



# MONTHLY REVIEW

TWELFTH FEDERAL RESERVE DISTRICT

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FEDERAL RESERVE BANK OF SAN FRANCISCO

## REVIEW OF BUSINESS CONDITIONS

**T**HE business situation in the Twelfth District at the start of the new year provided a fairly sharp contrast with conditions in early 1953. A year ago the economy of the District exhibited strong upward tendencies with expansion occurring in a wide range of activities. Consumer and business demands for District production were high and rising; business inventories were being accumulated at a fairly rapid pace; Government procurement programs had not quite reached peak levels and additional expansion in District industries was under way to take care of the demands from the military agencies. At the start of the current year, however, the situation was significantly different. Consumer and business demands had weakened considerably from earlier peak levels; the decline in consumer demand reflected the drop in consumer incomes as layoffs and reduced weekly hours lowered total pay rolls. Also, consumer stocks of durable goods were high and the desire to acquire additional items of household equipment and automobiles was less intense than in earlier periods. A sharp reduction in demand for inventories and a moderate tapering off in plant and equipment expenditures have lowered business demands significantly from previous peak levels. A run-off of some types of defense contracts and the reduction in general Federal Government activities reduced the demands of the Government for District products and services.

By the end of 1953, however, the shifts and changes had not driven the level of District business activity below the corresponding period of 1952, although since mid-1953 they had been instrumental in narrowing the margin of gain. In December business activity was still ahead of the same period a year earlier. Nonagricultural employment, for example, (the most comprehensive measure of over-all economic activity available for the District) in December was still slightly ahead of December 1952; in the second quarter it had been 5 percent above the second quarter of 1952. Thus, while activity remains high in the District, sufficient elements of weakness have appeared to reduce the level somewhat and to change significantly the tone of the over-all situation.

### *Nonagricultural employment exhibits declining trend*

Employment levels in nonfarm activities in the District have shown a tendency in recent months to decline considerably more than the usual seasonal amounts. During

most of the period after Korea the general rise in activity minimized the seasonal declines. However, since last summer when employment reached a peak, seasonal declines have been accentuated by weakness in a number of non-seasonal industries. Strikes in the aircraft and metal processing industries, which affected employment totals in the three closing months of the year, have also contributed to declining employment levels.

In December, nonagricultural employment was off nearly 2 percent from the September peak, although the total was still ahead of December 1952 by a small margin. The major nonseasonal declines have occurred in durable manufacturing industries and in employment at Federal defense establishments throughout the District. Principal gains over the previous year have taken place in the service industries and in real estate and finance activities. The gains in the service and finance and real estate fields reflect the large increases in population which continue in the District and which require added employment in these lines.

### *Mining activity rises but expanding supplies darken outlook*

The opening of a new major copper mine in Nevada and sustained activity at the Arizona and Utah copper mines raised the level of employment in the District's non-ferrous mining industry in the latter months of the year. Continued high demand for District output of copper has been the major sustaining force in the District's metal mining industry throughout all of 1953. Lead and zinc

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### Supplement

**California Agriculture and International Commodity Developments**

mines have faced depressed markets since late in 1952 and cutbacks in output have lowered employment at these operations substantially. For example, in Idaho where lead and zinc production rank ahead of any other state in the District (and nation), mining employment in late 1953 was about 17 percent behind the same period in 1952, while in Utah and Arizona, major copper centers, mining employment was up 1 and 5 percent, respectively.

In 1954, however, the copper industry will face a greatly expanded supply situation both as to District production and available world supplies. The new ore body in Nevada which opened last November will add some 2,500 tons monthly to District production, and two additional projects in Arizona will add further substantial quantities in 1954. In addition, in December the government of Chile released to the world market its monthly production of some 30,000 tons of copper which had been held off the free market under various restrictions since early 1952. These supply factors combined with a slackening in demand will undoubtedly have a depressing influence on copper prices and on the output of the District industry in the months ahead if the general level of business activity continues to taper off.

#### ***Manufacturing industries reflect weakening tone of business activity***

The declining demands noted earlier in this discussion have had their major impact on the District's manufacturing industries and particularly on the producers of durable goods. The durable goods industries were the principal areas of strength as the defense program expanded and consumer and business demand reacted to the impetus of greater military outlays. In recent months the easing defense program, the mild slippage in consumer spending, and the reaction of business to declining sales have had a greater effect upon the durable goods industries than other sectors of the economy, and they now constitute the primary sources of weakness. Total manufacturing employment in the District in December was less than  $\frac{1}{2}$  percent behind December a year earlier, a contrast with the nearly 7 percent gain over year-ago levels recorded in June and July. Nationally, the decline in manufacturing was significantly larger. In July manufacturing employment in the nation was 11 percent above the level of July the year before and in December the number of workers was 3 percent below December 1952. This difference is largely accounted for by the fact that those durable goods industries most severely affected by the recent downturn are more important in the nation than in the District, especially in so far as consumer durable items of production are concerned.

In contrast to the general weakening tone in most durable product lines has been the continued strength in aircraft and parts manufacture and a recent firming tendency in the markets for District forest products. Aircraft and parts production has continued to rise, in part reflecting some shifts in Air Force procurement that have proved favorable to District producers. Improvement in the mar-

kets for District lumber and plywood, while not removing the industry from its position as a major source of weakness in the late months of the year, has imparted a note of strength in this area of District manufacturing activity.

#### ***Lumber and plywood close year on brighter note***

In lumber and wood products, employment continues to reflect the basic market weakness that has confronted the industry over much of the second half of the year. In December, employment in the industry in Washington was more than 8 percent behind December 1952; in Oregon the decline was not quite 7 percent; in Idaho and Arizona it was down 17 and 3 percent, respectively; and in California the number of workers was just slightly under the year-ago level. Developments late in the year in the lumber and plywood segments of the industry, however, presented a somewhat different view than that obtained from the employment situation by itself. The pickup in the construction field in the late months of the year has had a definite firming effect on the markets for District lumber products. Production cutbacks since mid-year in the Douglas fir region and the bringing of production of western pine into better balance with orders and shipments have also contributed greater strength in the market. In addition, Canadian Douglas fir producers have recently shifted more of their output to markets in the United Kingdom with a resultant cutback in their shipments to eastern United States markets and a firming of prices quoted on eastern shipments by District producers. In the plywood industry the recovery which started in early November has continued into December, with further price advances and a general pickup in the rate of operation of District mills. Industry feeling in both lumber and plywood is one of relative optimism, a sharp contrast with the pessimistic feeling a scant month or two ago. The construction revival and the high level of building permit authorizations in the past several months along with the favorable reaction of buyers to lower price levels have caused the industry to look ahead to 1954 with confidence of maintaining high rates of production and employment.

#### ***Aircraft shows continued strength***

District aircraft and parts manufacture represents a major departure from the declining trend exhibited by the durable goods industries generally. Employment in aircraft production, after discounting the effects of the strike against a major producer, was up substantially in November and December from the same period a year earlier, about 8 percent in California and more than 20 percent in Washington. However, in Arizona, the only other area of significant aircraft and parts manufacture in the District, employment in the industry in December fell to a level 46 percent below December a year before. This latter reflects the completion of a major conversion and modification contract and there are no signs of a resumption of this activity in the foreseeable future. The over-all industry outlook, however, is for continued expansion at least through the first quarter of the year and existing

backlogs of orders on hand should keep the industry operating at very high levels for an indefinite period.

#### ***Other durables reflect recent slackening of demand***

The impact of recent weakening in the business situation has been particularly noticeable in several District industries producing durable goods. These industries until quite recently were the major sources of business strength but in the latter months of the past year became the principal area of weakness. In the primary metals industry operating rates fell well below the previous year in the closing months of the year, especially in the steel industry in California and Utah but also to some lesser extent in aluminum in the Pacific Northwest. Steel companies, particularly smaller mills with a restricted range of output, are finding it difficult to fill order books for the early months of the present year. Metal fabricators and machinery manufacturers were generally cutting back on production as orders slackened off, reflecting reduced Government buying and the heavy inventory position of business firms. Less buying of durable household equipment by consumers has had a direct impact upon producers of electrical appliances and television receivers and in the furniture field where activity was substantially lower than a year before. Motor vehicle assembly plants, however, where activity fell 3 or 4 percent behind the previous year in November, have experienced a pickup in levels of operation as work on new models has gotten under way.

#### ***Nondurables generally show steadier trend***

District employment in nondurable goods manufacturing has generally held substantially more stable than in the durables segment. These industries have reacted less than the durable goods sector to changes in consumer incomes during recent years and the postponement of purchases or consumption is not as important a factor as for items of greater durability. Consequently, the fluctuations in employment and output have been less severe than those described for the durable goods industries. Employment in nondurables in the late months of the year averaged slightly more than 1 percent above the comparable period a year before.

This movement in the aggregate levels of nondurables employment, however, tends to mask some movements of significance within particular industries. Considerable strength late in the year was evident in printing and publishing and in the chemical industry. The paper industry continued to show moderate gains over the previous year and in Washington recovered most of the employment losses recorded early in the fourth quarter. In textiles and apparel some modest weakness appeared in November and December when employment fell below the comparable months of 1952. Apparel producers expect no significant change in this situation in the first quarter of the current year, although there appears to be some possibility of moderate improvement. In petroleum a rather sharp rise in stocks brought about by a combination of too much production and fairly heavy importations of foreign

crudes earlier in the year has resulted in significant output cuts in recent months. Demand, however, has remained high and steady and prices have shown no tendency to decline, in contrast to the price declines that have occurred in other areas of the United States. Activity in food processing plants, after allowance for the highly seasonal character of the industry, remained relatively stable as some recent weakness shown in California was substantially offset by gains in the Pacific Northwest and Utah.

#### ***Weekly hours show decline in manufacturing industries***

Cutbacks in the average length of the work week of production workers in manufacturing industries have been quite general in the District, a further reflection of the declining trend in over-all levels of activity. In November the average work week in the District was 39.6 hours compared with an average of 40.0 hours in October and 40.1 hours in November 1952. The number of hours worked per week has fallen consistently below the previous year in each month since July both in the District and in the nation. In relative terms, the decline has been considerably larger nationally than in the District—3.2 percent in November in the nation compared with a District decline of 1.3 percent from year-ago levels. Declines in hours have been general throughout the District but the largest reductions have taken place in the Pacific Northwest, reflecting to a large extent the weakness in lumber where activity is well below the year before.

