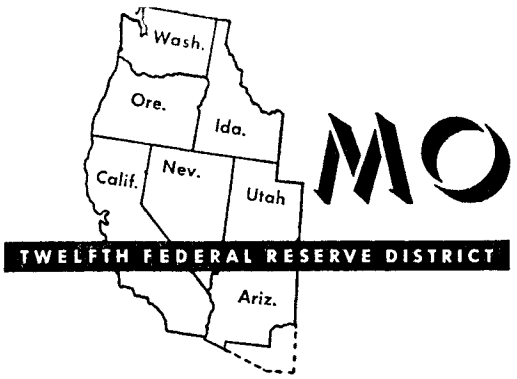


MONTHLY REVIEW

MAY 1950 FEDERAL RESERVE BANK OF SAN FRANCISCO

REVIEW OF BUSINESS CONDITIONS

THE first several months of 1950 have reflected an optimism in the Twelfth District which contrasts sharply with the falling level of business and comparative pessimism of early 1949. The pick-up in activity continued through April. The evidence of improvement includes better retail sales, rapidly declining unemployment, greater than usual gains in employment, increasing production in most industrial lines, and a very high rate of construction activity.

The decline in business inventories and manufacturers' new orders during the first half of 1949 stemmed in part from uncertainty throughout the nation about the level of consumer expenditures. The anticipated decline in consumer buying did not materialize, however, and production had to be stepped up in the latter part of the year in order to keep pace with consumption. Construction activity, particularly in residential building, fell off considerably in early 1949. By mid-year, however, a strong upward movement had begun and the number of housing units started last year reached an all-time record. Though this District did not fare so well as the country as a whole in construction, the District lumber industry made a very strong recovery in late 1949. The crux of the situation was to be found in the fact that consumer demand did not weaken significantly either for housing or for consumption goods in total. Following the clearing-out of excess inventories, in fact over-reduction in some cases, industrial production rose well above the level of the first half of 1949.

The relative stability of personal income last year and the higher level early this year, together with increased consumer borrowing, have resulted in increased consumer buying. Production this year has also been on the increase, except in February when strikes were a factor. There is little indication, either nationally or in this District, that increased production has as yet led to any over-accumulation of inventories.

Retail trade advances though soft goods sales lag

Despite the fact that the dollar volume of retail sales at department stores, other general merchandise stores, and food stores has lagged behind 1949, total retail sales have gained in most areas of the District so far this year. To some extent the gain in total retail trade reflects the distribution of National Service Life Insurance dividends. However, personal income, excluding the insurance dividends, has been slightly larger than a year earlier on a national basis, and the District has probably fared as well as the country. Consequently it does not necessarily follow that, in the absence of the insurance dividend payments, retail sales would have been significantly below a year ago.

Durable goods sales ahead of last year

The gains in retail sales have been concentrated in the durable goods field. Furniture stores in this District reported sales for the first quarter 8 percent ahead of the same period last year. The Department of Commerce reported first quarter automobile sales from 25 to 50 percent higher than a year ago for a number of the metropolitan areas of the District. Lumber and building material sales in these areas increased from 15 to 30 percent during the same period, with the largest increase reported in Salt Lake City.

District department stores reported a decline in sales through mid-May of about 2 percent. Soft goods lines and basement store items (usually soft goods and small wares) accounted for most of the decline. Men's and boys' clothing was the only soft goods line which gained significantly. Sales of hard goods, paced by television sets, were well ahead of last year.

Employment situation improves

In March, District nonagricultural employment virtually regained the year-ago level, after averaging about 1 percent below in January and February. Nonagricultural employment during the first quarter was retarded by several factors, some of which either have been or may

Also in This Issue

shortly be corrected. First quarter construction employment fell short of last year because of poor weather in some parts of the District early in the year, but more important was the curtailment of atomic energy plant construction at Hanford, Washington. It now appears likely that these projects will again be in full swing by July, and that other private and public projects will provide additional jobs. Manufacturing employment, particularly in the lumber industry, fell off early in the year owing to the weather, but by March manufacturing employment in most District states surpassed the 1949 level. Trade employment has been ahead of 1949, and the service and finance industries have remained fairly stable. Transportation, government, and mining employment during the first quarter dropped below a year earlier. Mining employment was affected by the coal strike and a reduction in nonferrous metal extraction because of poor market demand, but the nonferrous metal market has improved considerably in recent weeks.

Several factors contribute to the brighter outlook for employment. Counter to seasonal trends, nonagricultural employment increased between January and February in five of the seven District states. The exceptions were Idaho and Utah. The coal strike was the major factor reducing employment in Utah. Furthermore, the District increases in employment between February and March, much greater than seasonal, have spread over a wider area than usual. A number of industries that were distinctly weak last year shared in the gain. Of equal importance, almost all the reporting labor market areas indicate further expansion in employment, and it appears quite likely that during the next few months nonagricultural employment will be ahead of last year. Insured unemployment in mid-April numbered 317,000, better than 25 percent below the same time last year.

Production in many lines improves

Industrial production showed considerable strength in the District during the first quarter. Unusually severe weather conditions retarded output somewhat during January and February, but in March many industries were operating at a level of output at least as great as last year. All nondurable goods industries other than petroleum had an output volume as good as or better than March 1949. In the fruit and vegetable canning industry, prospects were clearly better than last year. Demand in recent months has been good, and production plans indicate an over-all pack equal to or better than last year's.

Output in some durable goods lines fell behind a year ago. Non-electrical machinery production was down markedly and shipbuilding and repair continued to decline. In contrast with last year, however, machinery production has been increasing during the first several months of this year and additional gains appear likely.

Lumber production has been pushed to the limit permitted by weather and output is likely to increase further. Other forest industries also display considerable activity. Plywood and planing-mill products face a strong demand. Producers of Douglas fir doors are reported as being booked well into the summer months.

Iron and steel output is staying close to capacity levels with no evidence of any drop in demand. The California aircraft industry finds itself a little busier now than last year, and the Washington plants have been maintaining a steady pace for several months in contrast with an almost continuous decline last year.

Business attitudes and plans favorable to continuing high activity

District businessmen's plans for plant and equipment expenditures during the first quarter did not keep pace with last year's level, but the outlook for the rest of the year appears fairly good. In California, planned expenditures on plant expansion actually topped last year in the early part of 1950. Plans for spending on new plants, however, failed to match the year-ago level, and this reduced total planned expenditures below a year ago. In recent months, however, requests for plant location information have come into the state at an encouraging rate, and expenditures on new plants may well increase. Information from Utah indicates that Utah businessmen planned a good rate of expenditures through April and that inquiries from outside the state regarding plant location are continuing to mount. Opinion in the Pacific Northwest tends toward the view that business expenditures on major projects in that area are near completion; the situation, however, is regarded as favorable for further expenditures on improvements and expansions of existing plants.

Business inventories, on the decline during most of 1949, have steadied for the present. Control over buying is still very close, but further reductions in stocks appear unlikely. Some business firms regard stocks as somewhat low relative to current needs, and may increase goods on hand somewhat later this year. Inventory rebuilding could play an increasingly important part in the volume of production. Nevertheless, a high rate of production will be necessary in any event to meet the level of demand which has appeared in recent months.

Prices rise somewhat

Since late January the Bureau of Labor Statistics' weekly index of wholesale prices has been moving upward. Through mid-May, the increase amounted to about 2.5 percent. The larger increases have come in prices for farm products and building materials. The effect of these changes on cost of living items through March, however, was negligible. Very minor increases in food prices have occurred nationally and in those metropolitan centers in this District for which separate figures are available. Generally, however, the picture remains unchanged.

In this District price changes have not been apparent over any wide range of production. Prices of lumber and

other forest products stand out as the major area of change. The best information available indicates an increase in lumber prices of roughly 25 percent for the lower grades of lumber from their low point late last summer. Prices for better grades of lumber have risen considerably less—in one case only 4 percent. Canned fruit and vegetable prices have firmed considerably since the first of the year. In April, peach prices were increased 20 cents per case.

Frost reduces fruit crops

Freezing weather during the last week in April did considerable damage to many crops in Washington, Oregon, Idaho, and Utah. Though the soft fruits suffered the most, damage extended to many annual crops in these states.

While final losses will not be known for several months, damage is reported as moderate to heavy in parts of Washington and Oregon. Peaches and apricots seem to have suffered the most during the recent freeze after sustaining moderate damage during January and February. Losses in southern Idaho and Utah were much heavier. In Idaho, the peach and apricot crops were the hardest hit. Losses up to 50 percent have been estimated for the cherry crop which was in full bloom. Apple and prune injury appears light. Frost damage to sugar beets, however, caused considerable reseeding and will result in a smaller crop.

Damage in Utah was undoubtedly the heaviest of any of the states. Agricultural observers believe the fruit crop loss the heaviest from frost damage in two decades or more. Although exact appraisal is still not possible, it seems certain that the state's apple, pear, apricot, and peach crops were reduced at least 50 percent with damage reported as near 100 percent in the counties around Salt Lake City.

Decline in business loans less than last year

The slackening of business activity during the fore part of last year was accompanied by the first prolonged and substantial decline in bank loans to business in the postwar period. The higher and improving level of business activity in the first four months of this year has also been accompanied by a decline in such loans, but one of considerably less magnitude than in the corresponding period a year ago and perhaps less than might be expected on the basis of purely seasonal factors.

As last year, the decline in the Twelfth District has been somewhat larger than in the country as a whole. The outstanding volume of commercial, industrial, and agricultural loans of weekly reporting member banks throughout the country fell 9 percent in the first four months of 1949, contrasted with only a 3 percent decline in the corresponding period this year. In the Twelfth District, the decrease was 9.5 percent a year ago and 4.6 percent this year. In both the District and the nation, the sharpest decline occurred in April. This was also the case last year for the United States as a whole, but in the Twelfth District, the greatest decrease in that year occurred in February.

