

MONTHLY BUSINESS REVIEW



FEDERAL RESERVE BANK OF DALLAS

Vol. 41, No. 2

DALLAS, TEXAS

February 1, 1956

TRENDS IN COTTON PRODUCTION

J. Z. ROWE, *Agricultural Economist*
Federal Reserve Bank of Dallas

Cotton is the most important commodity produced by farmers in the states of the Eleventh Federal Reserve District. Preliminary reports of the Census of Agriculture indicate that 38 percent of the farms in the District states harvested some cotton in 1954 and that the sales of cotton lint and seed accounted for over half of the total value of products sold on about one-fourth of the farms.

As a result of the large percentage of farms receiving the major portion of their incomes from cotton, cash receipts from the marketing of this product represent the major source of income to District farmers. During the 30-year period beginning in 1925, cash receipts from cotton lint and seed accounted for about one-third of the total cash receipts from the marketings of all farm commodities. Cash receipts from cotton lint and seed were proportionately lower during and immediately following World War II than they were during any other period. This decline was the result of large production and relatively higher prices received for other agricultural commodities, particularly animal products.

Because of the importance of cotton production to farm income in the District, the build-up of domestic cotton stocks in recent years — which has resulted in the imposition of stricter and stricter acreage controls — has caused concern about the future of the cotton industry. The 1956 cotton acreage allotment for the Nation is 69 percent of the acreage in cultivation on July 1, 1953, and that for the District states is only about three-fourths of the acreage in cultivation at that time.

Despite these restrictions, the total supply of cotton in the United States for the 1955-56 season is estimated at a record 25,900,000 bales, according to the United States Department of Agriculture. On August 1 this year, the carry-over of cotton is expected to be around 14,000,000 bales, or almost 3,000,000 bales more than on the same date a year earlier.

When viewed from a long-range perspective, it is apparent that the problems facing cotton growers are of long standing. The problems have been obscured by wars and postwar

booms, which have provided temporary relief but no lasting solution. Since 1929 the Government has been engaged actively in programs directed toward the solution of the cotton production and price problem. During the 22 crop years from 1933 through 1954, the Commodity Credit Corporation made loans on 52,769,000 bales, which amounts to approximately one-fifth of the production during the period. As of January 20, 1956, the Commodity Credit Corporation had made loans on an additional 6,459,805 bales of 1955-crop cotton.

Patterns of cotton production have changed within the past three decades. The application of research and technology, as well as changing economic forces in this country and abroad, has resulted in increased yields of cotton, shifts in cotton-producing areas, and the introduction of new and improved man-made fibers to compete with natural fibers. As mechanization has progressed and cotton farms have become larger, the capital required in farming and the cash costs of operation have increased, making cotton farming more hazardous, especially during periods of drought, declining prices, and rising costs.

Foreign Cotton Production

Although world consumption of cotton has risen, world production has increased faster and has exceeded consumption every year since the 1950-51 season. The latest estimate of the United States Department of Agriculture for the 1955-56 marketing year indicates that world production may exceed disappearance by 2,800,000 bales. One of the factors which have prevented a more rapid increase in the utilization of cotton has been the rise in consumption of man-made fibers, particularly since 1950. Incomplete data for 1955 suggest that the production of synthetic fibers may be equivalent to 13,000,000 bales of cotton.

Although the United States is still the largest producer of cotton, its portion of total world production has declined. Prior to 1933, the production of United States cotton accounted for over one-half of the total world production of commercial cotton. Since 1933, production of foreign cotton

has exceeded domestic output in every year except four; and in the 1950-54 period, the proportion of the world's supply of commercial cotton produced in the United States was 40 percent.

In 1950, 1954, and 1955, cotton acreage restrictions were placed upon American cotton producers to prevent the accumulation of surpluses and thus encourage a better balance between supply and demand at the domestic price support levels being maintained. During these years, foreign cotton-producing countries were expanding their output rapidly. As a result, the proportion of the world's commercial cotton produced in the United States during these 3 years was only 36 percent.

Nearly all foreign cotton-producing nations have increased production since the end of World War II, with the sharpest rise occurring since the beginning of the Korean War in 1950. Foreign commercial cotton production in the 1955-56 season is placed at 25,900,000 bales, or 147 percent larger than 11 years earlier. The greatest increases in foreign cotton production in recent years have occurred in Mexico and Central America, where new irrigation systems, reclamation of jungle areas, and the plowing up of pastures have provided additional acreages. New irrigation systems also have been an important factor in increased cotton production in most countries of the Near East, particularly in Turkey, Syria, and Iran.

Higher yields per acre also have been of major importance in the increased production of foreign cotton. As in the United States, foreign growers are making greater use of insecticides, fertilizers, improved seeds, mechanization, and other cultural practices. Cotton acreage in Mexico in 1955 was only 160 percent larger than the 1945-49 average, but production increased 255 percent. During the same time, acreage in South America increased 19 percent, but production rose 40 percent.

Long-range private estimates and production goals available from foreign sources indicate that foreign production

is expected to continue its upward trend but at a slower rate. Nigeria is undertaking a program to expand cotton production during the next few years from the current level of 180,000 bales to about 700,000 bales, and some expansion is planned by other countries. However, it is likely that most of the expansion in foreign production will be sought through a greater output per acre rather than through further large increases in acreages, except in cases where new irrigation facilities can be developed economically.

The rise in foreign cotton production has resulted from a combination of economic and political factors. The sharp rise in world cotton prices at the outbreak of the Korean War probably stimulated expansion in cotton production abroad. The maintenance of cotton prices in the United States at relatively attractive levels probably was a further inducement to foreign nations to increase output. In recent years, grain prices have been relatively lower than cotton prices, and foreign governments have emphasized production of cotton while increasing imports of the relatively cheaper food grains.

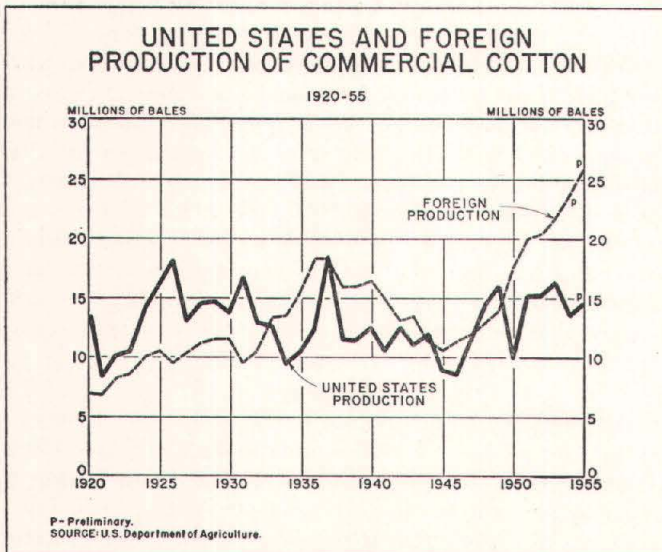
Of possible significance in the long-time trend in cotton production has been the desire of foreign countries to increase their self-sufficiency in cotton production for local consumption and to achieve a more favorable balance of payments through the sale of an export crop. To a large extent, the increases in foreign cotton production have occurred in those nations generally considered to be underdeveloped. In countries with large available land areas and a relative abundance of labor, agriculture provides a method of utilizing underemployed resources. Cotton is a crop which can be exported and, if a country embarks upon an industrialization program, can provide the raw material for a textile industry.

Cotton Production in the United States

Cotton production in the United States also has undergone significant changes. Substantial reductions in acreages have occurred, while per acre yields have risen sharply. During the 1920-24 period, an average of 33,900,000 acres of cotton was harvested, with an average production of 10,980,000 bales. In 1950-54, over one-fourth more cotton was produced on two-thirds of the acreage. Yields per harvested acre in 1950-54 averaged 297 pounds, or nearly double those in 1920-24, while yields for the 1955 crop are estimated at 416 pounds, or 170 percent higher than in 1920-24.

These increased yields are the result of many factors. Government policies with respect to acreage controls have caused farmers to select the best land for their cotton. In addition, the use of fertilizer has increased in terms of both the proportion of cotton acreage fertilized and higher rates of application per fertilized acre. The Department of Agriculture estimates that 56 percent of the cotton acreage was fertilized during 1950-54, compared with an average of about one-third of the acreage during 1928-32. Since 1928-32, the number of pounds of fertilizer used per acre of cotton in cultivation on July 1 has increased 128 percent.

Improved varieties of cotton, better insect control, and cultural practices also have played a part in increasing yields.



PERCENT OF UNITED STATES COTTON CROP PRODUCED AND AVERAGE YIELD PER ACRE, BY REGIONS

Period	IRRIGATED WEST ¹		OKLAHOMA AND TEXAS		DELTA STATES ²		SOUTHEAST ³	
	Percent of U. S. production	Average yield per acre (Pounds)	Percent of U. S. production	Average yield per acre (Pounds)	Percent of U. S. production	Average yield per acre (Pounds)	Percent of U. S. production	Average yield per acre (Pounds)
1930-34...	3	420	38	150	29	201	30	221
1935-39...	6	527	30	151	36	296	28	251
1940-44...	6	498	29	180	38	342	27	283
1945-49...	10	571	30	180	37	331	23	288
1950-54...	19	705	30	199	33	355	18	278
1955p.....	15	841	32	303	35	533	18	421

¹ California, Arizona, and New Mexico.

² Missouri, Arkansas, Tennessee, Mississippi, and Louisiana.

³ Virginia, North Carolina, Georgia, Florida, Alabama, South Carolina, and minor producing states.

p—Preliminary.

