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SOUTHWESTERN AGRICULTURE IN TRANSITION

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Significant changes occurred in southwestern farming and ranching during the past quarter century. During this time, agriculture experienced a severe depression, two wars, a prolonged drought, and the birth of numerous programs designed to assist the farm business in weathering economic and natural calamities. A growing population, the adoption of technological improvements in agriculture—as well as in nonagricultural industries, and a high level of general business activity have resulted in far-reaching changes in farming and farm-family living.

The acceleration of the trend from a self-sufficing to a commercial-type agriculture has resulted in the need for increasingly larger amounts of cash to defray the costs of family living items and farm production goods. As a result, farmers have become more dependent upon other segments of the economy to supply their needs and provide a market for their products.

The Basis for Change

Much of the basis for the changes in American agriculture had been laid prior to 1930. The establishment of agricultural experiment stations and extension services and the introduction of vocational agricultural training had provided research and education to rural people. The foundation for accelerating the rate of mechanization also had been laid. The cumbersome tractors, adapted principally for heavy work, were gradually being replaced with lighter, faster general-purpose tractors, and a start had been made in equipping them with rubber tires and mounted equipment.

Government programs designed to meet the problems of low agricultural income probably stimulated some of the changes in farming. Under the acreage control programs of the Agricultural Adjustment Administration of the early 1930's, farmers were anxious to increase acreages of high-profit crops in order to utilize equipment fully and obtain the benefits of the programs. The reduction in numbers of croppers and share tenants was retarded during the early part of the Agricultural Adjustment Administration, apparently

because landlords were subject to loss of benefit payments if they needlessly removed or discriminated against tenants.

A major stimulus which accelerated changes in agriculture was the exceptionally heavy need for farm products during World War II and the continuance of a high level of demand for food and fiber following the cessation of hostilities. Shortages of agricultural labor, created by manpower requirements for the Armed Forces and defense industries, resulted in further pressure to mechanize and combine farming units.

Farm Productivity

Output per farm worker rose sharply as those remaining in agriculture utilized the advances of science and technology. Increased farm labor productivity in the United States has made it possible for one worker to supply almost 20 people with agricultural products, which reflects an increase of about nine persons since 1940 as contrasted with an increase of about seven persons during the 100 years prior to 1940. This increased efficiency has resulted from many changes, which often have been so gradual that they passed almost unnoticed.

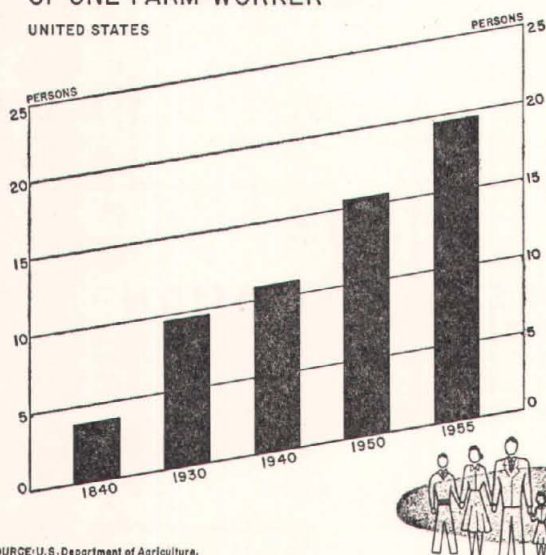
Much of the gain in farm output in the Southwest has resulted from the adoption of new varieties and hybrids, the increased use of higher-analysis fertilizers and other soil-conserving practices, the expansion of irrigation, the increased timeliness of farm operations which results from greater mechanization, and the utilization of acreages formerly devoted to the production of feed for work stock. The transition in southwestern agriculture has resulted in changes in the structure of farming and ranching and in rural living that are perhaps irreversible.

One of the more important developments is the increased size of farms¹ and the accompanying decline in numbers.

¹ The United States Bureau of the Census makes no distinction between farms and ranches; thus, livestock ranches are included in the general term "farms." All the land under the control or management of one person or partnership is included as one farm. Control may be through ownership, lease, rental, or cropping arrangement.

PERSONS SUPPORTED BY PRODUCTION OF ONE FARM WORKER

UNITED STATES



SOURCE: U.S. Department of Agriculture.

The size of farms in the District states has been growing since 1925, but it was not until a decade later that the trend toward larger units accelerated. During much of this time, the total land area devoted to farming also was increasing, but not as rapidly as the size of farms.

Land in Farms

In 1930, slightly more than half of the land area in the District states was in farms. Since then, the land in farms has increased more than a third, rising in 1954 to 73 percent of the total land area in these states. The greatest increases in the proportion of land in farms since 1930 have occurred in Arizona, New Mexico, and Texas. Part of the gain reflected an expansion in irrigation, but a portion resulted from a more complete enumeration of farm lands in subsequent censuses.

Under existing technology, the acreage in farms in the District states in 1954, at 284,387,506 acres, probably is close to the peak. Reclamation may provide additional acreage, but widening and construction of roads and expansion of industrial, recreational, and residential areas are likely to result in a net reduction in farm land in the future.

The number of farms in District states, which reached a peak of 944,751 in 1935, declined to 553,433 in 1954, or almost 40 percent. The average size of farm increased to 514 acres, being more than double the size a quarter century earlier.²

Although the average size of farm increased steadily in each of the District states from 1930 to 1954, not all of the

states experienced the same rate of growth. The acreage per farm in Arizona increased sixfold; in New Mexico, it rose over $2\frac{1}{3}$ times; in Texas the acreage per farm almost doubled; and farm sizes in both Oklahoma and Louisiana increased about 80 percent. Between 1950 and 1954, the average size of farm in the District increased 16 percent, compared with a 12-percent rise for the Nation.

The growth in average farm size for the District states was not as rapid during the past few years as it was immediately prior to and during World War II. During the 1935-45 period, the average farm size increased 55 percent; but during the next 10 years, the acreage per farm rose only 35 percent. Most of this difference in rate of growth, however, resulted from the extremely large gains in Arizona and New Mexico — particularly during 1940-45.

The exceptional gains in farm size immediately preceding and during World War II partially reflected the rapid combination of units to take advantage of mechanization and to offset farm labor shortages, as well as the relatively profitable operations resulting from rising farm product prices. More importantly, however, the gain in farm size was the result of substantial additions of grazing land in Arizona and New Mexico. The changes among the various sizes of farms comprising the average have been even more significant than the changes in the average size of farm. Studying only the trend in average size does not pinpoint the important developments that have resulted from the impacts of economic and technological forces.

Size of Farms

The size of the farm business in District states — as measured by acreage — has followed three broad trends. First, there has been an increase in the proportion of farms with fewer than 10 acres. Secondly, the proportion of small- and medium-size farms (those with between 10 and 179 acres) has been declining, with the largest decrease occurring in the percentage of farms with fewer than 100 acres. Thirdly, the proportion of the District's farms with 180 acres or larger has increased, the highest relative gain occurring in the group of farms with 260 acres or more.

The proportion of farms in the District states with fewer than 10 acres has increased $2\frac{1}{3}$ times since 1930 and now accounts for a tenth of the total. Most of these represent rural residences for retired persons or part-time farms of workers employed in off-farm jobs. This group of extremely small farms may increase further, particularly if industry locates in rural areas and provides employment opportunities. In addition, as older farmers become eligible for social security benefits, many of them may decide to retire to small acreages to occupy their time and supplement their retirement benefits with home-grown produce.

Farms with between 10 and 179 acres — including the traditional homestead size — accounted for only 56 percent of the total number of farms in the District states in 1954,

² Because of changes in the census definition of a farm, the data are not strictly comparable throughout the period; however, the changes have not been great enough to obscure basic trends.

compared with over three-fourths in 1930. More than half of the decline in this group occurred among farms with fewer than 50 acres, which generally are too small to be economic units. Many of these small tracts are subsistence farms, providing only part-time employment for the operator and his family, and a substantial portion of the family's income is derived from off-farm sources.

The problem of low farm income is most acute among operators of farms within the 10- to 179-acre group. In the absence of supplemental income, the farm family's living may be near subsistence levels. The agricultural resources of operators of small units usually are insufficient to produce an adequate volume of crops and livestock or to utilize fully the labor of the farm family, except where highly specialized production is feasible. Production of high-value commodities, such as vegetables and dairy products, is one method of overcoming the disadvantage of small-size farms. There is a limit to which this can be accomplished, because of location or inadequate market outlets. Farms in the 10- to 179-acre group may show some further decline in response to the need for large-volume output at lower per unit costs.

In 1954, a third of the farms in District states had 180 acres or more, or about twice the proportion in 1930. The greatest relative gain was made by farms with 260 acres or over, particularly those with above 1,000 acres. The proportion of farms in the latter group has almost tripled since 1930, although they still comprise less than 6 percent of the total. The rising importance of farms with 180 acres or more probably reflects efforts of farmers to take advantage of mechanization and volume output.

The increased proportion of extremely large-size farms (1,000 acres or more) is alarming to some people. Most of these farms are located in areas where considerable acreage is needed for a sufficiently large output to be economically feasible. The large-size farms are located primarily in the low-rainfall areas in the western part of the District, where extensive range livestock operations and wheat farming are conducted. In 1954, about 70 percent of the farms with 1,000 acres or more in the District states were located west of a line generally extending southward from the northern boundary of Oklahoma through Enid, Oklahoma, and San Antonio, Texas, to the Rio Grande River.

The trend toward fewer small-size farms and the gain in numbers of larger units are not phenomena of the post-Korean period only. The increase in the number of farms with 1,000 acres or more in District states between 1950 and 1954 was only a fourth of that between 1935 and 1940 and about a third of the increase between 1930 and 1935. The decrease in numbers of farms of 10 to 179 acres during the 5-year period ended in 1954 was about the same as in 1935-40.