Consumer instalment credit rises more in District than in nation

The volume of consumer instalment credit outstanding at commercial banks registered a significant gain during the first four months of this year in both the District and the nation as a whole, with the District rate of increase nearly double the national one. Owing largely to the slackening in sales of durable goods in the early part of last year, consumer instalment credit outstanding at commercial banks declined during the corresponding period of last year in both the District and the country as a whole.

Real estate loans increase

Nationally, the much larger volume and rate of increase of construction activity and real estate sales so far this year have resulted in a substantially greater growth in real estate loans outstanding at banks through April of this year than in the corresponding period a year ago. In the District, on the other hand, the relative gain was about the same in both periods, despite a somewhat larger increase in construction activity during the first four months.

The growth in real estate and consumer loans has largely offset the decline in business loans, with the result that the volume of total loans outstanding at weekly reporting member banks remained virtually unchanged through April in both the District and the United States.

Banks throughout the country, as well as in the District, increased their holdings of corporate securities substantially in the first four months of this year. Their total loans and investments declined, however, as a consequence of a decrease in the amount of Government securities held in their portfolios.

Smaller decline in bank deposits and reserves

Total deposits in member banks declined less in the first four months of this year than in the corresponding period a year ago, both in the District and in the country as a whole. The major factors responsible for this difference were smaller income tax collections in the first quarter of this year, a virtually unchanged total loan volume compared with the decline of last year, and the veterans' insurance refund this year.

Reserves of member banks also declined substantially less through April this year than last, both nationally and in the Twelfth District. The major factors affecting bank reserves in this District are Treasury transactions and commercial transactions. Net Treasury payments in the District during the first four months were nearly four times larger this year than last. Net transfers of funds out of the District on commercial account were also substantially greater. The net loss of reserves, however, was only a third as large as in the corresponding period a year ago.

CONSTRUCTION—FIRST FOUR MONTHS OF 1950

In the early part of this year business conditions nationally and in this District strengthened considerably. One of the factors underlying the improved business picture was a record level of construction in this District as well as in the nation. The upsurge in building was marked by substantial gains in both private and public building. Residential building was the dominant factor in the construction picture. A gain of 50 percent in urban residential building permits in the seven western states and also in housing construction activity in the nation as a whole raised the level of total private construction well above the level of the first four months of 1949. Nationally, but less so in this District, private nonresidential construction lagged behind the first four months of 1949. Public construction in both areas continued to grow. Prospects for the remainder of the year point to a continued high level of building, even though some decline may be expected because of normal seasonal conditions.

A major factor in maintaining the high level of construction, particularly of homes, is the ready availability of credit. The relative decline in demand for business and commercial credit since late 1948 has contributed to an abundant supply of mortgage credit; the conditions under which it is extended, however, are somewhat more stringent than in the immediate postwar years. The Housing Act of 1950, which became law on April 20, 1950, liberalized in some respects the terms for FHA and VA loans and authorized additional funds for FHA and FNMA activities.

Nationwide construction volume ahead of last year

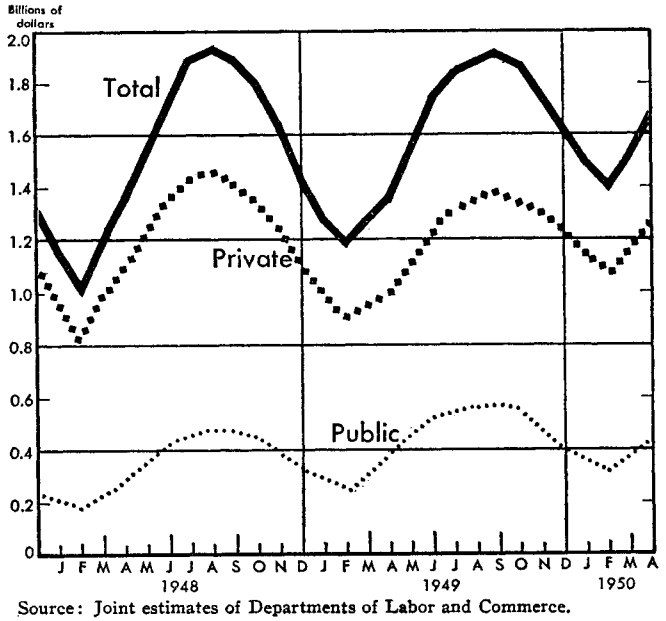
During the first four months of this year, a record rate of construction contributed to the steadily rising level of economic activity in the United States. Expenditures for new construction in the first four months of the year totaled $6.1 billion, 20 percent above the corresponding period last year, and the highest on record for the four months from January through April. This represented an annual rate of construction well above $21 billion compared with the total expenditure in 1949 of $19.3 billion. This record, however, conceals a very significant development. Unlike 1949, when construction also exceeded the previous year, building so far in 1950 reflects a sharply rising volume of private construction as well as a growing level of public building. In 1949, despite a record number of housing starts, private construction expenditures dropped 3 percent behind the previous year, and in the first four months of last year private building lagged 4.5 percent.

The 20 percent gain in total construction through April 1950 applies equally to private and public construction. The gain in private building this year arises almost entirely from the unprecedented level of spending on housing. Expenditures on residential building during the first four months totaled 50 percent more than during the same period in 1949. Nonresidential construction, however, declined 8 percent in this period, chiefly because of a large drop in spending on industrial buildings and a lesser decline for warehouses, office buildings, and amusement places. Public construction gained 20 percent during this period.

District construction industry makes sharp recovery

Comprehensive data on construction expenditures for the District so far in 1950 are not yet available, but

NEW CONSTRUCTION PUT IN PLACE—UNITED STATES, 1948-50



Source: Joint estimates of Departments of Labor and Commerce.

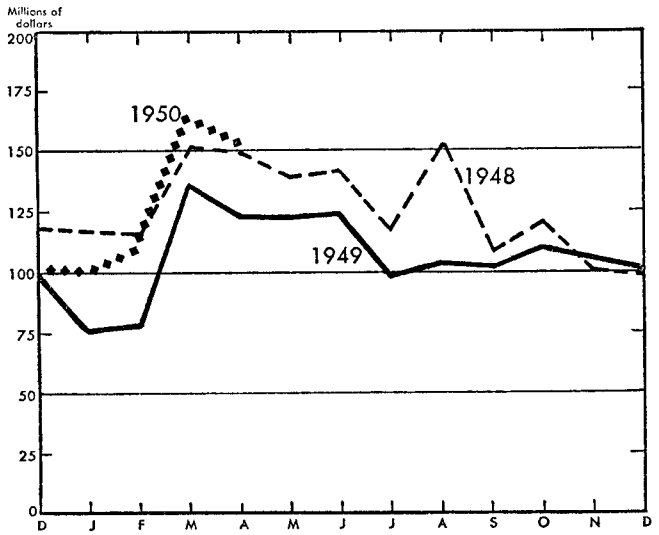
NEW CONSTRUCTION ACTIVITY, CONTINENTAL UNITED STATES

(in millions)

Type of construction	First 4 months 1950	First 4 months 1949	Percent change, 1949-50
Total new construction	$6,128	$5,102	+ 20
Total private	4,616	3,847	+ 20
Residential (excl. farm)	2,610	1,740	+ 50
Nonresidential building	985	1,069	— 8
Industrial	278	399	— 30
Warehouses, office, and loft bldgs.	95	104	— 9
Stores, restaurants and garages	205	211	— 3
Other nonresidential building	407	355	+ 15
Religious	111	99	+ 12
Educational	80	82	— 2
Hospital and institutional	98	44	+123
Social and recreational	68	77	— 12
Hotels and miscellaneous	50	53	— 6
Farm construction	72	70	+ 3
Public utility	949	968	— 2
Railroad	101	110	— 8
Telephone and telegraph	175	200	— 13
Other public utility	673	658	+ 2
Total public	1,512	1,255	+ 20
Residential	93	40	+133
Nonresidential building	593	474	+ 25
Educational	310	252	+ 23
Hospital and institutional	170	120	+ 42
Other nonresidential building	113	102	+ 11
Military and naval	38	31	+ 23
Highway	310	288	+ 8
Sewer and water	186	168	+ 11
Misc. public service enterprises	32	28	+ 14
Conservation and development	203	180	+ 13
All other public	57	46	+ 24

Source: Joint estimates of the Department of Commerce and the Department of Labor.

VALUE OF TOTAL URBAN CONSTRUCTION AUTHORIZED—TWELFTH DISTRICT, 1948-50



Note: Figure for April 1950 estimated.
Source: U. S. Department of Labor, Bureau of Labor Statistics.

urban construction authorized (covering building permits granted in urban areas of the District) rose almost 25 percent over 1949 during the first four months of this year and surpassed the record volume of the same period two years ago. This represents a marked change from last year. During 1949, construction in the District was less favorable than in the country as a whole. Total expenditures on construction activity dropped 10 percent in 1949 from the previous year principally because of a 23 percent decline in private residential construction. A slight gain in public construction last year offset a decline in private nonresidential construction, but failed to overcome the reduction in residential building as well.

The developments in the District roughly approximate those in the nation. Residential building permits through March increased almost 50 percent over last year (the breakdown by types of construction for April is not yet available). Nonresidential construction, including private and public building, led last year's volume for the same period by 10 percent.

