776 223,374 12,063 51,838 7,297	
Subtotal Trunk Line	6,963	511,230	
Territory			
Delaware Maryland &	309	24,316	
Dist. of Columbia New Jersey New York Pennsylvania Virginia West Virginia	1,924 5,068 9,707 6,353 705 684	137,979 381,417 730,146 463,825 55,908 51,389	
Subtotal	24,750	1,844,980	
CFA Territory			
Indiana Michigan Ohio	3,078 5,035 4,215	224,157 376,852 305,181	
Subtotal	12,328	906,190	
Total Officia	al		
Territory	44,041	3,262,400	28
Southeastern Territory			
Alabama Florida Georgia Kentucky Mississippi North Carolina South Carolina Tennessee	647 210 33 363 194 29 4 309	45,827 17,559 2,315 26,450 14,873 2,006 334 23,542	
Subtotal	1,789	132,906	1

Western Trunk Line Territory	Number of Cars	Weight 1000 Lbs.	Percent of Total
Illinois Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota Wisconsin	10,384 6,370 4,689 12,459 4,524 3,333 3,036 3,160 3,469	826,398 452,438 334,309 925,727 310,384 233,616 219,884 233,773 253,285	
Subtotal	51,424	3,789,814	33
Southwestern Territory			
Arkansas Louisiana Oklahoma Texas	626 1,079 5,867 4,091	43,598 89,742 401,667 306,586	
Subtotal	11,663	841,593	7
Western Territory			
Arizona Colorado Idaho Montana Nevada New Mexico Utah Wyoming	1,735 2,262 1,640 1,557 202 791 1,854 981	132,396 161,364 119,472 109,485 14,535 59,802 135,564 69,232	
Subtotal	11,022	801,850	7
Pacific Coast States Territory			
California Oregon Washington	22,903 4,054 10,218	1,743,090 271,046 665,940	
Subtotal	37,175	2,680,076	24
Grand Total	157,114	11,508,639	.100

Comparison of Present and Proposed Increased Rates Ex Parte 166 From Portland, Ore. and Hattiesburg, Miss. To Typical C.F.A. and Trunk Line Destinations

Rates in cents per 100 lbs.

	Portla	rad Ore.	rom Hattie	ahiiwa	Spr	ead	Amount	
TO	Pres.	Prop. Inc. Rates	Pres.	Prop. Inc. Rates	1	rer	Port-	Hatt. Miss
	-)		5% Maximum		100 lbs.		112200
Centralia Ill. Chicago " Rockford "	85 1 85 2 85 2 85 2	97년 97년 97년 97년	36 48 48	45 60 60	49년 37년 3 7 년	52½ 37½ 37½	12 12 12	9 12 12
Milwaukee Wis.	85½	97 <u>급</u>	49	61	$36\frac{1}{2}$ $36\frac{1}{2}$	36½	12	12
Beloit "	85½	97급	49	61		36½	12	12
Terre Haute Ind.	92	104	46	58	46	46	12	12
Indianapolis "	92	104	48	60	44	44	12	12
Ft. Wayne"	92	104	48	60	44	44	12	12
Lansing Hich. Detroit " Grand Rapids " Bay City "	92	104	49	61	43	43	12	12
	92	104	49	61	43	43	12	12
	92	104	49	61	43	43	12	12
	92	104	52	64	40	40	12	12
Dayton Ohio Toledo "Akron"	92 92 92	104 104 104	48 49 50	60 61 62	44 43 42	44 43 42	12 12 12	12 12 12
Pittsburgh Pa.	92	104	50	62	42	42'	12	12
Harrisburg "	92	104	52	64	40	40	12	12
Philadelphia"	92	104	53	65	39	39	12	12
Buffalo N.Y. Syracuse " New York "	92	104	52	64	40	40	12	12
	92	104	53	65	39	39	12	12
	92	104	54	66	38	38	12	12
Boston Mass.	92	104	59	71	33	33	12	12
Concord N.H.	92	104	59	71	33	33	12	12
Portland Ne.	92	104	59	71	33	33	12	12

WCLA Traffic Department August 4, 1947.

Comparison of Present and Proposed Increased Rates Ex Parte 166 From Portland, Ore. and Hattiesburg, Miss. To Typical Western Trunk Line Destinations

Rates in cents per 100 lbs.

				om		SI	read	Amoun	t of
		Portla		Hatti	esburg	Por	rtland		ease
			Prop.		Prop.		over	Port-	Hatt
		Pres.	Inc.	Pres.	Inc.	Hattie		land	Miss
TO	National Sections	Rates	Rates	Rates	Rates	Pres. Prop.			
	, -0 - 0 - 0 - 0 - 0	pro-a-a-a-a-a-a-a-a-a-a-a-a-a-a-a-a-a-a-a	In	crease 1	5% or Max	imum 129	per 100	lbs.	Dagin dan buma ukasa
Chillicothe	Mo.	81불	932	43	49	38=	441	12	6
Kansas City	11	752	862	43	49	322	372	11	6
Springfield	11	822	86½ 94½	40	46	422	482	12	6
Sedalia	- 11	84	96	43	49	41	47	12	6
Joplin	11	752	862	43	49	322	37=	111	6
Atchison	Kans.		862	43	49	321	37=	11	6
Topeka	11	752	862	46	53	292	332	11	7
Wichita	11	752	862	46	53	292	332	11	7
Salina	11	752	862	46	53	292	332	11	7
Coffeyville	1)	752	862	46	53	292	332	11	7
Lincoln	Nebr.	75호	86글	48	55	27불	312	11	7
Omaha	11	752	862	48	55	272	312	11	7
Grand Island	11	75=	862	60	69	15 2	17분	11	9
North Platte	17	72	83	66	76	6	7	11	10
Ottumwa	Ia.	1 ~	932	48	55	332	382	12	7
Des Moines	11.	812	932	48	55	332	382	12	7
Cedar Rapids	- 11	81호	932	52	60	292	332	12	8
Mason City	11	815	932	52	60	292	$33\frac{1}{2}$ $26\frac{1}{2}$	12	8
Sioux City	11	75호	86 <u>1</u>	52	60	232		11	8
Mankato	Minn.	75호	86글	59	68	162	182	11	9
Pipestone	11	751	86호	66	76	92	102	11	10
Minneapolis	11	75 2	86 <u>2</u>	56	64	192	22 2	11	8
Duluth	11	75물	862	60	69	152	17 2	11	9
Watertown	S. D.	66½	76½	69	79	* 32	* 22	10	10
Madison	Wis.	851	97불	56	64	29글	332	12	8
Green Bay	11	851	$97\frac{1}{2}$	55	63	302	$34\frac{\tilde{1}}{2}$	12	8
Chippawa Fall	s II	821	942	56	64	262	30 <u>1</u>	12	8