A further increase in the number of large farms is likely as the economies of large-scale operations are more fully realized. Continued improvement in the design and operation of farm equipment and machinery may result in addi-

PERCENTAGE DISTRIBUTION OF TOTAL FARMS, BY SIZE GROUP
Five Southwestern States

Size group (Acres)	1930	1935	1940	1945	1950	1954
Under 10.....	4.3	6.4	7.3	10.9	8.5	10.1
10 to 29.....	19.4	19.4	17.4	15.5	15.3	14.2
30 to 49.....	34.8	13.8	12.4	11.3	10.7	9.7
50 to 69.....	21.9	8.9	8.1	7.4	7.1	6.4
70 to 99.....	21.9	11.6	11.0	9.8	9.3	8.6
100 to 139.....		9.9	9.8	9.2	9.2	8.3
140 to 179.....		11.2	10.8	10.2	9.7	8.9
180 to 219.....		3.7	4.1	4.3	4.7	4.6
220 to 259.....		2.5	3.0	3.2	3.8	3.9
260 to 499.....	6.8	7.1	8.7	9.8	11.5	12.8
500 to 999.....	2.8	3.2	4.0	4.6	5.6	6.9
1,000 and over.....	2.0	2.3	3.4	3.8	4.6	5.6
Total.....	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: United States Bureau of the Census.

tional consolidation of holdings, but growth of large-scale units is apt to be a gradual process.

It is difficult, if not impossible, to pinpoint any single factor as being mainly responsible for the rate at which the changes in the various sizes of farms have occurred. Mechanization, war-induced farm labor shortages, nonfarm employment opportunities, changes in farm profit prospects, weather risks, and even farm programs have been factors influencing the size of the farming unit. Generally, the average acreage of all farms increased during the past quarter century — regardless of the principal product grown; thus, the factors responsible for the trends in the size of farms apparently were common to all types of farms. The changes in the proportion of farms within the various size groups illustrate the fact that agriculture can be quite dynamic in making adjustments to conform to a different set of relationships.

Trends in the average acreage in farms are an imperfect measure of the changes in the size of the agricultural business. Acreages needed for economic family-size farms in the production of dry-land crops are different from those for irrigated crops; acreages of pasture needed in eastern parts of the District for a given number of animal units are far below requirements for the same number of livestock in arid western areas. Within the same general farming area, differences in soils, topography, and types of enterprises — and even in the skills and managerial ability of operators — will result in variations in acreages needed for an economic farm unit. The 1954 Census of Agriculture contains data on farms by economic class in 1949 and 1954 which provide the distribution of farms in terms of gross value of sales. Between the years, the changes occurring in economic classes of farms would be influenced greatly by relative changes in production and prices.

Total agricultural output in the District states in 1954 was a tenth smaller than during 1949. This decrease resulted from a 16-percent decline in crop output, which was only partially offset by a 1-percent increase in marketings of livestock and livestock products. Moreover, prices for all farm commodities were 4 percent lower, inasmuch as a 9-percent increase in crop prices was more than offset by a 15-percent decline in livestock prices. Thus, it would be reasonable to expect a reduction in the proportion of the farms in 1954 with extremely large gross sales and an increase in the pro-

portion of those with a smaller dollar volume of marketings. This was not strictly true.

Value of Sales

The proportion of noncommercial farms (part-time and residential) in District states increased to almost 40 percent of the total number of farms in 1954, or 5 percentage points more than in 1949. In the Nation, these farms accounted for about 30 percent of the total, or slightly less than in 1949. The gain in importance of noncommercial farms in the Southwest partially reflects the rising significance of off-farm work and the larger number of farm families whose income from other employment exceeded that received from sales of farm products, although the smaller output and lower prices between the 2 years may have been a factor.

The proportion of noncommercial farms among the southwestern states in 1954 was the lowest in Arizona (33 percent) and the highest in Louisiana (almost 46 percent). These farms accounted for 38 percent of the total in both Oklahoma and Texas and 43 percent in New Mexico. The proportions increased from the 1949 levels in all of the southwestern states except Arizona.

In line with trends for the Nation, commercial farms with sales of less than \$5,000 in 1954 accounted for a smaller proportion of all southwestern farms than 5 years previously. On the other hand, the proportion of commercial farms in the District states with sales totaling \$25,000 or more increased slightly, and the percentage of farms with gross marketings of \$10,000 to \$24,999 gained fractionally between 1949 and 1954. Excluding part-time and residential farms, each class with sales of \$2,500 or more in 1954 comprised a larger proportion of total commercial farms than in 1949. Almost 58 percent of commercial farms in 1954 had gross

FARMS BY ECONOMIC CLASS, 1954 AND 1949

Five Southwestern States

Class of farms (Value of products sold)	Number		As percentage of			
			All farms		Commercial farms	
	1954	1949	1954	1949	1954	1949
COMMERCIAL FARMS.....	335,088	410,166	60.5	64.9	100.0	100.0
Class I (\$25,000 or more).....	20,309	18,693	3.7	3.0	6.1	4.6
Class II (\$10,000-\$24,999).....	40,700	43,428	7.3	7.2	12.1	11.1
Class III (\$5,000-\$9,999).....	55,925	67,340	10.1	10.7	16.7	16.4
Class IV (\$2,500-\$4,999).....	76,024	89,882	13.7	14.2	22.7	21.9
Class V (\$1,200-\$2,499).....	85,288	105,722	15.4	16.7	25.4	25.8
Class VI (\$250-\$1,199).....	56,842	83,101	10.3	13.1	17.0	20.2
OTHER FARMS.....	219,007	221,839	39.5	35.1	—	—
Part-time.....	87,294	83,070	15.8	13.1	—	—
Residential (less than \$250 value of products sold).....	131,468	138,177	23.7	21.9	—	—
Abnormal (public and private institutional farms, etc.).....	245	592	.0	.1	—	—
ALL FARMS.....	554,095	632,005	100.0	100.0	—	—

¹ Farms with the value of sales totaling \$250 to \$1,199 and with operators either reporting 100 days or more of off-farm work or reporting other income exceeding the value of farm sales.

SOURCE: United States Bureau of the Census.

sales of \$2,500 or more, compared with 54 percent during the previous census period.

The largest proportion of residential and part-time farms and low-income commercial farms is located in the eastern third of the District, where farms are small and nonfarm employment opportunities are relatively more numerous. For example, over 72 percent of the noncommercial farms in Texas in 1954 were located in Crop Reporting Districts 4, 5, and 8, which have significant industrial development. These three crop reporting districts accounted for over half of the commercial farms in the State. Approximately three-fourths of the farms selling between \$250 and \$1,199 of products were located in these three districts, as were two-thirds of the farms with gross sales between \$1,200 and \$2,499.

In contrast, western Texas Crop Reporting Districts 1-N, 1-S, and 6 accounted for only 2 percent of the State's noncommercial farms and about 14 percent of the commercial farms. However, fewer than 6 percent of the commercial farms with sales between \$250 and \$2,499 were located in these districts. Almost half of the Texas commercial farms with sales of \$25,000 or more in 1954 were located in the three western crop reporting districts, compared with fewer than a fifth of the total in the three eastern districts.

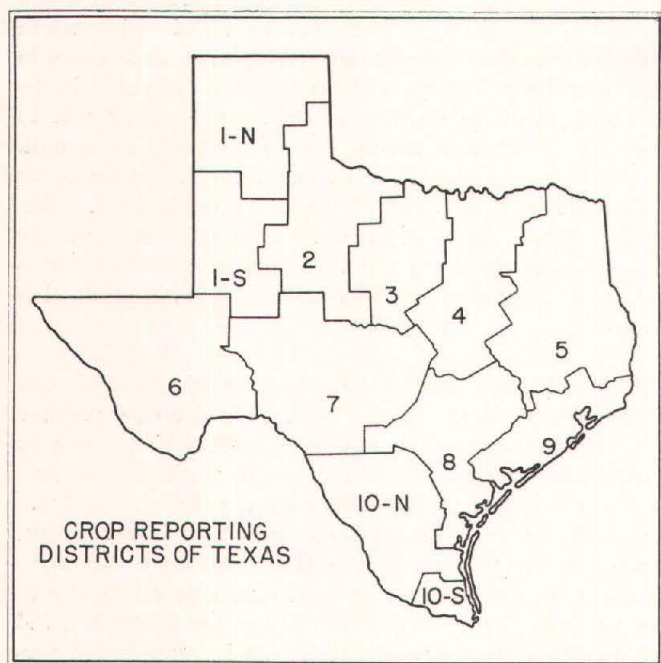
PERCENTAGE DISTRIBUTION OF FARMS, BY ECONOMIC CLASS, 1954

Texas Crop Reporting Districts

Crop reporting district	Com-mer-cial farms	COMMERCIAL FARMS, BY CLASS (Value of products sold)							Other farms¹
		Class I (\$25,000 or more)	Class II (\$10,000-\$24,999)	Class III (\$5,000-\$9,999)	Class IV (\$2,500-\$4,999)	Class V (\$1,200-\$2,499)	Class VI (\$250-\$1,199)		
1-N.....	6.1	23.2	14.3	6.5	3.4	1.5	0.8	1.1	
1-S.....	6.6	22.0	18.8	6.7	3.1	1.7	.6	.9	
2.....	9.8	4.1	11.1	15.4	13.3	7.6	3.9	3.3	
3.....	7.0	2.1	4.2	6.7	6.9	9.3	8.4	7.6	
4.....	22.0	4.8	13.3	22.8	28.3	27.4	20.0	17.9	
5.....	15.2	4.1	7.7	10.2	11.0	18.7	33.2	41.8	
6.....	1.0	4.7	1.8	.9	.5	.3	.3	.4	
7.....	5.5	4.4	5.7	6.6	6.7	5.3	3.5	3.1	
8.....	15.2	9.3	9.5	10.6	16.4	19.2	20.7	12.6	
9.....	5.4	10.4	5.7	6.5	5.1	3.9	4.4	7.7	
10-N.....	2.5	2.8	2.0	2.8	2.4	2.6	2.3	1.7	
10-S.....	3.7	8.1	5.9	4.3	2.9	2.5	1.9	1.9	
State...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

¹ Includes part-time, residential, and abnormal farms.