Residential construction in District leads increase

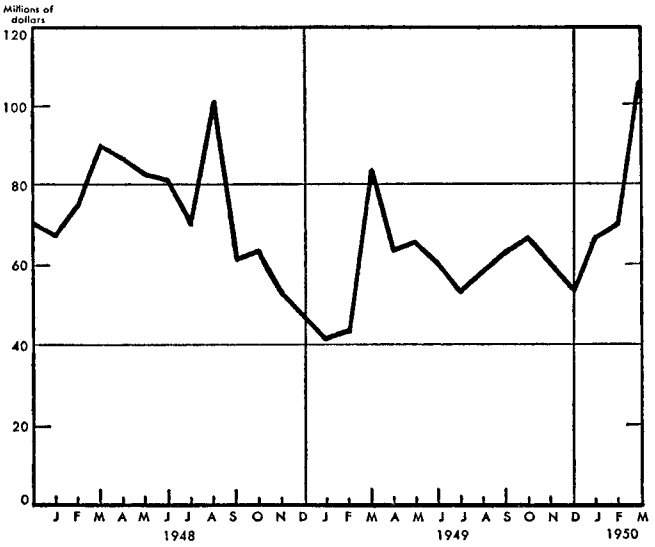
In contrast with early 1949, District residential construction authorized this year has shown substantial increases over the previous year. The dollar volume through March gained 60 percent over last year and reached a level slightly below that of the record-breaking construction in the same months of 1948. Preliminary data for April indicate that a high rate of residential building continued and that the volume for the first four months exceeded the comparable figure for 1948. The level of construction in itself is encouraging, but other factors lend considerable reassurance to the basic strength in the outlook. One significant element in the current situation rests in the fact that builders are reported as having plans for a continued high volume of home building. March is usually the peak month in terms of the volume of permits issued, and some decline in future months may be expected. Nevertheless, the prospects point to a rather moderate seasonal decline in the rest of the year.

The market for houses has been brisk. Many tracts of lower-priced houses have been sold before construction was completed. Evidence of any slowness in the market is confined to houses costing more than $10,000, and even in these cases the evidence is fragmentary.

The exceedingly good market for houses undoubtedly stems from a number of factors such as high consumer income, unsatisfied housing needs, easy credit terms, and good consumer expectations. Nevertheless, the trend toward the construction of lower-priced houses since 1948 has probably contributed substantially to the continuation of a good market. An increasingly large number of houses built in this District are in the under-$10,000 class. This type of house has been selling very rapidly. The lower price tag on individual houses represents some reduction in the size of homes and some decline in costs, but at the same time it appears likely that the features included and the construction have improved. Recent increases in the cost of building materials have not yet resulted in any significant change in selling prices, but some industry observers are of the opinion that prices may rise.

The trend toward the construction of rental housing has increased in recent months. This type of housing has been represented by large apartment houses and in some cases multiple single and duplex tracts. These rental developments have been constructed by large investors such as insurance companies and large residential builders. The demand for moderately-priced rental units is strong and further expansion in this line of building is likely if costs can be held in check. Reports indicate that the demand for the more expensive rental units recently constructed is not very strong, and future construction may

VALUE OF URBAN RESIDENTIAL CONSTRUCTION AUTHORIZED—TWELFTH DISTRICT, 1948-50



Source: U. S. Department of Labor, Bureau of Labor Statistics.

have to be channeled into units renting for less than $100 a month.

Though the construction of public housing nationally was twice the 1949 rate during the first four months of this year, the effect of the Housing Act of 1949 has not been important in this District. A few communities, principally San Francisco and San Bernardino, have had funds reserved for their use. As yet, however, no construction has started under the most recent program. It is quite likely that very little public residential construction will be started in the District this year.

Nonresidential construction makes good progress

The 10 percent gain in the first quarter for nonresidential construction in the Twelfth District over the same period in 1949 is somewhat greater than the national change, if both private and public nonresidential construction are lumped together. In three areas of private spending on nonresidential construction, however, the District comes out with a pattern quite different from the national one. During the first quarter, the dollar value of permits granted in this District exceeded the 1949 figure for factories and other industrial buildings, stores and other mercantile structures, and office buildings. In each of these cases national spending declined for both the first quarter and the four-month period through April. Other private spending on construction in the District followed a course nearly parallel to the national pattern. It may be assumed, therefore, that private nonresidential construction has fared somewhat better in this District than nationally. At the same time, no basis exists at present for predicting any marked decline during the balance of the year in spending on private nonresidential construction.

Construction of schools remained the most important nonresidential activity in terms of the dollar value of permits granted in the District. In the first quarter, however, March permits failed to show the unusual gain recorded between February and March 1949. In fact, the dollar value of permits issued in March for school construction declined from the February level this year. Expenditures on other public buildings, however, increased over last year.

The outlook for public nonresidential construction in this District appears good. Available information points to increasing construction of conservation projects, highways, sewer and water projects, and hospitals. In recent months construction of atomic energy installations has expanded and present indications point to further increases. The construction of schools and other public buildings is expected to continue at a high rate.

Mortgage credit in plentiful supply

Available evidence indicates that the current high level of construction activity is not likely to suffer in the near future from lack of sufficient credit. This applies not only to the supply of credit for mortgages on single houses, but also to the availability of funds for other types of private construction and for public construction of various sorts.

While in most areas the conditions under which residential mortgage credit is extended are somewhat more stringent than they were in the immediate postwar period, its supply is still plentiful and credit terms are easy. The pronounced shift toward the construction of less expensive houses coupled with liberal credit terms has made it possible in many areas of the Twelfth District to buy a house for a smaller down payment than is required on a new automobile. The recently-passed Housing Act of 1950 liberalized in some respects the terms for mortgage loans insured by the Federal Housing Administration or guaranteed by the Veterans' Administration.

The volume of residential mortgages outstanding in the nation has risen markedly and continuously during the postwar period. Preliminary estimates indicate that mortgage loans made on 1- to 4-family nonfarm homes during 1949 equalled the peak of $10.8 billion reached in 1948, thereby raising the total of such mortgages outstanding to $37.2 billion.

Shifts in interest rates and lending patterns

In the postwar period, lending institutions have been able to extend credit for the purchase of homes under three varieties of mortgages: loans guaranteed by the Veterans' Administration, loans insured by the Federal Housing Administration, and conventional loans carrying no Government guarantee or insurance. The last type has accounted for approximately two-thirds of all home mortgages recorded during the past three years. Public attention has been concentrated, however, upon the terms prescribed by law and administrative regulation for VA and FHA mortgage loans.

Throughout the postwar period the maximum rate of interest permitted on loans guaranteed by the VA has been 4 percent, although since August 1948 the Veterans' Administrator has had the authority to raise the rate to 4.5 percent. The peak year for the making of VA loans was 1947, with a sharp drop in volume in 1948 and a still further decline in 1949. On a monthly basis, however, February was the low point in 1949, and the volume has risen almost continuously each month since.

Among the factors producing the sharp drop in VA loans during 1948 and the subsequent upward movement since February 1949 has been the trends in yields on alternative investments, especially on Government securities. Yields on both short- and long-term Government securities began to rise in the latter part of 1947, and throughout 1948 were at a substantially higher level than in 1947. This rise in yields on Government securities made 4 percent VA mortgage loans relatively less attractive as investments, and consequently lending institutions were less willing to make such loans during 1948. Late in 1948, however, yields on Government securities began to decline, and for 1949 as a whole the average was significantly lower than in 1948. This had the effect of making 4 percent VA loans relatively more attractive as

investments and lending institutions started making such loans in increasing volume.

Government secondary market

Another factor of prime importance in stimulating the making of VA loans during 1949 was the reestablishment of a Government secondary market for such loans in 1948. Such a market had existed prior to June 30, 1947. Congress abolished it for a year, and then reestablished it in June 1948 by permitting lenders to sell to the Federal National Mortgage Association 25 percent of their VA mortgages made after April 30, 1948. The same limitation was also applied to FHA mortgages, for which the FNMA had maintained a secondary market since 1938. In August 1948, another law increased the proportion to 50 percent and also made insured mortgages on apartment projects eligible both for sales to the FNMA and for inclusion in the base on which the 50 percent was to be figured. A law signed on October 25, 1949 removed all limitations upon the sale to FNMA by individual lenders of VA loans not in excess of $10,000 each and written and guaranteed after that date.

During 1947 and 1948, most of the FHA mortgages for the purchase of homes were written under Title VI of the National Housing Act and also carried only 4 percent interest, plus 0.5 percent for mortgage insurance. Title VI was allowed to expire on April 30, 1948, but a large volume of commitments was issued under it before the deadline. Parts of it were revived in August 1948, but the insurance of mortgages for the purchase of individual homes was shifted largely to the provisions of Title II of the National Housing Act. The authorized rate of interest under this title was 4.5 percent, plus 0.5 percent for mortgage insurance.

The differential in interest rate of 0.5 percent between currently-made VA and FHA loans during part of 1948 and all of 1949 resulted in lenders selling primarily VA loans to the Federal National Mortgage Association. During 1949, its purchases consisted of two-thirds VA loans and one-third FHA loans.

In recent months, the Federal National Mortgage Association has embarked upon an active program of selling some of its mortgage holdings. In March, its sales amounted to one-half of its purchases for the same month. Virtually all of its sales have consisted of FHA rather than VA loans, however.

Housing Act of 1950

The Housing Act of 1950, signed by the President on April 20, 1950, made several significant changes in the provisions affecting both FHA and VA loans. Upon signing the bill, President Truman announced that the Federal Housing Administrator, under authority granted in the National Housing Act, was reducing the rate of interest on FHA loans from 4.5 percent to 4.25 percent effective April 24, 1950. The intent of this action is to narrow the differential in rates between FHA and VA loans.

The new law also contains a provision designed to assure the availability of VA guaranteed loans carrying 4 percent interest. This is accomplished by authorizing the Veterans' Administration to make direct loans to veterans at 4 percent in case private funds are not available in the area for such financing. This provision is to become effective July 20, 1950, and is scheduled to end June 30, 1951. Individual loans cannot exceed $10,000 and the aggregate amount is limited to $150 million.