SOURCE: United States Department of Agriculture.

Of particular significance are the shifts in acreages that have taken place among the various cotton-producing areas of the United States. One of the major factors in the shifts has been the expansion of irrigation facilities in the western states.

Since 1930-34, the western irrigated areas and the Mississippi Delta region have accounted for a larger proportion of the total United States cotton production. As irrigation systems were developed, cotton production expanded rapidly in the irrigated western regions. In these areas, irrigation — together with good fertilization, insect control, and cultural practices — has provided exceptionally high yields.

The greatest decreases in cotton production have occurred in the southeastern part of the United States and, to a lesser extent, in Oklahoma and Texas. Output in Oklahoma has declined continuously since the early 1930's. The proportion of United States cotton produced in Texas declined until about the end of World War II and then increased slightly, although it still remains below the 1930-34 average.

In general, the greatest expansion in the Nation's cotton production has occurred in those areas where yields are above the national average. For example, the harvested acreage in California during the 1930-34 period was less than 1 percent

of the national average, while the State produced 2 percent of the Nation's cotton. During 1950-54 the average acreage harvested in California was 5 percent of the national average, and production was 11 percent of the national output.

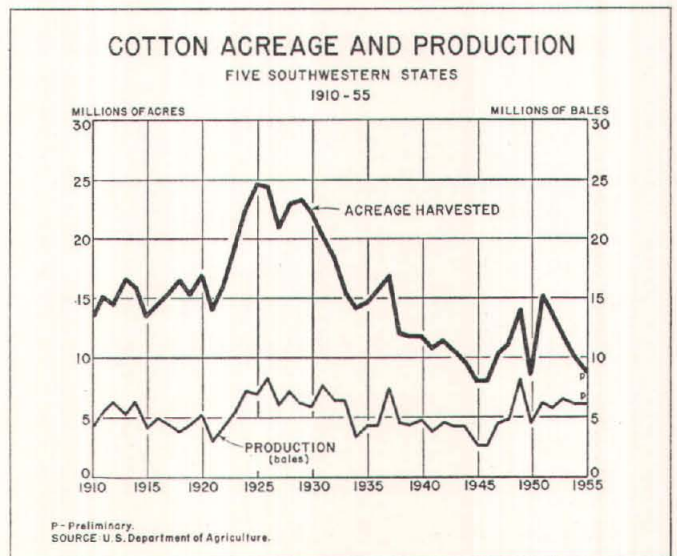
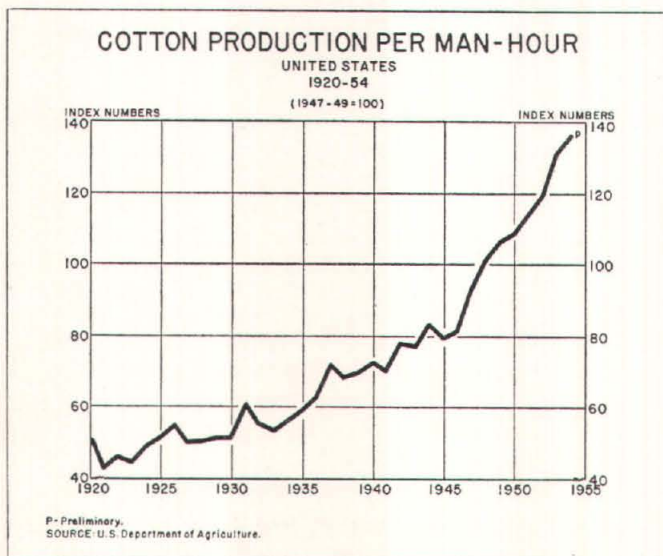
The upward trend in per acre cotton yields and the increased mechanization of the Nation's cotton farms have resulted in a striking gain in output per man-hour. In terms of the 1947-49 average, the preliminary index of cotton production per man-hour was 136 percent in 1954, or about one and one-half times that in the 1930-34 period.

The gains in cotton output per man-hour in recent years have not been uniform among the various producing areas. In California the output per man-hour in 1954 is estimated to be 61 percent larger than the 1947-49 average. New Mexico and Arizona showed gains of 49 percent, while the output per man-hour in Louisiana, Oklahoma, Texas, and Arkansas was slightly more than one-third above the 1947-49 averages. However, the gain in efficiency generally was greater for the District states than for the group of states in the southeastern part of the Nation.

Cotton Production in the District States

During the 1930-54 period, farmers in the Eleventh Federal Reserve District received 38 percent of the Nation's cash receipts from farm marketings of cotton lint and seed. During this period, the District states accounted for over half of the acreage of cotton harvested in the Nation and for almost 40 percent of the cotton produced.

The acreage of cotton harvested in the District states reached a peak of 24,618,000 acres in 1925. Subsequently, it has trended downward, and preliminary estimates by the Department of Agriculture place harvested acreage in 1955 at one-third of the 1925 record. However, the level of production generally has been maintained, as a result of increased yields. During the 1925-29 period, an average of 6,970,000 bales was harvested from an average of 23,271,000 acres —



HARVESTED ACREAGE AND PRODUCTION OF COTTON

Five Southwestern States

Period	FIVE STATES		PERCENT OF HARVESTED ACREAGE AND PRODUCTION IN FIVE STATES ACCOUNTED FOR BY									
	Acreage (Thousands of acres)	Production (Thousands of bales)	Arizona		Louisiana		New Mexico		Oklahoma		Texas	
			Acreage	Production	Acreage	Production	Acreage	Production	Acreage	Production	Acreage	Production
1930-34.....	18,117	5,934	1	2	9	11	1	1	17	16	72	70
1935-39.....	14,113	5,024	1	4	9	15	1	2	15	11	74	68
1940-44.....	10,770	4,353	2	4	9	12	1	3	15	15	73	66
1945-49.....	10,316	4,590	2	7	8	11	2	4	11	8	77	70
1950-54.....	11,885	5,868	5	13	7	11	2	5	9	6	77	65
Average.....	13,040	5,154	2	6	9	12	1	3	14	11	74	68

SOURCE: United States Department of Agriculture.

the largest acreage and production in the history of the District states. In the 1950-54 period, only 16 percent less production was achieved on less than half as much acreage.

A review of trends in acreage and production during the past 25 years reveals rather important shifts in cotton-producing areas in the District states. The volume of cotton produced in New Mexico and Arizona during the 1950-54 period averaged 18 percent of the output for the District states, compared with an average of only 3 percent in 1930-34, while their proportion of the harvested acreage increased from 2 percent to 7 percent. Between these two periods, Oklahoma's proportion of the harvested acreage in the District states declined almost one-half, and its proportion of the production decreased 62 percent. The proportion of harvested acreage in the District states accounted for by Louisiana declined slightly, but its proportion of the production remained unchanged.

During the past quarter of a century, Texas accounted for an average of 74 percent of harvested acreage in the District states and 68 percent of the cotton produced. During this time, Texas increased its share of the harvested acreage, but its proportion of the total cotton production declined as yields failed to increase as rapidly as those in some of the other states.

Among the District states, Arizona and Louisiana showed the greatest improvement in per acre yields, with increases of 134 percent and 98 percent, respectively, from the 1930-34 averages. Yields in New Mexico and Texas increased more than one-third. However, although the relative gain in yields in New Mexico may appear small, it was quite phenomenal since the 1930-34 average was 408 pounds, or one-fifth larger than the highest yields for any other state and 168 percent larger than the yields for Texas.

The expansion of irrigated acreage in the District states, particularly in Arizona and Texas, has contributed substantially to higher yields per acre of many crops. In 1954 all the land irrigated in the District states totaled 7,334,520 acres, or one-third more than in 1949 and 215 percent larger than in 1939. A substantial portion of the new land under irrigation was planted to cotton. If this expansion in irrigation had not occurred, the effects of the drought on cotton yields in 1950-54 would have been much more severe than they actually were. During the past few years, interest in providing supplemental irrigation facilities has increased in many areas of Texas and Louisiana which, traditionally, have been dependent upon rainfall for growing cotton. As irrigation develops to a more significant extent in these areas, higher yields can be expected.

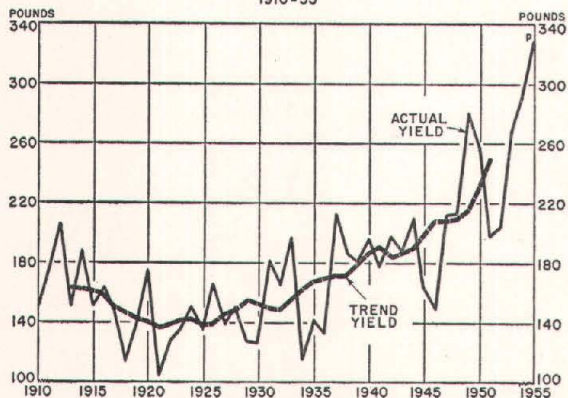
According to available data, most District states have followed the national trend toward fertilizing more of their cotton acreage and increasing the rates of application on acreage that is fertilized. The number of pounds of fertilizer used per acre of cotton in Texas was 13 percent more in 1950-53 than in 1930-33, while fertilizer application per acre increased 49 percent in Louisiana during the same period. Although data are not available for Arizona and New Mexico, reports from reliable sources indicate an increased use of fertilizers. In Oklahoma, however, the amount of fertilizer applied per acre of cotton during 1950-53 was 37 percent below that in the 1930-33 period, although the total tonnage of fertilizer increased.

