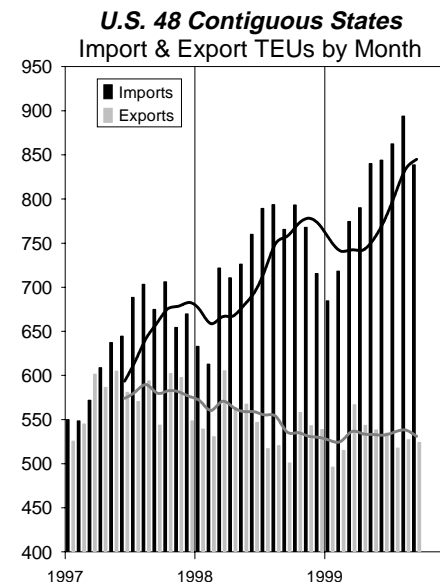
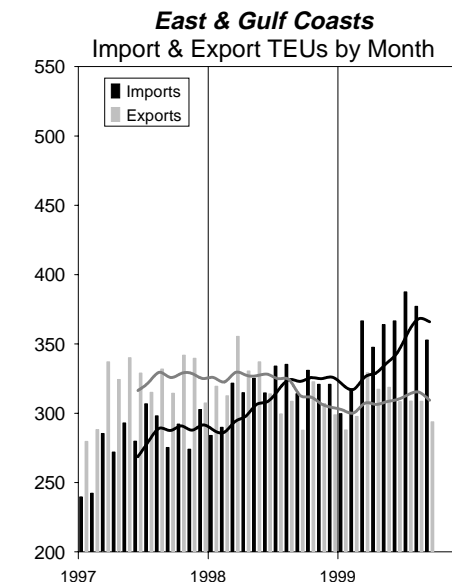
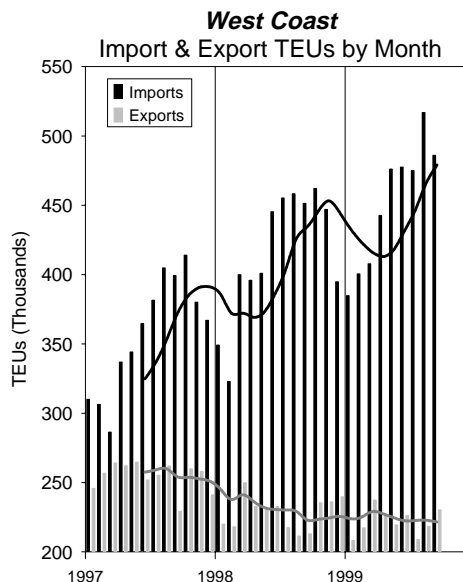


Import Containers Surge on West, East, and Gulf Coasts



The gap between the number of imported container TEUs and the number of export container TEUs continues to widen, and the phenomenon is not confined to the West Coast.

The graphs above, developed from PERS data, show for the West Coast (left) and for the East & Gulf Coasts (center), the

number of container TEU imports and exports for each month from January 1997 through September 1999.

Both of these graphs are on the same scale and the base line for each begins at 200,000 TEUs. A comparison of the data shown in the graphs for the West Coast and the East & Gulf Coasts illustrate the differences in the container import and export distribution between the two regions even though each handles about 50% of the total foreign trade containers moving in and out of the U.S.

The trend lines shown for imports and exports on the two graphs are very similar in shape even though the starting points are different. The import and export trend lines for the East & Gulf cross in mid-year 1998 whereas the West Coast trend lines were showing a significant gap between import and exports by the beginning of 1997.

Total US Container TEU Movement

The right most graph above shows the total number of US import and export container TEUs from January 1997 through September 1999. The baseline for this chart is 400,000 TEUs.

The trend is obvious in that U.S. container foreign trade imports have increased while export numbers have slowly eroded.

East/Gulf Imbalances

Within the East and Gulf region there are significant differences in import and ex-

port numbers. Both the East and the Gulf Coast ports have experienced an increase in imports and a decrease in exports.