SOURCE: United States Bureau of the Census.



As contrasted to the eastern crop reporting districts of Texas, agriculture in the western part of the State is characterized by large farm and ranch units, more extensive irrigation, and topographic and climatic conditions favoring the use of large-scale machinery. Fewer opportunities for alternative employment and crop failure risks have prompted commercialization of agriculture to a greater extent than in the eastern districts.

One of the disturbing factors in the southwestern agricultural situation is that more than 40 percent of the commercial farms have gross sales below \$2,500. When production expenses are deducted, little remains for family living, repayment of debts, or capital accumulation. Although data are not available on the net income of these low-income farms, the average net income (including value of home consumption and rental value of farm dwellings) for all farms in the District in 1954 totaled \$2,263, or 22 percent less than in 1949.

Off-farm Employment

Fortunately, off-farm work and other sources have tended to sustain the farm family's income. During 1954, almost half of the farm operators in the District states reported off-farm work; of this group, two-thirds worked 100 days or more off their farms. A quarter century earlier, only 29 percent of the operators reported off-farm work, and fewer than a third of these spent over 100 days in such employment. While data are not available on the amount of off-farm income received by District farmers, 38 percent of the farm operators in 1954 had outside income exceeding agricultural income. In the Nation, about 29 percent of the total net income of the farm population was derived from nonfarm sources.

The rising trend in the proportion of farmers engaged in off-farm work is the result of pressures to supplement family income and the attractiveness of alternative nonagricultural employment. Some of the increase in off-farm work may be

due to custom farm labor and employment on neighboring farms, but a major proportion probably is the result of employment in nonagricultural jobs. Since 1930, the farm population in the Southwest has declined almost one-half, as opportunities for nonfarm employment have increased. In many instances, part-time off-farm employment may be the first step before leaving the agricultural field.

The loss of farm population in many communities has resulted in rather severe adjustments in the business of merchants. Where expansion in nonagricultural segments occurred, adjustments were less severe since merchants were able to shift emphasis to services and products needed by nonagricultural customers. On balance, the increase in off-farm work and the smaller farm population probably have resulted in a gain to the southwestern economy as a whole. The enlargement of agricultural holdings has made it possible for farmers to increase efficiency and introduce economies, and, therefore, to receive a larger proportion of the total agricultural income. For persons remaining on part-time farms, supplementation of the family's income through off-farm employment has resulted in a higher and more stable income and has contributed to the growth of the economy.

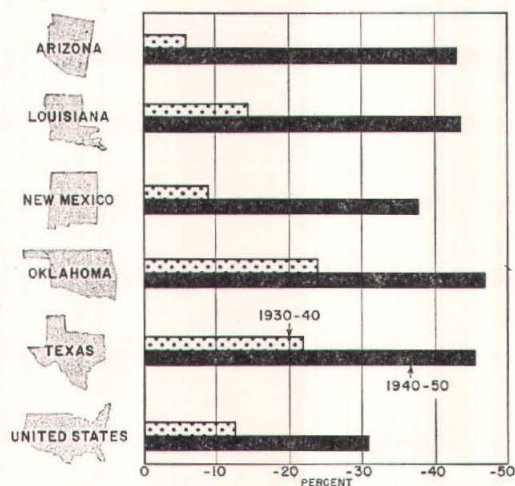
Mechanization

Paralleling the decrease in the number of farms and the farm population and the increase in the size of farms and off-farm work has been the striking growth in the usage of tractors and auxiliary equipment, electricity, and fuel-driven power units. Power equipment makes it possible for farmers to plant, cultivate, and harvest crops from larger acreages in less time and with the same or lower labor requirements.

Since 1940, the number of tractors on farms in the District states has increased 185 percent. The harvested acreage per tractor in 1940 was 276 acres; but by 1954, it had been reduced to only 88 acres, or about two-thirds. The reduction in harvested acreage per tractor does not indicate fully the extent to which tractor power usage has risen, because of the upward trend in sales of tractors with higher horsepower ratings. In 1939, about 94 percent of the all-purpose farm tractors sold in the Nation had belt horsepower ratings of 30 or below, compared with only 16 percent in 1954; approximately 45 percent of the tractors sold in 1954 were rated at 40 belt horsepower or above.

Accompanying the higher tractor horsepower, auxiliary equipment was developed which increased the capacity of the operator to carry on the farm business. The larger and more efficient machines permit the operator to make substantial savings in labor, time, and energy — and often in costs of production. In recent years, the use of other types of farm equipment has increased at a faster rate than that for tractors. Although the number of farm tractors in the District states rose a fifth between 1950 and 1954, pick-up hay balers increased 73 percent, corn pickers more than doubled, and the number of field forage harvesters more than quadrupled. Mechanical harvesting of cotton has increased steadily; in 1955, over a fifth of the Texas cotton crop was harvested mechanically, or double the proportion in 1949.

DECREASE IN RURAL-FARM POPULATION
FIVE SOUTHWESTERN STATES AND UNITED STATES



Percentage of persons alive at both the beginning and end of each decade.
SOURCE: U.S. Department of Agriculture.

The substitution of machinery for labor has been an almost continuous process in agriculture. As labor shortages grew during World War II, farm operators increasingly sought to introduce labor-saving equipment; however, wartime scarcities of machinery retarded the rate of mechanization. After hostilities ceased, the trend toward mechanization accelerated as machinery became more plentiful and high wages in the nonfarm segments drew more people from farms.

As mechanization of some of the more important southwestern crops—particularly corn and cotton—is adopted on a wider scale, the proportion of hired workers to family workers may decline. Larger farm units and lower birth rates of farm families are counteracting influences which may tend to maintain the importance of hired workers in agriculture. Many farm chores—especially in livestock production—require decisions and close attention which machine technology has not been able to supplant; however, mechanized watering and feeding devices and other innovations are reducing labor requirements.

Progress in mechanization and the adoption of improved techniques in production and marketing have resulted in more exacting requirements for successful farm operators and workers. A modern farm needs alert, skilled workers to make the most effective use of power equipment. The sizable investment in much of today's equipment requires careful and regular maintenance, and the high-speed machinery requires expert operators. Obtaining and keeping good "tractor men" remains a problem of farm operators, as many workers highly skilled in the use and care of farm machinery are also well adapted to semiskilled and skilled jobs in nonagricultural lines.

Reductions in numbers of workers needed to carry on farm operations have resulted in improvement in communications between the farmer and his workers and in the supervision of tasks. As long as large numbers of workers are needed, expansion in farm size under one management is complicated unless an effective method of worker supervision is developed. The use of large-scale power equipment for farm work permits the operator to spend a greater portion of his time in more productive farm management activities.

Management decisions of farmers are integrally related to the tenure arrangements under which they operate. Under the relatively high capital requirements of present-day farming, stable tenure arrangements are desirable to justify the accumulation of facilities and equipment for the efficient use of resources. Stability of tenure is especially helpful during times of natural adversity, such as drought, or when additional capital is required to undertake adjustments in the farming operations resulting from natural and economic forces and—in some cases—governmental programs.

Farm Operators

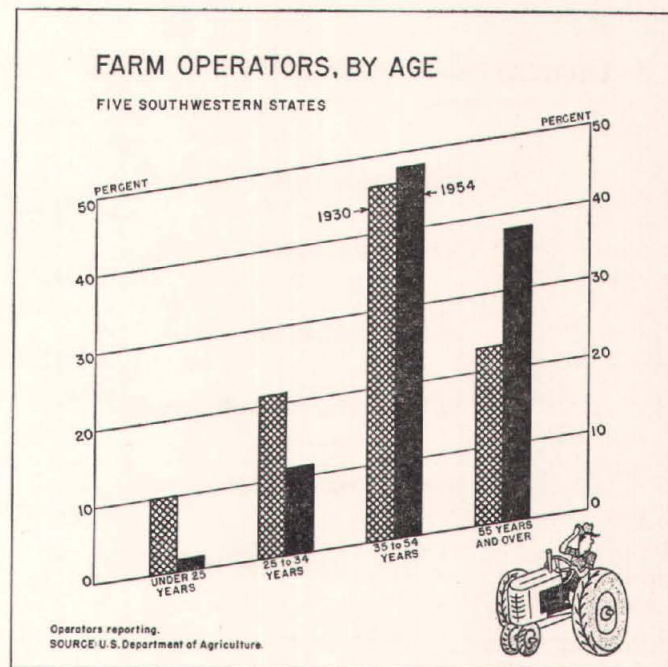
During the past quarter century, the proportion of farm-owner operators in the District states increased continuously. In 1954, over half of the farms were operated by owners, compared with fewer than a third in 1930. The proportion of

farmers owning land and renting additional acreage to enlarge their farm business increased from about 8 percent in 1930 to 21 percent in 1954. As a result, tenancy declined steadily. Some tenants became farm owners, while others moved out of agriculture or became farm laborers.

In 1954, about a fourth of the farms in District states were under the management of tenants, compared with 60 percent in 1930. Tenant farmers accounted for one of every three farm operators in Louisiana, about one of every four in both Texas and Oklahoma, and only slightly more than one of every 10 farmers in Arizona and New Mexico.

The largest gain in the proportion of farm owners and the greatest decline in the proportion of tenants in District states occurred between 1940 and 1945, and by almost the same amounts. During this period, agricultural prices and manpower requirements for both the Armed Forces and defense industries rose sharply. While the alternative employment opportunities in nonfarm jobs drew some tenants from farms, the relative attractiveness of farm ownership provided those with capital or credit the incentive for buying farms or enlarging existing holdings. Also, military service was quite important in reducing numbers of tenants since, traditionally, the younger farmers are those who rent as their first step in owning land.