Texas Cotton Production

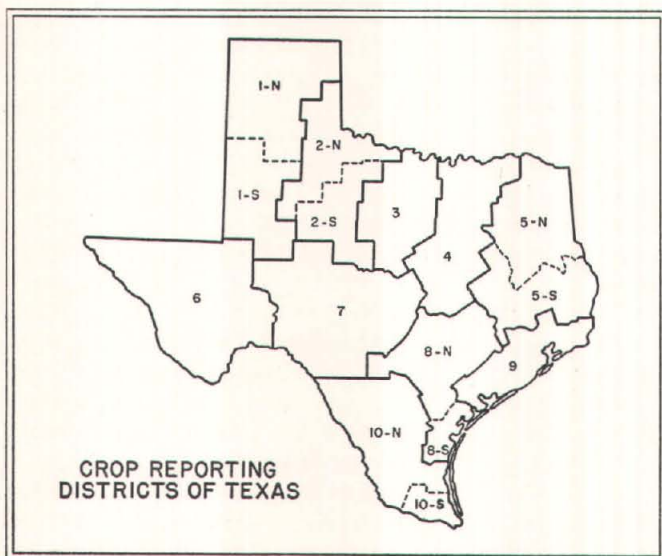
A remarkable shift in cotton acreage and production occurred in Texas during the past 25 years. In general, there has been a shift in both acreage and production of cotton to the extreme western, northwestern, and southern portions of the State.

COTTON YIELDS PER HARVESTED ACRE

FIVE SOUTHWESTERN STATES
1910-55



P - Preliminary.
SOURCE: U.S. Department of Agriculture.



A comparison of trends in acreage and production in each of the major Texas crop reporting districts indicates that changes in cotton output in some areas have occurred gradually, while the changes in other areas have been rather rapid. During the 1950-54 period, the average cotton production in only four of the 15 crop reporting districts exceeded their respective production during 1930-34. The largest increase occurred in Districts 10-S and 1-N, where the 1950-54 average output was over five and one-half times larger than the 1930-34 average output. Production in Districts 6 and 1-S increased 311 percent and 177 percent, respectively.

The gain in production that occurred in the extreme western, northwestern, and southern areas of Texas resulted from both an expansion in acreages and relatively larger increases in yields than were experienced in other areas. The acreage planted to cotton in Districts 1-S, 6, and 10-S during the 1945-49 period was sharply above that of the 1940-44 period and showed a subsequent increase during 1950-54. In District 1-N, however, practically all of the increase in acreage occurred during the 1950-54 period.

During the 1930-34 period, Crop Reporting Districts 1-N, 1-S, 6, and 10-S — which include the High Plains, Trans-Pecos, and Lower Rio Grande Valley areas — accounted for about 12 percent of the State's planted acreage and production of cotton. In 1950-54, over one-third of the planted acreage was in these four crop reporting districts, and their production constituted one-half of the cotton output in Texas.

Although the yield per planted acre in Texas during 1950-54 was about one-fifth larger than in 1930-34, the average yields in Districts 1-N, 1-S, 6, and 10-S increased at a much more rapid rate. During 1950-54 the yields per planted acre in Districts 6, 1-N, and 10-S were the highest in the State, while District 1-S ranked sixth in yield. The average yields per planted acre in Districts 3, 4, 5-N, and 8-N were below the state average in each of the 5-year periods beginning with 1930-34, with the exception of Districts 4 and 5-N during the 1935-39 period.

Districts 4, 5-N, and 8-N — which include the Black and Grand Prairies, most of the Southern Texas Prairies, and the northern part of the East Texas Timbered Plains — experienced the greatest relative decline in the percentage of the State's planted acreage and production of cotton. In 1930-34, approximately one-half of the acreage planted to cotton in Texas was in these three districts, and they accounted for about half of the State's output. Since that time, production has declined almost continuously; and in 1950-54, less than a fourth of the Texas cotton production originated in these districts, and their proportion of the State's total acreage declined to less than one-third.

One of the major factors accounting for differences in production is the effects of weather conditions on yields and harvested acreage. If it were not for the relatively larger proportion of cotton being grown under irrigation as compared with a decade ago, production during the low-rainfall period of 1950-54 would have been much smaller. As an increasing proportion of the acreage planted in Texas was irrigated, moisture deficiency—one of the principal produc-

INDEX OF PLANTED ACREAGE OF COTTON

Texas Crop Reporting Districts

(1930-34 = 100)

Crop reporting district	1930-34 average planted acreage (Acres)	PERCENT OF 1930-34 AVERAGE			
		1935-39	1940-44	1945-49	1950-54 ¹
1-N —Northern High Plains.....	255,154	89	68	69	222
1-S —Southern High Plains.....	1,200,636	103	96	128	181
2-N —Red Bed Plains.....	1,214,510	72	60	61	68
2-S —Red Bed Plains.....	1,497,580	74	56	58	73
3 —Western Cross Timbers.....	551,136	66	36	16	26
4 —Black and Grand Prairies.....	3,836,280	74	56	61	55
5-N —East Texas Timbered Plains..	1,717,460	68	45	26	20
5-S —East Texas Timbered Plains..	662,400	67	47	28	30
6 —Trans-Pecos.....	72,674	92	113	161	270
7 —Edwards Plateau.....	380,398	74	47	33	52
8-N —Southern Texas Prairies.....	1,473,604	69	44	33	34
8-S —Southern Texas Prairies.....	436,704	80	58	48	70
9 —Coastal Prairies.....	505,636	74	54	56	67
10-N —South Texas Plains.....	345,108	66	39	34	53
10-S —Lower Rio Grande Valley...	164,320	129	116	254	381
State.....	14,313,600	75	57	57	68

INDEX OF COTTON PRODUCTION

Texas Crop Reporting Districts

(1930-34 = 100)

Crop reporting district	1930-34 average production (Bales)	PERCENT OF 1930-34 AVERAGE			
		1935-39	1940-44	1945-49	1950-54 ¹
1-N —Northern High Plains.....	59,876	104	93	182	656
1-S —Southern High Plains.....	331,826	138	152	202	277
2-N —Red Bed Plains.....	327,770	74	88	82	64
2-S —Red Bed Plains.....	381,894	78	78	75	57
3 —Western Cross Timbers.....	115,080	59	47	23	21
4 —Black and Grand Prairies.....	1,185,408	81	59	63	56
5-N —East Texas Timbered Plains..	429,370	88	51	29	22
5-S —East Texas Timbered Plains..	206,724	71	44	34	42
6 —Trans-Pecos.....	53,034	125	138	235	411
7 —Edwards Plateau.....	87,072	75	57	42	36
8-N —Southern Texas Prairies.....	451,880	52	38	39	39
8-S —Southern Texas Prairies.....	166,680	92	72	76	83
9 —Coastal Prairies.....	211,382	63	63	63	98
10-N —South Texas Plains.....	72,524	53	37	58	73
10-S —Lower Rio Grande Valley...	56,680	162	163	503	673
State.....	4,137,200	81	69	77	91

¹ Data for 1954 are preliminary.
SOURCE: United States Department of Agriculture.

¹ Data for 1954 are preliminary.
SOURCE: United States Department of Agriculture.

tion hazards — was overcome in such areas, and the disparity between the average yields of cotton in irrigated areas and those in dry-land regions increased. In 1954, approximately four-fifths of the irrigated acres on Texas farms were in Districts 1-N, 1-S, 6, and 10-S. The acreage irrigated in these districts was 55 percent larger than in 1949 and was well over five times greater than in 1939.

Because of the relatively high costs of irrigation, it is necessary to maintain a high output per acre to reduce per unit costs. Consequently, farmers growing cotton under irrigation use heavy applications of fertilizer to boost yields and to offset the loss of plant nutrients leached out by irrigation water. In areas where rainfall is likely to be light or sporadic, fertilization practices cannot be geared as precisely as they can in those areas with supplemental water. As a result, average yields in dry-land cotton areas are likely to remain below those in irrigated sections.

Summary

The production of foreign cotton increased sharply from 1930 to 1937, during which time acreage restrictions were first imposed in the United States. Subsequently, foreign output declined until 1946. Since that time, such production has increased, with the largest gains occurring since the outbreak of the Korean War, when world cotton prices rose sharply. There is little indication that foreign cotton output will be reduced. If foreign governments promote the expansion of cotton production as a matter of national policy, the trend in foreign output may continue upward at a rapid rate. The pricing and export policies of the United States with respect to domestic cotton have played, and will continue to play, an important part in the decisions made by foreign producers.

As new technologies are developed and applied in the production of cotton in foreign countries, a gradual increase in yields can be expected. These higher yields—coupled with the increases expected in acreages of land suitable for crops, as a result of irrigation and other land reclamation projects—indicate that the potential cotton-producing capacities of foreign countries are likely to increase, rather than diminish.

In the United States, changes in cotton production have been perhaps as dramatic as those that have taken place in foreign production. The elements of change that seem particularly noteworthy are the general improvement in production efficiency throughout the Nation's Cotton Belt, the shifts from east to west in cotton production, and the differential in output among the various regions.

A continued increase in cotton production efficiency can be expected. During the past quarter of a century, mechanization and other technologies in cotton production have increased the output per man-hour, as average yields have risen and as double- and four-row tractor equipment has replaced single- and double-row horse-drawn implements. Higher yields and greater output per man-hour also have resulted from the use of soil-building crops, high-analysis fertilizers, irrigation, and improved varieties.