^{*} Spread favor North Pacific Coast

Comparison of Present and Proposed Increased Rates Ex Parte 166 From Portland, Ore. and Hattiesburg, Miss. To Typical Southwestern Destinations

Rates in cents per 100 lbs.

			rom	Spr	ead	Amoun	Amount of		
	Portla	nd Ore.	Hatti	esburg	Port	land	Increase		
TO	Pres. Rates	Prop. Inc. Rates	Pres. Rates	Prop. Inc. Rates	Hattie	sburg Prop.	Port- land	Hatt. Miss.	
			Increase 1	5% Maxim	Branders and the complete of Characters of the Complete State of t	r 100 lb	Se	The state of the s	
Shreveport La	852	97호	29	33	56 1	64 1	12	4	
Little Rock Ark Ft. Smith "	85½ 75½	97½ 86½	36 40	41 46	49½ 35½	56½ 40½	12	5	
Springfield Mo	82글	94호	40	46	421	48분	12	6	
Tulsa Okla. Oklahoma City "	75 g 75 g	86 <u>ਵੇ</u> 86 <u>ਵੇ</u>	43 43	49 49	32½ 32½	37½ 37½	11 11	6	
Houston Tex. Ft. Worth " Austin " San Antonio " El Paso " Amarillo "	8512121212121212121212121212121212121212	97212121212 97212121212 97562	37 38 42 42 55 52	43 44 48 48 63 60	47 43 43 43 43 28 33 2 33 2 3	542 5322 4921 4921 2621 3242 262	12 12 12 12 12 12	6 6 6 6 8 8	

WCLA Traffic Dept. August 4, 1947

Comparison of Present and Proposed Increased Rates Ex Parte 166 From Portland, Ore. and Hattiesburg, Miss. To Typical Southeastern Destinations

Rates in cents per 100 lbs.

	Doub?		om	- 1	Spre Portland		Amount of Increase		
	Portland Ore. Prop. Pres. Inc.		Pres.	Prop. Inc.	ove Hattiesb	r	Port- land		
TO	Rates	Rates	Rates	Rates	Pres.	Prop.			
		Inc	rease 15%	% Maximum	m 12¢ per	100 lbs.			
Memphis Tenn. Nashville "Chattanooga "Knoxville "	85분 99분 102 102	97년 111년 114 114	22 33 29 34	25 38 33 39	63½ 66½ 73 68	72글 73글 81 75	12 12 12 12	3 5 4 5	
Jackson Miss.	89	101	11	13	78	88	12	2	
Birmingham Ala. Montgomery Mobile	99년 99년 94년	111 ½ 111 ½ 106 ½	20 20 13	23 23 15	79 है 79 है 81 है	88±2 88±2 91±2	12 12 12	3 3 2	
Atlanta Ga. Savannah "	102 104 ½	114 116½	31 36	36 41	71 68급	78 75분	12 12	5 5	
Tallahassee Fla. Jacksonville " Miami "	104호 104호 104호	116 ½ 116 ½ 116 ½	29 36 44	33 41 51	75 ± 68 ± 60 ± 60 ±	83호 75 <u>구</u> 65호	12 12 12	4 5 7	
Columbia S.C. Charleston	104월	116½ 116½	38 38	44 44	66 = 66 = 66 = 66 = 66 = 66 = 66 = 66	72½ 72½	12 12	6	
Winston-Salem N.C Raleigh " Wilmington "	104 104 104 	116 116 116 116 	41 43 43	47 49 49	$ \begin{array}{c} 63\frac{1}{2} \\ 61\frac{1}{2} \\ 61\frac{1}{2} \end{array} $	69 <u>1</u> 67 <u>1</u> 67 <u>1</u>	12 12 12	6 6 6	

WCLA Traffic Department August 4, 1947 West Coast and Southern Pine Lumber
Rate History Shows the West is Losing
Competitively in Western Trunk Line Territory

Rates in cents per 100 lbs.

		om		
TO	Portland Ore,	Hattiesburg Miss.	Spread Portland over Hattiesburg	Increase in Spread
Topeka, Kansas				
May 15, 1943 Jan. 1, 1947, Ex P162 Proposed Ex P166	65 <u>ੀ</u> 75 <u>¦ਂ</u> 86ਕੂ	36 43 49	29급 32급 37급	3 8
Omaha, Nebraska				
May 15, 1943 Jan. 1, 1947, Ex P162 Proposed Ex P166	6510 75210 860	40 48 55	25½ 27½ 31½	- 2 6
Des Moines, Iowa				
May 15, 1943 Jan. 1, 1947 Ex Pl62 Proposed Ex Pl66	712 812 932	40 48 55	31½ 33½ 38½	- 2 7
Sioux City, Iowa				
May 15, 1943 Jan. 1, 1947, Ex P162 Proposed Ex P166	65 ਹੈ 75 ਤੇ 86ਫ਼	43 52 60	22 1 2 2312 262	1 4

West Coast and Southwestern Lumber Rate History Shows the West is Losing Competitively In Southwestern Territory

Rates in cents per 100 lbs.

		Fr	om		
TO	Portla Ores		Alexandria La.	Spread Portland over Alexandria	Increase in Spread
Tulsa, Oklahoma					
May 15, 1943 Jan. 1, 1947, Ex Proposed Ex P	162	65½ 75½ 86½	28 34 39	37 <u>1</u> 41 <u>2</u> 47 <u>2</u>	4 10
Ft. Worth, Texas					
May 15, 1943 Jan. 1, 1947, Ex F Proposed Ex F	P 162	75글 85글 9 7 글	25 30 35	5012 5512 622	5½ 12
Houston, Texas					
May 15, 1943 Jan. 1, 1947, Ex F Proposed Ex F	162	75½ 85½ 97½	25 30 35	5010 5510 6210	5½ 12
Austin, Texas					
May 15, 1943 Jan. 1, 1947, Ex F Proposed Ex F	162	75½ 85½ 97½	27 32 37	48급 53급 60일	5 12

RAIL LUMBER SHIPMENTS

1937-9 and 1946

Total and Western Trunk Line

Year	Total Cars	W. T. L. Cars	Percent of Total
1.937	49,236	18,843	38.27
1938	38,231	16,966	44.38
1939	47,808	21,047	44.02
1946	38,376	12,724	33.16

WCLA Traffic Department August 5, 1947 Position of West Coast Lumber Industry:

The Committee representing the West

Coast Lumber Industry asks that

carriers petition in Ex Parte 166 be

amended to provide a maximum increase

of 7 cents per one hundred pounds,

where increase proposed is 15 percent.