Farm operators under 25 years of age accounted for only 2 percent of the total farmers in District states in 1945, or less than half the proportion in 1940 and a fifth smaller than in 1930. In 1950 the proportion of these youthful farmers increased slightly, but the recent census indicates that they comprise less than 2 percent of the total. The proportion of farmers between 25 and 34 years of age also has shown an almost continuous decline since 1930. Farmers 45 years of age and older consistently have gained in importance; in this



group, the proportion of those 65 years and over rose from 8 percent of the total in 1930 to 17 percent in 1954.

The increase in the average age of farm operators is understandable in the light of changes that have occurred in both agricultural and nonagricultural sectors of the economy. Advancements in nutrition, medicine, sanitation, and other fields have contributed to a longer life span. However, retirement programs among farmers have not been as widespread, nor in effect as long, as have those for nonagricultural workers. An amendment to the Social Security Law in the summer of 1954 extends coverage to farm operators for retirement benefits under the Federal Old-Age and Survivors Insurance Program. This coverage could significantly affect the relative ages of farm operators in the future as many of the older farmers participate in the program long enough to qualify for retirement benefits.

Traditionally, farmers have regarded land ownership as a major factor in providing security in old age. The energies and capital of a lifetime often have been used to acquire land so that the farmer would have a place to live and an income during his twilight years. Once his capital is invested in land, active management may be continued as long as possible, in the absence of supplemental sources of income, in order to maximize the returns accruing from both ownership and management.

With the expansion of employment in nonagricultural sectors of the economy, the younger segment of the farm population has been able to take advantage of alternative opportunities. Young farmers have greater mobility than older ones, who have considerable investment in land and equipment or deep-rooted ties in their communities. Improvement of educational facilities in rural areas has provided young people with broader backgrounds and greater skills useful in nonfarm jobs. Also, the increasing number of farm youths entering college has tended to reduce the proportion returning to the farm.

Traditionally, the beginning farmer rents land to accumulate capital and experience needed for eventual farm ownership. In many cases, father-son partnership arrangements are made, so that the family farm can be handed down as a going concern when the father dies or relinquishes active management. Since social security benefits soon will be available to many older owner-operators, many farm properties may become available to young replacement operators through leasing or purchasing arrangements designed to minimize capital gain taxes.

The changes in southwestern agriculture would have little significance unless they make it possible for farm families to increase their levels of living. The disparities in living conditions between city dwellers and farm families have narrowed gradually. The extension of electric and telephone services into rural areas, construction of all-weather roads, and improvement in educational facilities for adults and youths have contributed to the betterment of rural living. The reduction in the time needed to go from the farmhouse to the courthouse has made it possible for rural families to

share in the advantages offered by larger urban centers and yet retain the many advantages of rural living they find enjoyable.

Indexes of the United States Department of Agriculture show that the levels of living of Texas and Oklahoma farm-operator families were twice as high in 1954 as in 1930 and almost three times higher in Louisiana. The improvements made in levels of living in these three District states (data are not available for Arizona and New Mexico) were at faster rates than those for the Nation, although the levels of living in Oklahoma and Louisiana remain below the national average.

Summary

A comparison of the characteristics of southwestern agriculture today with those a quarter century ago indicates that changes have been revolutionary. However, data in one period as compared with those in another are only still pictures reflecting events at particular moments; and if the motion of events between the two periods is presented, it would indicate that the changes are evolutionary, rather than revolutionary. When changes occur rapidly, it is often more difficult to comprehend the rate at which the transition is taking place than to visualize the changes themselves. The impact of wars, capriciousness of weather, introduction and application of new technology, and ebb and flow of economic forces within the past two and a half decades produced a setting in which rapid changes were inevitable.

The transition is as much the result of forces outside agriculture as those from within. The tremendous expansion of industrialization and the resultant opportunities for employment; the exceptional demands born of wartime scarcities and post-World War II aid programs; the improvements in transportation, communications, and services; and a prosperous, growing population are factors which have influenced, and will continue to influence, agriculture.

Many of the trends evident since 1930 are likely to continue. Some further decline in numbers of commercial farms and farm employment and an increase in farm size may occur; but with favorable weather conditions and an orderly growth in over-all economic activity, these developments may take place at a slower rate. There is a practical level near which total farm employment is likely to stabilize, although workers in agriculture may comprise a still smaller proportion of the total labor force than they do at present. Economic pressures and new technology may result in a further increase in the number of large farms, and the direction and extent of this change will vary according to the location and type of farm or ranch.

A surprisingly large number of farms produce only small amounts of produce for market, and a significant proportion of the operators has other income. The rising importance of part-time farming has provided an expanding market for garden-type tractors, custom work, and other agricultural supplies and services designed for the special needs of this group. On the other hand, the output of a large number of

farm operators not having supplementary income is inadequate for family needs. In this group, adjustments are needed to improve efficiency and income, provide other employment, or both.

Among the efficient commercial farms, the effect of the changes has been to place more emphasis upon business management. Capital requirements are likely to continue at a high level, and cash expenses may represent a rising proportion of the total costs of operating a farm; consequently, good financial management will become one of the prerequisites of a successful farmer. The past two decades were partially characterized by the adaptation of power and other mechanical sciences to farming, and the future is likely to be characterized by the addition of chemistry and other physical sciences. The development of systemic poisons, weed killers, and antibiotics and the use of hormones may result in as startling an achievement in production efficiency as the general-purpose tractor did.

The rapid expansion in manufacturing, trade and service, and government employment in the Southwest in recent years has tended to reduce agriculture's relative importance in the total economy. In 1954, agriculture accounted for only 8 percent of total personal income, compared with about 18 percent in 1930. However, the share of income derived from any industry does not reflect fully its importance to the economy.

Like the primary metals industry, agriculture supplies raw materials to and is a customer of a multitude of secondary and tertiary industries engaged in processing, manufacturing, warehousing, transportation, distribution, finance, and services. Because of the interdependence of industries, the well-being of one influences others.

Aside from the industries furnished raw materials by agriculture, merchants, bankers, and others are aware of the importance of rural customers. In 1954, farmers in District states spent \$1,838,100,000 for farm production goods and paid \$148,000,000 in rent to nonfarm landlords and as interest on farm mortgage indebtedness. Depreciation on farm capital amounted to almost \$355,000,000. After deducting these operating costs, southwestern farmers and ranchers had a net income of \$1,332,200,000 for family living or investment. Thus, agriculture in District states in 1954 was almost a \$4,000,000,000 industry.

The transition during the past quarter century and the changes likely to occur within the foreseeable future point toward a continuing dependence of farmers upon nonfarm commodities and services to provide a substantial part of the production items needed for profitable operations. Although there may be a decrease in the numbers of farms and people on farms, the aggregate dollar volume of purchases by farmers in the Southwest is likely to be maintained.

REVIEW OF BUSINESS, AGRICULTURAL, AND FINANCIAL CONDITIONS



Consumer buying at Eleventh District department stores during September was 6 percent below that in August but was slightly higher than in September 1955. Sales of consumer durable goods declined sharply during the month and were at the lowest point since February last year. Department store stocks increased 4 percent during September and at the end of the month were 3 percent larger than a year ago. Furniture store sales declined 13 percent from August and 1 percent from September 1955.

Agricultural prospects were improved slightly during October as a result of light to heavy rains over most of the District. Fall harvesting of major crops, except cotton in western areas, is virtually complete; cotton production in the District states is indicated to be 10 percent below output in 1955. Fall grazing conditions as of October 1 were at all-time low levels, and prior to the recent rains, cattle receipts at major southwestern markets were exceeding those at the same time a year ago.

Crude runs to refinery stills were curtailed during September and early October in an effort to reduce gasoline stocks, which are excessive for this time of the year. Crude oil production in the District and the Nation decreased slightly during the first half of October and was only a little above the year-earlier average. Texas allowables for November production were increased slightly.

Nonagricultural employment in the District states during September reached 4,144,300, a record high for the second consecutive month. A seasonal increase in school employment provided the largest gain from August.

The value of construction contracts awarded in the District during September showed a downturn of 6 percent from August but was at the same level as a year earlier. Both residential and "all other" awards were below their levels in the previous month.

Total loans and investments of the District weekly reporting member banks rose sharply between September 19 and October 17, primarily because of the \$49,156,000 increase in holdings of Treasury bills. Member bank reserves during this period averaged \$3,808,000 lower than in August, and free reserves also declined.



The total dollar volume of sales at department stores in the Eleventh Federal Reserve District, after a less than seasonal increase from July to August, declined contraseasonally during September and was only slightly higher than in September a year earlier. The month-to-month decrease was partially accounted for by two fewer trading days in September. The sales index for September, adjusted for seasonal variation and the number of business days, was 140, compared with 134 for the same month in 1955 and 148 in August. Cumulative sales for the first 9 months of this year were 4 percent higher than in the comparable period of 1955. In the first half of October, department store sales decreased 9 percent from the same period a year ago.

Sales in the soft goods departments in September generally showed moderate increases from a year earlier, while sales in the consumer durable goods departments declined sharply during the month and were at the lowest point since February 1955. Sales in the women's and misses' apparel and accessories departments were up 3 percent and 4 percent, respectively, from a year ago, while sales of men's and boys' wear showed no change. Of selected major soft goods departments, only piece goods and household textiles experienced a marked decline from a year earlier, with sales down 7 percent. Year-to-year declines in the sales of important home furnishings departments in September ranged from 12 percent for both furniture and floor coverings to 17 percent for housewares. Sales of major household appliances and television sets were 17 percent lower than those of September 1955.