In many areas, hand labor in cotton harvesting has been reduced to a fraction of its former importance through the use of mechanical strippers and pickers. Improvements and adaptations in the design of mechanical harvesting equipment continue, and plant breeders are working on varieties of cotton which are better adapted to machine harvesting. The improvements in ginning facilities—particularly the widespread use of lint-cleaning and -drying equipment—have reduced much of the objection to mechanically harvested cotton.

With these developments—and as more farmers adopt machine harvesting methods and gain in their proficiency in using cotton-harvesting equipment—cotton production truly can be said to be mechanized to a marked degree through every stage from seed to bale.

The shift that has taken place between areas in the production of cotton is the result of a combination of two factors: (1) an expansion in cotton production potential in new areas through irrigation and better adapted varieties of cotton and (2) economic factors which relate to the costs and returns between alternative enterprises.

In the arid sections of the United States, cotton production has been able to expand greatly only as new surface irrigation projects have been developed and underground water supplies have been utilized. As these acreages were brought into cultivation, the decision as to whether cotton or other crops would be grown depended upon the relative costs and returns the individual farmer expected between the alternatives from which he could choose.

The decision that an individual farmer must make is fundamentally the same, regardless of the area in which he farms. That decision is to choose the best combination of enterprises which will maximize net farm income. Consequently, a farmer will continue to grow cotton as long as it remains the most profitable enterprise in which he can engage. On an area basis, if cotton generally remains the most profitable of the various farm enterprises which can be chosen, cotton will be produced, even though the relative returns may be considerably lower than those in other cotton-producing areas.

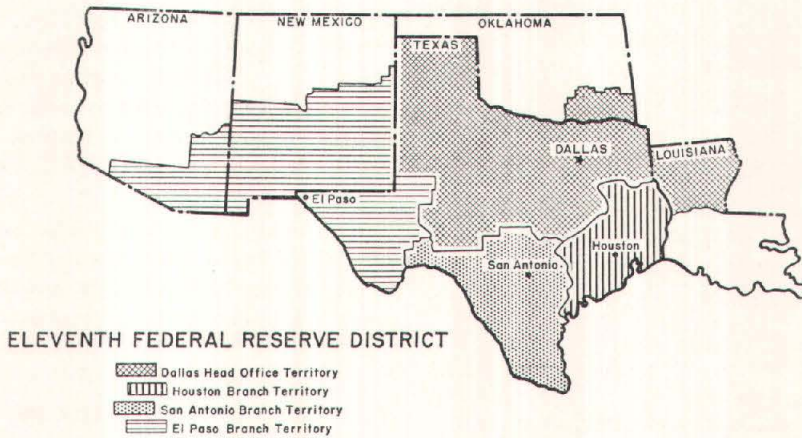
As a result, there has been—and will continue to be—wide disparities between the incomes of cotton farmers, either between areas or within the same area. If the costs of producing cotton increase, or if the prices received decrease, or if a combination of both occurs and—despite this unfavorable relationship—cotton is relatively more profitable than other alternatives, it may continue to be produced. The effect would be to reduce the net income of cotton farmers, if there is no offsetting increase in output. Cotton farmers in areas with high costs of production or the most inefficient cotton growers within an area would feel the impact of reduced income more sharply than the efficient farmers or those growers producing cotton in areas with relatively lower costs.

It is impossible to appraise accurately to what extent further shifts in production may occur between the Nation's various cotton-producing areas. Such shifts will depend upon

the relative changes in acreages and yields between areas. The potential cotton-producing capacity of the Nation's farms is substantially greater than the volume which world markets and domestic consumers are willing to take at present prices. This has led to successive reductions in acreages during the pre-World War II period and again in recent years, in order to reduce the accumulation of cotton stocks acquired by the Federal Government in price support operations. It appears likely that some controls on production will be needed during the next several years if the national policy is to be di-

rected toward maintaining cotton prices at approximately present levels.

In the foreseeable future, cotton is likely to remain the major crop grown in the District states. As long as acreage allotments are apportioned according to past acreage histories, present acreage relationships will be relatively fixed, and changes in output among areas will reflect relative changes in yields resulting from growing conditions and cultural practices.



REVIEW OF BUSINESS, AGRICULTURAL, AND FINANCIAL CONDITIONS



Sales at department stores in the Eleventh Federal Reserve District in December rose more than seasonally above the previous month and were 6 percent above December 1954. Consumer durable goods sales continued strong in December, with sales of homefurnishings increasing 8 percent above those of a year earlier. Department store inventories on December 31 were at a record year-end high. District furniture store sales rose 37 percent over November and 3 percent over December a year earlier.

Snow and rain in many parts of the District during January materially brightened agricultural prospects. Production of 1956-crop winter wheat in the District states is estimated to be more than double the 1955 output. The value of crops produced in the District states during 1955 was moderately below that in 1954.

District crude oil production in early January increased slightly above the December level, and a further increase is expected in February as a result of the larger allowable set by the Texas Railroad Commission. Crude runs to refinery stills in the District averaged 2,278,000 barrels per day in early January, or slightly higher than in December and 125,000 barrels above January a year ago. Continued strong demand for petroleum products is causing higher levels of production and refining and a reduction in stocks.

Total nonagricultural employment in the District states during December established another all-time record at 4,032,600 workers, as seasonal increases in trade and government employment continued to provide the major gains. Manufacturing employment declined seasonally to a level of 737,200, with aircraft and chemical manufacturing showing the greatest strength.

The value of construction contracts awarded in the District during December was down 6 percent from the November level. Residential awards showed a sharp upturn, but "all other" awards decreased substantially.

Weekly reporting member banks in the Eleventh District increased their holdings of short-term Governments and reduced their portfolio of longer-dated issues. Gross loans increased one-half of 1 percent; although commercial, industrial, and agricultural loans declined seasonally.



Consumer buying in the Eleventh Federal Reserve District maintained a high level during December 1955, continuing the record levels that prevailed in the first 11 months of the year. Department stores sales set a new December record, as the dollar volume rose 6 percent above the previous December peak in 1954. Since the November-to-December increase of 61 percent was more than seasonal, the adjusted index of sales reached 144 in December, compared with 136 in both November 1955 and December 1954.

The demand for consumer durable goods continued to be a strong factor in maintaining the high level of department store sales. During December, sales of homefurnishings, which were approximately 17 percent of total sales, rose 8 percent above those of December 1954. The principal items accounting for the increase were furniture and bedding, sales of which were up 8 percent; major household appliances, up 13 percent; and radios, up 30 percent. On the other hand, sales of television sets were down 9 percent, and sales of domestic floor coverings were 14 percent lower than a year earlier.

December sales of soft goods were 4 percent above those in December 1954. The largest gains were in sales of women's and misses' ready-to-wear apparel, which were up 7 percent; piece goods and household textiles, up 7 percent; and small wares, up 4 percent.

Instalment sales in the District's department stores in December increased 40 percent from November and were 17 percent higher than in December 1954. Regular charge account sales increased 57 percent and 3 percent from the month-earlier and year-earlier figures, respectively, while

RETAIL TRADE STATISTICS
(Percentage change)

Line of trade by area	NET SALES			STOCKS ¹	
	Dec. 1955 from		12 mo. 1955 comp. with 12 mo. 1954	Dec. 1955 from	
	Dec. 1954	Nov. 1955		Dec. 1954	Nov. 1955
DEPARTMENT STORES					
Total Eleventh District	6	61	8	13	-14
Corpus Christi	3	84	6	29	-16
Dallas	4	61	9	18	-15
El Paso	5	68	8	12	-11
Fort Worth	9	60	9	12	-20
Houston	7	59	7	11	-17
San Antonio	3	55	6	3	-12
Shreveport, La.	7	61	6	6	-13
Waco	7	73	12	18	-7
Other cities	8	65	11	13	-9
FURNITURE STORES					
Total Eleventh District	3	37	15	10	-5
Amarillo	-16	10	-	21	-6
Austin	-3	24	13	20	-7
Dallas	-4	23	15	7	-7
Houston	19	57	23	5	-11
Lubbock	14	50	-	15	1
San Antonio	-6	51	6	19	-1
Shreveport, La.	8	44	14	11	-8
Wichita Falls	16	27	-	-	-
Other cities	3	31	10	5	-2
HOUSEHOLD APPLIANCE STORES					
Total Eleventh District	15	13	-	-	-
Dallas	11	13	-	-	-

¹ Stocks at end of month.

INDEXES OF DEPARTMENT STORE SALES AND STOCKS

(1947-49 = 100)

Area	UNADJUSTED				ADJUSTED ¹			
	Dec. 1955	Nov. 1955	Oct. 1955	Dec. 1954	Dec. 1955	Nov. 1955	Oct. 1955	Dec. 1954
	SALES—Daily average							
Eleventh District.....	241	155	146	228	144	136	138	136
Dallas.....	236	152	140	226	139	132	130	134
Houston.....	268	175	165	251	158	154	160	149
STOCKS—End of month								
Eleventh District.....	142p	165	162	125r	157p	149	147	139

¹ Adjusted for seasonal variation.
p—Preliminary.
r—Revised.

cash sales rose 75 percent from the previous month and 3 percent from December 1954. Cash purchases during December represented 35 percent of total sales, while charge account sales accounted for 54 percent and instalment sales, 11 percent.

Department store inventories on December 31 were at a record year-end high. The dollar volume of stocks, when adjusted for seasonal variation, showed a less than seasonal decrease during December but at the end of the month was 13 percent above the year-earlier level. Although merchandise on order at the end of December was down 25 percent from November, it was up 6 percent from the same date in 1954.