Percent of Imports and Exports Separately for East & Gulf

	East (85.6%)		Gulf (14.3%)	
	Import	Export	Import	Export
1999 Sept	54.5%	45.5%	47.0%	53.0%
1998	51.3	48.7	42.5	57.5
1997	47.4	52.6	41.8	58.2

Los Angeles/Long Beach Imbalance

The import/export imbalance on the West Coast has occurred almost exclusively in the Ports of Los Angeles and Long Beach where the number of imported container TEUs is now over three times the number that is exported. The volume of exports for the month of July represented a three-year low followed by a small increase in August and again in September.

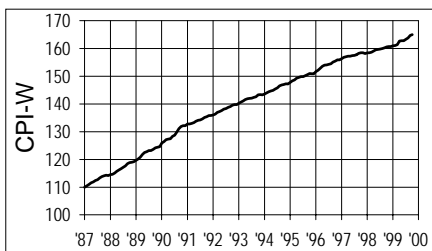
The difference between the number of import and export containers in Los Angeles and Long Beach is currently averaging about 250,000 TEUs per month. In almost all cases, the excess empty containers will have to be returned to Asia. At the current rate, it would take 100 ships with the capacity to hold 2,500 TEUs just to reposition empty containers.

The repositioning of empty containers represents a significant cost to vessel operators and based upon data through Septem-

CONSUMER PRICE INDEX U.S. CITY AVERAGE - ALL ITEMS (1982-84 = 100)

Urban Wage Earners & Clerical Workers

Month	1997	1998	1999	12 Mo.
JAN	156.3	158.4	161.0	1.64
FEB	156.8	158.5	161.1	1.64
MAR	157.0	158.7	161.4	1.70
APR	157.2	159.1	162.7	2.26
MAY	157.2	159.5	162.8	2.07
JUN	157.4	159.7	162.8	1.94
JUL	157.5	159.8	163.3	2.19
AUG	157.8	160.0	163.8	2.38
SEP	158.3	160.2	164.7	2.81
OCT	158.5	160.6	165.0	2.74
NOV	158.5	160.7		1.39
DEC	158.2	160.7		1.58



ber, the current trend shows no sign of abating.

Repositioning empties affects not only vessel operators, but also truckers and the railroads, adding tens of millions of dollars to the cost of cargo transportation and creating logistical nightmares for transportation managers throughout the transportation system. In an ideal world, there would be no empties, and all of the containers being shipped back to Asia would be carrying revenue-generating cargo. (See *PMA Update* Vol. 10, No. 8 - August 1998; "The Container Crisis: Empties Stranded in the US!")

West Coast Trading Partners

Japan accounts for about 35% of the total value of dry cargo trade moving through West Coast ports. (See *PMA Update* Vol. 10, No. 12 - December 1998; "Pacific Rim Nations Account for 90% of Value of West

Coast Imports & Exports.")

The table below shows the percent of the value of dry cargo moving through West Coast ports by country of origin and destination. Nearly 60% of West Coast trade is with just two countries; Japan and China.

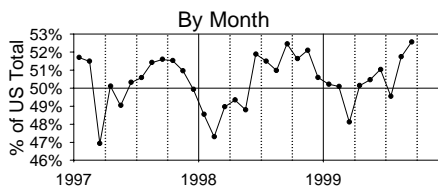
	Imports	Exports	Total
Japan	34.7%	34.6%	34.7%
China/HK	27.4	13.7	23.7
Taiwan	9.3	8.4	9.0
Rep of Korea	5.0	12.1	6.9
Thailand	3.7	2.6	3.4
Malaysia	3.3	2.1	3.0
Indonesia	2.8	2.2	2.6
Singapore	1.6	4.3	2.3
Philippines	2.0	2.7	2.2
Australia	1.0	5.4	2.2
Rest of World	9.2	11.9	10.0
Grand Total	100.0%	100.0%	100.0%

East/West Containers Split About 50/50

In the US, over one-third of all import and export cargo containers move through the Los Angeles and Long Beach Port complex. The two Southern California ports handle a disproportionately large share of the empty containers, most of which must be sent back to Asia.