Installment sales at District department stores, reflecting the smaller volume of hard goods sales, were 11 percent lower

RETAIL TRADE STATISTICS

(Percentage change)

Line of trade by area	NET SALES			STOCKS ¹	
	Sept. 1956 from		9 mo. 1956 comp. with 9 mo. 1955	Sept. 1956 from	
	Sept. 1955	Aug. 1956		Sept. 1955	Aug. 1956
DEPARTMENT STORES					
Total Eleventh District.....	1	-6	4	3	4
Corpus Christi.....	9	-11	8	-2	2
Dallas.....	-2	-2	2	-4	3
El Paso.....	4	-3	4	4	4
Fort Worth.....	2	-7	6	16	7
Houston.....	0	-6	6	5	8
San Antonio.....	0	-11	0	-5	-1
Shreveport, La.....	0	-6	3	-1	-3
Waco.....	-1	-5	5	9	2
Other cities.....	3	-9	7	8	0
FURNITURE STORES					
Total Eleventh District.....	-1	-13	2	4	4
Amarillo.....	9	-2	—	—	—
Austin.....	-6	-24	-1	13	5
Dallas.....	-22	-6	-20	-14	-5
Houston.....	10	-13	11	10	7
Lubbock.....	8	6	—	14	-4
San Antonio.....	-4	-14	-4	-6	2
Shreveport, La.....	-2	-21	11	9	8
Wichita Falls.....	-14	25	—	—	—
Other cities.....	-6	-10	7	-5	0
HOUSEHOLD APPLIANCE STORES					
Total Eleventh District.....	-8	-14	—	—	—
Dallas.....	-18	-21	—	—	—

¹Stocks at end of month.

INDEXES OF DEPARTMENT STORE SALES AND STOCKS

(1947-49 = 100)

Area	UNADJUSTED			ADJUSTED ¹				
	Sept. 1956	Aug. 1956	July 1956	Sept. 1955	Sept. 1956	Aug. 1956	July 1956	Sept. 1955
SALES—Daily average								
Eleventh District.....	140	138	129	134r	140	148	152	134r
Dallas.....	134	126	120	131	127	143	145	125
Houston.....	155	152	149	149	152	162	170	147
STOCKS—End of month								
Eleventh District.....	163p	158	149	159r	154p	159	157	150r

¹ Adjusted for seasonal variation.

r—Revised.

p—Preliminary.

in September than in the previous month but were 1 percent above the same month last year. Charge account sales, although up 1 percent from August, were 3 percent lower than a year ago. Cash sales showed a 9-percent decrease from August but were up slightly from a year earlier.

Charge accounts outstanding increased seasonally during September, bringing month-end balances to 6 percent above both August 1956 and September a year ago. Collections during the month amounted to 42 percent of first-of-month balances outstanding, or 1 point below the August collection ratio and 3 points below September a year earlier. Instalment accounts outstanding at department stores continued practically unchanged during September and at the month end were 6 percent above a year earlier. The instalment collection ratio, at 14 percent, was the same as a month ago but was 2 points more than in September 1955.

Inventories at department stores rose during September; at the end of the month, they were up 4 percent from a month earlier and 3 percent from the same date last year. Total orders outstanding at the end of September were 4 percent larger than at the close of August but were 3 percent below those at the end of September last year.

Furniture store sales in the District during September declined 13 percent from August, or more than seasonally, and were 1 percent under the level of September 1955. Although collections were down 4 percent, accounts receivable at the end of September were unchanged from August and were up 5 percent from a year ago. Inventories at the close of September were 4 percent above both August and a year earlier.

Registration of new car sales during September in Dallas, Fort Worth, Houston, and San Antonio was down 38 percent from a year earlier and 22 percent from August. New car sales in the four cities for the January-September period were 22 percent less than in the same period of 1955.



Light to heavy general rains extending from the eastern sections of New Mexico eastward during mid-October provided encouragement to drought-harassed farmers and water-conscious city dwellers. Precipitation generally was heaviest in the west-central, southern, and upper coastal Texas counties, although local areas received rain in cloudburst proportions. Runoff in southern Texas slightly increased the water

COTTON PRODUCTION

Texas Crop Reporting Districts

(In thousands of bales—500 lb. gross wt.)

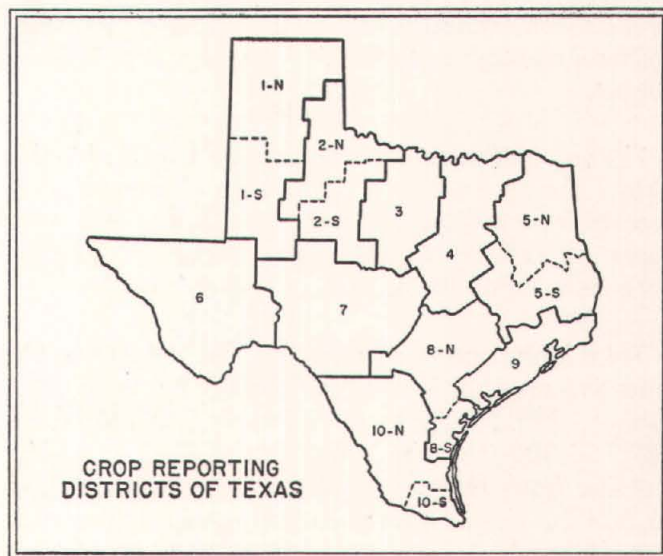
Crop reporting district	1956 Indicated October 1	1955	1954	1956 as percent of 1955
1-N.....	465	379	512	123
1-S.....	1,070	1,024	1,097	104
2-N.....	170	273	221	62
2-S.....	90	264	179	34
3.....	8	23	21	35
4.....	360	642	447	56
5-N.....	85	145	76	59
5-S.....	75	94	75	80
6.....	305	269	261	113
7.....	9	33	26	27
8-N.....	80	163	142	49
8-S.....	135	69	217	196
9.....	165	238	192	69
10-N.....	50	40	67	125
10-S.....	393	383	407	103
State.....	3,460	4,039	3,940	86

SOURCE: United States Department of Agriculture.

supplies impounded in Falcon Reservoir. Inadequate moisture remains the dominant feature of the agricultural situation in the District, and slow, general rains are needed to replenish subsoil moisture supplies and stock water tanks.

The precipitation was especially helpful to early planted winter grains and for germinating grain seeded in dry soils. Hail and rain damaged cotton in some west Texas areas. Late-planted feed crops in the eastern part of the District were benefited by the moisture and may provide additional forage before frost.

Harvesting of 1956-crop cotton is virtually complete in most of the District except western areas. Pulling of light-yielding dry-land cotton is well advanced in northwestern Texas, and harvest of irrigated cotton is past the halfway mark. Cotton grades in the High Plains have been good during the early part of the season, increasing returns to farmers. Harvesting is at a peak in the irrigated areas of the Trans-Pecos of Texas and in Arizona and New Mexico. The generally dry, open weather and premature opening of bolls resulting from drought have speeded harvest of this year's crop. Cotton



CROP PRODUCTION
Texas and Five Southwestern States
(In thousands of bushels)

Crop	TEXAS			FIVE SOUTHWESTERN STATES ¹		
	Estimated October 1, 1956	1955	Average 1945-54	Estimated October 1, 1956	1955	Average 1945-54
Cotton ²	3,460	4,039	3,518	5,455	6,078	5,256
Corn.....	25,528	48,288	44,209	47,483	77,273	78,089
Winter wheat....	28,275	14,326	50,722	95,129	41,204	131,765
Oats.....	21,998	23,590	27,090	39,052	40,518	44,837
Barley.....	2,480	2,072	2,040	17,023	17,181	10,589
Rye.....	184	124	244	910	691	822
Rice ³	10,841	14,880	11,837	22,185	28,030	23,476
Sorghum grain....	93,480	148,309	82,103	107,465	175,296	97,420
Flaxseed.....	95	96	911	147	174	1,293
Hay ⁴	1,541	2,261	1,660	4,921	6,255	4,951
Peanuts ⁵	88,550	239,235	252,600	140,675	374,055	366,517
Irish potatoes ⁶ ...	1,286	1,760	1,474	3,155	3,787	13,382
Sweet potatoes ⁶ ..	594	1,914	1,397	4,674	7,932	76,369
Pecans ⁷	27,500	38,000	30,565	53,000	99,460	65,595

¹ Arizona, Louisiana, New Mexico, Oklahoma, and Texas.

² In thousands of bales.

³ In thousands of bags containing 100 pounds each.

⁴ In thousands of tons.

⁵ In thousands of pounds.

⁶ In thousands of hundredweight.

⁷ Average, 1949-54.

SOURCE: United States Department of Agriculture.

ginnings prior to October 1 in the District states are estimated to be 41 percent of the prospective crop, compared with 31 percent of the 1955 crop ginned as of the same date a year ago.

The 1956 cotton crop in the Nation is estimated, as of October 1, at 13,268,000 bales, or 153,000 bales more than the month-earlier forecast but 10 percent below the outturn in 1955. The indicated yield of 407 pounds of lint per harvested acre is second only to the 417 pounds harvested a year ago. In the District states, prospective production is placed at 5,455,000 bales, which is 20,000 bales higher than was indicated on September 1 but is 10 percent below production last year. The October 1 estimates place prospective output higher than a month earlier in Arizona and Louisiana but 5,000 bales lower in both New Mexico and Oklahoma.

The Texas cotton crop is estimated at 3,460,000 bales — unchanged from the September 1 indication but 14 percent below the 1955 outturn. Production is below average in all dry-land districts except the Coastal Bend, where the crop made excellent progress during the early part of the season. Above-average output is expected in irrigated districts — especially in the Trans-Pecos area, where a record crop is being harvested. Indicated lint yield per harvested acre in the State is placed at 266 pounds, compared with 281 pounds for the 1955 crop.