#### ***Unemployment up sharply in District***

The degree of utilization of the District's labor force in the face of the general sliding off in economic activity has declined substantially in recent months. Total unemployment in the District in the late months of the year rose to a level approximately 30 percent above the same period in 1952. It must be recalled, however, that while these increases are substantial on a percentage basis the jobless total is still relatively small on an historical basis. It appears probable on the basis of preliminary data for the late months of 1953 that the ratio of unemployment to total labor force did not exceed 4 percent by very much. This compares with a ratio of 3.9 percent in December 1952.

Insured unemployment, a less comprehensive measure than total unemployment, shows the same upward trend but a considerably larger percentage increase over a year ago. This is due largely to the fact that employment declines have been greatest in those activities covered by the unemployment insurance laws. In December insured unemployment in the District was more than 46 percent ahead of December 1952 and reached a total in excess of 234,000 workers. In Utah, Oregon, Nevada, and Arizona the rise from a year ago in insured unemployment exceeded 70 percent while in Washington, California, and Idaho the increases were under 50 percent.

## THE SITUATION AND OUTLOOK FOR IMPORTANT TWELFTH DISTRICT FIELD CROPS

CASH receipts in 1953 from Twelfth District farm marketings of field crops may about equal those received in 1952, but the outlook for the year ahead is not so favorable. Present farm prices of major field crops with the exception of cotton are below 1952 levels and are also below parity (Table 1). However, general increases in crop tonnage produced and marketed (Table 2) tended to bolster cash receipts in 1953. During the first half of 1953, cash farm receipts from sale of District crops (including fruits and vegetables) were 10 percent below cash receipts during a like period in 1952, but for the period January through November 1953 cash receipts were only 3 percent below those of a comparable period in 1952. Furthermore, changes in cash receipts from 1952 were not uniform among District states. Utah and Nevada suffered substantial reductions in cash income due to drought conditions which prevailed throughout 1953, but in Washington and Arizona the value of crop marketings through November 1953 increased 9 and 22 percent, respectively, over the comparable period in 1952.<sup>1</sup>

District crop producers' net realized incomes in 1953—gross income minus production costs—are expected to fall below those received in 1952 by about 7 percent. Some farm production costs such as seed and rent have declined slightly. However, fertilizer costs were about the same as during 1952 and small increases have appeared in maintenance and depreciation charges, operating costs of motor vehicles, property taxes, farm mortgage interest

<sup>1</sup> Increases occurred in these states partly as a result of the general and greater than usual movement in wheat and cotton into the price support program during the last quarter of 1953. As explained later, proceeds of price support loans are included in Government statistics on farm marketings. However, generally favorable growing conditions and larger crops of wheat and fruit in Washington contributed to the increase in that state. A larger crop of cotton together with the continued high rate of growth in agricultural resources bolstered crop receipts in Arizona.

TABLE 1  
FARM PRICES OF SELECTED FIELD CROPS AND SEEDS WITH  
COMPARISONS  
MOUNTAIN<sup>1</sup> AND PACIFIC COAST STATES, JANUARY 15, 1954

	Jan. 15, 1954		Percent change since Jan. 15, 1953		United States average price as percent of parity
	Mountain	Pacific	Mountain	Pacific	
Wheat (bu.)	\$ 1.98	\$ 2.06	0	-2.8	82
Rice (cwt.)	...	5.20 <sup>2</sup>	...	-14.8	99
Oats (bu.)	.78	.89	-15.2	-13.6	89
Barley (bu.)	1.12	1.29	-17.0	-18.4	85
Cotton (lb.) <sup>3</sup>	.312	.304 <sup>2</sup>	+ 2.7	+ 1.3	87
Cottonseed (ton)	52.90	51.00 <sup>4</sup>	-19.0	-15.0	72
Potatoes (bu.)	.62 <sup>4</sup>	1.06 <sup>4</sup>	-59.2 <sup>5</sup>	-42.7 <sup>5</sup>	45
Beans, dr. (cwt.)	7.48	9.10	- 4.6	- 8.5	90
Seeds:					
Alfalfa (cwt.)	21.20	26.50	-28.1	-22.3	59
Alsike (cwt.)	14.50 <sup>6</sup>	15.00	-42.0	-40.0	48
Red clover (cwt.)	28.10	28.70	-11.4	-27.9	67
Hay (bale)					
All (ton)	21.40	22.80	-24.4	-25.5	96
Alfalfa (ton)	21.80	24.30	-23.0	-23.8	..

<sup>1</sup> In addition to Arizona, Utah, Nevada, and Idaho, Mountain states include Montana, Wyoming, Colorado, and New Mexico. Since variations of average prices among these states are small, they may be considered fairly representative of the District states included.

<sup>2</sup> California only.

<sup>3</sup> American Upland cotton.

<sup>4</sup> December 15, 1953.

<sup>5</sup> December 15, 1952.

<sup>6</sup> Idaho only.

Source: *Agricultural Prices*, United States Department of Agriculture.

payments, outlays for hired labor, and many of the smaller miscellaneous items. National statistics indicate that in 1953 falling farm prices together with continued high production expenses reduced average net farm income to 36 percent of gross farm income, the smallest proportion in many years.

The principal determinants of prices and incomes received by Twelfth District field crop producers are national and international in scope rather than strictly local. Although field crops are an important source of District agricultural income, the District accounts for a small proportion of the total United States production of most field crops. Total United States production of individual field crops, prospective consumption of the individual crops in domestic and foreign markets, potential carry-overs, and total supply as well as the form and level of Government price support operations are among the more important factors affecting the returns to District producers from sale of field crops. An even more fundamental factor is the economic health of the general economy. Any general decline in business activity vitally affects agriculture in every area of the nation (Table 3).

In the last few years industrial production and disposable consumer income have been very high, and in the year ahead they are expected to remain at high, although slightly reduced, levels. But the combined effect of (1) drastically reduced export demands for American farm products during the last year and a half (Chart 2), (2) a sustained high level of production, and (3) price support operations of the Federal Government have resulted in very large storage and carry-over stocks of wheat, corn, cotton, and some other important commodities. The large and increasing excess of supplies over disappearances in domestic and foreign markets, in turn, has had the effect of bringing commodity prices down near or below price support levels.

TABLE 2  
PRODUCTION OF SELECTED FIELD CROPS AND SEEDS WITH  
COMPARISONS, TWELFTH DISTRICT, 1953

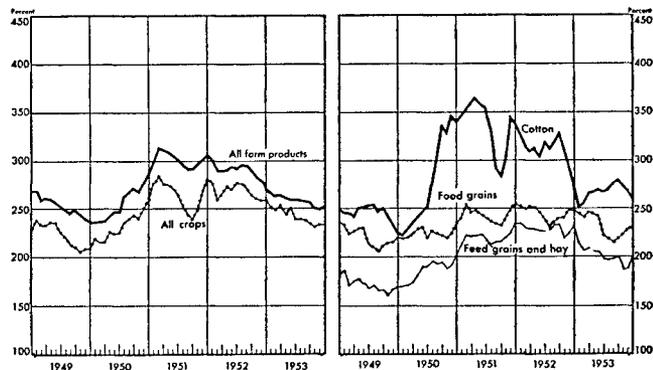
	1953 production (in thousands)	Percent change since	
		1952	1942-51
Wheat (bu.)	186,228	+ 7	+ 31
Barley (bu.)	93,617	+ 2	+ 10
Oats (bu.)	31,235	- 7	- 5
Rice (bag)	11,948	+ 2	+ 55
Cotton (bale)	2,756	- 2	+153
Potatoes (bu.)	123,136	+10	+ 18
Sugar beets (ton)	6,239	+33	+ 37
Hay:			
All (ton)	14,648	+ 1	+ 5
Alfalfa (ton)	10,232	+ 2	+ 10
Dry edible beans (bag)	6,966	+ 5	- 3
Dry field peas (bag)	2,672	+19	- 51
Seeds: <sup>1</sup>			
Alfalfa (lb.)	80,005	- 7	+176
Alsike clover (lb.)	8,452	-12	+ 30
Red clover (lb.)	10,453	- 3	.. <sup>2</sup>
Ladino clover (lb.)	6,913	-43	+126

<sup>1</sup> Production and comparisons for Washington, Oregon, Idaho, and California.

<sup>2</sup> Less than 1 percent.

Source: *Crop Production, 1953 Annual Summary*, United States Department of Agriculture.

CHART 1  
INDEXES OF PRICES RECEIVED BY FARMERS—  
UNITED STATES, 1949-1953  
(1910-1914=100)



Source: United States Department of Agriculture, Bureau of Agricultural Economics, *Agriculture Prices*.

**Price support operations for field crops**

In the past year Government policy toward agriculture and price support operations of the Commodity Credit Corporation have had a profound effect upon the situation and outlook for field crops. This condition appears likely to continue in the year ahead. Supplies of most of the crops eligible for price support have been accumulating under the price support program (Table 4). On November 30, 1953, loans and inventories of the CCC amounted to \$5.2 billion compared with \$2.2 billion a year earlier. President Eisenhower found it necessary in January this year to ask Congress to increase the statutory debt limit of the CCC above the present \$6.75 billion.

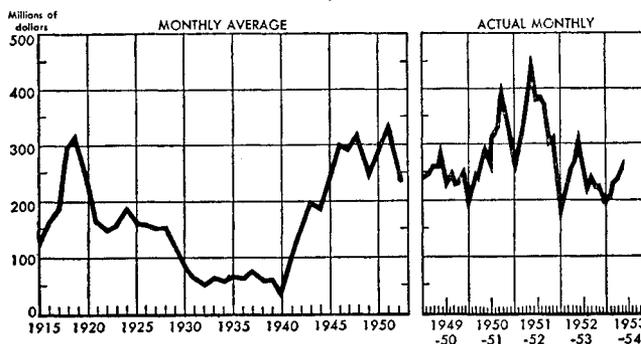
Within the period of a crop season the greater the volume of a commodity impounded by the CCC, the smaller is the quantity of the commodity held in private hands or in "free" supply. Crops which appear short or near a shortage of free supplies, relative to the market for them, tend to approach or exceed the effective support price. As indicated in Table 4, the free supply of several crops is relatively small when compared with anticipated utilization. Free supplies of wheat appear particularly short.