The West Coast handled 53% of all U.S. waterborne foreign trade containers in 1994. By 1996 the West Coast was down to 50% and has remained in that range since. The chart on the right shows how the total number of TEUs handled in the U.S. has changed each month since January 1997.

West Coast TEUs as a % of US Total



US Container Cargo Weight and Value

Container shipping is a major factor in US waterborne foreign trade. During the last half of 1998, container imports represented 68.9% of the value of all US waterborne foreign trade imports including crude oil and refined oil products. In terms of weight, import containers represented only 9.2% of the tonnage. Export containers represented 63.7% of the value of US Waterborne foreign export trade and 15.9% of the tonnage. However, export cargo represented only 31.3% of the value of all US waterborne foreign trade.

The average weight and value of imported container cargo differs greatly from that of exported container cargo. For the last six months of 1998, there were 4.6 million TEUs of cargo imported to the US valued at \$146B weighing 38.8 million tons. This averages to \$3,797 per ton or \$31,408 per TEU. Additionally, each TEU weighs an average of 8.27 tons.

Comparatively, there were 3.18 million TEUs of export cargo valued at \$61.6B weighing 29.5 million tons: an average of \$2,088 per ton or \$19,387 per TEU with each TEU weighing an average of 9.29 tons.

The value and weight of container imports and exports from West Coast ports during the same period was as follows:

Container Imports and Exports to Several West Coast Ports

July to December 1998

	IMPORTS			EXPORTS		
	Value/TEU	Tons/TEU	Value/Ton	Value/TEU	Tons/TEU	Value/Ton
Los Angeles	\$ 35,149	7.8	\$4,483	\$20,007	9.4	\$2,138
Long Beach	28,408	6.2	4,598	18,211	8.9	2,049
Oakland	41,095	7.3	5,644	18,040	8.5	2,117
Seattle	43,044	6.7	6,447	15,218	12.0	1,264
Tacoma	31,777	5.1	6,279	9,582	9.1	1,053

Containers and TEUs

"TEU" is the acronym for "twenty foot equivalent unit." The acronym has been used in the trade press for many years and it has become more common to see it used in the general press.

All containers, including dry freight, reefer, open top, and flat rack containers measure 8' wide with heights ranging from half heights at 4'3," standard boxes at 8'6," and high cube boxes at 9'6."

Containers come in various lengths besides the "standard" 20-foot length, including 40', 45', 48', and 53 foot along with several other less commonly used lengths.

For data collection and statistical purposes, containers are converted to 20-foot equivalent unit (TEU) counts. For example, a 45-foot long container is counted as 2.25 TEUs — the result of dividing 20 into 45.

A standard 20-foot container has a maximum dry cargo weight capacity of about 25 tons depending upon construction. A 40-foot container has a dry cargo weight capacity of about 32 tons or, on a TEU basis, about 15 tons per TEU. Very heavy cargo may be loaded onto a 40-foot "container" platform which can carry about 55 tons.

Containers longer than 20-foot do not hold a proportionately greater weight, but do offer greater space. An empty 20-foot steel container weighs about 2.5 tons.

A 40-foot container constructed primarily of aluminum has a cargo weight capacity equal to or slightly greater than a steel container and the container itself, weigh nearly one ton less.

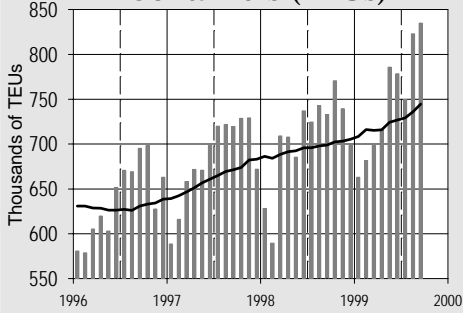
An empty 40-foot steel container weighs about 4.25 tons. A 40-foot standard dry container has a cargo capacity of about 2,390 cubic feet. A high cube 40-foot container has an additional 325 cubic feet of space.