Harvest of other major field crops in the District is rapidly coming to an end. Combining of grain sorghums is virtually complete in the High Plains of Texas and New Mexico, with yields generally satisfactory in irrigated areas but poor on dry-land acreages. The output of both corn and grain sorghums in District states is placed, as of October 1, at 39 percent below the outturn in 1955. In Texas, corn production is estimated at 25,528,000 bushels, or only slightly more than half last year's production and the smallest crop in over 80 years. Unusually low yields and the smallest harvested acreage since 1875 account for the short crop. Harvesting of rice is virtually complete in District states, with the outturn being a

LIVESTOCK RECEIPTS

(Number)

Class	FORT WORTH MARKET			SAN ANTONIO MARKET		
	Sept. 1956	Sept. 1955	Aug. 1956	Sept. 1956	Sept. 1955	Aug. 1956
Cattle.....	102,862	68,832	112,125	24,312	26,263	34,033
Calves.....	31,847	21,417	31,076	27,544	18,227	27,979
Hogs.....	44,147	41,840	43,341	3,222	3,873	4,472
Sheep.....	84,875	58,993	104,627	139,807	126,720	136,159

¹ Includes goats.

fifth below last year. The drought-stricken peanut crop is estimated to be only a third as large as the 1955 production, and hay output is indicated to be a fifth less.

Inadequate moisture is curtailing activity in Texas commercial vegetable areas. Light to heavy rains during mid-October were beneficial, but crops are making slow development in much of south Texas. Plantings of fall and early winter vegetables in the Laredo, Winter Garden, and Eagle Pass areas are making good progress. Production of commercial fresh vegetables for fall harvest in Texas is estimated, as of October 1, to be 27 percent above last year's output. Plantings of all fall-harvested vegetables are lower than a year earlier, except the Panhandle carrot crop.

A small volume of citrus fruits is being shipped from the Lower Valley, but the fruit is comparatively small and is sizing slowly. Texas citrus production for the 1956-57 season is forecast, as of October 1, at 3,500,000 boxes of grapefruit and 2,300,000 boxes of oranges. Total citrus output in the State is expected to be 53 percent larger than it was in 1955-56 and the highest since the 1951 freeze.

Fall grazing conditions in District states are at all-time low levels. According to the United States Department of Agriculture, range feed conditions in Texas and Oklahoma on October 1 were the lowest of record — even worse than during the 1934 drought; conditions in New Mexico were equal to the all-time low in 1934; and those in Arizona were the worst since 1924. October rains in scattered areas provided some encouragement, but most ranchers face a severe feed shortage unless sufficient moisture is received to bring out winter weeds and grasses. Receipts of cattle and calves at major southwestern livestock markets in September were 38 percent larger than during the same month a year earlier; sales of sheep were 45 percent greater.

FARM COMMODITY PRICES

Top Prices Paid in Local Southwest Markets

Commodity and market	Unit	Week ended Oct. 22, 1956	Comparable week, previous month	Comparable week, previous year
COTTON, Middling 15/16-inch, Dallas....	lb.	\$.3280	\$.3275	\$.3275
WHEAT, No. 1 hard, Fort Worth.....	bu.	2.53½	2.52	2.41½
OATS, No. 2 white, Fort Worth.....	bu.	1.02½	.95½	.85
CORN, No. 2 yellow, Fort Worth.....	bu.	1.64¾	1.80	1.53
SORGHUMS, No. 2 yellow, Fort Worth....	cwt.	2.46	2.37	2.05
HOGS, Choice, Fort Worth.....	cwt.	16.50	16.75	15.50
SLAUGHTER STEERS, Choice, Fort Worth...	cwt.	24.00	25.50	23.00
SLAUGHTER CALVES, Choice, Fort Worth...	cwt.	19.00	19.00	20.00
STOCKER STEERS, Choice, Fort Worth.....	cwt.	19.00	19.50	21.00
SLAUGHTER SPRING LAMBS, Choice, Fort Worth.....	cwt.	20.00	20.00	19.50
BROILERS, south Texas.....	lb.	.18	.18	.24

The index of prices received by Texas farmers and ranchers at mid-September is placed at 248 percent of the 1910-14 average, reflecting declines of almost 1 percent from a month earlier and nearly 2½ percent from a year ago, according to the Department of Agriculture. Lower prices received for cotton, cottonseed, peanuts, Irish potatoes, sweet potatoes, some commercial vegetables, beef cattle, and chickens more than offset increases in prices for hay, all grains except sorghums, calves, eggs, milk sold at wholesale, and wool. The all-crops index was 243 percent, or 2 percent lower than a month earlier but unchanged from a year ago. The livestock and livestock products index — at 255 percent of the average — rose 1 percent from mid-August but was 5 percent below the level on September 15, 1955.



The sharp expansion in loans and investments at Eleventh District weekly reporting member banks between September 19 and October 17 was moderately smaller than in the corresponding period last year, and the composition of the changes was markedly different. This year, the expansion was dominated by an increase of \$49,156,000 in holdings of Treasury bills, which was occasioned by the purchase of the special issue of bills dated October 17 by credit to Tax and Loan Account. The net increase of \$8,679,000 in loans reflected the sharp increase in interbank loans (mostly Federal funds) and the more moderate gains in real-estate loans, loans on securities, and "all other" loans, which were only partially offset by the substantial decline in commercial and industrial loans.

In the same period a year earlier, the banks were increasing their earning assets; and the gains were concentrated in commercial, industrial, and agricultural loans, "all other" loans, and Treasury certificates — the latter reflecting the type of seasonal borrowing effected by the United States Treasury. Moreover, in the third quarter of 1955, bank

CONDITION STATISTICS OF WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES

Eleventh Federal Reserve District

(In thousands of dollars)

Item	Oct. 17, 1956	Oct. 19, 1955	Sept. 19, 1956
ASSETS			
Commercial, industrial, and agricultural loans...	\$1,518,445	\$1,513,515	\$1,533,205
Commercial and industrial loans ¹	1,486,971	—	1,501,306
Agricultural loans ¹	31,474	—	31,899
Loans to brokers and dealers in securities.....	28,657	16,590	24,359
Other loans for purchasing or carrying securities.....	145,190	118,763	145,380
Real-estate loans.....	218,221	205,166	214,259
Loans to banks.....	25,832	13,035	8,540
All other loans.....	579,530	528,539	578,435
Gross loans.....	2,515,875	2,395,608	2,504,178
Less reserves and unallocated charge-offs..	35,821	25,226	32,803
Net loans.....	2,480,054	2,370,382	2,471,375
U. S. Treasury bills.....	87,148	39,318	37,992
U. S. Treasury certificates of indebtedness.....	70,949	74,143	76,943
U. S. Treasury notes.....	220,303	258,271	213,024
U. S. Government bonds (inc. gtd. obligations) ..	796,930	834,909	801,932
Other securities.....	241,725	248,547	237,606
Total investments.....	1,417,055	1,455,188	1,367,497
Cash items in process of collection.....	442,123	379,441	436,429
Balances with banks in the United States.....	523,437	425,810	518,053
Balances with banks in foreign countries.....	1,704	1,771	1,347
Currency and coin.....	47,523	47,853	47,859
Reserves with Federal Reserve Bank.....	524,651	596,255	567,979
Other assets.....	162,703	139,886	157,924
TOTAL ASSETS.....	5,599,250	5,416,586	5,568,463
LIABILITIES AND CAPITAL			
Demand deposits			
Individuals, partnerships, and corporations....	2,862,962	2,837,590	2,838,267
United States Government.....	127,928	131,640	91,911
States and political subdivisions.....	155,435	180,170	168,172
Banks in the United States.....	953,287	861,131	953,837
Banks in foreign countries.....	19,807	18,011	19,285
Certified and officers' checks, etc.....	70,307	66,041	66,893
Total demand deposits.....	4,189,726	4,094,583	4,138,365
Time deposits			
Individuals, partnerships, and corporations....	724,229	698,465	720,854
United States Government.....	12,240	11,874	12,229
Postal savings.....	452	452	452
States and political subdivisions.....	130,745	118,431	133,550
Banks in the U. S. and foreign countries.....	7,282	2,025	7,185
Total time deposits.....	874,948	831,247	874,270
Total deposits.....	5,064,674	4,925,830	5,012,635
Bills payable, rediscounts, etc.....	19,700	40,200	44,400
All other liabilities.....	83,216	61,910	85,172
Total capital accounts.....	431,660	388,646	426,256
TOTAL LIABILITIES AND CAPITAL.....	5,599,250	5,416,586	5,568,463

¹ Prior to January 4, 1956, agricultural loans were not reported separately. Comparable year-earlier figures will be shown as they become available.

CONDITION STATISTICS OF ALL MEMBER BANKS

Eleventh Federal Reserve District

(In millions of dollars)

Item	Sept. 26, 1956	Sept. 28, 1955	Aug. 29, 1956
ASSETS			
Loans and discounts.....	\$3,893	\$3,711	\$3,881
United States Government obligations.....	2,312	2,337	2,297
Other securities.....	600	575	596
Reserves with Federal Reserve Bank.....	940	945	985
Cash in vault ^e	109	159	123
Balances with banks in the United States.....	1,158	959	966
Balances with banks in foreign countries ^e	2	2	2
Cash items in process of collection.....	506	357	358
Other assets ^e	218	186	220
TOTAL ASSETS^e.....	9,738	9,231	9,428
LIABILITIES AND CAPITAL			
Demand deposits of banks.....	1,179	981	1,003
Other demand deposits.....	6,309	6,186	6,195
Time deposits.....	1,388	1,292	1,387
Total deposits.....	8,876	8,459	8,585
Borrowings ^e	28	34	17
Other liabilities ^e	101	71	96
Total capital accounts ^e	733	667	730
TOTAL LIABILITIES AND CAPITAL^e.....	9,738	9,231	9,428

e—Estimated.

credit of the weekly reporting member banks advanced more rapidly than during the same period of 1956.

Between September 19 and October 17, all but a minor part of the \$52,039,000 deposit increase was channeled through demand deposit accounts. United States Government demand balances showed the largest growth, as the banks credited the United States Government with the proceeds of the special Treasury bill awards. The balances of individuals and businesses also were replenished, but state and local governments claimed part of their checking account balances. During the recent 4-week period, the weekly reporting member banks repaid \$24,700,000 of indebtedness.