Furniture store sales during December gained 37 percent over November and 3 percent over the same month in 1954. Accounts receivable at the end of the month were 4 percent more than in November and 11 percent higher than at the end of December 1954. During 1955, end-of-month inventories at reporting furniture stores were consistently above those of the comparable months in 1954; at the end of December, stocks were 10 percent above those of a year earlier.

During 1955, over 55,500 new cars were sold in Dallas County, reflecting a 24-percent increase from the number sold in 1954. In Harris County, approximately 59,000 new cars were sold in 1955, indicating a year-to-year gain of 47 percent. During December, registrations in Dallas County were down 23 percent from a year earlier, whereas Harris County showed a 3-percent increase.



Snow and rain fell in many parts of the District during mid-January. This was the first moisture of consequence in much of the northwestern part of the District since October

and in the northern and eastern regions since the last week in November. The major portion of the snow—which measured 1 to 4 inches—occurred in an area extending southward from Oklahoma to Alpine, Texas, and northern Louisiana; as much as 2 inches of rain fell in south-central and east Texas. Smaller amounts of precipitation were received in other areas of northwestern Texas and eastern New Mexico. The moisture will be beneficial to small grains, winter legumes, and pastures and will help germinate spring oats.

LIVESTOCK RECEIPTS

(Number)

Class	FORT WORTH MARKET			SAN ANTONIO MARKET		
	Dec. 1955	Dec. 1954	Nov. 1955	Dec. 1955	Dec. 1954	Nov. 1955
	Cattle.....	47,150	57,115	59,709	17,135	21,065
Calves.....	13,251	21,782	18,123	13,409	19,172	23,011
Hogs.....	83,466	52,215	72,696	2,953	2,067	2,179
Sheep.....	36,725	47,543	45,642	18,401	114,453	114,399

¹ Includes goats.

More rain will be needed soon in all areas to provide deep moisture for growing crops and to condition the soil for spring planting.

Preceding the snow and rain, low temperatures extended as far south as the Lower Valley of Texas. Some damage to tender vegetables was reported, but hardy-type vegetables were not affected. Field work is active in south Texas vegetable areas, and the movement of hardy vegetables—especially cabbage, carrots, cauliflower, and spinach—is under way in all irrigated commercial vegetable areas. The shortage of moisture in the early nonirrigated vegetable areas in south Texas is delaying planting; in most irrigated sections, planting of spring-crop vegetables is active.

Heavy supplemental feeding of livestock continues over most of the District, as range forage and pasture grass supplies are limited. In central, western, and south Texas, many ranchers are continuing to burn prickly pears for livestock feed. Very little grazing remains in old stubble fields in the northwestern part of the District, but recent moisture in eastern areas has benefited rescue grasses and winter legumes. As a result of heavy supplemental feeding and generally mild, open weather, livestock remain in fair to good condition.

The number of sheep and lambs on feed on January 1, 1956, in all of the District states except Louisiana—which was not reported—totaled 414,000, or 16 percent less than on the same date in 1955, according to the United States Department of Agriculture. The number on feed in each of the District states except New Mexico was lower than a year earlier; that State showed a 13-percent gain. In the Nation, sheep and lambs on feed totaled 4,100,000, or 8 percent fewer than a year ago.

The acreage seeded to 1956-crop winter wheat in the District states as of December 1, 1955, totaled 9,871,000 acres, or about 1 percent larger than the acreage seeded for the 1955

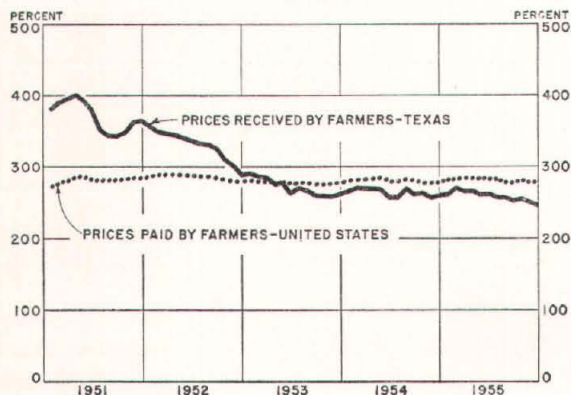
WINTER WHEAT
Four Southwestern States

Area	ACREAGE SEEDED (In thousands of acres)			PRODUCTION (In thousands of bushels)		
	Crop of 1956	Crop of 1955	Crops of 1944-53	Crop of 1956 ¹	Crop of 1955	Crops of 1944-53
	Arizona.....	44	44	28	1,144	1,218
New Mexico.....	450	441	586	1,800	1,500	2,867
Oklahoma.....	5,021	4,923	6,599	65,273	23,784	79,304
Texas.....	4,356	4,356	6,153	19,602	13,464	55,404
Total.....	9,871	9,764	13,366	87,819	39,966	138,179

¹ Indicated December 1, 1955.
SOURCE: United States Department of Agriculture.

AGRICULTURAL PRICE INDEXES

1910-14=100



SOURCE: U.S. Department of Agriculture.

crop but 26 percent below the 1944-53 average, according to the Department of Agriculture. The production of winter wheat in the District states in 1956 is indicated at 87,819,000 bushels, or more than double the small output in 1955 but 36 percent below the 10-year average. The largest increases in indicated production from a year earlier are in Oklahoma and Texas, where output is placed at 174 percent and 46 percent, respectively, above production in 1955.

The index of prices received by Texas farmers on December 15, 1955, was 247 percent of the 1910-14 average, or 1 percent below the month-earlier index and the lowest level since June 1946. The livestock and livestock products index was unchanged from that of mid-November, as a result of offsetting price changes for such commodities. However, increases in the prices of feed crops did not offset the lower prices received by Texas farmers for cotton, vegetables, and fruits.

The total value of principal crops grown in Texas during 1955 is placed at \$1,237,000,000, or 7 percent below a year earlier, according to the Department of Agriculture. The

CROP PRODUCTION
Texas and Five Southwestern States

(In thousands of bushels)

Crop	TEXAS			FIVE SOUTHWESTERN STATES ¹		
	1955	1954	Average 1944-53	1955	1954	Average 1944-53
Cotton ²	4,025	3,940	3,388	6,025	6,032	5,067
Corn.....	50,690	33,184	47,111	80,330	51,659	84,584
Wheat.....	13,464	30,894	55,404	40,236	102,783	138,465
Oats.....	26,110	41,354	28,167	43,081	66,757	47,500
Barley.....	2,072	3,135	2,481	16,964	22,441	9,964
Rice ³	14,880	17,040	10,918	28,030	32,996	21,886
Sorghum grain...	144,711	125,340	77,502	169,325	138,373	93,103
Flaxseed.....	96	578	879	174	676	1,300
Hay ⁴	1,850	1,415	1,570	5,619	4,519	4,807
Peanuts ⁵	239,235	108,185	272,522	372,575	155,035	390,998
Irish potatoes.....	2,880	2,033	3,479	5,722	4,815	7,580
Sweet potatoes..	3,480	1,500	3,664	14,300	10,524	13,379
Pecans ⁵	22,000	24,000	32,665	72,000	49,000	65,550

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.

SOURCE: United States Department of Agriculture.

FARM COMMODITY PRICES

Top Prices Paid in Local Southwest Markets

Commodity and market	Unit	Week ended January 20, 1956	Comparable week, previous month	Comparable week, previous year
COTTON, Middling 15/16-inch, Dallas....	lb.	\$.3395	\$.3350	\$.3355
WHEAT, No. 1 hard, Fort Worth.....	bu.	2.47	2.44	2.72½
OATS, No. 2 white, Fort Worth.....	bu.	.87	.90	1.01¼
CORN, No. 2 yellow, Fort Worth.....	bu.	1.60½	1.62½	1.82¾
SORGHUMS, No. 2 yellow, Fort Worth....	cwt.	2.21	2.24	2.71
HOGS, Choice, Fort Worth.....	cwt.	12.50	12.00	18.50
SLAUGHTER STEERS, Choice, Fort Worth...	cwt.	20.50	21.00	26.00
SLAUGHTER CALVES, Choice, Fort Worth..	cwt.	19.50	19.00	21.00
STOCKER STEERS, Choice, Fort Worth....	cwt.	19.00	19.00	22.00
BROILERS, south Texas.....	lb.	.21	.20	.25

acreage of principal crops harvested in 1955 also was 7 percent below that of 1954. Higher yields per acre partially offset the lower average prices received by Texas farmers for their crops. Record-high yields were realized for rice, Irish potatoes, sweet potatoes, and Sudan grass seed; while yields of corn, cotton, sorghum grain, and hay were at near-record levels.

The value of crops grown in Louisiana and New Mexico during 1955 was 5 percent and 12 percent, respectively, less than in 1954. Although data are not available, crop values during 1955 in Arizona and Oklahoma are expected to be lower than their 1954 levels. In the Nation the 1955 crop value was 3 percent below that in the previous year.

On January 27, 1956, rice growers voted in a referendum to determine whether or not marketing quotas and acreage allotments are desired on the 1956 crop. A national acreage allotment of 1,639,084 acres has been proclaimed for the 1956 rice crop; and the minimum national average support price has been set at \$4.04 per hundredweight, which is 75 percent of the November 15, 1955, parity price. The new national allotment is 15 percent below the 1955 allotment, and the minimum dollars-and-cents support level is 13 percent less than the 1955 support level of \$4.66 per hundredweight. In the District states, the 1956 rice acreage allotment (excluding the unapportioned acreage held in the national reserve) totals 882,112 acres, or 16 percent below the 1955 acreage allotment.