Containers that are moved over public roads are subject to weight limitations that are strictly enforced.

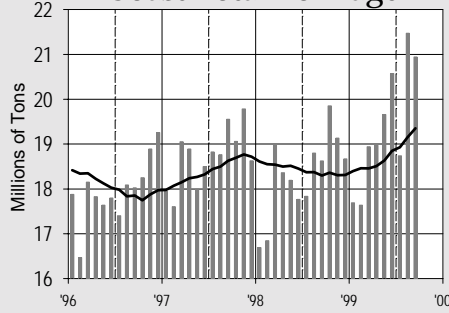
Data presented in this issue have been compiled and combined from several sources including the *Journal of Commerce*, PIERS Database, the US Army Corps of Engineers, Navigation Data Center, and the US Department of Commerce, Bureau of the Census.

Monthly Tonnage by Reporting Category and Weekly Hours by Occupation Code Type

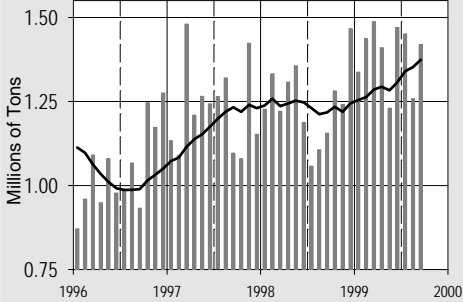
Containers (TEUs)



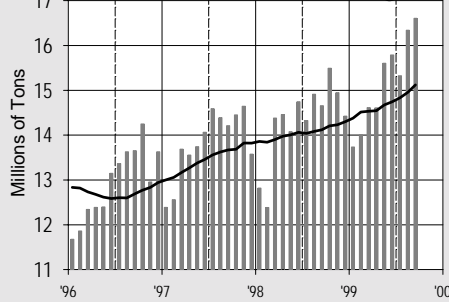
Coast Total Tonnage



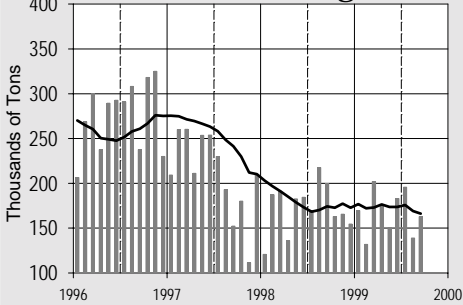
Automobiles & Trucks



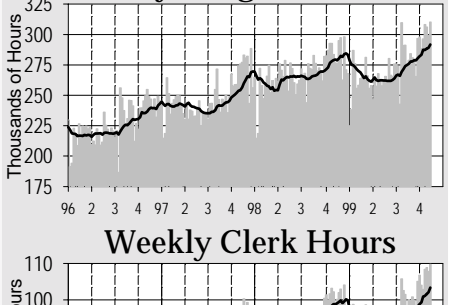
"Weighted" Total Tonnage (Includes 1/50 of Bulk Tonnage)