Several other important changes were made in the provisions relating to loans guaranteed by the VA. Under the former law, the VA could guarantee up to 50 percent of a mortgage loan, with the maximum guarantee limited to $4,000. The new law raises the percentage which may be guaranteed to 60 and increases the maximum amount of guarantee to $7,500. Second mortgages guaranteed by the VA in conjunction with first mortgage FHA loans will not be granted after December 31, 1950, or sooner if the Veterans' Administrator so decides. The maximum maturity of VA home loans is increased to 30 years, compared with the former 25 years.

Numerous changes were made in the provisions affecting FHA loans, of which only a few of the more important ones will be indicated here. Section 2 of Title I of the National Housing Act, under which property improvement loans may be insured by FHA, expired March 1, 1950. This section was revived, made retroactive to March 1, and extended to July 1, 1955. The aggregate amount of such loans that may be insured is fixed at $1.25 billion. Changes were also made in Title I affecting relatively small mortgages on new houses.

The provisions of Title II, under which the bulk of the currently-written FHA loans are now insured, were changed in numerous ways. In principle, the changes are designed to authorize somewhat larger mortgages on the least expensive houses, and slightly smaller mortgages on medium-priced homes. Provision is made, however, for larger mortgages based upon the number of bedrooms in a home, a type of measure not formerly used.

Certain changes were also made in the provisions of Title II and Title VI relating to the insurance of mortgages on large-scale rental projects. Section 608 of Title VI, which provided mortgage insurance for such projects, lapsed on March 1, 1950. The new law, however, authorized an additional $500 million of insurance for any Section 608 applications filed on or before March 1, 1950. New applications for this type of insurance will be handled under Section 207 of Title II. The provisions of this section were made somewhat more stringent than they had been by requiring larger equity outlays by the owner.

The insurance authorization under Title II is increased by $1 billion by the new law, with an additional $1.25 billion available if approved by the President. This raises the authorization from the former $6.75 billion to $9 billion.

At the end of March of this year, the Federal National Mortgage Association held mortgages totalling $1 billion, and its undisbursed commitments to purchase mortgages amounted to another $1.5 billion, thereby exhausting its gross authorization of $2.5 billion. The new law granted another $250 million in funds to FNMA. It also terminated FNMA's authority to make advance commitments to purchase mortgages.

The over-all intent of the Housing Act of 1950 is to make the terms for mortgage credit somewhat easier than before, especially on lower-priced houses. This comes at a time when residential construction is already at peak levels. Since the current high level of activity is straining productive facilities, the recent liberalization of credit terms will serve to increase inflationary pressures in that sector of our economy.

THE TWELFTH DISTRICT SHEEP INDUSTRY—I. SHEEP RAISING[1]

Sheep raising has been an important agricultural pursuit for many centuries, and early became an important segment of agriculture on the Spanish peninsula. It was here that the fine-wool Merino breed was evolved. This breed was eventually to serve as the foundation stock for the extensive flocks that populated the New World after 1800. The sheep industry became so important to Spain that she jealously guarded her breeding stock from exportation and established liberal laws in favor of flock owners. Towards the end of the eighteenth century, however, the Spanish control of its fine-wooled Merinos was gradually weakened. Some breeding stock found its way to France. Numerous other lots were smuggled out to the Americas. These exportations resulted in the development of the improved Merino strains. Because of its grazing habits, its strong instinct to flock, and the high quality of its wool, the breed proved particularly profitable to exploitation of the natural grass resources of the new frontiers—western United States, southern Argentina, Australia, and New Zealand.

Beginning nearly a century ago, sheep have played an important part in the agricultural development of the western states. The northwest boundary treaty with Great Britain in 1846 and the treaty with Mexico in 1848 established American ownership of a vast expanse of land west of the Rocky Mountains. The natural grass resources which were opened to American occupation with the acquisition of this territory gave impetus to a rapid expansion in the grazing of livestock.

From the original Spanish flocks introduced via Mexico through the mission program and the "rancheros" who followed, the industry had its beginning in California and Arizona. In Utah and surrounding areas it was established with the early Mormon colonies. In the Pacific Northwest, sheep arrived overland following the Oregon pioneers in the 1850's and '60's. During the following two decades, sheep were established on the intermountain ranges of Nevada and Idaho in the wake of the trail flocks.

In the beginning, the profitableness of western sheep production was based essentially on the sale of wool. Wool, as a storable commodity, could be held from season to season for speculation and could be shipped long distances via the slow methods of transportation existing at the time. The Merino was well adapted to the production of fine wool under range conditions. These sheep were efficient grazers on the far flung ranges; they flocked well on the unfenced bedding ground at night; and their wool grew rapidly from one shearing to the next. They also travelled well to and from seasonal pasture areas.

As population continued to expand in the United States after 1900, the demand for meat steadily increased. The production of lamb became a more and more important aspect of the industry, and the sale of lamb and mutton came to contribute the greater share of the income from sheep raising. The British or mutton breeds gained in popularity. Of the medium wool groups, Hampshire Southdown Suffolk breeds became popular; of the long wool groups, Cotswold, Lincoln, and Leicester. Cross breeds were developed—Corriedale, Panama, Columbia, and a number of others—in an effort to produce a profitable meat carcass while sacrificing as little as possible the desirable wool characteristics of the Merino strains. In most range areas, a percentage of Merino blood has been retained to preserve the strong flocking instinct required in sheep management under range conditions.

Character of District production

Sheep are raised in all Twelfth District states. Within this area, the structure of the industry is essentially one of range operations. The regulation of the free range through the formation of the Forest Service of the Department of Agriculture in 1905 and the establishment of the Grazing Service of the Department of the Interior in 1934 required basic adjustments in early production methods. The creation of these regulatory Government bureaus resulted in the pattern of operation becoming more stable through the institution of range control. They brought an end to the days of the free open range, and eliminated the competition for favorable grass which had resulted in overstocking and depletion of the forage. Their establishment wrote the final chapter to the wars between sheep and cattle interests. They also brought to an end, however, the possibility of starting "a sheep spread" with only a small band of ewes, a camp outfit, and a willingness to be alone.

Other factors have also influenced District sheep production during the last 40 years. When flocks could be trailed long distances to slaughter centers, they were marketed as mature sheep. Good slaughter condi-

[1] A second article on the sheep industry will deal primarily with the marketing of Twelfth District lambs. This will be followed by a discussion of the wool situation.

THE 1950 SEASON TO DATE

Range conditions over the District were generally favorable for livestock during the winter of 1949-50. Most areas of the intermountain region experienced good wintering conditions as contrasted to the severe weather of the previous year. In central and western Washington and Oregon, range feed was retarded by cold and heavy snow, but developed favorably over most of Arizona and California. In California valley and foothill areas where growth of grass was retarded by dry weather, late rains improved pasture to a marked degree.

Lambs in the Pacific Northwest have made relatively good growth to date, considering the tardy season, but will probably be marketed later than usual as a result of unfavorable weather during March. Marketing from the early lamb producing area in Arizona progressed at a slower rate during the current season than a year ago, but May 1 Department of Agriculture reports indicated that shipments were nearly completed.

Spring lambs in California were reported in good condition as of May 1, and the percentage of fat lambs is expected to be higher than a year earlier. Southern San Joaquin Valley lambs started to slaughter centers in mid-March and the bulk is expected to have been moved by the end of April, followed by volume shipments out of the Sacramento Valley through mid-May. May and June shipments from the central coast area will be considerably reduced from last year. The total lamb crop will probably be smaller than in 1949 as a result of the smaller number of breeding ewes on hand.

Federally inspected slaughter of sheep and lambs in the first quarter of 1950 was down 11 percent from the corresponding period last year. The reduction resulted primarily from smaller slaughter during the first two months of the year. Slaughter during April and May, however, was above last year. Total slaughter of sheep and lambs is expected to be somewhat less for 1950 than for 1949, reflecting the smaller over-all lamb crop. Production of lamb and mutton during the first two months of 1950, as could be expected, declined, but March production was estimated to be 7 percent above the corresponding period last year. Average weight of sheep and lambs slaughtered so far during the current year has run above 1949 levels. Average yield per carcass was up about 6 percent during the first quarter, indicating higher finish in fed lambs marketed during the period.

Prices on slaughtered lambs moved generally upward in early May, though at levels approximately 7 percent below a year ago. Good to choice spring lambs averaged $27.42 cwt. at Chicago during the first week in May as against $29.42 cwt. at this time a year ago. Receipts were predominantly spring lambs, though a few old-crop wooled lambs were still arriving.

Production of shorn wool in 1950 is expected to approximate that of the previous year. Stock sheep numbers declined 2 percent in 1949, but fleeces in the current season will attain average weights as contrasted to last year when severe weather in some areas caused heavy losses and adversely affected wool growth.

Production of pulled wool will probably be lower in 1950 than last year as a result of the expected reduction in total slaughter of sheep and lambs.

Price support for the 1950 clip will be at 90 percent of the parity price of wool on March 31, 1950, or approximately 45¢ per pound (farm basis) as compared with 42.3¢ in 1949. The Agricultural Act of 1949 requires that wool be supported at a sufficient level between 60 percent and 90 percent of parity to encourage production of 360 million pounds of shorn wool. In 1949 production of shorn wool was 216 million pounds, grease basis, the record low since 1879.

Trading in greasy domestic worsted wool has been active and prices were above support levels. Some large District clips in Nevada and Utah were recently contracted for at between 62 and 64 cents per pound, grease basis; other clips ranged lower depending on the quality and length of staple.[1]

[1] USDA, Market News Livestock Branch, May 2, 1950.

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tion was a secondary consideration to wool production. The offspring not sold one season yielded another wool clip and could be sold the next. Young ewes were held for flock expansion or disposed of to other breeders. Grass was cheap, and capital investment therefore was essentially limited to livestock. As the west became settled and the public domain reduced, an increasing investment in real estate was required, often exceeding the value of the breeding flock. It was no longer practical to retain each year's increase. Sheep-men were able to adjust successfully to these changing circumstances, however, because of the extension of rail transportation and the demand for meat by an expanding population.