Gross loans of weekly reporting member banks in the Eleventh District rose \$12,583,000 in the 5 weeks ended January 18, 1956. Loans for financing security transactions grew \$14,793,000. Real-estate credits registered a gain of \$3,993,000, and "all other" loans rose \$14,449,000. Commercial, industrial, and agricultural loans declined \$20,052,000, consistent with the customary post-New Year loan repayment of commercial and industrial borrowers. Interbank loans decreased nominally. In the corresponding weeks a year ago, gross loans grew \$28,746,000, or more than twice the gain this year.

The weekly reporting member banks added \$21,194,000 to their investment portfolio during the 5-week period. The changes in the various categories indicate some shortening

of maturities; total holdings of Treasury bills rose \$27,861,000, and Treasury certificates of indebtedness increased \$5,603,000. The other investment categories were below their mid-December levels; the United States Government bond account led the decline, decreasing \$7,756,000 in the 5 weeks. In the counterpart weeks a year earlier, the investment accounts revealed some lengthening of maturities.

Total deposits remained almost stationary, decreasing only \$8,427,000, or less than one-half of 1 percent. A nominal increase in demand deposits was recorded, as the expanded balances of individuals and businesses offset decreases in the other accounts. The only major change in time deposits was registered in the balances of state and local governments, which declined \$11,787,000, whereas all time deposits decreased \$10,727,000.

The banks increased their use of borrowed funds \$7,550,000 to a total of \$42,500,000 in the 5 weeks. In the corresponding weeks of the preceding year, rediscounts and other borrowings declined to a nominal \$5,000,000.

CONDITION STATISTICS OF WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES

Eleventh Federal Reserve District

(In thousands of dollars)

Item	Jan. 18, 1956	Jan. 19, 1955	Dec. 14, 1955
ASSETS			
Commercial, industrial, and agricultural loans...	\$1,568,653	\$1,426,353	\$1,588,705
Commercial and industrial loans ¹	1,510,661	—	—
Agricultural loans ¹	57,992	—	—
Loans to brokers and dealers in securities.....	21,922	11,263	16,936
Other loans for purchasing or carrying securities.....	127,340	120,826	117,533
Real-estate loans.....	214,957	174,381	210,964
Loans to banks.....	13,465	19,205	14,065
All other loans.....	548,668	430,331	534,219
Gross loans.....	2,495,005	2,182,359	2,482,422
Less reserves and unallocated charge-offs..	30,525	22,371	25,568
Net loans.....	2,464,480	2,159,988	2,456,854
U. S. Treasury bills.....	70,462	123,498	42,601
U. S. Treasury certificates of indebtedness.....	46,097	107,123	40,494
U. S. Treasury notes.....	238,837	250,115	241,766
U. S. Government bonds (inc. gtd. obligations) ..	815,176	882,270	822,932
Other securities.....	239,459	229,625	241,044
Total investments.....	1,410,031	1,592,631	1,388,837
Cash items in process of collection.....	403,227	356,477	431,983
Balances with banks in the United States.....	483,535	463,684	475,161
Balances with banks in foreign countries.....	1,527	2,364	2,128
Currency and coin.....	45,901	42,758	52,554
Reserves with Federal Reserve Bank.....	554,444	607,389	566,276
Other assets.....	139,013	135,676	144,733
TOTAL ASSETS.....	5,502,158	5,360,967	5,518,526
LIABILITIES AND CAPITAL			
Demand deposits			
Individuals, partnerships, and corporations....	2,913,350	2,866,555	2,862,338
United States Government.....	28,165	50,825	49,936
States and political subdivisions.....	181,145	197,267	186,590
Banks in the United States.....	939,946	989,118	955,522
Banks in foreign countries.....	15,974	14,729	16,567
Certified and officers' checks, etc.....	61,948	63,262	67,275
Total demand deposits.....	4,140,528	4,181,756	4,138,228
Time deposits			
Individuals, partnerships, and corporations....	711,837	633,168	710,922
United States Government.....	12,079	13,370	11,874
Postal savings.....	452	452	452
States and political subdivisions.....	130,662	96,191	142,449
Banks in the U. S. and foreign countries.....	1,965	923	2,025
Total time deposits.....	856,995	744,104	867,722
Total deposits.....	4,997,523	4,925,860	5,005,950
Bills payable, rediscounts, etc.....	42,500	5,000	34,950
All other liabilities.....	58,738	74,805	70,312
Total capital accounts.....	403,397	355,302	407,314
TOTAL LIABILITIES AND CAPITAL.....	5,502,158	5,360,967	5,518,526

¹ Prior to January 4, 1956, agricultural loans were not reported separately. Comparable month-earlier and 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	Dec. 28, 1955	Dec. 29, 1954	Nov. 30, 1955
ASSETS			
Loans and discounts.....	\$3,929	\$3,465	\$3,892
United States Government obligations.....	2,400	2,674	2,345
Other securities.....	568	511	570
Reserves with Federal Reserve Bank.....	945	985	969
Cash in vault ^a	164	138	148
Balances with banks in the United States.....	1,107	1,189	1,009
Balances with banks in foreign countries ^a	2	2	2
Cash items in process of collection.....	420	357	414
Other assets ^a	196	179	199
TOTAL ASSETS^a.....	9,731	9,500	9,548
LIABILITIES AND CAPITAL			
Demand deposits of banks.....	1,123	1,210	1,002
Other demand deposits.....	6,485	6,393	6,381
Time deposits.....	1,324	1,140	1,287
Total deposits.....	8,932	8,743	8,670
Borrowings ^a	12	43	96
Other liabilities ^a	81	85	82
Total capital accounts ^a	706	629	700
TOTAL LIABILITIES AND CAPITAL^a.....	9,731	9,500	9,548

^a—Estimated.

The daily average of gross demand deposits for all District member banks in December 1955 was \$10,779,000 below the average during December 1954. The small year-to-year increase in demand deposits at country banks was offset by a somewhat larger decrease at reserve city banks. From November to December, however, the daily average of gross demand deposits increased \$131,562,000. Both reserve city and country member banks showed an increase in demand obligations.

District member banks recorded an increase in average time deposits in December compared with the preceding month, as well as the corresponding month in 1954. Time deposits in December 1955 averaged \$1,309,060,000, or 15.6 percent more than in December 1954. The month-to-month increase amounted to \$33,855,000. The reserve city and country banks shared in the expansion in both time periods.

Information from reporting banks in 24 cities in the District reveals that debits to deposit accounts in December 1955 rose 13 percent above those in the preceding month and were 3 percent more than in December 1954. In the November-December comparison, every reporting center showed increased debit activity, with the largest percentage gains occurring in Abilene and Tyler. These two cities also had the largest percentage increases over the year-earlier totals.

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
Dec. 1953....	\$7,104,841	\$ 971,988	\$3,453,418	\$545,675	\$3,651,423	\$426,313
Dec. 1954....	7,551,892	1,131,996	3,687,178	629,548	3,864,714	502,448
Aug. 1955....	7,144,992	1,276,939	3,480,158	755,284	3,664,834	521,655
Sept. 1955....	7,195,579	1,271,089	3,517,182	748,666	3,678,397	522,423
Oct. 1955....	7,304,808	1,260,749	3,589,745	736,233	3,715,063	524,516
Nov. 1955....	7,409,551	1,275,205	3,586,763	747,023	3,822,788	528,182
Dec. 1955....	7,541,113	1,309,060	3,656,903	764,200	3,884,210	544,860

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

(Amounts in thousands of dollars)

Area	DEBITS ¹			DEPOSITS ²			
	December 1955	Percentage change from		Dec. 31, 1955	Annual rate of turnover		
		Dec. 1954	Nov. 1955		Dec. 1955	Dec. 1954	Nov. 1955
ARIZONA							
Tucson.....	\$ 161,742	24	17	\$ 107,385	18.8	17.4	17.0
LOUISIANA							
Monroe.....	65,424	12	5	55,239	15.1	15.2	15.6
Shreveport.....	274,884	16	16	192,968	17.3	15.6	15.0
NEW MEXICO							
Roswell.....	31,035	0	2	28,335	13.3	11.9	13.2
TEXAS							
Abilene.....	91,183	37	24	60,788	16.9	13.4	13.8
Amarillo.....	172,532	11	9	111,384	18.8	16.8	17.4
Austin.....	147,091	14	13	119,443	15.0	13.2	13.4
Beaumont.....	133,299	7	1	114,328	14.5	14.4	15.1
Corpus Christi.....	173,960	-2	9	106,316	19.2	17.8	17.4
Corsicana.....	17,579	3	16	21,727	9.6	9.2	8.2
Dallas.....	2,295,990	-3	12	1,095,724	26.4	28.4	24.7
El Paso.....	266,625	6	10	135,411	24.0	22.6	22.3
Fort Worth.....	715,062	5	19	364,283	23.3	23.2	19.4
Galveston.....	84,440	-8	8	71,949	14.2	15.7	13.0
Houston.....	2,240,183	3	13	1,296,425	21.6	22.1	19.7
Laredo.....	22,390	5	10	19,271	13.9	13.4	12.6
Lubbock.....	171,098	-8	7	103,894	20.8	21.1	20.6
Port Arthur.....	57,949	6	8	42,875	15.6	16.6	14.0
San Angelo.....	48,100	6	10	46,462	12.5	11.5	11.4
San Antonio.....	501,044	5	12	349,852	17.3	17.2	15.5
Texarkana ³	20,576	-1	6	18,611	13.6	14.2	13.1
Tyler.....	87,802	25	26	61,080	17.8	14.5	14.8
Waco.....	93,155	6	8	70,371	16.1	15.0	14.8
Wichita Falls.....	114,781	15	13	110,913	12.7	11.0	11.6
Total—24 cities.....	\$7,987,924	3	13	\$4,705,034⁴	20.9	21.1	19.1

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 \$43,353,000 for the month of December 1955.