TABLE 3  
CASH RECEIPTS FROM FARM MARKETINGS OF CROPS WITH  
COMPARISONS—TWELFTH DISTRICT AND UNITED STATES  
January through November, 1953

	Cash receipts <sup>1</sup>		Percent change	
	Jan.-Nov. 1953 (in millions of dollars)	Jan.-Nov. 1953 from Jan.-Nov. of	Jan.-Nov. of	
			1952	1951
Arizona .....	288.8	+21.9	+60.7	
California .....	1,460.4	- 6.3	+ 1.0	
Idaho .....	184.8	- 3.3	+11.7	
Nevada .....	4.9	-30.1	- 6.8	
Oregon .....	214.9	-14.9	+ 1.0	
Utah .....	34.6	-21.4	-17.1	
Washington .....	385.7	+ 9.0	+19.1	
Twelfth District .....	2,574.1	- 2.7	+ 7.8	
United States .....	12,543.6	- 2.8	+ 7.4	

<sup>1</sup> Cash receipts from marketings of crops include receipts from fruits and vegetables and, therefore, is not strictly representative of gross income from field crops.  
Source: *Farm Income Situation*, United States Department of Agriculture.

CHART 2  
AGRICULTURAL EXPORTS, UNITED STATES—1915-1953<sup>1</sup>



<sup>1</sup> Years begin with July.  
Source: United States Department of Agriculture, Foreign Agricultural Service, *Foreign Agricultural Trade*.

Some tightness already has occurred in the free supply of cotton and, as a result, spot prices of cotton have recently moved up from a low reached about mid-December to slightly above the effective loan level. However, there are several ways in which these free supplies could be either increased or decreased during the remainder of the marketing season. They could be decreased by continued net movement of free stocks into the price support program or by a greater than expected demand in domestic or foreign outlets. Further build up in CCC inventories of 1953 crops is limited by the fact that for most crops other than cotton January 31, 1954 was the last date for securing CCC loans on the 1953 crop. On the other hand, free supplies in relation to utilization could be increased by use of CCC supplies for export or domestic markets instead of free supplies or by repayment and redemption of price support loans.

The comparatively rapid movement of eligible crops under price supports during the latter part of 1953 may have bolstered District cash farm receipts in 1953 at the expense of such receipts during the beginning months of 1954. This possibility arises from the inclusion in Department of Agriculture statistics on cash receipts from farm marketings of the proceeds from Government price support loans. Although most crops are harvested in the latter half of the calendar year, products of the harvest usually are available for sale and distribution until the succeeding harvest. Hence, farm receipts from the sale of crops are distributed between two calendar years. Cash returns from District farm marketings during the first half of 1953 were 10 percent below the same period in 1952. However, by November 30 such receipts for the year were only 2.7 percent below the same period a year before. Since a larger than usual proportion of the 1953 crop apparently was disposed of by farmers in the year in which it was harvested either through actual sales or entry into the loan program, a smaller than usual proportion of the crop may be available for sale by farmers in the first part of 1954.

The large private and public stocks have made mandatory the declaration of marketing quotas on cotton and wheat. Marketing quotas on these crops were overwhelm-

ingly approved by producers of these two commodities, which means that acreage planted to these crops will be reduced in 1954 and Government loans on 1954 wheat and cotton will be forthcoming at 90 percent of parity. Marketing quotas on rice were considered during the final quarter of 1953, but late in December 1953 the United States Department of Agriculture announced that there would be no marketing quotas and no acreage allotments on the 1954 rice crop. At the same time, however, the Department warned against undue expansion of rice acreage. Rice, a basic commodity, will continue to be supported at 90 percent of parity. Although price supports on feed grains other than corn are not mandatory, they have been extended at 85 percent of parity for the 1954 crops of oats, barley, rye, and grain sorghums. National average support prices for current and prospective crops of a number of commodities are indicated in Table 5.

The remainder of this article will be devoted to a discussion and analysis of the situation and outlook for individual field crops.

### Wheat

Another large wheat crop in 1953 accompanied by an exceptionally large carry-over has provided the United States with a record supply of 1.7 billion bushels of wheat.<sup>1</sup> This is 8 percent above the previous record set in 1942. A number of problems are presented by this situation. Among them, adequate storage is of increasing concern. Although the storage situation was not considered acute in the Pacific Northwest, some of the wheat produced in that area was piled on the ground. Despite enactment of marketing quotas, a continued need in 1954 for additional grain storage facilities in the Pacific Northwest is expected. The United States Maritime Commission recently authorized the use of 135 ships of the Pacific Northwest "mothball" fleet for grain storage. This action will aid greatly in alleviating the storage problem which is expected with the harvest of the 1954 grain crops in that area. The 1953 storage problem was more severe in several other producing areas and is expected to continue in 1954. Officials of the Department of Agriculture have attempted to alleviate the storage situation

<sup>1</sup> The supply of 1.7 billion bushels consists of a carry-over at the start of the current crop year (July 1, 1953) of 562 million bushels, the 1953 crop of 1,168 million bushels, and imports of possibly 5 million bushels.

by indicating a willingness to guarantee occupancy and returns on new storage facilities in the hope of encouraging construction. As of January 14, the Department of Agriculture had accepted applications under this program for a total of 274 million bushels of additional storage capacity. The construction of additional facilities is also encouraged by Federal legislation which permits amortization deductions over a period of 60 months for grain storage facilities completed after December 31, 1952.

Another and perhaps more important problem involves the necessity of finding or developing new outlets for wheat if the size of carry-over stocks is to be reduced. The large inventories which accumulated soon after the beginning of World War II were reduced principally by subsidizing the use of wheat for feed. The possibility of expanding the consumption of wheat for feed purposes at the present time, however, does not appear nearly as feasible as during the 1942-45 period because of the large supply of feed grains. Furthermore, the outlook for wheat exports from the United States is for continued readjustment from a record volume of world trade in wheat to lower levels, partly as a result of very large world production and supplies of wheat.

A large proportion of United States wheat exports has been made to International Wheat Agreement countries. The current export quota for the United States under the new International Wheat Agreement is 209.6 million bushels. The volume of exports under the Agreement so far indicates that the United States may be experiencing difficulty in finding "wheat dollars" available in Agreement importing countries.

In addition to the expected wheat exports under the IWA, the Commodity Credit Corporation has instituted a program designed to increase the movement of wheat into export. However, the intent of the Government in initiating the new program is to supplement rather than substitute for scheduled exports under the IWA. In line with this policy the CCC is permitted to sell in export at a price below the United States market price but has been directed not to sell at prices less than the price of wheat sold under the IWA. There is some fear, however, that this program may weaken the IWA as there apparently exists very little price advantage for nations which import wheat under the IWA.

TABLE 4  
SUPPLY AND EXPECTED DISAPPEARANCE OF SELECTED CROPS WITH DATA ON PRICE SUPPORT ACTIVITIES  
UNITED STATES, 1953-54 CROP YEAR  
(in millions)

	Total supply <sup>1</sup>	CCC stocks <sup>2</sup>	Free supply <sup>3</sup>	Expected utilization <sup>4</sup>	Free supply minus expected utilization	Last date 1953 crop can be placed under supports
Wheat (bu.)	1,735.0	901.0	834.0	950.0	-116.0	January 31, 1954
Corn (bu.)	3,977.0	670.0	3,307.0	3,072.0	+235.0	May 31, 1954
Oats (bu.)	1,512.0	48.0	1,464.0	1,301.0	+163.0	January 31, 1954
Barley (bu.)	317.0	32.0	285.0	263.0	+ 22.0	January 31, 1954
Grain sorghums (bu.)	115.0	26.0	89.0	111.0	- 22.0	January 31, 1954
Cotton (bale)	22.1	7.7	14.4	12.6	+ 1.8	April 30, 1954

<sup>1</sup> Stocks on hand at the beginning of the crop year in addition to 1953 production.

<sup>2</sup> Stocks of the Commodity Credit Corporation at the beginning of the crop year plus 1953 crop entries under the price support program through December 15 except cotton which includes entries through January 8.

<sup>3</sup> Difference between total supply and CCC stocks.

<sup>4</sup> Official USDA estimates which include expected disappearance in domestic and export outlets during the 1953-54 crop year.

Source: Various publications, United States Department of Agriculture.

TABLE 5  
AVERAGE PRICE SUPPORT LEVEL FOR SELECTED CROPS  
UNITED STATES—1953 AND 1954

	United States average support price 1953 crop	Latest date for securing Government loan 1953 crop	United States minimum average support price 1954 crop
Wheat (bu.) .....	\$ 2.21	January 31, 1954	\$2.20
Upland cotton (lb.) .....	.308	April 30, 1954	... <sup>1</sup>
Cottonseed (ton) .....	54.50	September 15, 1954	... <sup>1</sup>
Rice (cwt.) .....	4.84	January 31, 1954	... <sup>1</sup>
Barley (bu.) .....	1.24	January 31, 1954	1.15
Grain sorghums (cwt.) .....	2.43	January 31, 1954	2.28
Oats (bu.) .....	.80	January 31, 1954	.75
Rye (bu.) .....	1.43	January 31, 1954	1.43
Flaxseed (bu.) .....	3.79	January 31, 1954	3.14
Beans, dry edible (cwt.) .....	7.79	January 31, 1954	... <sup>1</sup>
Corn (bu.) .....	1.58	May 31, 1954	... <sup>1</sup>

<sup>1</sup> Not yet announced.

Source: *Active and announced Price Support Programs approved by Board of Directors*, United States Department of Agriculture.

Acreage allotments and marketing quotas are expected to result in reduced wheat production in 1954. It is possible, however, that this anticipated decrease in production will not be sufficient to halt the accumulation of wheat stocks. Based on 1943-52 average yields, 950 million bushels of wheat would be produced on the national allotment of 62 million acres.<sup>1</sup> A crop of 950 million bushels would result in little if any reduction in carry-over stocks, as the total disappearance during the crop year ending June 30, 1953 is estimated to have been slightly above 1 billion bushels.

Wheat prices are expected to remain at or below the effective loan rate, and returns during 1954 from diverted wheat acreage planted to substitute crops probably will be less than was obtained from the production of wheat on the same acreage in 1953. Consequently, land devoted to production of wheat in 1953 is likely to yield a smaller net income this year.

### Cotton

Marketing quotas on cotton were made necessary by loss of some foreign markets for cotton,<sup>2</sup> loss of some potential domestic cotton markets to synthetic fibers,<sup>3</sup> and a series of large crops. The result has been the accumulation of cotton supplies which exceed the "normal" supply<sup>4</sup> by 4 million bales (500 pounds each) or nearly half the annual domestic market requirements.

The United States has produced large crops of cotton in every year since 1950, the last year in which marketing quotas were in effect. For the last three years, production has averaged considerably above the average level during the period 1942-51. The largest crop in fifteen years—16.5 million bales—was produced in 1953 despite a reduc-

<sup>1</sup> Based on conditions as of December 1, 1953 a yield of 16.1 bushels per acre is indicated for the 1954 winter wheat crop compared with an average yield of 17.7 bushels for the period 1943-52.