Meat production is now the more important factor. Consequently, successful lamb raising and marketing under present day conditions necessitate close supervision by competent and technically trained management. The expanding District population is increasing competition for the use of the remaining public domain by other than livestock interests. The use of farm flocks as a means of agricultural diversification is increasing in some District areas. Nevertheless, the sheep industry in the Twelfth District is still essentially pastoral in character.

Patterns of Operation

The pattern of operation in Twelfth District sheep raising is related to the natural forage characteristic of the western range. Range operations in the intermountain area may be distinguished from those in California and in Arizona. To a lesser but increasing degree, sheep are raised in farm flocks, notably west of the Cascade range in Washington and Oregon, in the northeast corner of California, and in scattered localities in Utah.

Intermountain area

Between the Cascade and Sierra Nevada Mountains in the west and the Rocky Mountain chain to the east lies the vast intermountain area. This region offers a variety of grazing for District flocks, being a sagebrush—short grass—shrub plateau of relatively high altitude extending from eastern Washington and Oregon, across southern Idaho, and over Nevada and Utah to the northern highlands of Arizona. This is principally an area of range flock operation where a large surplus of market lambs is produced in conjunction with a valuable wool clip. These are ranges of the primary producer. The general pattern of operation which identifies the industry in this intermountain region is one of movement of flocks from winter quarters to Federal or state lands (or sometimes to private leases) in the spring of the year, thence on to the summer pasture in the national forests, again a transfer to lower ranges in the fall, and back to home quarters or desert ranges in the winter.

Idaho: The Snake River Valley of southern Idaho from Payette on the western border as far east as Idaho Falls serves as the winter ground for many flocks. Hay

and feeds are raised in the valley bottom. This is the principal shed-lambing area of the District where the ewes, which have been bred to lamb in January and February, are winter fed and lambing is done under sheds. With the arrival of spring, movement starts over the Federal grazing lands toward the nearby national forests where operators have their respective summer grazing permits—north and east within the state or south to the Humboldt National Forest in Nevada. Lambs are sold off the summer pastures, three-quarters of which are marketed as fat, averaging from 85 to 90 pounds. Those which fail to fatten are pastured on the valley beet or stubble fields in the fall or finished in the feed lots. Many of the flocks are cross-bred ewes which are mated to black-face mutton breeds.

The southwestern desert plateau of Idaho, most of which is public domain, provides winter grazing for some sheep from western Utah, eastern Oregon, and northern Nevada. Usually an area of moderate winters, supplemental feeding of concentrated feed is necessary to augment the desert forage. Lambing is necessarily later than in the shed area.

Utah-Nevada: The pattern of land settlement in Utah introduced the raising of sheep in conjunction with other operations of farm village communities. Farm flocks are still prevalent in the state, but Utah is fundamentally a pasture area of sparse range, the greater portion of which is within the confines of Federal lands. Sheep arrived in the area with the early Mormon colonists and proved adaptable to the forage of the region. The early flocks of Spanish and French Merino blood established a hardy foundation stock in the dry climate of the high plateaus. The English breeds later found considerable favor as central markets developed for mutton carcasses.

The national forests cross the center of the state of Utah in a northeast-southwesterly direction. Within their altitudes exist a number of valleys where production of feed, in conjunction with other crops, allies crop farming and livestock production. The national forests also contain extensive areas suitable for summer grazing. On the desert areas, east and west of the national forests, extend the lands of the Grazing Service. The importance of range sheep production in the state rests upon the complementary nature of these two areas of natural feed. In contrast with farm flock enterprises, which usually have no allotment on the public range and consequently are required to maintain their sheep on home-grown feeds through the winter, range operators winter their bands on Federal leases. Storm hazards exist, and severe winters periodically cause high death losses. One of the most severe in the history of western range management was experienced in 1948-49.

There is much overlapping of grazing ranges in the intermountain states. The desert reaches of southern Nevada serve as the winter range for flocks from the forest reserves of the state or for sheep entering from western Utah. The Arizona strip north of the Grand Canyon receives Utah flocks for the winter. Some Idaho sheep summer in the Nevada forests. From western Nevada irrigated areas, where hay is raised for winter feeding, sheep cross into California forests of the Sierra Nevadas for summer pasture. Also, out of eastern Washington flocks are shipped to Idaho and Montana summer ranges.

Eastern Oregon and Washington: East of the Cascades considerable numbers of sheep are raised, though they have been much reduced since prewar years. The Okanogan highlands of Washington produce some of the best pasture of the state and serve as summer grazing for the cross-bred ewes from the southern lambing area. Good quality fat lambs are marketed off grass in late summer, principally during September. In south central Washington, the Columbia Basin, with its adequate feed resources of alfalfa and wheat, serves as winter quarters for flocks which summer on the highlands, or on the mountain ranges to the east.

South of the Columbia River in the wheat and semi-arid areas, three-fourths of Oregon's sheep were grazed prior to 1940. During recent years, however, the industry has been shifting to the Pacific side of the Cascades, so that presently the larger share is run west of the mountains. The use of lambing sheds, and the alfalfa, grains, and wild hay produced in the Blue Mountain area, make possible the production of early fat lambs in the northeastern district. On the high semi-desert ranges to the south, later lambing takes place in the open, usually in April and May. Flocks graze over the public ranges and move on to allotments in the national forests. Lambs are marketed off the high ranges in September averaging between 80 and 85 pounds.

Oregon farm flock production

On the Pacific side of the Cascade Range in Oregon, starting from Curry, Coos, and Douglas counties along the Rogue River, through Lane, Benton, Linn, Polk, Yamhill, and Marion counties along the Willamette Valley, about 60 percent of the state's sheep are raised. This is the farm flock area. Relative to the rest of Oregon, the percentage of sheep in this section is steadily increasing. In 1940 over 76 percent of the sheep were run under range conditions east of the mountains. Presently, Douglas County in the southwest has the largest sheep population of any county in the state.

Farm flocks in the District are small flocks, often managed in conjunction with other agricultural pursuits such as dairying, hay, and crops. Small numbers are grazed, usually not more than a few hundred, within the confines of pastures and cut-over timber lands which are under fence or where migration is limited by topographical conditions. In this Oregon coast area there is some grazing on national forest lands by larger flocks under range conditions, but these are in the minority. As a result of smaller flocks, less uniformity of breed is found in this locality. Coarse-wool breeds—Cotswold, Lincoln, Co-

lumbia, and Romney—which are more adaptable to the damp climate, predominate in the south. In the north Willamette Valley some mutton types of good quality are raised—Shropshires and Hampshires. Sheep are not herded in this area, and operators run their flocks on owned or leased land, much of which is former timber land which has been burned or logged-over. Because the climate is mild, ewes are bred to lamb in February and March, unattended by herders. Fat lambs are sold off grass in the May-July period to Oregon and California markets.

Closer surveillance and accessibility to the farm flock make management practices possible which are more difficult to apply under open range conditions, such as parasite and disease control, or breeding and lambing control. Shearing, however, sometimes poses a difficulty to the farm flock manager. Operators of large range bands are able to arrange for contract shearing at a central gathering place by crews of professional shearers, and in such manner accomplish this important task at the most advantageous time. Farm flocks, being widely dispersed and composed of a small number of animals, do not offer a continuity of employment to large crews, so that professional shearers are more apt to concentrate on areas of greater sheep population. The manufacture of improved one- and two-man portable shearing machines, and shearing training programs for students and farm owners, are helping to overcome this problem.

California

The irrigated valleys and extensive ranges and forests of California carry more sheep than any other state in the District. Feed-lots in the state also produce the largest number of fat slaughter lambs.

The leading sheep producing district in California is the Sacramento-San Joaquin or Central Valley area. The greater portion of the state's early lamb output originates in this region. Ewes are bred to lamb between November and February depending upon the weather characteristics of each locality. The earliest production originates on the upper reaches of the San Joaquin Valley. The Central Valley and its foothills are a grass area of high carrying capacity from the first fall rains until late spring. Sheep graze throughout the winter and lamb in the open in the foothill areas or on the native pastures of the Sacramento Basin or uplands of the San Joaquin Valley floor. In May, sheep-men in the Sacramento Valley transfer their flocks to the national forests of the Sierra Nevada Mountains for summer grazing. Many sheep in the Central Valley area spend the summer and fall in the valley on irrigated pastures, stubble fields, and crop-land refuse after the completion of harvests. Operations in the foothills of the San Joaquin are similar to those in the Sacramento Valley. Sheep are also wintered and lambed in the alfalfa fields and native pastures of the valley floor. Some flocks move out in the spring to the westside plains, and to sugar beet fields in summer and fall. Other flocks are transferred in the spring to range on the Mojave desert, in years of favorable feed conditions, and from there to the summer forest ranges. Range in the valleys is privately-owned or leased. Flocks can be closely surveyed, making for a high lambing percentage. Lamb crops averaging 140 percent are not uncommon. This high percentage, plus good quality stock and the fast weight gains made on the excellent natural grasses of the region, is conducive to the production of early maturing milk-fat lambs which command a premium price at a season of scarcity.

The northern mountains of the state are also an area of important sheep production. Mendocino and Humboldt are the leading counties in this area. Methods of operation differ considerably from other areas of the state. Except for some summer grazing in the national forests, ranges are mostly large, privately-owned and fenced pastures within which the sheep are allowed to roam at will. There is some farm flock operation in this district. Grass in the area is not so nutritious as that of the valley sections so that lambs do not attain the fine finish of the valley product, and many go out as feeders. Ewes lamb on the range, usually in February and March, and the lambs are marketed in early fall.