The annual rate of turnover of demand deposit accounts increased from 19.1 in November to 20.9 in December. However, the December rate was below the 21.1 rate of December 1954. The velocity of turnover is derived by dividing demand deposits into debits against these accounts.

The Federal Reserve Bank of Dallas held earning assets of \$987,705,000 on January 18, 1956, representing a decrease of \$21,370,000 in the 5 weeks beginning December 14, 1955. The United States Government securities account was reduced \$28,756,000, reflecting this bank's participation in Federal Reserve System actions to counter the seasonal return of currency and repayment of bank loans. Member bank discounts rose \$7,335,000, while other discounts and advances

CHANGES IN FACTORS AFFECTING MEMBER BANK RESERVE BALANCES

Eleventh Federal Reserve District

(In thousands of dollars)

	CHANGE ¹	
	5 weeks ended Jan. 18, 1956	Dec. 28, 1955— Jan. 18, 1956
FACTORS		
Federal Reserve credit—local.....	+\$ 15,296	—\$ 34,410
Interdistrict commercial and financial transactions...	— 192,351	— 146,833
Treasury operations.....	+ 139,554	+ 102,088
Currency transactions.....	+ 46,011	+ 40,518
Other deposits at Federal Reserve Bank.....	+ 373	+ 201
Other Federal Reserve accounts.....	+ 2,444	+ 2,323
RESERVE BALANCES		
January 18, 1956.....	\$979,767	
December 14, 1955.....	\$968,440	
	+\$ 11,327	+\$ 32,707

¹ Sign of change indicates effect on reserve balances.

NEW MEMBER BANK

The Gonzales National Bank, Gonzales, 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 January 16, 1956, as a member of the Federal Reserve System. The new bank has capital of \$100,000, surplus of \$100,000, and undivided profits of \$50,000. The officers are: Harold R. McCaskill, Chairman of the Board; W. R. Knight, Vice Chairman; Zack H. Pruett, President; Irving S. Forgotston, Vice President; Vernon W. Thames, Vice President and Cashier; and Marvin T. Philippus, Assistant Cashier.

NEW PAR BANKS

The Louisiana Bank & Trust Company, Shreveport, Louisiana, an insured, nonmember bank located in the territory served by the Head Office of the Federal Reserve Bank of Dallas, was added to the Par List on its opening date, January 10, 1956. The officers are: Ray P. Oden, Sr., President; R. McL. Jeter, First Vice President; W. Mitchell Brown, Vice President; and James C. Atkins, Vice President and Cashier.

The Continental Bank & Trust Company, Houston, Texas, an insured, nonmember bank located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, was added to the Par List on its opening date, January 16, 1956. The officers are: J. B. Greenfield, Chairman of the Board; W. P. Wells, Jr., President; W. J. Reed, Vice President and Cashier; and Mrs. Mildred L. White, Assistant Cashier.

The First State Bank, Point, Texas, a nonmember bank located in the territory served by the Head Office of the Federal Reserve Bank of Dallas, was added to the Par List on January 17, 1956. The officers are: J. C. Thompson, President; M. C. Tucker, Vice President; F. C. Montgomery, Cashier; and Miss Ethel Whittle, Assistant Cashier.

increased only nominally. Federal Reserve notes of this bank in actual circulation declined \$23,691,000 from December 14 to January 18, following customary seasonal changes. Total earning assets were about \$35,000,000 above their level on the corresponding Wednesday of last year, an amount ap-

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS

(In thousands of dollars)

Item	Jan. 18, 1956	Jan. 19, 1955	Dec. 14, 1955
Total gold certificate reserves.....	\$705,612	\$ 839,809	\$ 717,402
Discounts for member banks.....	37,750	2,000	30,415
Other discounts and advances.....	51	6,267	0
U. S. Government securities.....	949,904	944,149	978,660
Total earning assets.....	987,705	952,416	1,009,075
Member bank reserve deposits.....	979,767	1,019,073	968,440
Federal Reserve notes in actual circulation.....	703,405	728,880	727,096

proximately equal to the January-to-January increase in credits extended to member banks.

Member banks added \$11,327,000 to their reserve balances in the 5-week period ended January 18. Treasury operations and the seasonal return of currency contributed \$139,554,000 and \$46,011,000, respectively, to the increase in member bank reserve balances. Local Federal Reserve credit increased reserve balances by an additional \$15,296,000, while other Federal Reserve deposits and accounts also expanded. The only drain on Eleventh District member bank reserves arose from the net outflow of funds in interdistrict transfers, totaling \$192,351,000.



The Nation's oil industry entered 1956 at a substantially higher level of activity than at the beginning of 1955. Production, refining, imports, and demand were all markedly above their year-earlier levels, and the outlook for the industry is promising. While very few industry sources expect 1956 activity to continue the rate of growth apparent in 1955, most of them expect moderate growth in the current year. The United States Bureau of Mines forecast for 1956 indicates an increase of approximately 4 percent in total demand, reflecting a decline of nearly 10 percent in total exports and an increase of about 5 percent in domestic demand. These changes indicate a much slower rate of growth in total demand than the 8-percent increase in 1955. The 1956 forecast also indicates an increase of nearly 4 percent in supply, with a 7-percent rise expected in imports.

Demand for refined products during the 5 weeks ended January 13 was exceptionally strong, particularly demand for kerosene, distillate fuel oil, and residual fuel oil. A further mild decline occurred in the demand for gasoline. Colder weather in the northern and eastern parts of the country stimulated the demand for light heating oils, which showed a 28-percent increase over the previous 5 weeks and a 17-percent gain over the comparable year-earlier figure. Total demand for the four major products in this latest 5-week

SUPPLY AND DEMAND FOR ALL OILS, 1954-56

United States
(In thousands of barrels per day)

	Forecast 1956	Estimated 1955	Actual 1954
NEW SUPPLY	9,087	8,738	8,079
Production.....	7,756	7,494	7,027
Crude.....	6,994	6,775	6,346
Other oils.....	762	719	681
Imports.....	1,331	1,244	1,052
Crude.....	836	781	656
Refined.....	495	463	396
CHANGE IN STOCKS	27	17	-29
Crude.....	0	0	-44
Products.....	27	17	15
DEMAND	9,060	8,721	8,108
Exports.....	333	370	356
Domestic.....	8,727	8,351	7,752
Gasoline.....	3,754	3,605	3,393
Kerosene.....	320	316	324
Distillate.....	1,686	1,577	1,442
Residual.....	1,516	1,505	1,430
All other.....	1,451	1,348	1,163

SOURCE: United States Bureau of Mines.

CRUDE OIL: DAILY AVERAGE PRODUCTION

(In thousands of barrels)

Area	December 1955 ¹	December 1954 ²	November 1955 ¹	Change from	
				December 1954	November 1955
ELEVENTH DISTRICT	3,280.3	3,043.9	3,225.6	236.4	54.7
Texas.....	2,936.7	2,718.9	2,882.5	217.8	54.2
Gulf Coast.....	601.9	574.5	592.5	27.4	9.4
West Texas.....	1,172.0	1,058.1	1,139.8	113.9	32.2
East Texas (proper).....	223.3	217.6	219.3	5.7	4.0
Panhandle.....	90.3	86.8	90.2	3.5	.1
Rest of State.....	849.2	781.9	840.7	67.3	8.5
Southeastern New Mexico..	227.0	210.5	226.9	16.5	.1
Northern Louisiana.....	116.6	114.5	116.2	2.1	.4
OUTSIDE ELEVENTH DISTRICT	3,675.4	3,350.1	3,604.9	325.3	70.5
UNITED STATES	6,955.7	6,394.0	6,830.5	561.7	125.2

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

period showed a 10-percent increase compared with both the previous 5-week period and the corresponding period a year ago.

Crude oil production in the District in early January averaged 3,282,000 barrels per day, or 2,000 barrels higher than in December but 49,000 barrels below January a year ago. In the Nation, crude oil production averaged 7,020,000 barrels per day, or 64,000 barrels above December and 258,000 barrels above January 1955.

District crude oil production is expected to show further increases, as the Texas oil allowables for February were increased 16,592 barrels per day over the mid-January level to take into account the fewer number of days in the month and to allow for new well completions. February allowables total 3,388,479 barrels per day, compared with 3,241,438 barrels in February 1955.

Crude runs to refinery stills in the District averaged 2,278,000 barrels per day in early January, or 9,000 barrels higher than in December and 125,000 barrels above the level in January a year ago. In the Nation, refinery crude runs averaged 7,982,000 barrels per day, or 209,000 barrels above December and 603,000 barrels above January 1955. The strong demand for petroleum products which has been stimulating production and refining activity in the past few months is expected to maintain an upward pressure upon refinery runs in the near future.

Total imports in the 5 weeks ended January 13 averaged 1,416,000 barrels per day, which is 9 percent above the previous 5-week period and is 10 percent above the comparable period of 1955. The recent increase came from larger imports of refined products, whereas the year-to-year gain stemmed from increased imports of crude oil.