<sup>2</sup> United States exports of cotton declined 45 percent in the year ending August 1, 1953.

<sup>3</sup> In the United States cotton consumption per person is about the same now as it was in 1916, but in the same period per capita consumption of all fibers has increased nearly 13 percent. Cotton has been losing some of its most important domestic outlets such as the tire cord market which for 30 years was the largest single use outlet for cotton. Now about three-quarters of that market has been taken over by rayon and synthetic fibers.

<sup>4</sup> "Normal" supply is defined as total domestic and foreign sales plus 30 percent of total sales to provide for reserves.

tion in acreage from 1952. An increase in yields more than offset the acreage decline.

As originally announced, the marketing quota on cotton was designed to reduce cotton production in 1954 by about one-third or to about 10 million bales. In order to accomplish such a decrease it was necessary to cut total acreage about 27 percent. However, under the legislation in effect when the quota was first announced, cotton producers of the Twelfth District were more seriously affected than cotton producers of other areas. Allocation of the national cotton quota to individual states was based on average production in the years 1947-48 and 1950-53. Since cotton production in western areas has increased rapidly in this period, required 1954 acreage reductions in California and Arizona would have averaged about 50 percent of acreage in 1953 compared with 27 percent in the nation as a whole.

In January this year Congress passed an amendment to the law affecting cotton marketing quotas which increases the total cotton quota allotment from 17.5 million to 21.4 million acres. As a result, acreage reductions for 1954 in California and Arizona are expected to approximate 34 percent. However, liberalizing present cotton quota provisions for 1954 may mean ensuring the imposition of acreage restrictions in succeeding years in order to reduce the size of the Government-held surplus. Even under the original provisions of the marketing quota law the carry-over of cotton on July 31, 1955 is expected to be only 5 percent lower than on the same date a year earlier.

Approval of a cotton marketing quota by cotton producers of the United States means that most of them will receive less income from cotton in 1954 than in 1953 because of the lower acreage they will be permitted to plant. On the other hand, disapproval of a marketing quota also would have meant less income from the 1954 crop. Had the cotton quota been rejected, mandatory acreage limitations would have been avoided. In this case, however, the guaranteed Government price would have dropped from the present minimum level of 90 percent of parity, or about 30 cents per pound, to 50 percent of parity, or about 18 cents per pound.

Even under the liberalized provisions of the cotton marketing quota law District cotton producers will be faced with loss of income and some serious adjustment problems, as there appear to be few satisfactory alternative crops for acreage removed from cotton production in California and Arizona. Choice of alternatives in western cotton areas is seriously limited by the available water supply, by the high level of fixed costs on cotton-producing land, and by other factors. Some possible alternatives, such as castor beans, would require additional investment in specialized machinery while others require considerable production experience. Other possible alternatives lack established marketing outlets from District cotton farming areas. Agricultural economists of the University of California have shown that in California net income per acre for land shifted to production of grain sorghums,

irrigated barley, and oilseed crops may be \$15 to \$50 less than could be expected from 1954 crop cotton. Alfalfa, sugar beets, corn, or dry farm barley, according to these analysts, can be expected to return from \$50 to \$90 per acres less net income than cotton.<sup>1</sup>

### Rice

Rice production continues to increase in the United States. The 1953 crop of 52.5 million bags was a record. A new record apparently was set not only for the country as a whole but also for each of the rice-producing states. Nationally, both acreage and average yields were greater than for the previous year.

The 1953 rice crop was preceded by a record volume of United States exports during the 1952 crop year—17.4 million bags. This volume of exports was over one-third the 1952 United States production and approximated 15 percent of the world exports of rice. Japan, Korea, and Cuba imported three-fourths of last year's exports from the United States. However, during the period September 1952 to November 1953 export supplies of United States rice were not adequate to meet requirements of both the United States military and importing countries. Consequently, the Federal Government found it necessary during this period to allocate the rice supply available for export to the various outlets. These export restrictions by the Department of Agriculture remained in effect past the original expiration date—June 1953—but greater than expected increases in production of rice in Southeast Asia and South Korea prompted the final release of these export controls.

The growing season for the 1953 Japanese crop of rice was particularly unfavorable. As a result, United States rice exports to Japan for 1953-54 are expected to exceed annual exports of the two previous years. However, United States foreign agricultural representatives indicate that maintenance of a reasonably competitive price for United States rice in the Japanese market is necessary to maintain Japan as an important outlet. Increased South Korean rice production has reduced rice import requirements of that country.

Since little change is expected in domestic civilian consumption of rice, continued high exports will be necessary to maintain farm prices of rice above the support level. Prices received by rice growers have advanced from early season levels in September. However, on January 15 California growers were receiving \$5.20 per 100 pounds compared with \$6.10 on the same date a year ago.

### Sugar beets

The District production of sugar beets in 1953 was 6.2 million tons, constituting more than 50 percent of the nation's 1953 sugar beet crop. This is an increase of 32 percent over last year and is 37 percent above average production in the years 1942-51. Large increases in District

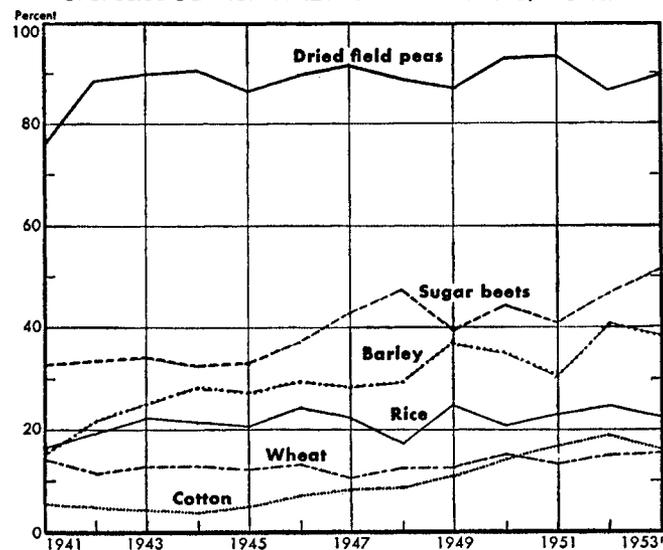
<sup>1</sup> C. O. McCorkle and T. R. Hedges, "Cotton Quotas and Allotments," *California Agriculture*, College of Agriculture, Extension Department, University of California, Vol. 7, Nos. 9-13 (September-December 1953).

sugar beet production in recent years have resulted from general increases in production in each major District sugar beet producing state. With increases for the United States in both acreage and yields of sugar beets, total national 1953 production of this crop is estimated to be about 18 percent greater than output last year.

Despite increased production the average price per ton received by farmers for sugar beets in 1953 is expected to average slightly above comparable 1952 prices.<sup>1</sup> Final reports are not available, but with District increases in both prices and average yields, gross returns per acre from sugar beets probably will average higher for the 1953 crop than for the crop of a year earlier. However, the outlook for sugar beet prices and gross returns in 1954 is somewhat more pessimistic. In the year ahead decreases in acreage devoted to cotton and falling prices of some other commodities may result in another increase in sugar beet production. However, establishment for 1954 of a market quota on domestic sugar at 1.8 million short tons may tend to suppress a great expansion in domestic sugar beet acreage. Allotment of the quota to each individual processor of sugar beets was necessary to provide each of them an equitable opportunity to market sugar in 1954 within the established quota. In turn, each processor must restrict his purchases of beets to quantities consistent with his market allocation of sugar. The limited capacity of sugar beet processing establishments also may tend to discourage general expansion of sugar beet production. However, a more complete utilization of existing processing capacity is being accomplished in California by planting part of the crop in the fall for spring harvesting.

<sup>1</sup> *Sugar Report*, Production and Marketing Administration, United States Department of Agriculture, October 1953.

CHART 3  
TWELFTH DISTRICT PRODUCTION AS A PERCENT OF  
U. S. PRODUCTION—SELECTED FIELD CROPS, 1941-1953



<sup>2</sup> Preliminary.

Source: United States Department of Agriculture, *Production, Farm Disposition, and Value of Principal Field Crops*.

### **Feed and forage**

Another large supply of feed grains and by-product feeds is available for the current feeding season.<sup>1</sup> Although United States supplies of oats and barley are below the 1952-53 level, the supply of corn, the principal feed grain, is at near record levels. In the District, the supply of feed grains is about the same this year as last. A smaller oat crop was balanced by larger crops of barley and grain sorghums.

Cash receipts from District farm marketings of feed grains may be less for the 1953 crop than for the 1952 crop. With a large national supply of corn the prices received by District feed grain producers have been averaging less this fall and winter than last. An expected reduction of barley exports in the year beginning last July 1 also will tend to hold District prices down, as this outlet was of considerable importance to District barley producers in the preceding crop year. However, with much of the diverted 1954 wheat acreage suitable for the production of either oats, barley, or grain sorghums, the production of these feed grains under normal growing conditions will probably increase in 1954. Consequently, cash receipts from the 1954 crop of feed grains and forage may increase, but this increase is expected to be more than offset by reductions in returns from cotton and wheat.

Although the national hay supply is larger now than in 1952-53, drought conditions in Missouri and Kansas and in several southern states seriously cut hay and pasture production in these areas. For the District as a whole hay production was slightly larger in 1953 than in 1952, but during the last year hay and pasture conditions have varied considerably among District states. Localized drought areas in Utah, Nevada, and Arizona reduced hay production in these areas and contributed to relatively poor pasture conditions. In Washington, Oregon, and parts of Idaho and California, fall pasture conditions were considerably improved over a year ago. District increases in hay production were confined largely to the Northwest. District hay prices are down considerably from year-ago levels and are below United States average prices for hay.

### **Potatoes**

The current potato situation illustrates the extreme sensitivity of potato prices to changes in output.<sup>2</sup> The nation's 1953 crop of late potatoes is only 3 percent larger than production last year, and for the eleven western states the 1953 output was slightly below that of a year earlier. Nevertheless, potato prices since early spring of 1953 have been considerably below those received in 1952. Prices received by District producers, as of January 15, ranged from 52 cents per bushel in Idaho to \$1.20 per bushel in northern California. At these levels they were about \$1 lower than a year ago.

<sup>1</sup>The feeding season is October 1 through September 30.

<sup>2</sup>The reason for this is that little variation in consumption of potatoes occurs in the United States from one year to another or in response to changes in prices of potatoes. Therefore, a small increase in production of potatoes often results in oversupply as in 1953-54 while a small decrease often causes a shortage as in 1952-53.