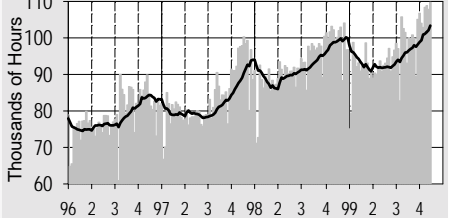
Lumber & Logs



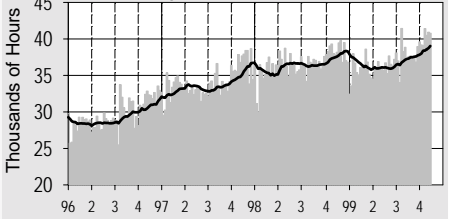
Weekly Longshore Hours



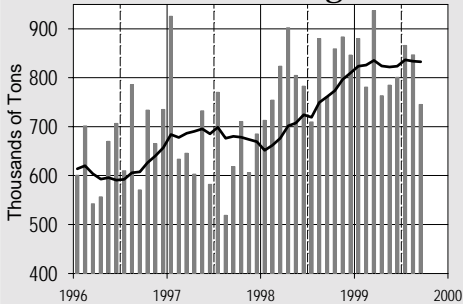
Weekly Clerk Hours



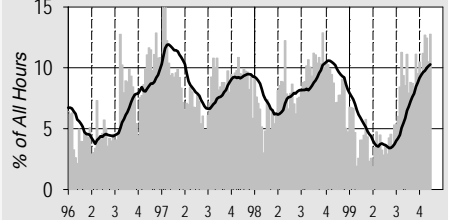
Weekly Foreman Hours



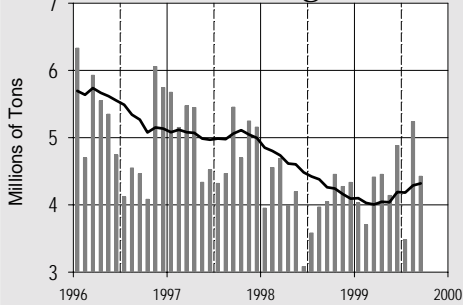
General Cargo



% of Hours Paid to Casuals



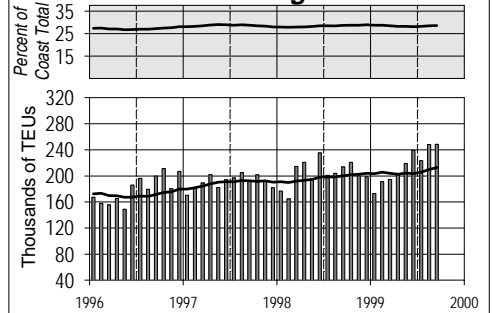
Bulk Cargo



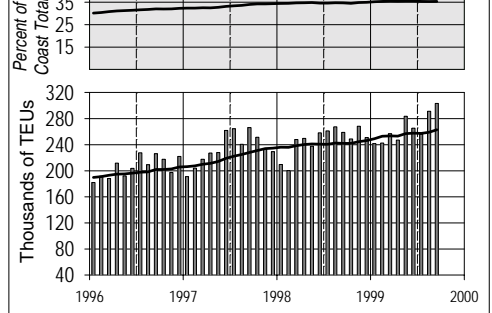
Bars represent monthly tonnage or weekly hours; solid lines represent 12-month or 13-week running averages.