Portland, Oregon August 5, 1947

RAIL FREIGHT COSTS



Rail Freight to be Added to F. O. B. Mill Prices to Convert to Delivered Price Basis for Individual Listed Rates LUMBER RAIL FREIGHT CHARGES ADJUSTED TO NEAREST 16

CALIFORNIA



Pounds per				L	UMBE	R RA	TE-In	Cents	Per H	undred	Pound	ls				Pounds
и. В. М.	20.9	22.0	24.2	30.8	31.9	33.0	34.1	35.2	37.4	39.6	40.7	41.8	44	45.1	46.2	M. B. M
400	.75	1.00	1.00	1.25	1.25	1.25	1.25	1.50	1.50	1.50	1.75	1.75	1.75	1.75	1.75	400
500	1.00	1.00	1.25	1.50	1.50	1.75	1.75	1.75	1.75	2.00	2.00	2.00	2.25	2.25	2.25	500
600	1.25	1.25	1.50	1.75	2.00	2.00	2.00	2.00	2.25	2.50	2.50	2.50	2.75	2.75	2.75	600
700	1.50	1.50	1.75	2.25	2.25	2.25	2.50	2.50	2.50	2.75	2.75	3.00	3.00	3.25	3.25	700
750	1.50	1.75	1.75	2.25	2.50	2.50	2.50	2.75	2.75	3.00	3.00	3.25	3.25	3.50	3.50	750
800	1.75	1.75	2.00	2.50	2.50	2.75	2.75	2.75	3.00	3.25	3.25	3.25	3.50	3.50	3.75	800
900	2.00	2.00	2.25	2.75	2.75	3.00	3.00	3.25	3.25	3.50	3.75	3.75	4.00	4.00	4.25	900
1000	2.00	2.25	2.50	3.00	3.25	3.25	3.50	3.50	3.75	4.00	4.00	4.25	4.50	4.50	4.50	1000
1100	2.25	2.50	2.75	3.50	3.50	3.75	3.75	3.75	4.00	4.25	4.50	4.50	4.75	5.00	5.00	1100
1200	2.50	2.75	3.00	3.75	3.75	4.00	4.00	4.25	4.50	4.75	5.00	5.00	5.25	5.50	5.50	1200
1300	2.75	2.75	3.25	4.00	4.25	4.25	4.50	4.50	4.75	5.25	5.25	5.50	5.75	5.75	6.00	1300
1400	3.00	3.00	3.50	4.25	4.50	4.50	4.75	5.00	5.25	5.50	5.75	5.75	6.25	6.25	6.50	1400
1500	3.25	3.25	3.75	4.50	4.75	5.00	5.00	5.25	5.50	6.00	6.00	6.25	6.50	6.75	7.00	1500
1550	3.25	3.50	3.75	4.75	5.00	5.00	5.25	5.50	5.75	6.25	6.25	6.50	6.75	7.00	7.25	1550
1600	3.25	3.50	3.75	5.00	5.00°	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.25	7.50	1600
1700	3.50	3.75	4.00	5.25	5.50	5.50	5.75	6.00	6.25	6.75	7.00	7.00	7.50	7.75	7.75	1700
1750	3.75	3.75	4.25	5.50	5.50	5.75	6.00	6.25	6.50	7.00	7.00	7.25	7.75	8.00	8.00	1750
1800	3.75	4.00	4.25	5.50	5.75	6.00	6.25	6.25	6.75	7.25	7.25	7.50	8.00	8.00	8.25	1800
1900	4.00	4.25	4.50	5.75	6.00	6.25	6.50	6.75	7.00	7.50	7.75	8.00	8.25	8.50	8.75	1900
2000	4.25	4.50	4.75	6.25	6.50	6.50	6.75	7.00	7.50	8.00	8.25	8.25	8.75	9.00	9.25	2000
2100	4.50	4.50	5.00	6.50	6.75	7.00	7.25	7.50	7.75	8.25	8.50	8.75	9.25	9.50	9.75	2100
2150	4.50	4.75	5.25	6.50	6.75	7.00	7.25	7.50	8.00	8.50	8.75	9.00	9.50	9.75	10.00	2150
2200	4.50	4.75	5.25	6.75	7.00	7.25	7.50	7.75	8.25	8.75	9.00	9.25	9.75	10.00	10.25	2200
2250	4.75	5.00	5.50	7.00	7.25	7.50	7.75	8.00	8.50	9.00	9.25	9.50	10.00	10.25	10.50	2250
2300	4.75	5.00	5.50	7.00	7.25	7.50	7.75	8.00	8.50	9.00	9.25	9.50	10.00	10.25	10.75	2300
2350	5.00	5.25	5.75	7.25	7.50	7.75	8.00	8.25	8.75	9.25	9.50	9.75	10.25	10.50	10.75	2350
2400	5.00	5.25	5.75	7.50	7.75	8.00	8.25	8.50	9.00	9.50	9.75	10.00	10.50	10.75	11.00	2400
2450	5.00	5.50	6.00	7.50	7.75	8.00	8.25	8.50	9.25	9.75	10.00	10.25	10.75	11.00	11.25	2450
2500	5.25	5.50	6.00	7.75	8.00	8.25	8.50	8.75	9.25	10.00	10.25	10.50	11.00	11.25	11.50	2500
2550	5.25	5.50	6.25	7.75	8.25	8.50	8.75	9.00	9.50	10.00	10.50	10.75	11.25	11.50	11.75	2550
2600	5.50	5.75	6.25	8.00	8.25	8.50	8.75	9.25	9.75	10.25	10.50	10.75	11.50	11.75	12.00	2600
2650	5.50	5.75	6.50	8.25	8.50	8.75	9.00	9.25	10.00	10.50	10.75	11.00	11.75	12.00	12.25	2650
2700	5.75	6.00	6.50	8.25	8.50	9.00	9.00	9.20	10.00	10.75	11.00	11.25	12.00	12.00	12.25	2700
2750	5.75	6.00	6.75	8.50	8.75	9.00	9.50	9.75	10.25	11.00	11.25	11.50	12.00	12.50	12.75	2750
2800	5.75	6.25	6.75	8.50	9.00	9.25	9.50	9.75	10.25	11.00	11.50	11.75	12.25	12.75	13.00	2800
2850	6.00	6.25	7.00	8.75	9.00	9.50	9.50	10.00	10.75	11.25	11.50	12.00	12.20	12.75	13.25	2850
2900	6.00	6.50	7.00	9.00	9.25	9.50	10.00	10.00	10.75	11.50	11.75	12.00	12.75	13.00	13.50	2900
2950	6.25	6.50	7.25	9.00	9.25	9.75	10.00	10.25	11.00	11.75	12.00	12.25			13.75	
3000	6.25	6.50	7.25	9.00		10.00	10.00					12.25	13.00	13.25		2950
3050	6.25	6.75	7.50	9.25	9.50			10.50	11.25	12.00	12.25		13.25	13.50	13.75	3000
3100					9.75	10.00	10.50	10.75	11.50	12.00	12.50	12.75	13.50	13.75	14.00	3050
	6.50	6.75	7.50	9.50	10.00	10.25	10.50	11.00	11.50	12.25	12.50	13.00	13.75	14.00	14.25	3100
3150	6.50	7.00	7.50	9.75	10.00	10.50	10.75	11.00	11.75	12.50	12.75	13.25	13.75	14.25	14.50	3150
3200	6.75	7.00	7.75	9.75	10.25	10.50	11.00	11.25	12.00	12.75	13.00	13.50	14.00	14.50	14.75	3200
3300	7.00	7.25	8.00	10.25	10.50	11.00	11.25	11.50	12.25	13.00	13.50	13.75	14.50	15.00	15.25	3300
3500	7.25	7.75	8.50	10.75	11.25	11.50	12.00	12.25	13.00	13.75	14.25	14.75	15.50	15.75	16.25	3500