The increase of late potato production in the eastern states and decreased production in most western states compared with 1952 is reflected in a reversal of last year's price differentials between the two areas. Last year, on January 15, Maine farm prices of potatoes exceeded prices received by Idaho farmers by 40 cents per bushel. This year the situation is reversed, with Idaho farmers receiving 12 cents more per bushel than Maine farmers.

Ordinarily, low prices for late potatoes one year are followed the next year by reductions in potato acreage and, according to an early survey by the Department of Agriculture on potato growers' planting intentions, potato acreage decreases are indicated for all late potato producing regions in 1954. Plantings are expected to be down 10 percent in eastern late states but only 2 percent lower in western late states. However, prices received later this winter for late potatoes and those received for early potatoes in 1954 can be expected to influence farmers' final decisions with regard to 1954 late potato acreage. Also, acreage restrictions on other farm commodities and the prospects of relatively unattractive prices for many alternative crops may tend to prevent large potato acreage reductions next year.

### **Dry edible beans and peas**

About 11 percent more dry edible beans were produced in the nation in 1953 than in 1952. The Twelfth District accounted for 42 percent of national production. The price outlook for dry edible beans, although good, is not so favorable as anticipated earlier. It had been thought that smaller carry-over stocks together with continued strong demand would offset the increased production. Dry bean prices were expected to average as high or higher than for the previous year. However, United States bean prices received by growers during December and January have averaged 3 to 4 percent below comparable prices of a year ago.

In 1953 the United States crop of dry field peas was about 25 percent larger than the small 1952 crop but much smaller than average production over the period 1942-51. Approximately 90 percent of the dry field peas produced in the United States are grown in this District. Although dry field peas are not a major source of District farm income, this crop will undoubtedly gain in relative importance if plantings are increased by using acres diverted from production of wheat. The effect upon producer incomes in 1954 from substituting peas for wheat in the wheat-pea producing area of the District will depend largely on the export market. Domestic consumption per capita has remained fairly constant at 0.7 pounds per year while exports have varied considerably and have been an important outlet for dry field peas since the end of World War II. A large share of the peas which were moved into export outlets were shipped under Government aid programs, and exports of this crop in the year ending July 31, 1953 were considerably smaller than those for any other recent year.

### Seed crops

The supply of alfalfa seed from the 1953 crop and from carry-over stocks is a little larger than for the preceding year. Although 1953 production of alfalfa seed was less than during the previous year, the carry-over at the beginning of the 1953 crop season was considerably larger. District output of alfalfa seed in 1953 was about 7 percent smaller than production the previous year. Even so, District states produced more than 2½ times as much alfalfa seed in 1953 as they did annually during the period 1942-51.

Farm prices of alfalfa seed remained low in 1953 and in December 1953 were about 24 percent under comparable 1952 prices. Little improvement in these prices is expected unless the search for crops to plant on diverted wheat and cotton acreage greatly stimulates the demand for alfalfa seed. Furthermore, with both prices and production of alfalfa seed down from levels of last year, total cash receipts of District alfalfa seed producers during the current marketing season are expected to be considerably less than during the 1952-53 marketing period, but they may exceed farm returns from this source during earlier years.

The national production of both ladino and red clover seed for 1953 was down considerably from 1952—red clover 16 percent and ladino clover 44 percent. Nearly all of the ladino clover seed and about 12 percent of the red clover seed produced nationally was produced in District states in 1953. Within the District, however, red clover is as important as ladino as a source of income. The large reduction in ladino clover seed production is attributed chiefly to the absence of price supports on the 1953 crop. Prices of ladino seed have dropped about 60 cents per pound in the last year and the available supply is very large. At the 1952 rate of disappearance it would take ten years to dispose of the 1953 production and carry-over of ladino seed. Consequently, the United States Department of Agriculture has been attempting to stimulate exports of ladino and other seeds.

Despite unfavorable seed producing conditions in some states, which accounted for much of the reduction in red clover seed production, prices in the last year have declined about 4 cents per pound. The principal reason for this development appears to be the large over-all supply of seeds. The 1954 price outlook is considerably better for red clover seed, however, than for ladino, as the carry-over of red clover is expected to be smaller at the end of the current marketing season than in 1953.

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### ACCELERATED AMORTIZATION IN THE TWELFTH DISTRICT

**S**HORTLY after the outbreak of hostilities in Korea Congress authorized the Executive Department of the Government to issue certificates of necessity for privately built defense or defense-related plant and equipment. These certificates offered accelerated amortization of the capital facilities they authorized, substituting a depreciation period of five years for a period normally much longer. The accelerated amortization program thus acted as a tax stimulus to investment expenditures necessary to the national defense program; \$27 billion worth of investment was authorized<sup>1</sup> under the program through June 1953.<sup>2</sup>

In the Twelfth District the dollar volume of awards as a proportion of the national total appeared low when compared to the District's share of national population, production, or income. One cause of this seemingly low proportion is statistical. Certificates granted to transportation firms were not allocated by states in many cases because the scope of operations extended over several states. Another cause was the low rate of awards to public utilities in some parts of this District resulting from the concentration of generating facilities in the hands of Federal agencies. In manufacturing the District received a somewhat greater share of awards than its proportion of national industrial output.

The volume of certificates authorized in the District may be taken as a measure of the District's defense-related investment outlays, but for several reasons the measure is only a rough one. The problem of allocation has already been mentioned. In addition, the amortization program does not reflect reactivation of idle facilities or more intense use of previous capacity. Furthermore, a number of certificates were granted in the expectation that the projected programs would be undertaken at a later date and some of these programs, such as a \$136 million steel plant in Sacramento County, California and a \$17 million petroleum refinery at Florence, Arizona, have not yet been started. Finally, some plans for which certificates had been granted were later curtailed or dropped.

The volume of certificates authorized does not, of course, reflect investment for which certificates were not granted. Because of the upward shift in demand following the Korean outbreak, the District experienced an influx of industries which sought to meet added demand by expanding in market areas distant from the then current sources of supply, and a fair number of these expansions did not qualify for accelerated amortization since they were not directly related to national defense.

Even with these limitations the volume of certificates in this District reveals some interesting effects of the defense program. The District, as mentioned above, received a slightly larger share of awards for manufacturing than its proportion of national industrial output. Moreover, the certificates tended to be concentrated in a few

<sup>1</sup> The figures used throughout this article represent the certified value of the projects awarded certificates of necessity rather than the total proposed cost of the projects.

<sup>2</sup> June 30, 1953 is the latest date for which the detailed figures discussed in this article have been compiled since the primary source data are not readily available.

manufacturing industries. The pattern of awards among the several District states, however, tended to follow that of previous output. The effects of the program were most pronounced in stimulating the expansion of durable goods industries and in enlarging the industrial base of the District.

#### **Awards to manufacturing industries play dominant role in Twelfth District**

The receipt by District manufacturing firms of a greater proportion of certificates than might have been expected and the heavy concentration within manufacturing compared with the national experience reflect a variety of forces. Several District manufacturing industries, such as food, lumber, aluminum, paper, and petroleum, account for a substantial proportion of national output, and factors favorable to their further expansion were still pronounced in this District. As a result these industries received a larger share of the awards than their proportion of national output in previous years. Also, because of the Twelfth District's proximity to the Orient, the petroleum industry received a somewhat greater impact in the District than nationally. The increase in demand for some strategic minerals and metals located in the District resulted in the establishment of a number of new processing plants. Detailed data are presented in Table 1.

Though the lumber industry received a small proportion of the awards in the District, it received a much larger share of the national awards to the industry than its share of 1951 output. This reflects greater mechanization of the District lumber industry and the very large share of virgin timber stands located in the western states. The District food industry, too, was granted a much larger share of certificates than its share of national output. The concentration of aluminum facilities in the Pacific Northwest along with rapid growth in the District steel industry led to a share of certificates for the primary metals group more than twice as large as the proportion the District contributed to the national value added by manufacture for that group in 1951. Despite the continued growth of the aluminum industry in the District, on a national basis the industry became more diversified geographically. Large blocks of power have been increasingly difficult to obtain in the Pacific Northwest and will probably continue so until new generating facilities are completed. In the meantime, aluminum plants have been established in the South and Southwest to take advantage of natural gas and lignite as fuels for the generation of electricity. Awards of certificates of necessity introduced a new line of production—ordnance—to the District and also stimulated growth of instrument output.

Awards in the transportation equipment industry, which includes aircraft, automobile, and shipbuilding,

TABLE 1  
CERTIFIED VALUE OF PROJECTS COVERED BY CERTIFICATES OF NECESSITY  
UNITED STATES AND TWELFTH DISTRICT, OCTOBER 1950-JUNE 30, 1953  
(in thousands of dollars)

Industry groups	United States		Twelfth District		Twelfth District percentage of United States certificates	Twelfth District percentage of United States value added by manufacture in 1951
	Certified value	Percent distribution	Certified value	Percent distribution		
Total Certified Facilities .....	27,101,408	100.0	1,799,741	100.0	6.6	...
Manufacturing .....	14,872,000	54.9	1,433,815	79.7	9.6	8.8
Durable goods industries						
Electrical machinery .....	484,170	1.8	17,182	1.0	3.5	3.4
Fabricated metals .....	226,873	0.8	19,763	1.1	8.7	7.1
Furniture .....	1,935	*	192	*	9.9	7.5
Instruments .....	129,649	0.5	16,593	0.9	12.8	3.6
Lumber .....	49,472	0.2	31,715	1.8	64.1	39.0
Machinery (nonelectrical) .....	761,463	2.8	38,378	2.1	5.0	4.6
Ordnance .....	296,615	1.1	23,926	1.3	8.1	...
Primary metals .....	5,346,151	19.7	627,769	34.9	11.7	5.4
Stone, clay, and glass .....	340,947	1.3	39,782	2.2	11.7	7.7
Transportation equipment .....	1,091,642	4.0	138,030	7.7	12.6	12.7
Nondurable goods industries						
Apparel .....	386	*	.....	...	...	6.2
Chemicals .....	2,912,425	10.7	129,409	7.2	4.4	6.5
Food .....	10,981	*	3,919	0.2	35.7	12.9
Leather .....	84	*	.....	...	...	...
Paper .....	774,113	2.9	92,382	5.1	12.1	10.1
Petroleum products .....	2,046,812	7.6	244,871	13.6	12.0	10.8
Printing and publishing .....	8,165	*	291	*	3.6	7.8
Rubber .....	111,622	0.4	9,181	0.5	8.2	...
Textiles .....	146,074	0.5	194	*	*	0.7
Miscellaneous .....	132,421	0.5	238	*	0.2	...
Nonmanufacturing .....	12,229,408	45.1	365,926	20.3	3.0	...
Agricultural services .....	21,455	0.1	19,824	1.1	92.4	...
Construction .....	8,045	*	.....	...	...	...
Mining .....	1,815,219	6.7	64,849	3.6	3.6	...
Services .....	29,518	0.1	9,242	0.5	31.3	...
Trade .....	238,440	0.9	21,686	1.2	9.1	...
Transportation .....	5,687,912	21.0	54,973	3.1	1.0	...
Utilities .....	4,428,819	16.3	195,352	10.9	4.4	...