Major Container Ports: Monthly TEUs Reported & Percent of Coast Total TEUs

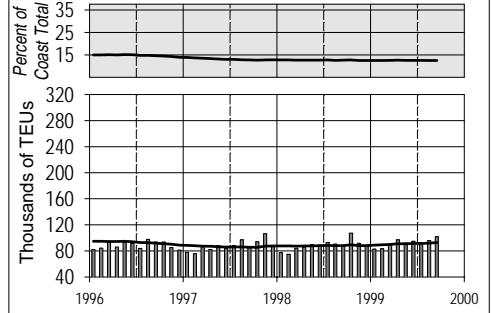
Los Angeles



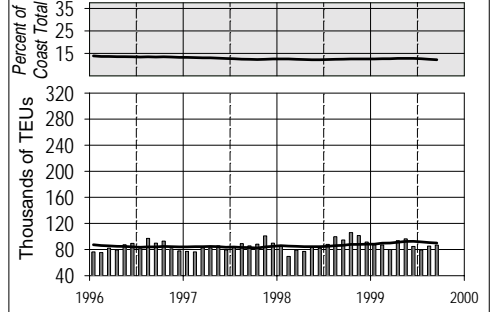
Long Beach



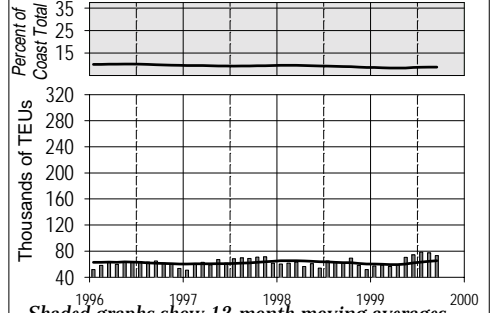
Oakland



Seattle



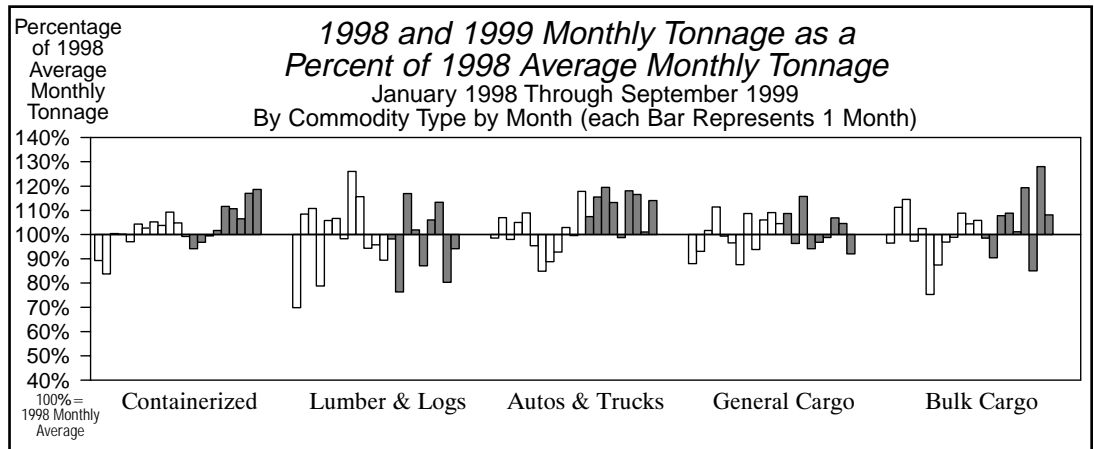
Tacoma



Shaded graphs show 12-month moving averages of TEUs reported in the port as a % of the coast total. Vertical bars represent TEUs reported in the port each month; lines are 12-month moving averages.