Shasta, Lassen, Modoc, Mono, and Inyo are sheep producing counties of considerable importance in which most flocks are grazed on the national forests in summer and wintered at the home ranches on hay.

Arizona

Sheep ranchers within Arizona follow various methods of operation, and graze their flocks from the desert lowlands to altitudes of 10,000 feet on summer pastures. The basis of most flocks are fine-wooled Rambouillet ewes. These are usually bred to mutton-type rams for the production of early lambs. A large percentage of Arizona flocks are summer grazed in the high mountain elevations which cross the center of the state in a northwest-southeasterly direction. The ewe bands winter to the north and south of this range. Flocks which come from the north of these mountains winter in the open on the high Colorado River plateau.

Because winters in this area are rather severe, the ewes are bred to lamb late—usually in May—and shearing takes place in June or July. Lambs are marketed in the fall, principally as feeders, for the late lambing season is not conducive to fat-lamb production. The number of sheep in this area has been greatly reduced during the past decade, sheep having been displaced by expanded cattle operations during recent years of high beef prices.

The eastern portion of this north district is grazed by Indian flocks on the extensive reservations. Indian-owned flocks are estimated roughly to represent one-half of the state's sheep. These sheep are of more mixed breeding, producing a coarse, light wool. They yield a wool clip of about two-thirds the usual weight of other fleeces.[1] Some

[1] "Arizona Agriculture 1949"—Agriculture Experiment Station, University of Arizona, Tucson.

of the meat and wool produced on the reservation is consumed by the Indian tribes themselves, though feeder lambs are exported during the fall and much wool disposed of through traders making yearly pilgrimages to the area.

The colorful migratory trail movements of the large sheep bands of the state's southern operators over the Forest Service driveways have been greatly curtailed in recent years. Bands from the pastures of the Salt River Valley and desert foothill winter range areas graze over the allotted driveways in late spring on their way to the summer mountain feed and return again to winter feed in the fall of the year. The long drive south during the hot autumn season occurs at a time when ewes are on the way to the lambing ground. Also, on the northern trek, flocks trailing from the greatest distances are pressed for time to arrive on the summer breeding grounds, and the later bands must travel on over-grazed trails. Increasing costs of operations make a high lambing percentage of great importance, and the difficulties encountered by use of the stock driveways have encouraged a greater use of rail and truck facilities.

There are two methods of handling flocks which winter in the southern half of the state. Bands are taken either to the alfalfa and irrigated fields of the Salt River Valley or to the desert foothills between the valley and the northern mountains. In either case, the climate being mild, they are wintered in the open. Flocks on the pasture areas lamb early, usually in November and early December, and are sheared in February and March. Fat slaughter lambs are sold in early spring to take advantage of the usual seasonally high market. Bands from the foothill area lamb somewhat later, usually in February, are shorn shortly afterwards, and produce a high percentage of early summer fat lambs sold off the ranges.

Arizona sheep numbers have been gradually reduced so that by 1950 there were less than a third of the number of stock sheep that grazed the state's ranges in 1920.

District lamb feeding

Depending on the forage characteristics and variations in seasonal pasture conditions, between a quarter and a third of all western range lambs each year do not attain sufficient flesh to be marketed for slaughter without additional feeding. On this fact rests the basis of the lamb feeding industry. Fed lambs constitute the main source of lamb supply on the nation's markets after the seasonal inventories of range fat lambs have been exhausted, between late fall and early spring.

The production ranges of the District supply many thousands of feeder lambs which are fattened each year both within the District and east of the continental divide. Within the District the feeding of lambs is an important aspect of the sheep industry. California markets are the chief outlets for District lambs fed through the late fall and winter seasons, though northwest markets are of growing importance.

California, Idaho, Utah, and Washington are the chief lamb feeding states of the Twelfth District. In California the largest concentration of lamb feeding is centered in the Los Angeles area where lambs are fattened in commercial feed yards. The same type of operations are carried on in the San Francisco Bay area and extend into the lower Sacramento Valley. There are two other important lamb feeding areas in the state: the permanent irrigated pasture areas of the Imperial Valley and the Stockton-Oakdale district in the Central Valley. From northern California and out of the ranges of neighboring states, large numbers of feeder lambs are imported and finished in these pastures and on nearby stubble and sugar beet fields.

Considerable lamb feeding in commercial feed lots is also practiced in other District states, in the lower Snake River Valley of Idaho, in the Yakima area of Washington, and in the small irrigated valley areas of central Utah.

Commercial lamb feeding has been a significant factor in the marketing of District-grown hay and grains, as well as of the expanding supplies of agricultural by-products from cotton, sugar-beets, and other farm products used as feed.

Dependence on the Public Domain

In all District states, Federal rural lands constitute a large portion of the grazing area. The degree of dependence on this source of feed, therefore, has had a direct influence on management practices and methods of operation. District sheep ranching is directly influenced by policies of public land administration, by the location, size, and accessibility of grazing allotments, by climatic variations, and by the location and productivity of privately-owned or -leased lands.

Approximately one-fourth of the total land area of continental United States is Federally-owned, consisting primarily of the residue from the public domain dis-

	Rural land holdings in Federal ownership[1] (acres)	Land area of state (acres)	Percent of land area Federally owned
Arizona	53,391,856	72,691,200	73
California	45,515,337	100,353,920	45
Idaho	34,608,970	52,997,120	65
Nevada	59,865,852	70,273,280	85
Oregon	32,603,627	61,664,000	53
Utah	38,386,018	52,701,440	73
Washington	15,127,004	42,865,280	35
Twelfth District	279,498,664	435,546,240	64

[1] United States Department of Agriculture, Bureau of Agricultural Economics, "Federal Rural Lands," June 1947, table 25.

tributed under the nation's various land laws. These Federal lands, of multitudinous types, are administered for the public benefit by a number of governmental agencies.[1] The grazing of livestock is recognized as one of the primary uses of over 300 million acres of public land on

[1] Rural land holdings in Federal ownership, by primary administrating agencies in 1948, were administered by the U. S. Forest Service, Bureau of Land Management, Office of Indian Affairs, National Park Service, Bureau of Reclamation, Soil Conservation Service, Fish and Wildlife Service, Farm Security Administration, War and Navy Departments, Tennessee Valley Authority, and other agencies. In 1946 the functions of the Grazing Service and the General Land Office were consolidated into the Bureau of Land Management.

which approximately 20 million head of livestock (principally sheep and cattle) are grazed some part of the year.[1]

Nature of Federal lands in Twelfth District

Over 61 percent of the rural lands in Federal ownership in the United States are located in the Twelfth Federal Reserve District and of the total District land area, 64 percent is in Federal rural holdings (see table). Nearly 70 percent of all public land incorporated into grazing districts is found within the states of the Twelfth District as are also half of all national forest lands, many of which are open to grazing some months of each year.[2] The greater portion of these vast Federal tracts are mountainous or arid and therefore not suitable for farming. In varying degrees, however, they are adaptable to the growing of natural grasses which serve as the raw material for the production of a considerable portion of the nation's meat supplies. The forage growth is seasonal in character and therefore of value to western meat and wool production essentially when used in conjunction with the feed resources of privately-held pasture or hay-growing areas.

Pasture lands incorporated into Federal grazing districts are generally lands of lower elevations and are often used in the spring and fall seasons in conjunction with the summer pasture areas of the higher elevations on the national forests. Consequently, to many of the Twelfth District's sheep operators, the holding of adequate grazing privileges in either or both national forests or Bureau of Land Management ranges is the determining factor in the management plan. The possession of such privileges and their extent and location are closely allied with the location and type of private holdings or leases where winter feed reserves are made available to breeding flocks. In most areas, grazing privileges on the public domain cannot be acquired by sheep-men without proof that sufficient feed resources are available to insure year-round operation for the number of animals covered by permit.

Grazing privileges

The holding of grazing privileges places upon operators the responsibility of adhering to range-management practices which conform to the beneficial-use standards established by the administrating agencies. These requirements are based upon the concepts of sustained-forage yield and the multiple-use purpose of public lands. Grazing privileges are granted for a specified number of sheep and run for either one year or ten years (depending upon type of privilege) with provision for renewal. Fees are assessed on a per-head per-month or a per-acre basis. Grazing privileges are transferable with the sale or disposal of the operating unit. In general, the cost of grazing livestock on the public domain is considerably less than the cost of owning comparable range, as is indicated by the high cash value placed upon grazing privileges when a sheep ranch is sold. Most public ranges are of low-carrying capacity, frequently badly depleted, and, in many areas, remote from transportation. From the standpoint of profitable operation, however, private lands of the same character usually will not warrant the investment of the capital necessary to increase their carrying capacity significantly.

Use of Federal grazing lands

A rough estimate based on the most recent available annual figures gives some indication of the extent to which Twelfth District flocks rely upon Federal lands for their grazing needs. During 1948 approximately 19 percent of the total sheep months (based on the number of sheep inventoried in the District on January 1) were spent pasturing on grazing-district lands, and another 6.5 percent were spent in the national forests. In other words, at least 25 percent of the total sheep months in 1948 were spent utilizing the natural forage of the public domain.

The public domain is used to a greater extent in Nevada and Utah than in other District states. In 1948 grazing-district lands were occupied for 46 percent of the annual sheep months required by Nevada flocks, and the national forests were used for 8 percent. In Utah the shares were 54 percent and 7 percent, respectively. Public lands are also used extensively in Idaho and Arizona, but are less significant to the sheep industry on the Pacific Coast.[1]

Stock Sheep Numbers

Records of the number of stock sheep on United States farms and ranches are available for as early as 1867. Since that pioneer date of the American range-sheep industry, the number of stock sheep has fluctuated, at approximately 8- to 12-year intervals, between a high of 51 million head in 1884 and a low of 27 million on January 1, 1950. Beginning in 1924, the trend of the stock sheep population in the United States as a whole was upward, and numbers were built up to over 49 million head on January 1, 1942. Following this second record high, inventories declined to a new low on January 1, 1950.