\*Less than one-tenth of 1 percent.

Source: United States Department of Commerce, Certificate of Necessity Code Sheets and *Annual Survey of Manufactures*, 1951

account for a significant proportion of certificates received in this District. As a share of the national total, however, the awards were less impressive than those in the industries previously mentioned. District aircraft firms were the principal recipients of these awards. These firms had considerable excess capacity at the start of the Korean conflict and expanded their plant facilities and equipment only to the extent required by new models. In addition, expansion of automotive facilities outside this District tended to balance the aircraft expansion here.

The low proportion of certificates in nonmanufacturing reflected a small volume of awards to transportation and utility firms. Utility firms in California received a fairly sizable volume of certificates of necessity. In other parts of the District—particularly the Pacific Northwest—the primary generating facilities are held to a large extent by Federal agencies. Much of the expansion of power facilities has been undertaken by these agencies, which do not pay taxes and consequently were not issued tax amortization certificates.

#### ***Awards of certificates to manufacturing important in each District state***

In each of the Twelfth District states manufacturing industries accounted for a proportionately greater amount of total certified facilities than did manufacturing industries in the United States. Table 2 illustrates the importance of awards by industry to District states. In California, the major industries responsible for this greater concentration of certificates in manufacturing were primary metals, petroleum refining, aircraft, and chemicals. Expansion of steel facilities in the Los Angeles, San Bernardino, and San Francisco metropolitan areas accounted for almost all of California's actual primary metal expansion. The aircraft industry made a sizable contribution to California's total certified facilities. More than 80 percent of certified expenditures proposed by the aircraft industry were proposed by aircraft frame and aircraft parts producers, with producers of aircraft engines and engine parts and propellers accounting for the remaining portion. Many other industries in California which individually account for only a small portion of total awards expanded facilities with the aid of certificates of necessity and experienced rapid growth. Among these industries are electrical machinery, nonelectrical machinery, ordnance, and fabricated metals. Within the nonmanufacturing sector, the electric light and power industry proposed a large share of certified facilities for the expansion of generating and transmitting facilities.

In Washington an exceedingly high portion—some 97 percent—of certified facilities fell among manufacturing industries. The explanation of this concentration lies in the importance of the aluminum, paper, petroleum refining, and aircraft industries to Washington's defense expansion. Aluminum producers proposed the major portion—35 percent—of certified facilities, as new smelting, refining, and rolling facilities were added to existing plant capacity. The large sum of proposed expenditures for

petroleum refining facilities reflects the availability of the new supply of crude oil being piped into northwestern Washington from the Alberta oil fields in Canada. Two major refineries are being built at Ferndale and Anacortes and other refining facilities are being expanded to receive this supply of crude oil. Certificates of necessity have also assisted the expansion of aircraft production facilities at aircraft plants in Renton and Seattle, Washington.

In Oregon, as in Washington, the manufacturing sector of the economy received the largest share of certified facilities as a result of the expansion of a few major industries, in this case primary metals and lumber. The primary metals industries accounted for 60 percent of total certified facilities. However, prior to the issuance of two certificates to Oregon firms for a \$22 million ferro-nickel smelting and refining plant and for a \$45 million aluminum reduction plant at The Dalles, proposed expenditures by primary metal firms accounted for less than 10 percent of the total. The other major industry in Oregon receiving certificates of necessity was lumber. For the most part, certified expansion in this industry occurred in plywood plants and sawmill and planing mills.

In Idaho, as in Washington, an exceedingly high portion of certified expenditures was proposed by manufacturing firms. The major industry to expand defense related facilities was chemicals, which contributed more than 70 percent of certified expenditures. Certificates issued to Idaho chemical firms covered the production of phosphatic fertilizers. Easy accessibility of phosphate rock, potash, and nitrates has encouraged the development of the fertilizer industry in the Intermountain area, particularly in Idaho.

In the three other Intermountain states—Utah, Arizona, and Nevada—manufacturing industries did not receive such a large portion of certificates of necessity as did those in the District as a whole. However, the manufacturing sector in these three states did propose a larger portion of certified expenditures than did manufacturing industries in the nation. Largely explaining the lesser degree of concentration of certified facilities in manufacturing in Utah, Arizona, and Nevada than in the rest of the District is the greater prominence of metal mining within these three states. In Utah, facilities expansion by metal mining firms accounted for 18 percent of total certified expenditures. The major portion (85 percent) of metal mining expansion was proposed by a major copper mining company working the Bingham Canyon copper deposits. Firms mining iron and tungsten ores received the remaining certificates. Other industries which contributed substantially to Utah's defense certified expansion were steel and chemicals. Further expansion of steel facilities at the Geneva plant accounted for somewhat less than 20 percent of Utah's total certified facilities. Chemical firms producing alkylate for aviation gasoline, sulphuric acid, phosphates, and petrochemicals also proposed a large share of certified facilities.

The somewhat smaller concentration of certified facilities in the manufacturing sector of Arizona's economy

than in the District generally is also explained by the very significant contribution made in the nonmanufacturing sector by Arizona's metal mining industry. Copper mining firms alone proposed a \$26 million metal mining expansion program. Approximately 50 percent of the certified projects were proposed by the primary metals industry. The major portion of this expansion was undertaken

by copper refining firms, the remainder being accounted for by the expansion of an aluminum plant in Phoenix and of scrap metal processing facilities.

Certified expansion of metal mining facilities also assumed considerable importance in Nevada. Metal mining firms proposed 35 percent of total certified facilities expansion. Firms mining copper, tungsten, and manganese

TABLE 2  
CERTIFICATES OF NECESSITY BY INDUSTRY—TWELFTH DISTRICT  
OCTOBER 1950-JUNE 30, 1953  
(in thousands of dollars)

Industry group	Twelfth District		California		Washington		Oregon	
	Dollar amount	Percent of total	Dollar amount	Percent of total	Dollar amount	Percent of total	Dollar amount	Percent of total
Manufacturing	1,433,815	79.7	841,909	75.8	262,132	96.7	131,338	87.8
Primary metals <sup>1</sup>	627,769	34.9	329,218	29.6	99,580	36.7	91,285	61.0
Blast furnaces, steel works and rolling mills, electrometallurgical	292,984	16.3	257,316	23.2	2,384	0.9	22,605	15.1
Primary smelting and refining of nonferrous metals								
Copper	74,701	4.2	....	...	207	0.1	....	...
Aluminum	155,115	8.6	....	...	88,952	32.8	66,163	44.2
Rolling, drawing, and alloying of nonferrous metals								
Copper	2,185	0.1	1,347	0.1	....	...	....	...
Aluminum	33,825	1.9	25,949	2.3	7,555	2.8	....	...
Zinc	5,225	0.3	3,032	0.3	....	...	....	...
Petroleum refining	242,835	13.5	175,803	15.8	42,959	15.8	228	0.2
Aircraft and parts	133,695	7.4	110,432	9.9	18,922	7.0	....	...
Chemicals	129,409	7.2	65,247	5.9	18,193	6.7	2,427	1.6
Paper and allied products	92,382	5.1	8,699	0.8	71,810	26.5	10,866	7.3
Machinery (nonelectrical)	38,378	2.1	33,367	3.0	1,055	0.4	1,434	1.0
Stone, clay, and glass	39,782	2.2	28,985	2.6	3,549	1.3	3,307	2.2
Lumber	31,715	1.8	10,290	0.9	2,025	0.7	19,360	12.9
Ordnance	23,926	1.3	14,985	1.3	749	0.3	903	0.6
Fabricated metal products	19,763	1.1	14,945	1.3	2,383	0.9	359	0.2
Electrical machinery	17,182	1.0	16,616	1.5	103	*	308	0.2
Other manufacturing industries	36,979	2.1	33,322	3.0	804	0.3	861	0.6
Nonmanufacturing	365,926	20.3	268,704	24.2	8,912	3.3	18,281	12.2
Transportation, communication, and public utilities	250,325	13.9	221,770	20.0	2,835	1.0	13,575	9.1
Electric light and power	190,572	10.6	182,165	16.4	....	...	7,040	4.7
Metal mining	57,466	3.2	5,903	0.5	1,618	0.6	3,566	2.4
Copper ores	38,022	2.1	....	...	....	...	....	...
Tungsten ores	4,992	0.3	998	0.1	....	...	....	...
Manganese ores	2,750	0.2	....	...	....	...	....	...
Agricultural services	19,824	1.1	11,920	1.1	....	...	....	...
Other nonmanufacturing industries	38,311	2.1	29,111	2.6	4,459	1.6	1,140	0.8
Total	1,799,741	100.0	1,110,613	100.0	271,044	100.0	149,619	100.0

Industry group	Idaho		Utah		Arizona		Nevada	
	Dollar amount	Percent of total	Dollar amount	Percent of total	Dollar amount	Percent of total	Dollar amount	Percent of total
Manufacturing	36,051	93.0	27,391	59.4	115,682	75.7	19,312	62.9
Primary metals <sup>1</sup>	1,213	3.1	10,417	22.6	78,335	51.2	17,721	57.2 <sup>2</sup>
Blast furnaces, steel works and rolling mills, electrometallurgical	....	...	9,314	20.2	....	...	1,365	4.4
Primary smelting and refining of nonferrous metals								
Copper	....	...	....	...	74,494	48.7	....	...
Aluminum	....	...	....	...	....	...	....	...
Rolling, drawing, and alloying of nonferrous metals								
Copper	....	...	838	1.8	....	...	....	...
Aluminum	....	...	....	...	321	0.2	....	...
Zinc	....	...	....	...	....	...	2,193	7.1
Petroleum refining	5,298	13.7	1,207	2.6	17,340 <sup>3</sup>	11.3	....	...
Aircraft and parts	....	...	....	...	4,324	2.8	17	0.1
Chemicals	27,904	72.0	12,568	27.2	1,686	1.1	1,384	4.5
Paper and allied products	1,007	2.6	....	...	....	...	....	...
Machinery (nonelectrical)	....	...	....	...	2,522	1.6	....	...
Stone, clay, and glass	175	0.5	92	0.2	3,484	2.3	190	0.6
Lumber	40	0.1	....	...	....	...	....	...
Ordnance	....	...	....	...	7,289	4.8	....	...
Fabricated metal products	....	...	2,076	4.5	....	...	....	...
Electrical machinery	....	...	22	*	133	0.1	....	...
Other manufacturing industries	414	1.1	1,009	2.2	569	0.4	....	...
Nonmanufacturing	2,698	7.0	18,753	40.6	37,201	24.3	11,377	37.1
Transportation, communication, and public utilities	1,114	2.9	8,724	18.9	2,248	1.5	59	0.2
Electric light and power	1,034	2.7	....	...	329	0.2	....	...
Metal mining	739	1.9	8,494	18.4	26,450	17.3	10,696	34.9
Copper ores	....	...	7,584	16.4	26,450	17.3	3,988	13.0
Tungsten ores	....	...	197	0.4	....	...	3,797	12.4
Manganese ores	....	...	....	...	....	...	2,750	9.0
Agricultural services	....	...	....	...	7,904	5.2	....	...
Other nonmanufacturing industries	845	2.2	1,535	3.3	599	0.4	622	2.0
Total	38,749	100.0	46,144	100.0	152,883	100.0	30,689	100.0

<sup>1</sup> Selected primary metal industries do not add to total as some details have been omitted.