ILWU LOCAL/PORT AREA	REGISTRATION		STATS (For 52 Payroll Weeks)							PORT HOURS (Year-to-date)					TONNAGE BY PORT AREA (For 12 months-to-date & YTD)									
	(At11/10/99)		(Ending 10/30/99)		Hours Paid:					Hours Paid at					% of Category Coast Total (12 Months-to-Date)					% of 1999 YTD				
	Class	Number	Annual	Wkly	Out of	Other	Cas-	Inac-	P/R Wks	Avg. Wkly	% Cst	Occ Codes	Exp.	Cont'r	Lmbr	Autos	Other	Bulk	1999 YTD	% of	'99 as a	Cstwise		
TOTAL	"B"	Working	Hrs Pd	PGP	Port	Local	uals	tives	Avg. Wkly	% Cst	Clk	Frm	Rates*	RU's	Logs	Trucks	Gen'l	Cargo	TOTAL	1999 YTD	Coast	'99 as a	Cstwise	
NO.	NO.	NO.	HRS	\$	%	%	%	%	HRS	%	%	%	%	%	%	%	%	%	%	TONS	%	%	TONS	
Longshorem																								
Southern California																								
29 San Diego	53	19	51	2,377	< 1	6.9	7.7	35.9	0.1	3,925	1.0	9.5	12.4	33.3	-	4.0	12.5	2.0	3.0	1.7	3,119,752	1.8	142.0	0
13 Los Angeles/Long Beach	4,053	836	4,003	2,111	< 1	0.3	0.6	5.7	0.7	241,936	59.2	24.9	9.8	21.2	63.9	6.5	34.4	51.8	24.6	52.0	91,117,334	52.2	106.4	129,420
46 Port Hueneme	81	11	79	2,039	1	5.6	8.0	40.0	0.0	6,164	1.5	15.5	6.4	31.7	0.1	< 0.1	11.1	7.0	0.1	1.2	2,067,579	1.2	115.5	0
Southern California Total	4,187	866	4,133	2,113	< 1	0.5	0.9	7.3	0.7	252,024	61.7	24.5	9.8	21.6	64.0	10.5	58.0	60.7	27.8	54.9	96,304,665	55.2	107.4	129,420
Northern California																								
10 San Francisco Bay Area	994	171	944	1,776	< 1	1.2	0.9	3.6	2.3	49,303	12.1	26.6	8.2	19.3	12.8	0.1	5.3	7.4	2.2	9.6	16,508,920	9.5	107.2	564
54 Stockton	55	23	55	1,632	40	7.2	5.8	12.0	1.2	2,318	0.6	19.2	7.3	5.5	-	-	-	1.5	3.1	0.8	1,234,036	0.7	127.3	0
18 Sacramento	23	1	23	1,597	139	11.7	17.5	22.1	1.7	1,588	0.4	23.8	6.9	14.7	-	0.1	-	2.0	1.2	0.4	654,122	0.4	105.4	0
14 Eureka	31	0	31	1,123	265	35.1	6.2	7.6	0.0	609	0.1	12.0	11.7	7.8	< 0.1	3.4	-	2.0	0.6	0.2	478,457	0.3	120.8	0
Northern California Total	1,103	195	1,053	1,745	13	2.3	1.7	4.6	2.2	53,818	13.2	26.0	8.2	18.4	12.8	3.7	5.3	12.8	7.1	10.9	18,875,535	10.8	108.6	564
Oregon																								
12 North Bend/Coos Bay	90	16	87	1,111	250	50.9	0.3	0.8	1.8	1,097	0.3	10.4	9.0	0.3	< 0.1	6.9	-	0.2	3.9	0.9	1,733,868	1.0	86.3	43,797
53 Newport	8	1	8	816	424	74.4	22.4	0.4	0.3	48	0.0	5.6	1.3	6.6	-	0.4	-	-	< 0.1	8,673	0.0	178.2	0	
50 Astoria	44	0	44	778	453	87.7	3.3	0.2	0.4	77	0.0	0.0	0.2	0.2	-	1.4	-	-	< 0.1	16,145	0.0	49.1	475	
8 Portland	463	58	451	1,827	8	3.0	13.0	2.6	3.4	22,296	5.5	14.5	7.6	7.4	2.3	2.9	19.2	9.4	21.5	8.1	13,840,541	7.9	106.0	36,385
4 Vancouver, WA	144	43	139	1,793	12	13.5	12.1	6.4	3.8	6,296	1.5	13.8	6.7	9.9	< 0.1	0.1	3.1	3.7	8.2	2.2	3,674,799	2.1	103.3	0
21 Longview, WA	184	22	182	1,995	10	20.5	7.3	5.5	3.4	8,695	2.1	9.0	7.9	7.1	< 0.1	31.3	-	6.5	13.0	3.5	6,194,464	3.5	110.5	46,063
Oregon Total	933	140	911	1,727	57	13.8	11.2	3.8	3.4	38,510	9.4	13.0	7.6	7.5	2.3	43.0	22.3	19.8	46.6	14.7	25,468,490	14.6	104.9	126,720
Washington																								
24 Aberdeen	66	0	66	1,391	177	25.7	9.1	4.3	1.8	1,684	0.4	6.5	5.8	1.5	< 0.1	15.6	-	0.4	-	0.2	285,265	0.2	107.7	159,629
27 Port Angeles	53	0	53	703	546	65.9	4.9	1.4	1.7	295	0.1	8.3	7.8	0.1	-	1.7	-	-	0.4	0.1	191,668	0.1	108.0	59,914
51 Port Gamble	11	0	10	476	704	83.8	0.0	0.0	10.2	15	0.0	0.0	0.0	0.0	-	-	-	-	-	0	0.0	-	0	
47 Olympia	28	5	28	682	361	49.8	18.8	5.1	0.6	262	0.1	2.9	19.3	7.8	< 0.1	1.3	-	< 0.1	< 0.1	< 0.1	33,225	0.0	31.3	100
23 Tacoma	492	111	491	1,905	< 1	1.8	3.4	12.8	0.1	27,796	6.8	21.5	8.8	12.0	8.8	17.4	10.4	2.4	11.5	9.3	16,588,491	9.5	117.1	0
19 Seattle	572	120	567	1,854	< 1	1.8	4.6	10.2	1.0	31,823	7.8	25.5	7.9	7.9	12.1	0.4	4.0	3.0	4.0	9.2	15,755,887	9.0	107.5	44,672
32 Everett	48	0	46	1,159	219	18.4	10.8	6.5	5.9	1,199	0.3	6.8	8.2	3.1	< 0.1	5.3	-	0.1	0.8	0.2	366,443	0.2	106.0	13,769
25 Anacortes	13	0	13	1,039	264	42.3	26.3	1.6	1.6	275	0.1	9.8	14.0	2.3	< 0.1	1.3	-	-	0.4	0.1	168,423	0.1	71.3	0
7 Bellingham	32	0	31	983	254	13.8	9.9	6.2	1.2	806	0.2	9.4	10.8	7.8	-	-	-	0.7	1.4	0.3	584,532	0.3	105.6	1,440
Washington Total	1,315	236	1,305	1,714	61	5.2	4.6	10.8	0.8	64,154	15.7	22.5	8.4	9.3	20.9	42.8	14.4	6.7	18.6	19.5	33,973,934	19.5	111.4	279,524
Total/Average	7,538	1,437	7,402	1,943	20	2.9	2.8	7.1	1.2	408,518	100.0	23.3	9.1	17.9	100.0	100.0	100.0	100.0	100.0	100.0	174,622,624	100.0	107.9	536,228
% Change from Update of 11/98	+1.2	-16.8	+1.5	+4.8	-4.8	+0.3	-0.4	-2.7	+0.6	+0.6	+0.5	+0.1	-2.5	6.8%	-4.6%	12.9%	9.4%	1.3%	5.9%				-30.7%	