In the 4-week period ended October 17, Eleventh District member banks experienced a reserve drain of \$58,273,000. Commercial and financial transactions led to an outflow to other districts of \$102,550,000 in reserve balances. Local Federal Reserve credit — float and member bank borrowing — contracted by \$24,430,000, and the flow of currency into circulation absorbed an additional \$10,766,000 of reserve

CHANGES IN FACTORS AFFECTING MEMBER BANK RESERVE BALANCES

Eleventh Federal Reserve District

(In thousands of dollars)

	CHANGE ¹	
	4 weeks ended Oct. 17, 1956	Dec. 28, 1955— Oct. 17, 1956
FACTORS		
Federal Reserve credit—local.....	—\$ 24,430	+\$ 11,045
Interdistrict commercial and financial transactions.....	— 102,550	+ 913,457
Treasury operations.....	+ 79,334	+ 837,573
Currency transactions.....	— 10,766	+ 29,930
Other deposits at Federal Reserve Bank.....	— 39	+ 50
Other Federal Reserve accounts.....	+ 178	+ 12,349
RESERVE BALANCES	—\$ 58,273	—\$ 22,510
September 19, 1956.....	\$982,823	
October 17, 1956.....	\$924,550	

¹ Sign of change indicates effect on reserve balances.

funds. Treasury transfers, the leading expansive factor during the period, released \$79,334,000 in reserve balances.

Daily average gross demand and time deposits at all member banks in the District rose in September. At \$7,388,782,000, the average of gross demand deposits reflected a monthly increase of \$178,339,000, about three-fifths of which occurred at reserve city banks, and an increase of \$193,203,000 over the year-earlier level. Daily average time deposits registered a monthly gain of \$7,439,000 in September and an increase of \$117,688,000 over the average for September 1955. Nearly all of the August-September increase in time deposits occurred at country banks.

Member bank reserves averaged \$1,008,252,000 in September, or \$3,808,000 below the August average. Required reserves rose \$7,297,000, however, and the combination of larger required balances and the loss of reserve funds produced an \$11,105,000 decline in excess reserves. Member bank borrowings from the Federal Reserve bank declined, and average free reserves (excess reserves minus borrowings from the Federal Reserve bank) decreased to \$40,937,000, or \$4,187,000 below August.

The loss of reserve funds, decline in excess reserves, and reduction in free reserves during September occurred entirely at country banks, as the reserve positions of reserve city banks showed a slight improvement. At these banks, a \$3,623,000 monthly gain in reserve funds more than covered the smaller increase in required reserves, and average excess reserves rose \$897,000. As reserve city banks reduced their borrowings from the Federal Reserve bank by \$6,072,000, their net borrowed reserves declined from \$8,977,000 in August to \$2,008,000 in September. In contrast, free re-

GROSS DEMAND AND TIME DEPOSITS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. In thousands of dollars)

Date	COMBINED TOTAL		RESERVE CITY BANKS		COUNTRY BANKS	
	Gross demand	Time	Gross demand	Time	Gross demand	Time
Sept. 1954....	\$7,086,193	\$1,081,850	\$3,499,932	\$600,926	\$3,586,261	\$480,924
Sept. 1955....	7,195,579	1,271,089	3,517,182	748,666	3,678,397	522,423
May 1956....	7,132,519	1,363,058	3,454,927	766,439	3,677,592	596,619
June 1956....	7,150,377	1,369,915	3,493,663	767,137	3,656,714	602,778
July 1956....	7,271,859	1,380,093	3,579,411	770,067	3,692,448	610,026
Aug. 1956....	7,210,443	1,381,338	3,529,320	764,026	3,681,123	617,312
Sept. 1956....	7,388,782	1,388,777	3,641,972	764,478	3,746,810	624,299

RESERVE POSITIONS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. In thousands of dollars)

Item	September 1956	September 1955	August 1956
RESERVE CITY BANKS			
Reserve balances.....	\$ 564,133	\$556,992	\$ 560,510
Required reserves.....	551,721	545,790	548,995
Excess reserves.....	12,412	11,202	11,515
Borrowings.....	14,420	26,576	20,492
Free reserves.....	—2,008	—15,374	—8,977
COUNTRY BANKS			
Reserve balances.....	444,119	435,508	451,550
Required reserves.....	395,818	388,399	391,247
Excess reserves.....	48,301	47,109	60,303
Borrowings.....	5,356	11,813	6,202
Free reserves.....	42,945	35,296	54,101
MEMBER BANKS			
Reserve balances.....	1,008,252	992,500	1,012,060
Required reserves.....	947,539	934,189	940,242
Excess reserves.....	60,713	58,311	71,818
Borrowings.....	19,776	38,389	26,694
Free reserves.....	40,937	19,922	45,124

serves of country banks decreased from \$54,101,000 in August to \$42,945,000 in September.

Earning assets of the Federal Reserve Bank of Dallas increased \$5,298,000 during the 4 weeks ended October 17. This increase featured a \$10,888,000 addition to the bank's holdings of Government securities, partially offset by a decline of \$5,590,000 in discounts for member banks. On October 17, earning assets were \$44,406,000 below the level of October 19, 1955. Gold certificate reserves declined \$12,954,000 during the 4 weeks to a total of \$720,217,000, or \$8,805,000 below the amount on October 19 last year. At

BANK DEBITS, END-OF-MONTH DEPOSITS
AND ANNUAL RATE OF TURNOVER OF DEPOSITS

(Amounts in thousands of dollars)

Area	DEBITS ¹			DEPOSITS ²		
	September 1956	Percentage change from		Annual rate of turnover		
		Sept. 1955	Aug. 1956	Sept. 30, 1956	Sept. 1955	Aug. 1956
ARIZONA						
Tucson.....	\$ 139,237	6	—8	\$ 98,850	17.0	16.7
LOUISIANA						
Monroe.....	64,292	8	2	50,543	15.7	16.4
Shreveport.....	245,389	2	—1	186,576	15.8	15.6
NEW MEXICO						
Roswell.....	26,185	—2	—1	26,378	11.9	12.2
TEXAS						
Abilene.....	70,664	5	—5	58,306	14.6	13.7
Amarillo.....	144,501	—8	—12	104,856	16.7	17.6
Austin.....	147,643	6	0	112,343	15.7	14.3
Beaumont.....	134,025	7	—3	102,423	15.6	15.4
Corpus Christi.....	172,440	10	—6	109,644	18.8	17.4
Dallas.....	16,580	—5	11	21,735	9.2	9.5
Dorcas.....	1,902,607	—3	—7	993,328	23.3	23.6
El Paso.....	215,851	—3	—13	132,787	19.9	20.5
Fort Worth.....	628,221	6	—8	372,319	20.3	19.9
Galveston.....	85,128	6	—22	73,696	13.9	13.7
Houston.....	2,109,105	7	—7	1,233,974	20.6	19.7
Laredo.....	20,834	6	—2	18,972	13.3	12.2
Lubbock.....	120,317	—5	3	89,165	16.6	16.8
Port Arthur.....	51,798	—4	—12	43,967	14.0	14.0
San Angelo.....	44,443	0	—1	45,900	11.6	11.6
San Antonio.....	431,662	—7	—13	341,405	15.0	16.2
Texarkana ³	18,733	0	—1	16,459	13.4	12.6
Tyler.....	74,659	3	—1	58,428	15.5	15.4
Waco.....	84,405	—4	—5	65,173	15.6	15.7
Wichita Falls.....	91,513	—6	—8	103,459	10.7	11.3
Total—24 cities.....	\$7,040,232	2	—7	\$4,460,686	19.0	18.8

¹ Debits to demand deposit accounts of individuals, partnerships, and corporations and of states and political subdivisions.² Demand deposit accounts of individuals, partnerships, and corporations and of states and political subdivisions.³ These figures include only one bank in Texarkana, Texas. Total debits for all banks in Texarkana, Texas-Arkansas, including two banks located in the Eighth District, amounted to \$40,048,000 for the month of September 1956.

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS

(In thousands of dollars)

Item	Oct. 17, 1956	Oct. 19, 1955	Sept. 19, 1956
Total gold certificate reserves.....	\$720,217	\$ 729,022	\$733,171
Discounts for member banks.....	10,361	41,155	15,951
Other discounts and advances.....	0	627	0
U. S. Government securities.....	948,289	961,274	937,401
Total earning assets.....	958,650	1,003,056	953,352
Member bank reserve deposits.....	924,550	991,626	982,823
Federal Reserve notes in actual circulation.....	718,531	718,014	710,049

\$718,531,000 on October 17, the bank's Federal Reserve notes in actual circulation reflected an increase of \$8,482,000 during the 4-week period and an increase of \$517,000 over a year earlier.

Primarily because of the smaller number of business days in September, bank debits declined in 20 of the District's 24 reporting centers. For all 24 centers, bank debits in September were 7 percent below August but 2 percent above the level of September 1955. The annual rate of deposit turnover in September was 19.0, compared with 20.6 in August and 18.8 in September 1955.

NEW MEMBER BANK

The Kelly Field National Bank of San Antonio, San Antonio, Texas, a newly organized institution located in the territory served by the San Antonio Branch of the Federal Reserve Bank of Dallas, opened for business October 15, 1956, as a member of the Federal Reserve System. The new bank has capital of \$300,000, surplus of \$200,000, and undivided profits of \$100,000. The officers are: B. B. McGimsey, President; Wm. F. Holder, Executive Vice President; and Wm. J. Bowman, Cashier.



The Nation's petroleum industry successively cut back refinery activity during the latter part of September and early October to prevent a further build-up of gasoline stocks.

However, such reductions in refinery activity were not sufficient to allow a reduction in gasoline stocks because of the need for enlarging fuel oil inventories. Gasoline stocks, much above last year, are considered excessive by industry sources and have exerted pressure on gasoline prices in many areas.