.74 .75 .82 158 .91 .93 .97 .99

Note: For complete freight actuary, see West Coast Lumbermen's Association Rate Book.

	1410 S. W. Mo Portland 5,															
Pounds per				L	UMBE	ER RA	TE—I	n Cents	Per H	lundred	Poun	ds				Pounds
М. В. М.	47.3	48.4	50.6	51.7	52.8	53.9	55.0	57.2	58.3	59.4	60.5	63.8	64.9	67.1	70.4	м. В. м
400	2.00	2.00	2.00	2.00	2.00	2.25	2.25	2.25	2.25	2.50	2.50	2.50	2.50	2.75	2.75	400
500	2.25	2.50	2.50	2.50	2.75	2.75	2.75	2.75	3.00	3.00	3.00	3.25	3.25	3.25	3.50	500
600	2.75	3.00	3.00	3.00	3.25	3.25	3.25	3.50	3.50	3.50	3.75	3.75	4.00	4.00	4.25	600
700	3.25	3.50	3.50	3.50	3.75	3.75	3.75	4.00	4.00	4.25	4.25	4.50	4.50	4.75	5.00	700
750	3.50	3.75	3.75	4.00	4.00	4.00	4.25	4.25	4.25	4.50	4.50	4.75	4.75	5.00	5.25	750
800	3.75	3.75	4.00	4.25	4.25	4.25	4.50	4.50	4.75	4.75	4.75	5.00	5.25	5.25	5.75	800
900	4.25	4.25	4.50	4.75	4.75	4.75	5.00	5.25	5.25	5.25	5.50	5.75	5.75	6.00	6.25	900
1000	4.75	4.75	5.00	5.25	5.25	5.50	5.50	5.75	5.75	6.00	6.00	6.50	6.50	6.75	7.00	1000
1100	5.25	5.25	5.50	5.75	5.75	6.00	6.00	6.25	6.50	6.50	6.75	7.00	7.25	7.50	7.75	1100
1200	5.75	5.75	6.00	6.25	6.25	6.50	6.50	6.75	7.00	7.25	7.25	7.75	7.75	8.00	8.50	1200
1300	6.25	6.25	6.50	6.75	6.75	7.00	7.25	7.50	7.50	7.75	7.75	8.25	8.50	8.75	9.25	1300
1400	6.50	6.75	7.00	7.25	7.50	7.50	7.75	8.00	8.25	8.25	8.50	9.00	9.00	9.50	9.75	1400
1500	7.00	7.25	7.50	7.75	8.00	8.00	8.25	8.50	8.75	9.00	9.00	9.50	9.75	10.00	10.50	1500
1550	7.25	7.50	7.75	8.00	8.25	8.25	8.50	8.75	9.00	9.25	9.50	10.00	10.00	10.50	11.00	1550
1600	7.50	7.75	8.00	8.25	8.50	8.50	8.75	9.25	9.25	9.50	9.75	10.25	10.50	10.75	11.25	1600
1700	8.00	8.25	8.50	8.75	9.00	9.25	9.25	9.75	10.00	10.00	10.25	10.75	11.00	11.50	12.00	1700
1750	8.25	8.50	8.75	9.00	9.25	9.50	9.75	10.00	10.25	10.50	10.50	11.25	11.25	11.75	12.25	1750
1800	8.50	8.75	9.00	9.25	9.50	9.75	10.00	10.25	10.50	10.75	11.00	11.50	11.75	12.00	12.75	1800
1900	9.00	9.25	9.50	9.75	10.00	10.25	10.50	10.75	11.00	11.25	11.50	12.00	12.25	12.75	13.50	1900
2000	9.50	9.75	10.00	10.25	10.50	10.75	11.00	11.50	11.75	12.00	12.00	12.75	13.00	13.50	14.00	2000
2100	10.00	10.25	10.75	10.75	11.00	11.25	11.50	12.00	12.25	12.50	12.75	13.50	13.75	14.00	14.75	2100
2150	10.25	10.50	11.00	11.00	11.25	11.50	11.75	12.25	12.50	12.75	13.00	13.75	14.00	14.50	15.25	2150
2200	10.50	10.75	11.25	11.25	11.50	11.75	12.00	12.50	12.75	13.00	13.25	14.00	14.25	14.75	15.50	2200
2250	10.75	11.00	11.50	11.75	12.00	12.25	12.50	12.75	13.00	13.25	13.50	14.25	14.50	15.00	15.75	2250
2300	11.00	11.25	11.75	12.00	12.25	12.50	12.75	13.25	13.50	13.75	14.00	14.75	15.00	15.50	16.25	2300
2350	11.00	11.25	12.00	12.25	12.50	12.75	13.00	13.50	13.75	14.00	14.25	15.00	15.25	15.75	16.50	2350
2400	11.25	11.50	12.25	12.50	12.75	13.00	13.25	13.75	14.00	14.25	14.50	15.25	15.50	16.00	17.00	2400
2450	11.50	11.75	12.50	12.75	13.00	13.25	13.50	14.00	14.25	14.50	14.75	15.75	16.00	16.50	17.25	2450
2500	11.75	12.00	12.75	13.00	13.25	13.50	13.75	14.25	14.50	14.75	15.25	16.00	16.25	16.75	17.50	2500
2550	12.00	12.25	13.00	13.25	13.50	13.75	14.00	14.50	14.75	15.25	15.50	16.25	16.50	17.00	18.00	2550
2600	12.25	12.50	13.25	13.50	13.75	14.00	14.25	14.75	15.25	15.50	15.75	16.50	16.75	17.50	18.25	2600
2650	12.50	12.75	13.50	13.75	14.00	14.25	14.50	15.25	15.50	15.75	16.00	17.00	17.25	17.75	18.75	2650
2700	12.75	13.00			14.25		14.75	15.50	15.75	16.00	16.25	17.25	17.50	18.00	19.00	2700
2750	13.00	13.25	14.00	14.25	14.50	14.75	15.25	15.75	16.00	16.25	16.75	17.50	17.75	18.50	19.25	2750
2800	13.25	13.50	14.25	14.50	14.75	15.00	15.50	16.00	16.25	16.75	17.00	17.75	18.25	18.75	19.75	2800
2850	13.50	13.75	14.50	14.75	15.00	15.25	15.75	16.25	16.50	17.00	17.25	18.25	18.50	19.00	20.00	2850
2900	13.75	14.00	14.75	15.00	15.25	15.75	16.00	16.50	17.00	17.25	17.50	18.50	18.75	19.50	20.50	2900
2950	14.00	14.25	15.00	15.25	15.50	16.00	16.25	16.75	17.25	17.50	17.75	18.75	19.25	19.75	20.75	2950
3000	14.25	14.50	15.25	15.50	15.75	16.25	16.50	17.25	17.50	17.75	18.25	19.25	19.50	20.25	21.00	3000
3050	14.50	14.75	15.50	15.75	16.00	16.50	16.75	17.50	17.75	18.00	18.50	19.50	19.75	20.50	21.50	3050
3100	14.75	15.00	15.75	16.00	16.25	16.75	17.00	17.75	18.00	18.50	18.75	19.75	20.00	20.75	21.75	3100
3150	15.00	15.25	16.00	16.25	16.75	17.00	17.25	18.00	18.25	18.75	19.00	20.00	20.50	21.25	22.25	3150
3200	15.25	15.50	16.25	16.50	17.00	17.25	17.50	18.25	18.75	19.00	19.25	20.50	20.75	21.50	22.50	3200
3300	15.50	16.00	16.75	17.00	17.50	17.75	18.25	19.00	19.25	19.50	20.00	21.00	21.50	22.25	23.25	3300
3500	16.50	17.00	17.75	18.00	18.50	18.75	19.25	20.00	20.50	20.75	21.25	22.25	22.75	23.50	24.75	3500
Pounds				SH	HINGL	ERA	TE—In	Cents	Per H	undred	Pound	ls				Pounds