<sup>2</sup> Titanium processing accounts for the major portion of these certificates.

<sup>3</sup> No action has been taken on this award.

\* Less than one-tenth of 1 percent.

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

Source: United States Department of Commerce, Certificate of Necessity Code Sheets.

received the major share of certificates issued to mining firms and a very small portion of certificates were issued to firms mining titanium. In manufacturing, one industry—primary metals—received a large portion of certificates. The expansion of zinc, manganese, tungsten, and titanium processing facilities accounted for more than 50 percent of total certified value.

***Distribution of certificates among District states tends to follow previous pattern of industrial activity***

The percentage distribution of defense-related manufacturing facilities among the three major areas of the Twelfth District—California, the Pacific Northwest, and the Intermountain states—has generally been proportionate to each area's contribution to manufacturing plant and equipment expenditures in 1951. Table 3 illustrates this pattern. California, with the largest industrial capacity, supplied 59 percent of certified expenditures for manufacturing facilities whereas the Pacific Northwest and the Intermountain area contributed 27 and 14 percent, respectively. Even though the Pacific Northwest contributed the same relative portion of District certified expenditures as of plant and equipment expenditures (1951), a shift within the area was evident. In comparison with 1951 plant and equipment expenditures, Washington contributed a larger share, and Oregon a smaller share, of certified defense expenditures. The importance of Washington's aircraft, aluminum, and petroleum refining industries to the defense effort accounts for its larger than expected share of the Pacific Northwest certified expenditures. On the other hand, Oregon's major industry—lumber—though faring better than the industry nationally, received a relatively small amount of certificates. This accounts for Oregon's lesser role in the certificate of necessity program.

While the Intermountain states contributed the smallest portion of certified facilities, these states (with the exception of Utah) contributed somewhat more to Dis-

trict defense facilities than they have to District plant and equipment expenditures and value added in previous years. Responsible for this larger contribution were Arizona and Nevada, in which the availability of strategic metals allowed considerable expansion of mining and processing operations. In addition, the defense-stimulated development of Arizona's aircraft and ordnance industries is reflected in this state's greater than normal contribution to District defense-certified expenditures.

As is shown in Table 3, California contributed more than 50 percent of total certified expenditures to most District industries whose expansion was aided by certificates of necessity. In such industries as nonelectrical and electrical machinery and aircraft more than 80 percent of District certified expenditures were made by California firms. However, there were several industries, namely paper, lumber, and metal mining, to which California made only a relatively small contribution. Of the total District certified expenditures applied to these three industries, Washington, Oregon, and the Intermountain region, respectively, accounted for the major portion.

***More certified facilities in metropolitan areas in California than in the Pacific Northwest***

In California more than 90 percent of proposed plant and equipment certified expansion was located in eight major metropolitan areas—Los Angeles, San Diego, San Bernardino, San Francisco, San Jose, Stockton, Sacramento, and Fresno. Table 4 highlights the type of industrial facilities proposed in these areas.

Washington and Oregon present a different distribution pattern of certified production facilities. Less than one-third of certified investment projects in each state was located in the metropolitan areas—Seattle, Spokane, Tacoma, and Portland. Largely explaining the greater degree of geographic dispersion of certified facilities in the Pacific Northwest than in California is the location of

TABLE 3  
CERTIFICATES OF NECESSITY, TWELFTH DISTRICT—PERCENT DISTRIBUTION BY STATE

Industry group	Twelfth District	California	Washington	Oregon	Arizona	Idaho	Utah	Nevada
Total Certified Facilities	100.0	61.7	15.1	8.3	8.5	2.2	2.6	1.7
Manufacturing <sup>1</sup>	100.0	58.7	18.3	9.2	8.1	2.5	1.9	1.3
Primary metals	100.0	52.4	15.9	14.5	12.5	0.2	1.7	2.8
Petroleum refining	100.0	72.4	17.7	0.1	7.1	2.2	0.5	..*
Aircraft	100.0	82.6	14.2	..	3.2	..	..	..
Chemicals	100.0	50.4	14.1	1.9	1.3	21.6	9.7	1.1
Paper	100.0	9.4	77.7	11.8	..	1.1	..	..
Machinery (nonelectrical)	100.0	86.9	2.7	3.7	6.6	..	..	..
Stone, clay, and glass	100.0	72.9	8.9	8.3	8.8	0.4	0.2	0.5
Lumber	100.0	32.4	6.4	61.0	..	0.1	..	..
Ordnance	100.0	62.6	3.1	3.8	30.5	..	..	..
Fabricated metals	100.0	75.6	12.1	1.8	..	..	10.5	..
Electrical machinery	100.0	96.7	0.6	1.8	..	..	0.1	0.8
Other	100.0	90.0	2.2	2.3	1.5	1.1	2.7	..
Nonmanufacturing	100.0	73.4	2.4	5.0	10.2	0.7	5.1	3.1
Transportation, communications, and public utilities	100.0	88.6	1.1	5.4	0.9	0.4	3.5	..*
Metal mining	100.0	10.3	2.8	6.2	46.0	1.3	14.8	18.6
Agricultural services	100.0	60.1	..	..	39.9	..	..	..
Other	100.0	76.0	11.6	3.0	1.6	2.2	4.0	1.6
Percent distribution of value added by manufacture, 1951	100.0	68.3	15.0	10.5	1.7	1.6	2.5	0.3
Percent distribution of plant and equipment expenditures, 1951	100.0	65.0	13.3	14.7	1.2	2.2	3.3	0.2

<sup>1</sup> Some selected industries are broad industry groupings usually referred to by the Census as two-digit industries; others are specific industries referred to as three-digit industries. The selection of the type of industry has been made to highlight the impact of awards in particular industries.

\*Less than one-tenth of 1 percent.

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

Source: United States Department of Commerce: Certificate of Necessity Code Sheets and *Annual Survey of Manufactures*, 1951.

aluminum plants along the Columbia River or its tributaries. Unlike many industries which are attracted to metropolitan areas to obtain an adequate supply of labor, the aluminum industry which is dependent upon low cost power has located close to the source of power. A second factor is the development of petroleum refineries in the northwestern part of Washington close to the new supply of crude oil. Moreover, in Oregon two primary metal plants, accounting for 60 percent of the value of certified facilities, are located outside of Portland. Oregon's lum-

ber firms, which received more certificates of necessity than lumber firms in California, are dispersed throughout western Oregon, particularly in Coos, Curry, Douglas, and Lane counties. However, it must be emphasized that a large number of certificates were awarded to a variety of industrial concerns, many of them small, in the metropolitan areas. Even though many of the large and high cost facilities were geographically dispersed, industry within the metropolitan areas also expanded under the stimulus of the tax amortization program.

TABLE 4  
CERTIFICATES OF NECESSITY BY INDUSTRY—CALIFORNIA METROPOLITAN AREAS  
OCTOBER 1950-JUNE 30, 1953  
(in thousands of dollars)

Industry group	California	Los Angeles <sup>1</sup>	San Diego	San Bernardino	San Francisco <sup>2</sup>	San Jose	Sacramento	Stockton	Fresno
Manufacturing .....	841,909	416,852	10,951	82,705	134,401	17,512	136,142	522	1,034
Primary metals .....	329,218	71,273	.....	73,673	47,437	553	136,142 <sup>3</sup>	.....	.....
Petroleum products .....	176,853	143,681	.....	.....	31,046	.....	.....	.....	.....
Transportation equipment .....	113,819	90,189	10,054	22	8,282	3,059	.....	.....	144
Chemicals .....	65,247	20,966	.....	6,191	25,413	1,318	.....	471	581
Machinery (nonelectrical) .....	33,367	29,522	255	.....	2,706	745	.....	.....	58
Stone, clay, and glass .....	28,985	5,383	.....	644	4,292	5,088	.....	.....	.....
Electrical machinery .....	16,616	10,753	69	.....	4,605	649	.....	.....	.....
Ordnance .....	14,985	10,813	.....	.....	3,707	384	.....	.....	.....
Fabricated metal products .....	14,945	9,443	56	.....	901	2,550	.....	.....	.....
Lumber .....	10,290	1,188	.....	.....	.....	.....	.....	.....	.....
Paper .....	8,699	904	.....	2,175	1,439	2,625	.....	.....	.....
Other .....	28,885	22,737	517	.....	4,573	541	.....	51	251
Nonmanufacturing .....	268,704	83,447	1,181	35,436	99,932	1,496	599	3,442	7,127
Utilities and sanitary services .....	184,032	50,135	.....	35,182	76,729	454	259	.....	494
Transportation by air .....	15,889	15,889	.....	.....	.....	.....	.....	.....	.....
Wholesale trade .....	15,041	5,102	751	220	7,123	168	235	234	223
Agricultural services .....	11,920	386	.....	.....	.....	.....	.....	.....	5,619
Water transportation .....	11,560	100	.....	.....	11,460	.....	.....	.....	.....
Trucking and warehousing .....	8,487	1,086	430	.....	988	874	105	3,208	791
Metal mining .....	5,903	230	.....	.....	3,159	.....	.....	.....	.....
Other .....	15,872	10,519	.....	34	473	.....	.....	.....	.....
Total .....	1,110,613	500,299	12,132	118,141	234,333	19,008	136,741	3,964	8,161

<sup>1</sup> Includes Orange and Los Angeles counties.