Crude oil production in the District, averaging 3,291,000 barrels per day, decreased slightly during the first half of October but was 1 percent greater than a year ago. Texas allowables for November production were increased 72,986 barrels per day, although the number of producing days remains at 15. Crude oil production in the Nation during early October, at 7,003,000 barrels per day, was 1 percent below September but 3 percent above the average of a year earlier.

CRUDE OIL: DAILY AVERAGE PRODUCTION

(In thousands of barrels)

Area	September 1956 ¹	September 1955 ²	August 1956 ¹	Change from	
				September 1955	August 1956
ELEVENTH DISTRICT.....	3,318.9	3,128.9	3,379.1	190.0	—60.2
Texas.....	2,959.6	2,785.9	3,025.6	173.7	—66.0
Gulf Coast.....	591.7	601.2	611.9	—9.5	—20.2
West Texas.....	1,224.5	1,073.6	1,254.0	150.9	—29.5
East Texas (proper).....	202.1	210.0	210.5	—7.9	—8.4
Panhandle.....	100.8	93.7	100.0	7.1	.8
Rest of State.....	840.6	807.4	849.2	33.2	—8.6
Southeastern New Mexico.....	237.9	219.6	231.1	18.3	6.8
Northern Louisiana.....	121.4	123.4	122.4	—2.0	—1.0
OUTSIDE ELEVENTH DISTRICT.....	3,727.4	3,601.7	3,727.1	125.7	.3
UNITED STATES.....	7,046.3	6,730.6	7,106.2	315.7	—59.9

SOURCES: ¹ Estimated from American Petroleum Institute weekly reports.
² United States Bureau of Mines.

Imports in the 5 weeks ended October 12 averaged 1,421,000 barrels per day, or 6 percent above the previous 5-week period and 26 percent above the comparable period of 1955.

Reflecting the previously announced plans of major oil companies, crude runs to refinery stills were cut back during the latter part of September and early October. District crude runs, at 2,189,000 barrels per day in the first half of October, were 6 percent below September and only 1 percent above the average for October 1955. Refinery crude runs in the Nation, at 7,581,000 barrels per day, were also 6 percent below September but were 2 percent above October last year.

Crude stocks remained virtually unchanged during early October but, at 279,458,000 barrels on October 13, were 10 percent greater than a year earlier. Because of the cutback in refinery activity and the increase in demand, stocks of the major refined products remained virtually unchanged during early October and did not show the usual seasonal increase. Stocks of these products totaled 408,174,000 barrels on October 12, or 6 percent above the level on October 14, 1955. Gasoline stocks, totaling 174,062,000 barrels on October 12, were 23,582,000 barrels—or 16 percent—above a year earlier. Residual fuel oil stocks were virtually unchanged from a year ago, while distillate fuel oil stocks were 3 percent larger.

The demand for the four major products from the beginning of 1956 to October 12 was 6 percent above the comparable period last year. The summer decline in demand, induced largely by the steel strike, was reversed sharply during September and early October. The demand for the major products during the 5 weeks ended October 12 was 6 percent above the previous 5-week period and 8 percent above the comparable period a year ago. Reflecting the end of the summer driving season, the demand for gasoline was 3 percent below the previous 5-week period but was 4 percent above the corresponding period of 1955. Influenced by cool weather in the northern consuming area, the demand for distillate fuel oil was 29 percent above the preceding 5-week period and 21 percent above the year-earlier period. The demand for residual fuel oil was up 4 percent from the previous period and 1 percent from the comparable period last year.



Nonagricultural employment in District states during September reached a record level for the second consecutive month. The total of 4,144,300 workers during September reflected gains of 32,900 from August and 135,100 from a year earlier. The largest month-to-month gain was the addition of 27,800 employees in government, with school employment accounting for most of the increase. Wholesale and retail trade showed a seasonal gain of 8,300.

NONAGRICULTURAL EMPLOYMENT Five Southwestern States¹

Type of employment	Number of persons			Percent change Sept. 1956 from	
	September 1956e	September 1955r	August 1956	Sept. 1955	Aug. 1956
Total nonagricultural					
wage and salary workers..	4,144,300	4,009,200	4,111,400	3.4	0.8
Manufacturing.....	767,800	745,900	765,700	3.0	.3
Nonmanufacturing.....	3,376,500	3,263,300	3,345,700	3.5	.9
Mining.....	258,300	249,700	262,800	3.4	-1.7
Construction.....	300,000	287,100	299,400	4.5	.2
Transportation and public utilities.....	402,600	402,900	403,500	-1	-2
Trade.....	1,061,600	1,027,800	1,053,300	3.3	.8
Finance.....	175,600	166,600	176,500	5.4	-5
Service.....	480,500	466,600	480,100	3.0	.1
Government.....	697,900	662,600	670,100	5.3	4.1

¹ Arizona, Louisiana, New Mexico, Oklahoma, and Texas.

e—Estimated.

r—Revised.

SOURCES: State employment agencies.
Federal Reserve Bank of Dallas.

Manufacturing employment increased 2,100 over August to a record high of 767,800 workers during September. The settlement of labor-management disputes in the aluminum industry and hirings in the transportation equipment, chemicals, and apparel industries offset the effects of a 2-week labor-management dispute which idled more than 3,000 workers in the District steel industry during mid-September. Construction employment showed little change from the August level.

Unemployment in the District declined during September as students and teachers withdrew from the ranks of those seeking employment. In Texas, unemployment decreased from 110,200 in August to 107,500 in September.

Average earnings of manufacturing workers in the District states during August, at \$79.94 per week and \$1.94 per hour, reflected year-to-year gains of 6 percent and 8 percent, respectively. Wage increases granted in several important District industries during August and September foreshadow further increases in average earnings. In the Nation, average

VALUE OF CONSTRUCTION CONTRACTS AWARDED

(In thousands of dollars)

Area and type	January—September				
	September 1956	September 1955	August 1956	1956	1955
ELEVENTH DISTRICT...	\$ 148,725	\$ 148,962	\$ 158,593	\$ 1,517,927	\$ 1,332,181
Residential.....	54,663	51,188	62,809	627,219	580,156
All other.....	94,062	97,774	95,784	890,708	752,025
UNITED STATES ¹	2,024,794	2,034,895	2,068,754	19,441,066	18,165,044
Residential.....	763,817	733,382	874,233	8,094,637	7,965,550
All other.....	1,260,977	1,301,513	1,194,521	11,346,429	10,199,494

¹ 37 states east of the Rocky Mountains.
SOURCE: F. W. Dodge Corporation.

BUILDING PERMITS

Area	September 1956		Percentage change in valuation from		9 months 1956		Percentage change in valuation from 9 months 1955
	Number	Valuation	Sept. 1955	Aug. 1956	Number	Valuation	
ARIZONA							
Tucson.....	282	\$ 962,675	78	—65	3,604	\$ 17,465,796	86
LOUISIANA							
Shreveport....	398	1,375,810	—31	—34	3,940	20,931,296	—28
TEXAS							
Abilene.....	110	1,010,948	—30	—32	1,594	18,180,428	19
Amarillo.....	196	1,456,292	—17	—2	2,050	15,592,850	—13
Austin.....	251	5,252,603	80	69	2,376	36,309,070	15
Beaumont.....	343	1,813,213	72	18	2,478	11,392,512	57
Corpus Christi..	324	958,651	—43	—4	3,030	15,355,700	—38
Dallas.....	1,993	10,719,542	—24	38	18,875	117,427,631	—15
El Paso.....	361	1,914,825	—25	—7	3,659	21,105,952	—22
Fort Worth.....	538	3,687,815	—10	—39	5,938	34,490,030	—23
Galveston.....	104	738,195	34	345	887	4,025,645	—3
Houston.....	708	11,364,100	26	—19	8,104	120,439,221	6
Lubbock.....	174	1,703,315	—10	0	2,042	17,322,588	—23
Port Arthur....	187	547,850	—7	21	1,642	3,935,548	—4
San Antonio....	1,420	3,628,220	—21	—32	15,154	48,523,881	7
Waco.....	310	2,322,518	122	159	2,696	13,089,668	8
Wichita Falls..	129	534,459	—68	—13	1,310	7,258,393	—31
Total—17 cities..	7,828	\$49,991,031	—3	—5	79,379	\$522,846,209	—6

earnings rose from \$79.79 per week and \$1.98 per hour during August to reach a weekly rate of \$81 and a record hourly rate of \$2 during September.

The value of construction contracts awarded in the District during September showed a downturn of 6 percent from the improved August level but was at the same level as in September 1955. Both residential and "all other" awards decreased from August; while residential awards were above the level of September 1955, "all other" awards were down 4 percent from a year earlier.

In the Nation, construction contract awards during September declined 2 percent from August and were 1 percent below the level in September last year. However, in both the District and the Nation, cumulative construction awards during the first 9 months of 1956 remained well above the totals for the corresponding period of last year.

Investment in plant facilities by District businesses declined during the third quarter, based on decreases in the value of construction awards for manufacturing and commercial buildings in Texas. At an estimated total of \$73,268,000, these awards during the 3 months ended September 30, 1956, reflected a decline of 21 percent from both the previous quarter and the corresponding period in 1955.

DOMESTIC CONSUMPTION AND STOCKS OF COTTON

(Bales)

Area	August 1956 ¹	August 1955	July 1956 ²
CONSUMPTION			
Total			
Texas mills.....	10,389	11,356	9,034
U. S. mills.....	686,276	717,115	549,520
Daily average			
Texas mills.....	519	568	452
U. S. mills.....	34,313	35,313	27,476
STOCKS, U. S.—End of period			
Consuming establishments.....	797,238	1,211,562	902,890
Public storage and compresses.....	12,312,831	9,764,505	12,845,734

¹ Four weeks ended August 25.

² Four weeks ended July 28.

SOURCE: United States Bureau of the Census.