144 1.03 144 158 .84 .87 .90 .92 .94 .95 .96 1.01 1.03 1.06 1.11 1.01 1.02 1.03 1.06 1.10 1.12 | 1.14 | 1.15 | 1.16 1.22 1.25 1.29 1.37 | 1.42

Note: For complete freight actuary, see West Coast Lumbermen's Association Rate Book.

October 13, 1947

RAIL FREIGHT COSTS



Portland 5, Oregon

Rail Freight to be Added to F. O. B. Mill Prices to Convert to Delivered Price Basis for Individual Listed Rates Lumber Rail Freight Charges adjusted to Nearest 25¢ — Shingle Rail Freight Charges adjusted to Nearest 1¢

STATES EAST OF ROCKY MOUNTAINS

1410 S. W. Morrison S Portland 5, Oregon

		-

Pounds per				L	UMBE	R RA	TE—In	Cents	Per H	undred	Pound	ds				Pounds
м. В. м.	61.6	66.0	69.85	73.15	76.45	79.2	80.3	81.4	83.05	83.6	85.8	88.55	89.1	89.65	90.75	м. В. м
400	2.50	2.75	2.75	3.00	3.00	3.25	3.25	3.25	3.25	3.25	3.50	3.50	3.50	3.50	3.75	400
500	3.00	3.25	3.50	3.75	3.75	4.00	4.00	4.00	4.25	4.25	4.25	4.50	4.50	4.50	4.50	500
600	3.75	4.00	4.25	4.50	4.50	4.75	4.75	5.00	5.00	5.00	5.25	5.25	5.25	5.50	5.50	600
700	4.25	4.50	5.00	5.00	5.25	5.50	5.50	5.75	5.75	5.75	6.00	6.25	6.25	6.25	6.25	700
750	4.50	5.00	5.25	5.50	5.75	6.00	6.00	6.00	6.25	6.25	6.50	6.75	6.75	6.75	6.75	750
800	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.50	6.75	6.75	6.75	7.00	7.25	7.25	7.25	800
900	5.50	6.00	6.25	6.50	7.00	7.25	7.25	7.25	7.50	7.50	7.75	8.00	8.00	8.00	8.25	900
1000	6.25	6.50	7.00	7.25	7.75	8.00	8.00	8.25	8.25	8.25	8.50	8.75	9.00	9.00	9.00	1000
1100	6.75	7.25	7.75	8.00	8.50	8.75	8.75	9.00	9.25	9.25	9.50	9.75	9.75	9.75	10.00	1100
1200	7.50	8.00	8.50	8.75	9.25	9.50	9.75	9.75	10.00	10.00	10.25	10.75	10.75	10.75	11.00	1200
1300	8.00	8.50	9.00	9.50	10.00	10.25	10.50	10.50	10.75	10.75	11.25	11.50	11.50	11.75	11.75	1300
1400	8.50	9.25	9.75	10.25	10.75	11.00	11.25	11.50	11.75	11.75	12.00	12.50	12.50	12.50	12.75	1400
1500	9.25	10.00	10.50	11.00	11.50	12.00	12.00	12.25	12.50	12.50	12.75	13.25	13.25	13.50	13.50	1500
1550	9.50	10.25	10.75	11.25	11.75	12.25	12.50	12.50	12.75	13.00	13.25	13.75	13.75	14.00	14.00	1550
1600	9.75	10.50	11.25	11.75	12.25	12.75	12.75	13.00,	13.25	13.50	13.75	14.25	14.25	14.25	14.50	1600
1700	10.50	11.25	11.75	12.50	13.00	13.50	13.75	13.75	14.00	14.25	14.50	15.00	15.25	15.25	15.50	1700
1750	10.75	11.50	12.25	12.75	13.50	13.75	14.00	14.25	14.50	14.75	15.00	15.50	15.50	15.75	16.00	1750
1800	11.00	12.00	12.50	13.25	13.75	14.25	14.50	14.75	15.00	15.00	15.50	16.00	16.00	16.25	16.25	1800
1900	11.75	12.50	13.25	14.00	14.50	15.00	15.25	15.50	15.75	16.00	16.25	16.75	17.00	17.00	17.25	1900
2000	12.25	13.25	14.00	14.75	15.25	15.75	16.00	16.25	16.50	16.75	17.25	17.75	17.75	18.00	18.25	2000
2100	13.00	13.75	14.75	15.25	16.00	16.75	16.75	17.00	17.50	17.50	18.00	18.50	18.75	18.75	19.00	2100
2150	13.25	14.25	15.00	15.75	16.50	17.00	17.25	17.50	17.75	18.00	18.50	19.00	19.25	19.25	19.50	2150