Another favorable factor in the oil industry's position at the start of 1956 was the level of crude and refined products stocks in relation to demand. Crude stocks on January 14, totaling 259,188,000 barrels, were 1 percent above the year-earlier figure but 1 percent below the level at the close of December 1955. Stocks of the four major refined products on January 13, at 336,739,000 barrels, were 1 percent below the year-earlier figure and 2 percent below the December 30

NATURAL GAS: MARKETED PRODUCTION

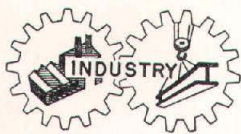
(In millions of cubic feet)

Area	Third quarter 1955	Third quarter 1954	Second quarter 1955
Louisiana.....	360,500	285,900	355,200
New Mexico.....	124,100	113,000	123,300
Oklahoma.....	145,400	152,600	173,000
Texas.....	1,132,100	1,069,600	1,143,700
Total.....	1,762,100	1,621,100	1,795,200

SOURCE: United States Bureau of Mines.

total. Among these major refined products, gasoline stocks were 6 percent above a year ago; kerosene, down 12 percent; distillate fuel oil, up 1 percent; and residual fuel oil, down 22 percent. The month-to-month changes showed substantial declines in kerosene and distillate stocks, a slight decline in residual fuel oil stocks, and a 4-percent increase in gasoline stocks. With demand markedly higher, crude and refined products stocks, in terms of the number of days' supply, are sharply lower.

Marketed production of natural gas in the four producing states lying wholly or partly within the Eleventh Federal Reserve District—Louisiana, New Mexico, Oklahoma, and Texas—totaled 1,762 billion cubic feet during the third quarter of 1955, or slightly below the second-quarter total of 1,795 billion cubic feet. On the other hand, the third-quarter total is 141 billion cubic feet above production in the comparable period a year earlier. Between the second and third quarters of 1955, increases in marketed production were shown in Louisiana and New Mexico, while decreases were evident in Oklahoma and Texas. The largest decline in the third quarter of 1955 occurred in Oklahoma production, which—at 145 billion cubic feet—was 28 billion cubic feet below the second quarter and 7 billion cubic feet below the third quarter of 1954. The other three District states showed increases against the year-earlier totals.



Total nonagricultural employment in the five states lying wholly or partly within the District established another all-time record, reaching a level of 4,032,600 in December.

This reflects an increase of more than 59,500 since November and a gain of 123,000 from a year earlier. Trade and government employment, responding to a record level of Christmas business, accounted for the largest month-to-month gains. Construction employment reflected further seasonal declines in activity.

Manufacturing employment showed a seasonal decline in December and, at 737,200, was approximately 6,000 below the level of the previous month. Aircraft and chemicals showed the largest employment gains, while food processing and lumber and wood products accounted for the major declines.

Unemployment in December declined moderately. Additions of temporary workers to the labor force prevented an unemployment decrease corresponding to the employment gain. In Texas, the only District state for which data are

NONAGRICULTURAL EMPLOYMENT

Five Southwestern States¹

Type of employment	Number of persons			Percent change Dec. 1955 from	
	December 1955e	December 1954r	November 1955	Dec. 1954	Nov. 1955
Total nonagricultural					
wage and salary workers..	4,032,600	3,909,600	3,973,100	3.2	1.5
Manufacturing.....	737,200	706,600	743,400	4.3	— .8
Nonmanufacturing.....	3,295,400	3,203,000	3,229,700	2.9	2.0
Mining.....	244,200	233,700	244,100	4.5	0
Construction.....	267,300	263,900	270,700	1.3	—1.3
Transportation and public utilities.....	401,000	390,400	398,600	2.7	.6
Trade.....	1,072,800	1,042,500	1,025,100	2.9	4.7
Finance.....	165,200	156,800	163,800	5.4	.9
Service.....	457,000	444,800	458,200	2.7	— .3
Government.....	687,900	670,900	669,200	2.5	2.8

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

e—Estimated.

r—Revised.

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

available, unemployment declined from 97,400 in November to 96,200 in December.

Construction contract awards in the District during December decreased to a value of \$125,739,000, which is 6 percent below the November level and is 22 percent below the level in December 1954. Residential construction awards showed an upturn from November with an increase of 40 percent, but awards for nonresidential building and heavy engineering construction decreased 23 percent. Compared with December 1954, both categories declined—residential awards, by 25 percent and “all other” awards, by 19 percent.

In the Nation, the value of construction contract awards during December was up 7 percent from November and was 5 percent more than in December 1954. Residential awards decreased 2 percent from November and were down 7 percent from a year earlier. However, “all other” awards increased 13 percent from both the previous month and the comparable month in 1954.

Total construction awards for 1955 in the District and in the Nation were up 17 percent and 20 percent, respectively, from 1954. Residential awards in the District showed a year-to-year gain of 1 percent, compared with 20 percent in the Nation. On the other hand, “all other” awards increased 30 percent in the District and only 21 percent in the Nation.

The total number of construction contracts awarded for buildings in Texas, the only District state for which detailed data are available, decreased from 53,631 in 1954 to 49,999

VALUE OF CONSTRUCTION CONTRACTS AWARDED

(In thousands of dollars)

Area and type	December 1955	December 1954	November 1955	January—December ¹	
				1955	1954
ELEVENTH DISTRICT..	\$ 125,739	\$ 160,068	\$ 134,056	\$ 1,715,578	\$ 1,471,846
Residential.....	50,596	67,284	36,113	714,633	704,506
All other.....	75,143	92,784	97,943	1,000,945	767,340
UNITED STATES ¹	1,920,754	1,828,837	1,796,787	23,764,277	19,770,267
Residential.....	711,206	761,577	725,712	10,204,259	8,518,291
All other.....	1,209,548	1,067,260	1,071,075	13,560,018	11,251,976

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

BUILDING PERMITS

Area	12 months 1955						
	December 1955		Percentage change in valuation from		12 months 1954		Percentage change in valuation from 12 months 1954
	Number	Valuation	Dec. 1954	Nov. 1955	Number	Valuation	
LOUISIANA							
Shreveport....	288	\$ 1,701,643	-59	-24	5,618	\$ 35,588,715	18
TEXAS							
Abilene.....	145	1,786,459	36	26	1,944	20,299,962	38
Amarillo.....	157	1,220,234	13	7	2,934	21,284,411	6
Austin.....	181	2,254,647	-28	-5	3,508	41,098,970	-9
Beaumont....	206	881,402	119	101	3,619	9,092,543	2
Corpus Christi..	391	1,519,211	-34	28	5,052	28,902,167	-15
Dallas.....	1,690	9,226,622	-18	-14	26,667	172,344,068	16
El Paso.....	278	6,311,286	103	161	5,038	38,585,805	28
Fort Worth....	426	2,189,277	-54	-28	8,999	56,367,343	20
Galveston....	75	140,490	-67	-65	1,232	4,960,632	-35
Houston.....	530	5,659,101	-54	-31	11,965	137,136,953	-17
Lubbock.....	312	1,686,677	-12	58	3,410	27,725,144	6
Port Arthur....	90	214,339	97	-36	1,835	5,267,669	46
San Antonio... 1,175	4,062,020	-29	-3	19,961	58,012,421	0	
Waco.....	231	1,110,657	-9	-6	3,469	15,512,024	1
Wichita Falls..	89	1,406,687	-88	12	1,673	14,174,786	-32
Total—16 cities..	6,264	\$41,370,752	-36	-1	106,924	\$686,353,613	1

DOMESTIC CONSUMPTION AND STOCKS OF COTTON

Area	(Bales)				
	November 1955 ¹	November 1954	October 1955 ²	August—November	
				This season	Last season
CONSUMPTION					
Total					
Texas mills.....	11,443	9,501	11,504	47,122	45,874
U. S. mills.....	741,447	703,367	737,056	3,070,567	2,895,524
Daily average					
Texas mills.....	572	475	575	554	540
U. S. mills.....	37,168	35,168	36,853	36,124	34,065
STOCKS, U.S.—End of period					
Consuming establishments.	1,553,485	1,557,428	1,362,267	—	—
Public storage and compresses.....	16,607,483	14,037,933	14,543,307	—	—

¹ Four weeks ended November 26.
² Four weeks ended October 29.
 SOURCE: United States Bureau of the Census.

to be the largest proven copper ore deposit in the United States.

in 1955. The floor area represented by these awards declined relatively less—from 111,015,000 square feet to 109,360,000 square feet. Total residential building awards decreased from 49,885 in 1954 to 46,043 in 1955, but nonresidential building awards increased from 3,746 to 3,956. Awards for manufacturing buildings in the State rose to 332 in 1955 from 286 in the preceding year. The total floor area of manufacturing building awards increased 53 percent in 1955 to 4,964,000 square feet.

A new copper mine and smelter, the property of the Magma Copper Company, are ready for production at San Manuel, Arizona, on the boundary of the Eleventh District, 40 miles northeast of Tucson. These facilities will add an estimated 70,000 tons per year, an increase of over 7 percent, to the domestic primary supply of refined copper when full production is reached this summer. The source of supply is reported

Although there has been a recent easing of the market, copper continues to be in short supply, with the Nation drawing heavily upon foreign sources. The price of electrolytic copper for shipment at United States refineries increased from 30 cents per pound in November 1954 to 43 cents per pound in November 1955. According to preliminary estimates, the gross supply of refined copper in this country in 1955 was the third largest in the past 10 years; refined copper consumption is expected to have set a peacetime record last year. High levels of automobile and other durable goods production, as well as increased construction activity, accounted for the largest part of this record demand. Estimates for 1955 indicate that the supply of refined copper was 1,749,000 tons, with 984,000 tons being provided by primary production of domestic ores. The consumption of refined copper is estimated at 1,486,000 tons for the year. Most of the excess supply was exported from this country. However, domestic production was insufficient to meet domestic demand.