Clerks												
29 San Diego	4	0	4	***	***	10.0	36.9	11.8	0.0			
46 Port Hueneme	12	0	12	2,541	-	2.5	30.9	8.4	0.0			
63 Los Angeles/Long Beach	928	2	915	2,677	< 1	0.1	11.3	12.0	0.7			
14 Eureka	3	0	3	***	***	18.5	41.1	0.0	0.0			
34 SF Bay Area & Delta	271	9	267	2,364	1	2.4	9.2	1.9	3.0			
40 Portland	93	0	90	2,510	3	32.7	13.1	1.5	2.5			
23 Tacoma	71	0	71	2,576	-	1.0	38.5	1.4	2.9			
52 Seattle	163	0	161	2,559	-	13.4	12.1	3.4	2.5			
Total/Average	1,545	11	1,523	2,591	< 1	3.8	13.1	8.5	1.5			
Foremen/Walking Bosses												
29 San Diego	2	0	2	***	***	0.2	71.7	2.4	0.0			
46 Port Hueneme	5	-	5	2,463	2	0.2	39.0	0.6	0.0			
94 Los Angeles/Long Beach	345	-	341	3,432	< 1	0.1	3.9	0.0	1.6			
91 Northern Calif. Area	71	-	70	2,646	28	0.7	16.1	0.0	3.3			
92 Portland	42	-	42	2,505	11	15.2	21.7	0.0	10.0			
98 Seattle	95	-	94	2,576	15	10.2	13.1	0.0	1.4			
Total/Average	560		554	3,108	7	2.5	9.3	0.0	2.4			



* Longshore and Clerk hours only. *** "Annual Hrs Pd" and "Wkly PGP" for groups of less than five individuals are not shown, but the data are included in category averages.