2200	13.50	14.50	15.25	16.00	16.75	17.50	17.75	18.00	18.25	18.50	19.00	19.50	19.50	19.75	20.00	2200
2250	13.75	14.75	15.75	16.50	17.25	17.75	18.00	18.25	18.75	18.75	19.25	20.00	20.00	20.25	20.50	2250
2300	14.25	15.25	16.00	16.75	17.50	18.25	18.50	18.75	19.00	19.25	19.75	20.25	20.50	20.50	20.75	2300
2350	14.50	15.50	16.50	17.25	18.00	18.50	18.75	19.25	19.50	19.75	20.25	20.75	21.00	21.00	21.25	2350
2400	14.75	15.75	16.75	17.50	18.25	19.00	19.25	19.50	20.00	20.00	20.50	21.25	21.50	21.50	21.75	2400
2450	15.00	16.25	17.00	18.00	18.75	19.50	19.75	20.00	20.25	20.50	21.00	21.75	21.75	22.00	22.25	2450
2500	15.50	16.50	17.50	18.25	19.00	19.75	20.00	20.25	20.75	21.00	21.50	22.25	22.25	22.50	22.75	2500
2550	15.75	16.75	17.75	18.75	19.50	20.25	20.50	20.75	21.25	21.25	22.00	22.50	22.75	22.75	23.25	2550
2600	16.00	17.25	18.25	19.00	20.00	20.50	21.00	21.25	21.50	21.75	22.25	23.00	23.25	23.25	23.50	2600
2650	16.25	17.50	18.50	19.50	20.25	21.00	21.25	21.50	22.00	22.25	22.75	23.50	23.50	23.75	24.00	2650
2700	16.75	17.75	18.75	19.75	20.75	21.50	21.75	22.00	22.50	22.50	23.25	24.00	24.00	24.25	24.50	2700
2750	17.00	18.25	19.25	20.00	21.00	21.75	22.00	22.50	22.75	23.00	23.50	24.25	24.50	24.75	25.00	2750
2800	17.25	18.50	19.50	20.50	21.50	22.25	22.50	22.75	23.25	23.50	24.00	24.75	25.00	25.00	25.50	2800
2850	17.50	18.75	20.00	20.75	21.75	22.50	23.00	23.25	23.75	23.75	24.50	25.25	25.50	25.50	25.75	2850
2900	17.75	19.25	20.25	21.25	22.25	23.00	23.25	23.50	24.00	24.25	25.00	25.75	25.75	26.00	26.25	2900
2950	18.25	19.50	20.50	21.50	22.50	23.25	23.75	24.00	24.50	24.75	25.25	26.00	26.25	26.50	26.75	2950
3000	18.50	19.75	21.00	22.00	23.00	23.75	24.00	24.50	25.00	25.00	25.75	26.50	26.75	27.00	27.25	3000
3050	18.75	20.25	21.25	22.25	23.25	24.25	24.50	24.75	25.25	25.50	26.25	27.00	27.25	27.25	27.75	3050
3100	19.00	20.50	21.75	22.75	23.75	24.50	25.00	25.25	25.75	26.00	26.50	27.50	27.50	27.75	28.25	3100
3150	19.50	20.75	22.00	23.00	24.00	25.00	25.25	25.75	26.25	26.25	27.00	28.00	28.00	28.25	28.50	3150
3200	19.75	21.00	22.25	23.50	24.50	25.25	25.75	26.00	26.50	26.75	27.50	28.25	28.50	28.75	29.00	3200
3300	20.25	21.75	23.00	24.25	25.25	26.25	26.50	26.75	27.50	27.50	28.25	29.25	29.50	29.50	30.00	3300
3500	21.50	23.00	24.50		26.75	27.75	28.00	28.50	29.00	29.25	30.00	31.00	31.25	31.50	31.75	
0000	21.00	20.00	21.00	20.00	20.10	21.10	20.00	20.00	20.00	20.20	00.00	01.00	01.20	01.00	01.70	0000

Pounds				SI	HINGL	ERA	TE-In	Cents	Per H	undred	Pound	ds				Pounds
per Square	61.6	66.0	69.85	73.15	76.45	79.2	80.3	81.4	83.05	83.6	85.8	88.55	89.1	89.65	90.75	Square
144	.89	.95	1.01	1.05	1.10	1.14	1.16	1.17	1.20	1.20	1.24	1.28	1.28	1.29	1.31	144
158	.97	1.04	1.10	1.16	1.21	1.25	1.27	1.29	1.31	1.32	1.36	1.40	1.41	1.42	1.43	158
192	1.18	1.27	1.34	1.40	1.47	1.52	1.54	1.56	1.59	1.61	1.65	1.70	1.71	1.72	1.74	192