In the Twelfth District, the upward swing in stock sheep numbers which occurred during the late 1920's reached its peak in 1931. A gradual decline during the next decade or so was succeeded by a more rapid and continuing decline beginning in 1942. Between 1942 and 1950, the number of stock sheep in the Twelfth District dropped 46 percent to a low of 5.6 million head.

Reasons for declining numbers

Although an eight-year decline is not inconsistent with the cyclical fluctuations in stock-sheep numbers over a long period, it is significant that it took place during a

[1] Estimates are for 1945, made by the Bureau of Agricultural Economics, USDA.

[2] Acreage figures taken from the BAE report, "Federal Rural Lands — 1947," Table 25.

[1] Considerable numbers likewise grazed on Section 13 lands (Bureau of Land Management lands not incorporated into grazing districts). Figures for numbers grazed on these lands are not available. Grazing on stock driveways on Federal lands and grazing on Indian lands and on state-owned lands are also not included in these figures.

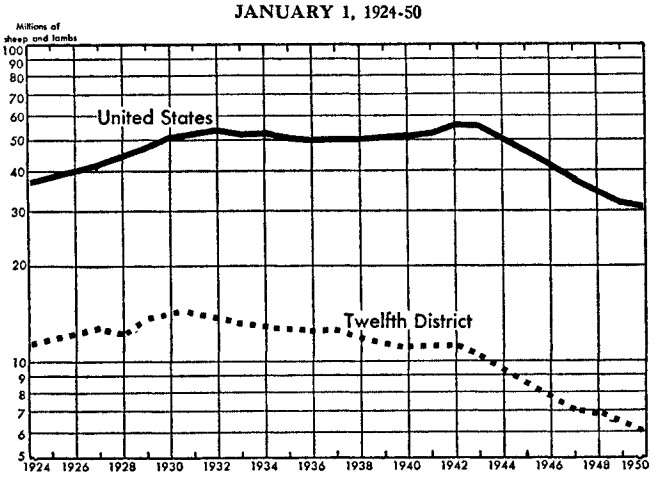
STOCK SHEEP IN TWELFTH DISTRICT STATES

	Numbers on January 1 (in thousands)		Percent change
	1942	1950	
Arizona	719	382	—46
California	2,977	1,602	—46
Idaho	1,858	990	—46
Nevada	698	435	—37
Oregon	1,577	671	—57
Utah	2,137	1,284	—39
Washington	583	298	—48
Twelfth District	10,549	5,662	—46
United States	....	....	—45

time of strong demand for meat and record domestic consumption of apparel wool. This was occasioned by a number of factors, some of which have been more pronounced in the Twelfth District than in the country as a whole.

Although wool prices were pegged in 1942, as part of the Federal price control policy at levels higher than the yearly average which growers had received in over two decades, prices of competing farm commodities proved more attractive in many instances. In California and Arizona, where large numbers of sheep are wintered and lambed on rented pastures, field crops—cotton, flax, and sugar beets—offered strong competition for land use. Planting of marginal land to wheat in some District areas was also expanded. Sheep-men viewed with uncertainty the long-term outlook for continued price support on wool and were apprehensive of the Federal Government's interest in a continuing low tariff policy. Production factors too, were influential in reducing the number of sheep in the District. As a band of ewes represents an investment of $30,000 or more at present prices, reliable and competent labor is essential to flock management under range conditions. Turned out on the range in the sole care of one or two herders for long periods, sheep require the supervision of skilled and experienced labor, possessed of a high degree of knowledge of the habits, grazing requirements, and characteristics of the animals under their care. During and since the war, competent herders have been scarce. Higher wages have been available in other fields of employment. The isolation and privation of a shepherd's life has not been conducive to attracting younger hands, and immigration laws have restricted foreign immigrants who formerly replenished the supply.

SHEEP AND LAMBS—UNITED STATES AND TWELFTH DISTRICT, JANUARY 1, 1924-50



During and since the war, production costs have risen sharply and relatively more than in some alternative fields of agriculture. High levels of industrial employment and high wages were more influential in increasing the per capita demand for beef, as industrial workers are beef-eaters rather than consumers of lamb and mutton. As a result, the farm price of beef in 1947 had increased 293 percent over the 1935-39 average and the farm price of veal calves 242 percent. During the same period, however, the price of lamb rose 236 percent, sheep 160 percent, and wool only 106 percent. Consequently, where grazing conditions were suitable, many sheep-men switched to cattle raising after liquidating their flocks.

These are the primary factors that have been influential in reducing the nation's stock-sheep numbers to the lowest point in an 83-year period. In the future, agricultural adjustments may possibly reverse the recent downward trend in over-all numbers. However, further restrictions on the use of the public domain for livestock, continuing high operating costs, large capital requirements, and skilled labor shortages will probably continue to encourage a reduction in large-range operations. Reclamation and irrigation developments may increase the number of farm flocks within the District. It is not likely, however, that District ranges will ever again graze as many stock sheep as in the past.

OWNERSHIP OF DEMAND DEPOSITS—TWELFTH DISTRICT

ON January 31, 1950, total demand deposits of individuals, partnerships, and corporations in the Twelfth District were practically unchanged from the year before, according to the Federal Reserve System's recent annual survey. In the District, the level of total demand deposits has shown but little change since 1946. This year's total is virtually the same as in 1946, and only 2 percent below the 1948 peak. A decline in personal deposits this year was offset by gains in holdings of businesses, particularly financial businesses. In the nation, personal nonfarm deposits as well as total demand deposits increased 1 percent.

Financial businesses increase balances by $80 million

Financial businesses, and particularly insurance companies, increased their demand deposits the most. In the Twelfth District, insurance corporations swelled the size of their deposits by almost 18 percent, while District financial businesses as a group increased theirs by 10 percent. For the nation as a whole, demand deposits of financial business were up 7 percent, also the largest percentage increase for any of the groups analyzed.

Non-financial business registered no appreciable net change in demand deposit holdings in the Twelfth Dis-

trict during the year, as retail and wholesale merchants' commercial balances were reduced 2 percent while deposits of manufacturing and mining firms and other non-financial enterprises rose slightly. In the United States as a whole, retailers' and wholesalers' deposits were drawn down only negligibly and non-financial businesses increased their total demand deposit holdings by 2 percent.

Individuals' accounts reduced in District

Individuals reduced their personal accounts in Twelfth District banks for the third successive year, by 2 percent or $60 million. The decline may be attributed to several factors. Some consumers apparently spent more than they received during the year, and some individuals apparently transferred funds from their checking accounts into other assets such as savings accounts or securities, judging from the continued growth in time deposits of banks and in balances at savings and loan associations. Both in the District and in the nation, farmers' deposits declined relative to total personal demand deposits. In the Twelfth District, the decline in farmers' deposits accounted for one-third of the decline in personal deposits; the nation, personal deposits other than farmers' actually rose. For Twelfth District farmers, the drop represents the third successive year-to-year net reduction in their commercial balances, and presumably reflects in large part declining agricultural prices and cash receipts.

Large accounts up, others down

In terms of the size of accounts, the changes in ownership of Twelfth District demand deposits tended to offset one another. Total balances in accounts over $25,000 increased 3 percent, while combined figures for all other accounts declined 2 percent. These changes closely reflect the changes in deposits of financial businesses and of individuals, described above. Deposits of financial businesses are of course predominantly in accounts over $25,000, and these large financial accounts swelled by 14 percent during the year; in fact, the entire net addition to financial deposits took place in this size category. Contrariwise, the entire net reduction in personal checking balances took place in accounts under $10,000, which comprise over two-thirds of total personal demand deposits; combined totals for all larger personal accounts were unchanged since January 31, 1949.

It is worth noting, however, that in the under-$10,000 and $10,000-$25,000 categories, not one of the District economic groups analyzed registered a net increase in demand deposits. In the largest deposit size group, $25,000 and over, only merchants and "other" depositors (a residual classification of bank trust funds, non-profit organizations, and foreign holders) had net withdrawals during the year.

Combined demand deposits of Twelfth District banking offices in each size group changed less than 1 percent, except the very smallest (banking offices with total deposits under $1 million), whose demand deposits of individuals, partnerships, and corporations exceeded the year-ago level by 7 percent.

PERCENT CHANGES, JANUARY 1949-JANUARY 1950, IN DEMAND DEPOSITS OF INDIVIDUALS, PARTNERSHIPS, AND CORPORATIONS—TWELFTH DISTRICT

Type of holder	Size of account: Balances under $10,000	Balances $10,000-25,000	Balances over $25,000	Total
Manufacturing and mining	—2	—3	+ 2	+ 2
Retail and wholesale trade	—2	—2	— 3	— 2
Other non-financial	—2	—2	+ 7	+ 3
Total non-financial	—2	—2	+ 2	0
Financial	0	—9	+14	+10
Total domestic business	—2	—3	+ 4	+ 2
Personal	—2	0	0	— 2
Other[1]	—5	—3	— 5	— 4
Total	—2	—2	+ 3	0

[1] Non-profit associations, foreign deposits, and trust funds of banks.