<sup>2</sup> Includes six counties: San Francisco, Alameda, Contra Costa, Marin, San Mateo, and Solano.

<sup>3</sup> No action has been taken on this award to date.

Source: United States Department of Commerce, Certificate of Necessity Code Sheets.

**BUSINESS INDEXES—TWELFTH DISTRICT<sup>1</sup>**  
(1947-49 average=100)

Year and month	Industrial production (physical volume) <sup>2</sup>								Total nonagri-cultural employment	Total mfg employment <sup>4</sup>	Car-loadings (number) <sup>2</sup>	Dep't store sales (value) <sup>2</sup>	Retail food prices <sup>5, 6</sup>	Waterborne foreign trade <sup>7, 8</sup>	
	Lumber	Petroleum <sup>3</sup>		Cement	Lead <sup>3</sup>	Copper <sup>3</sup>	Wheat flour <sup>1</sup>	Electric power						Exports	Imports
		Crude	Refined												
1929	97	87	78	54	165	105	90	29	....	....	102	30	64	190	124
1931	51	57	55	36	100	49	86	29	....	....	68	25	50	138	80
1933	41	52	50	27	72	17	75	26	....	....	52	18	42	110	72
1935	54	62	56	33	86	37	87	30	....	47	68	24	48	135	109
1936	70	64	61	58	96	64	81	34	....	54	77	28	48	131	116
1937	74	71	65	56	114	88	84	38	....	60	81	30	50	170	119
1938	58	75	64	45	92	58	81	36	....	51	72	28	48	164	87
1939	72	67	63	56	93	80	91	40	....	55	77	31	47	163	95
1940	79	67	63	61	108	94	87	43	....	63	82	33	47	132	101
1941	93	69	68	81	109	107	87	49	....	83	95	40	52	....	....
1942	93	74	71	96	114	123	88	60	....	121	102	49	63	....	....
1943	90	85	83	79	100	125	98	76	100	164	99	59	69	....	....
1944	90	93	93	63	90	112	101	82	101	158	105	65	68	....	....
1945	72	97	98	65	78	90	112	78	96	122	100	72	70	....	....
1946	85	94	91	81	70	71	108	78	95	97	101	91	80	89	57
1947	97	100	98	96	94	106	113	90	99	100	106	99	96	129	81
1948	104	101	100	104	105	101	98	101	102	102	100	104	103	86	98
1949	99	99	103	100	101	93	88	108	99	97	94	98	100	85	121
1950	112	98	103	112	109	115	86	119	103	105	97	105	100	91	137
1951	114	106	112	128	89	115	95	136	111ar	122	100	109	113	186	157
1952	107	107	116	124	86	112	96	144	118ar	132ar	101	114	115	171	200
1952															
November	109	107	118	133	85	116	97	141	120ar	137ar	100a	117	114	135	194
December	109	108	114	126	78	111	96	138	121ar	138ar	102a	116r	115	148	232
1953															
January	118	107	115	105	77	109	99	141	121ar	138a	100a	116	114	151	195
February	117	108	117	131	85	113	92	154	121a	138a	103a	117r	112	158	187
March	121	109	123	126	85	116	96	142	122a	139ar	103a	120r	113	179	336
April	119	108	122	132	82r	114	96	165	121a	139a	102a	116	113	164	336
May	112	109	127	142	75	115	91	167	122ar	140a	102a	124	113	118	384
June	110	110	121	134	77r	105	99	179	122a	141ar	103a	121r	113	114	372
July	112	110	125	140	64	106	96	172	121ar	142ar	98a	117	113	123	356
August	108	109	124	134	69	110	92	168	122a	139a	99a	114r	113	127	337
September	100	109	126	133	73	111	101	166	124a	140a	98a	110	114	129	368
October	106	109	125	137	69r	112r	99	163	123ar	141ar	95a	111	114	....	316
November	105	110	121	128	69	112p	98	157	121a	137a	97a	112	113	....	....

**BANKING AND CREDIT STATISTICS—TWELFTH DISTRICT**  
(amounts in millions of dollars)

Year and month	Condition items of all member banks <sup>7</sup>				Bank rates on short-term business loans <sup>9</sup>	Member bank reserves and related items <sup>10</sup>					Bank debits Index 31 cities <sup>13, 14</sup> (1947-49=100) <sup>2</sup>
	Loans and discounts	U.S. Gov't securities	Demand deposits adjusted <sup>8</sup>	Total time deposits		Reserve bank credit <sup>11</sup>	Commercial operations <sup>12</sup>	Treasury operations <sup>12</sup>	Coin and currency in circulation <sup>11</sup>	Reserves	
1929	2,239	495	1,234	1,790	.....	- 34	0	+ 23	- 6	175	42
1931	1,898	547	984	1,727	.....	+ 21	- 154	+ 154	+ 48	147	28
1933	1,486	720	951	1,609	.....	- 2	- 110	+ 150	- 18	185	18
1935	1,537	1,275	1,389	2,064	.....	+ 2	- 163	+ 219	+ 14	287	25
1937	1,871	1,270	1,740	2,187	.....	- 1	- 90	+ 157	- 3	549	32
1938	1,869	1,323	1,781	2,221	.....	- 3	- 210	+ 276	+ 20	565	29
1939	1,967	1,450	1,983	2,267	.....	+ 2	- 192	+ 245	+ 31	584	30
1940	2,130	1,482	2,390	2,360	.....	+ 2	- 148	+ 420	+ 96	754	32
1941	2,451	1,738	2,893	2,425	.....	+ 4	- 596	+ 1,000	+ 227	930	39
1942	2,170	3,630	4,356	2,609	.....	+ 107	- 1,980	+ 2,826	+ 643	1,232	48
1943	2,106	6,235	5,998	3,226	.....	+ 214	- 3,751	+ 4,186	+ 708	1,462	66
1944	2,254	8,263	6,950	4,144	.....	+ 98	- 3,534	+ 4,183	+ 789	1,706	66
1945	2,663	10,450	8,203	5,211	.....	- 76	- 3,743	+ 4,682	+ 545	2,033	72
1946	4,068	8,426	8,821	5,797	.....	+ 9	- 1,607	+ 1,329	- 326	2,094	86
1947	5,358	7,247	8,922	6,006	.....	- 302	- 510	+ 698	- 206	2,202	95
1948	6,032	6,366	8,655	6,087	.....	+ 17	+ 472	- 482	- 209	2,420	103
1949	5,925	7,016	8,536	6,255	3.20	+ 13	- 930	+ 378	- 65	1,924	102
1950	7,093	6,415	9,254	6,302	3.35	+ 39	- 1,141	+ 1,198	- 14	2,026	115
1951	7,866	6,463	9,937	6,777	3.66	- 21	- 1,582	+ 1,983	+ 189	2,269	132
1952	8,839	6,619	10,520	7,502	3.95	+ 7	- 1,912	+ 2,265	+ 132	2,514	140
1953	.....	.....	.....	.....	.....	- 4	- 3,073	+ 3,158	+ 39	2,551	150
1952											
December	8,844	6,627	10,504	7,498	3.95	- 299	- 240	+ 422	- 12	2,514	157
1953											
January	8,816	6,633	10,390	7,490	.....	+ 138	- 263	+ 136	- 77	2,565	146
February	8,838	6,474	9,911	7,551	.....	+ 83	- 119	- 13	+ 22	2,491	150
March	8,983	6,299	9,937	7,560	4.01	- 220	- 147	+ 240	- 18	2,394	164
April	9,054	6,173	10,011	7,597	.....	+ 16	- 277	+ 239	+ 11	2,378	153
May	9,092	6,020	9,843	7,627	.....	- 12	- 174	+ 293	+ 22	2,463	150
June	9,156	5,997	9,899	7,703	4.18	- 39	- 531	+ 435	+ 39	2,274	155
July	9,167	6,675	10,005	7,729	.....	+ 75	- 184	+ 275	+ 3	2,452	148
August	9,229	6,589	9,950	7,749	.....	- 100	- 98	+ 176	+ 36	2,397	142
September	9,241	6,481	10,018	7,794	4.17	+ 113	- 308	+ 217	- 4	2,425	149
October	9,255	6,556	10,248	7,854	.....	+ 19	- 391	+ 394	+ 7	2,449	142
November	9,248	6,693	10,255	7,815	.....	- 137	- 149	+ 330	+ 23	2,476	144
December	9,235	6,721	10,575	7,978	4.19	+ 50	- 432	+ 438	- 26	2,551	158

<sup>1</sup> Adjusted for seasonal variation, except where indicated. Except for department store statistics, all indexes are based upon data from outside sources, as follows: lumber, various lumber trade associations; petroleum, cement, copper, and lead, U.S. Bureau of Mines; wheat flour, U.S. Bureau of the Census; electric power, Federal Power Commission; nonagricultural and manufacturing employment, U.S. Bureau of Labor Statistics and cooperating state agencies; retail food prices, U.S. Bureau of Labor Statistics; carloadings, various railroads and railroad associations; and foreign trade, U.S. Bureau of the Census.  
<sup>2</sup> Daily average. <sup>3</sup> Not adjusted for seasonal variation. <sup>4</sup> Excludes fish, fruit, and vegetable canning. <sup>5</sup> Los Angeles, San Francisco, and Seattle indexes combined. <sup>6</sup> Commercial cargo only, in physical volume, for Los Angeles, San Francisco, San Diego, Oregon, and Washington customs districts; starting with July 1950, "special category" exports are excluded because of security reasons. <sup>7</sup> Annual figures are as of end of year, monthly figures as of last Wednesday in month or, where applicable, as of call report date. <sup>8</sup> Demand deposits, excluding interbank and U.S. Gov't deposits, less cash items in process of collection. Monthly data partly estimated. <sup>9</sup> Average rates on loans made in five major cities during the first 15 days of the month. <sup>10</sup> End of year and end of month figures. <sup>11</sup> Changes from end of previous month or year. <sup>12</sup> Minus sign indicates flow of funds out of the District in the case of commercial operations, and excess of receipts over disbursements in the case of Treasury operations. <sup>13</sup> Debits to total deposits except interbank prior to 1942. Debits to demand deposits except Federal Government and interbank deposits from 1942. <sup>14</sup> a—New revised series. p—Preliminary. r—Revised.