	Note:	For complete freight actuary	see West Coast	Lumbermen's Association	Rate Book
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	91.00	94.4	94.00	91.9	101.2	103.95	109.09	106.15	107.25	108.35	109.45	111.65	112.2	113.3	114.95	M. D. M.
400	3.75	3.75	3.75	_	4.00	4.25	4.25	4.25	4.25	4.25	4.50	4.50	4.50	4.50	4.50	400
500	4.50	4.50	4.75		5.00	5.25	5.25	5.25	5.25	5.50	5.50	5.50	5.50	5.75	5.75	500
600	5.50	5.50	5.75	5.75	6.00	6.25	6.25	6.25	6.50	6.50	6.50	6.75	6.75	6.75	7.00	600
700	6.50	6.50	6.50	6.75	7.00	7.25	7.25	7.50	7.50	7.50	7.75	7.75	7.75	8.00	8.00	700
750	7.00	7.00	7.00	7.25		7.75	8.00	8.00	8.00	8.25	8.25	8.25	8.50	8.50	8.50	750
800	7.25	7.50	7.50	7.75	8.00	8.25	8.50	8.50	8.50	8.75	8.75	9.00	9.00	9.00	9.25	800
900	8.25	8.25	8.50	8.75	9.00	9.25	9.50	9.50	9.75	9.75	9.75	10.00	10.00	10.25	10.25	900
1000	9.25	9.25	9.50	9.75	10.00	10.50	10.50	10.50	10.75	10.75	11.00	11.25	11.25	11.25	11.50	1000
1100	10.00	10.25	10.25	10.75	11.25	11.50	11.50	11.75	11.75	12.00	12.00	12.25	12.25	12.50	12.75	1100
1200	11.00	11.00	11.25	11.75	12.25	12.50	12.50	12.75	12.75	13.00	13.25	13.50	13.50	13.50	13.75	1200
1300	12.00	12.00	12.25	12.75	13.25	13.50	13.75	13.75	14.00	14.00	14.25	14.50	14.50	14.75	15.00	1300
1400	12.75	13.00	13.25	13.75	14.25	14.50	14.75	14.75	15.00	15.25	15.25	15.75	15.75	15.75	16.00	1400
1500	13.75	13.75	14.00	14.75	15.25	15.50	15.75	16.00	16.00	16.25	16.50	16.75	16.75	17.00	17.25	1500
1550	14.25	14.25	14.50	15.25	15.75	16.00	16.25	16.50	16.50	16.75	17.00	17.25	17.50	17.50	17.75	1550
$\frac{1600}{1700}$	14.75 15.50	14.75	15.00	15.75	16.25	16.75	16.75	17.00	17.25	17.25	17.50	17.75	18.00	18.25	18.50	1600
1750	16.00	15.75 16.25	16.00	16.75	17.25	17.75	17.75	18.00	18.25	18.50	18.50	19.00	19.00	19.25	19.50	1700
1800	16.50	16.75	16.50	17.25	17.75	18.25	18.50	18.50	18.75	19.00	19.25	19.50	19.75	19.75	20.00	1750
1900	17.50	17.50	17.75	18.50	18.25 19.25	18.75	19.00	19.00	19.25	19.50	19.75	20.00	20.25	20.50	20.75	1800
2000	18.25	18.50	18.75	19.50	20.25	19.75	20.00	20.25	20.50	20.50	20.75	21.25	21.25	21.50	21.75	1900
2100	19.25	19.50	19.75	20.50	21.25	21.75	21.00	21.25	21.50	21.75	22.00	22.25	22.50	22.75	23.00	2000
2150	19.75	19.75	20.25	21.00	21.75	22.25	22.50	22.25 22.75	22.50	22.75 23.25	23.00	23.50	23.50	23.75	24.25	2100
2200	20.25	20.25	20.75	21.50	22.25	22.75	23.00	23.25	23.00		23.50	24.00	24.00	24.25	24.75	2150
2250	20.75	20.75	21.25	22.00	22.75	23.50	23.75	24.00	24.25	23.75 24.50	24.00	24.50	24.75	25.00	25.25	2200
2300	21.25	21.25	21.75	22.50	23.25	24.00	24.25	24.50	24.75	25.00	24.75 25.25	25.00 25.75	25.25 25.75	25.50	25.75	2250
2350	21.50	21.75	22.00	23.00	23.75	24.50	24.75	25.00	25.25	25.50	25.75	26.25	26.25	26.00 26.75	26.50 27.00	2350
2400	22.00	22.25	22.50	23.50	24.25	25.00	25.25	25.50	25.75	26.00	26.25	25.75	27.00	27.25	27.50	2400
2450	22.50	22.75	23.00	24.00	24.75	25.50	25.75	26.00	26.25	26.50	26.75	27.25	27.50	27.75	28.25	2450
2500	23.00	23.00	23.50	24.50	25.25	26.00	26.25	26.50	26.75	27.00	27.25	28.00	28.00	28.25	28.75	2500
2550	23.50	23.50	24.00	25.00	25.75	26.50	26.75	27.00	27.25	27.75	28.00	28.50	28.50	29.00	29.25	2550
2600	24.00	24.00	24.50	25.50	26.25	27.00	27.25	27.50	28.00	28.25	28.50	29.00	29.25	29.50	30.00	2600
2650	24.25	24.50	25.00	26.00	26.75	27.50	27.75	28.25	28.50	28.75	29.00	29.50	29.75	30.00	30.50	2650
2700	24.75	25.00	25.50	26.50	27.25	28.00	28.25	28.75	29.00	29.25	29.50	30.25	30.25	30.50	31.00	2700
2750	25.25	25.50	25.75	27.00	27.75	28.50	29.00	29.25	29.50	29.75	30.00	30.75	30.75	31.25	31.50	2750
2800	25.75	25.75	26.25	27.50	28.25	29.00	29.50	29.75	30.00	30.25	30.75	31.25	31.50	31.75	32.25	2800
2850	26.25	26.25	26.75	28.00	28.75	29.75	30.00	30.25	30.50	31.00	°31.25	31.75	32.00	32.25	32.75	2850
2900	26.75	26.75	27.25	28.50	29.25	30.25	30.50	30.75			31.75	32.50	32.50		33.25	2900
2950	27.00	27.25	27.75	29.00	29.75	30.75	31.00	31.25	31.75	32.00			33.00	33.50	34.00	2950
3000	27.50	27.75	28.25	29.25	30.25	31.25	31.50	31.75	32.25	32.50		10101	33.75	34.00	34.50	3000
3050	28.00	28.25	28.75	29.75	30.75	31.75	32.00	32.50	32.75	33.00			34.25	34.50	35.00	3050
3100	28.50	28.75	29.25	30.25	31.25	32.25	32.50	33.00	33.25	33.50			34.75	35.00	35.75	3100
3150	29.00	29.00	29.75	30.75	32.00	32.75	33.00	33.50	33.75	34.25	34.50	35.25	35.25	35.75	36.25	3150
3200	29.50	29.50	30.00	31.25	32.50	33.25	33.50		34.25	34.75	35.00	35.75	36.00	36.25	36.75	3200
3300	30.25	30.50	31.00	32.25	33.50			-0.90 TES A		35.75	36.00	36.75	37.00	37.50	38.00	3300
3500	32.25	32.25	33.00	34.25	35.50	36.50	36.75	37.25	37.50	38.00	38.25	39.00	39.25	39.75	40.25	3500
Pounds				SI	HINGI	FRA	TF_I-	Conto	Por LI	ındəsd	Pound					Pounds
per Square	91 85	99 1	04.05	07.0				Cents	I EI III	marea	round	3				per