ESTIMATED DISTRIBUTION BY OWNERSHIP OF DEMAND DEPOSITS OF INDIVIDUALS, PARTNERSHIPS, AND CORPORATIONS, TWELFTH DISTRICT AND UNITED STATES, ON SELECTED DATES 1947-50

(in millions)

Type of holder	Twelfth District: Feb. 1947	Jan. 1948	Jan. 1949	Jan. 1950	% change Jan. 1949 to Jan. 1950	United States: Jan. 1949	Jan. 1950	% change Jan. 1949 to Jan. 1950
Manufacturing and mining	$1,060	$1,160	$1,160	$1,180	+ 2	$17,100	$17,600	+3
Retail and wholesale trade	1,610	1,650	1,600	1,560	— 2	13,400	13,300	0
Other non-financial	1,010	1,100	1,070	1,100	+ 3	8,900	9,300	+4
Total non-financial	3,690	3,910	3,830	3,840	0	39,400	40,200	+2
Financial	730	790	770	850	+10	7,200	7,700	+7
Total domestic business	4,420	4,700	4,600	4,690	+ 2	46,600	47,900	+3
Farmers	820	800	770	750	— 3	7,100	6,800	—4
Other personal	2,870	2,820	2,740	2,700	— 1	22,000	22,300	+1
Total personal	3,690	3,620	3,510	3,450	— 2	29,100	29,100	0
Other[1]	440	400	450	430	— 4	5,200	5,000	—4
Total	8,550	8,770	8,560	8,570	0	80,800	82,000	+1

[1] Non-profit associations, foreign deposits, and trust funds of banks.
Note: Figures will not necessarily add to totals because of rounding.

BUSINESS INDEXES—TWELFTH DISTRICT[1]

(1935-39 average = 100)

Year and month	Industrial production (physical volume)[2]								Total mf'g employment[4]	California factory payrolls[4]	Carloadings (number)[2]	Dep't store sales (value)[2]	Dep't store stocks (value)[5]	Retail food prices[3]
	Lumber	Petroleum[3] Crude	Petroleum[3] Refined	Cement	Lead[3]	Copper[3]	Wheat flour[3]	Electric power						
1929	148	129	127	110	171	160	106	83	....	111	135	112	134	132.0
1931	77	83	90	74	104	75	101	82	....	73	91	92	110	104.0
1932	46	78	84	48	75	33	89	73	....	54	70	69	86	89.8
1933	62	76	81	54	75	26	88	73	....	53	70	66	78	86.8
1934	67	77	81	70	79	36	95	79	....	64	81	74	83	93.2
1935	83	92	91	68	89	57	94	85	88	78	88	86	88	99.6
1936	106	94	98	117	100	98	96	96	100	96	103	99	96	100.3
1937	113	105	105	112	118	135	99	105	112	115	109	106	108	104.5
1938	88	110	103	92	96	88	96	102	96	101	96	101	101	99.0
1939	110	99	103	114	97	122	107	112	104	110	104	109	107	96.9
1940	120	98	103	124	112	144	103	122	118	134	110	119	114	97.6
1941	142	102	110	164	113	163	103	136	155	224	128	139	137	107.9
1942	141	110	116	194	118	188	104	167	230	460	137	171	190	130.9
1943	137	125	135	160	104	192	115	214	305	705	133	203	174	143.4
1944	136	137	151	128	93	171	119	231	295	694	141	223	179	142.1
1945	109	144	160	131	81	137	132	219	229	497	134	247	183	146.3
1946	130	139	148	165	73	109	128	219	175	344	136	305	238	167.4
1947	141	147	159	193	98	163	133	256	184	401	142	330	300	200.3
1948	144	149	162	211	107	153	116	284	189	430	134	353	346	216.1
1949	136*r*	147	167	202	103	140	104	303	186	423*r*	126	331*r*	323	209.6
1949														
February	115	152	170	173	107	129	118	297	185	423	103	314	327	214.1
March	131	153	176	195	120	169	102	295	187	412	118	328*r*	342	213.3
April	141	152	169	212	124	167	82	303	189	412	126	335	331	215.6
May	143	149	170	215	126	159	100	304	189	415	134	340	320	211.0
June	146	148	174	219	118	138	104	315	188	419	139	335	313	209.9
July	136	146	162	217	98	131	108	299	186	423	120	329	302	206.3
August	135	144	165	209	93	121	109	310	186	429	138	333	309	205.7
September	140	144	166	208	84	136	108	308	185	437	138	326	333	207.3
October	139	141	158	200	77	136	104	306	185	435	124	337	330	205.5
November	147	140	161	200	89	145	101	299	183	421	129	319	331	205.7
December	149	140	156	196	105	140	89	306	182	424	128	339	315	202.5
1950														
January	121	140	161	178	123	168	104	322	179	417	96	316	323	206.4
February	131	139	157	179	118	164	91	313	182	421	108	323	338*r*	204.1
March	148	138	151	201	121	168	91	299	184	427	125	321	353	203.4

BANKING AND CREDIT STATISTICS—TWELFTH DISTRICT

(amounts in millions of dollars)

Year and month	Condition items of all member banks[7]				Bank rates on short-term business loans[9]	Member bank reserves and related items[10]					Bank debits index 31 cities[3,13] (1935-39=100)[2]
	Loans and discounts	U.S. Gov't securities	Demand deposits adjusted[8]	Total time deposits		Reserve bank credit[11]	Commercial operations[12]	Treasury operations[12]	Coin and currency in circulation[11]	Reserves	
1929	2,239	495	1,234	1,790	.....	− 34	0	+ 23	− 6	175	146
1931	1,898	547	984	1,727	.....	+ 21	− 154	+ 154	+ 48	147	97
1932	1,570	601	840	1,618	.....	− 42	− 175	+ 234	+ 30	142	68
1933	1,486	720	951	1,609	.....	− 2	− 110	+ 150	− 18	185	63
1934	1,469	1,064	1,201	1,875	.....	− 7	− 198	+ 257	+ 4	242	72
1935	1,537	1,275	1,389	2,064	.....	+ 2	− 163	+ 219	+ 14	287	87
1936	1,682	1,334	1,791	2,101	.....	+ 6	− 227	+ 454	+ 38	479	102
1937	1,871	1,270	1,740	2,187	.....	− 1	− 90	+ 157	− 3	549	111
1938	1,869	1,323	1,781	2,221	.....	− 3	− 240	+ 276	+ 20	565	98
1939	1,967	1,450	1,983	2,267	.....	+ 2	− 192	+ 245	+ 31	584	102
1940	2,130	1,482	2,390	2,360	.....	+ 2	− 148	+ 420	+ 96	754	110
1941	2,451	1,738	2,893	2,425	.....	+ 4	− 596	+1,000	+ 227	930	134
1942	2,170	3,630	4,356	2,609	.....	+ 107	−1,980	+2,826	+ 643	1,232	165
1943	2,106	6,235	5,998	3,226	.....	+ 214	−3,751	+4,486	+ 708	1,462	211
1944	2,254	8,263	6,950	4,144	.....	+ 98	−3,534	+4,483	+ 789	1,706	237
1945	2,663	10,450	8,203	5,211	.....	− 76	−3,743	+4,682	+ 545	2,033	260
1946	4,068	8,426	8,821	5,797	.....	+ 9	−1,607	+1,329	− 326	2,094	298
1947	5,358	7,247	8,922	6,006	.....	− 302	− 443	+ 630	− 206	2,202	326
1948	6,032	6,366	8,655	6,087	.....	+ 17	+ 472	− 482	− 209	2,420	355
1949	5,925	7,016	8,536	6,255	3.20	+ 13	− 931	+ 378	− 65	1,924	350
1949											
March	5,899	6,208	8,147	6,102	3.27	− 15	− 34	+ 6	− 31	2,299	364
April	5,811	6,230	8,157	6,109	.....	+ 6	− 127	+ 109	+ 11	2,264	354
May	5,738	6,357	8,154	6,112	.....	− 8	− 202	+ 94	+ 37	2,128	345
June	5,762	6,330	8,006	6,179	3.24	0	− 53	− 5	0	2,063	351
July	5,707	6,548	8,139	6,179	.....	+ 20	− 213	+ 130	− 16	1,997	344
August	5,729	6,846	8,221	6,170	.....	− 30	− 194	+ 40	+ 1	1,832	332
September	5,853	6,863	8,273	6,186	3.14	+ 13	+ 41	− 37	+ 9	1,837	336
October	5,873	6,909	8,317	6,196	.....	+ 2	− 95	+ 92	+ 7	1,831	351
November	5,919	6,944	8,511	6,157	.....	− 12	+ 21	− 2	− 16	1,854	349
December	5,925	7,016	8,536	6,255	3.16	+ 40	+ 32	+ 30	− 8	1,924	376
1950											
January	5,901	7,123	8,620	6,244	.....	− 48	− 92	+ 5	− 62	1,892	354
February	5,893	6,999	8,311	6,262	.....	+ 5	− 34	− 7	+ 10	1,848	360
March	5,946	6,923	8,167	6,303	3.36	− 2	− 223	+ 204	− 16	1,842	373
April	5,937	6,881	8,289	6,285	.....	+ 28	− 126	+ 106	+ 4	1,821	360

[1] All monthly indexes but wheat flour, petroleum, copper, lead, and retail food prices are adjusted for seasonal variation. Excepting 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; Manufacturing employment, U.S. Bureau of Labor Statistics and cooperating state agencies; Factory payrolls, California State Division of Labor Statistics and Research; Retail food prices, U.S. Bureau of Labor Statistics; and Carloadings, various railroads and railroad associations. [2] Daily average. [3] Not adjusted for seasonal variation. [4] Excludes fish, fruit, and vegetable canning. Factory payrolls index covers wage earners only. [5] At retail, end of month or year. [6] Los Angeles, San Francisco, and Seattle indexes combined. [7] Annual figures are as of end of year; monthly figures as of last Wednesday in month or, where applicable, as of call report date. [8] Demand deposits, excluding interbank and U.S. Gov't deposits, less cash items in process of collection. Monthly data partly estimated. [9] New quarterly series beginning June 1948. Average rates on loans made in five major cities during the first 15 days of the month. [10] End of year and end of month figures. [11] Changes from end of previous month or year. [12] 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. [13] Debits to total deposit accounts, excluding interbank deposits. *p*—preliminary. *r*—revised.