91.85 | 92.4 | 94.05 | 97.9 | 101.2 | 103.95 | 105.05 | 106.15 | 107.25 | 108.35 | 109.45 | 111.65 | 112.2 | 113.3 | 114.95

1.53 | 1.54 | 1.56

1.66 | 1.68 | 1.69 | 1.71

LUMBER RATE—In Cents Per Hundred Pounds

91.85 92.4 94.05 97.9 101.2 103.95 105.05 106.15 107.25 108.35 109.45 111.65 112.2 113.3 114.95 M.B.M.

1.55 1.60 1.64

1.32 1.33 1.35

1.49

1.45 1.46

5M-10-47-JK&A

1.66

2.21

1.63

1.79

2.18

1.77

1.73 | 1.76

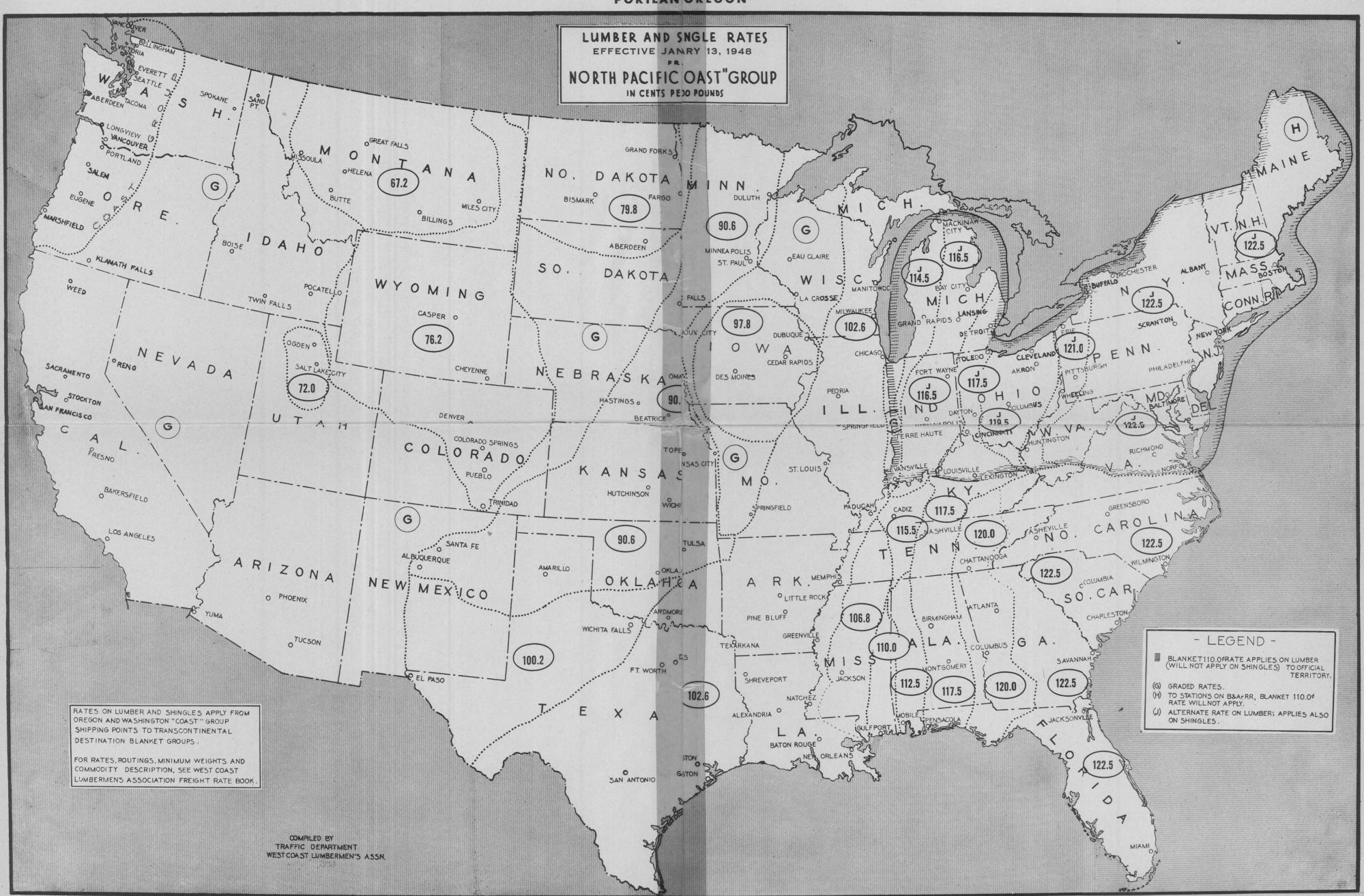


WEST CUAST LUMBERMENS

ASSOCATION









WEST COAST UMBERMEN'S ASSOCATION



