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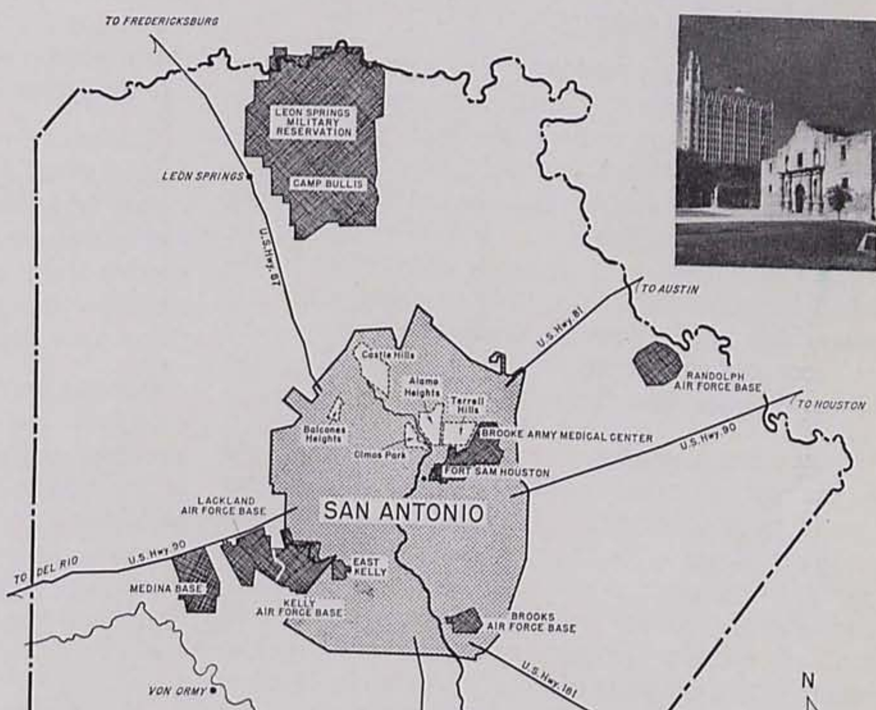
SAN ANTONIO



FEDERAL RESERVE BANK OF DALLAS
DALLAS, TEXAS

SAN ANTONIO

San Antonio, one of the oldest and perhaps the most venerated of Texas cities, has a richness of history and tradition which few cities in the Nation can match. Like other cities that have a proud heritage, it has made strong efforts to preserve and protect its links with an almost legendary past, and, in this respect, it has achieved remarkable success. Evidences of a romantic, bygone era are abundant everywhere, and they have contributed much toward placing San Antonio high in the ranks of America's most distinctive and charming cities.

San Antonio's great pride in its historical associations and its respect for earlier traditions are amply demonstrated by the fact that the city's participation in the Southwest's rapid industrialization and over-all economic expansion has not altered the fundamental character and personality of the city. From a military and religious outpost in the Texas wilderness, San Antonio has grown into the cultural and economic center of a south Texas empire of livestock, oil and gas, farm crops, and growing industry.

Its sky line has grown to impressive proportions; its industrial base, although still relatively narrow, has been broadened, and some of its local manufacturers have risen to positions of national leadership; its financial institutions are among the largest in the Southwest; and its population has been swelled by one of the largest concentrations of military installations in the United States. Nevertheless, these changes, with their far-reaching implications for the city's economy, have not succeeded in altering the basically nostalgic and old-world atmosphere for which the city is famous.

In fact, San Antonio's graceful integration of the old and the new has served to place its past in even sharper focus by creating the setting for some of the most interesting contrasts to be found in the Southwest: the grounds of the city's most famous structure — the historic Alamo — shaded by office buildings; modernistic places of worship alongside cathedrals and missions more than two centuries old; La Villita, a city block of San Antonio's earliest residential settlement as it existed more than 200 years ago, nestled near the center of the busy shopping district. These are only a few of the many contrasts which separate, in bold relief, the city's past from its present.

Located 150 miles from the Gulf of Mexico and about the same distance from the Mexican border at Laredo, the city of San Antonio is laid out along both banks of the San Antonio River, a river of great natural beauty that rises from springs located within the city's boundaries. Elevation ranges from 650 to 800 feet above sea level.

To the north and northwest of the city, the elevation rises sharply to form rugged hill country, which supports a sparse rural population and an economy based mainly on cattle, sheep, and goat ranching. Numerous summer camps and health and pleasure resorts also are located in this area, making tourism an important source of local income. South and southwest from San Antonio extends a vast area of undulating, brush-covered plains, interrupted by natural prairies and land cleared for grazing or intensive cultivation. This area, which extends as far as the Mexican border, is predominantly an agricultural region too, with petroleum and natural gas production as a secondary source of income. Ranching operations dominate the agricultural scene; however, important concentrations of cotton, grain sorghum, and forage crops occur in the central and eastern sections of the region, and the extreme southern section is outstanding in the Nation as a producer of citrus fruits and winter vegetables. Winter vegetables also are grown immediately west of San Antonio.

Eastward from San Antonio stretch fertile coastal prairies which support both cattle ranching and a wide variety of farm crops, including cotton, forage, grain sorghums, and commercial truck crops. Petroleum production also is important in this area. Nearer the coast, the population becomes largely urban, and industry replaces agriculture as the principal source of income.

For this south Texas area, San Antonio serves as the economic and cultural center. Its economic domain stretches roughly from the Rio Grande to as far north as San Angelo and Waco and from Del Rio on the west to Victoria on the east. Moreover, San Antonio also serves as an important point of contact in facilitating the flow of commerce and tourists between the United States and Mexico.

Historical Development

The city of San Antonio is of Spanish origin. Although early explorers camped at its present location during the late 1600's and christened the spot San Antonio (in honor of St. Anthony of Padua), the city's real beginnings date from 1718, when the Spanish Government sought to strengthen its claims against rival French claims by establishing a halfway post between Spanish missions in east Texas and Spanish garrisons in northern Mexico. The original buildings consisted of a fort called San Antonio de Bejar and a mission known as San Antonio de Valero. An era of mission building followed shortly thereafter, as older outposts were abandoned in east Texas and re-established along the banks of the San Antonio River. By 1730, San Antonio had become one of Spain's most important military and religious outposts in the Texas wilderness.

During the first decade of its existence, San Antonio was populated more or less exclusively by Spanish soldiers and missionaries, plus a relatively large assembly of Indians who were drawn into the settlement. Attempts were soon made to colonize the area, however, and in 1731 the Spanish Government succeeded in establishing there a colony of 15 families from the Canary Islands. By 1745, the combined population of the settlements around the missions, forts, and the village proper—each located at some distance from the others—was well in excess of 1,000, and the combined livestock numbers totaled over 10,000. Thus, even at this early date, San Antonio's future as an agricultural and military center was beginning to take shape.

San Antonio was made the Spanish capital of Texas in 1772; the missions were secularized, and the clusters of population in the village and around the various missions and forts were consolidated into San Antonio de Bejar. The town suffered extreme hardships during the long war of Mexico's revolution against Spain, serving as the battleground for almost continual strife between royalists and revolutionists for possession of the city. With the winning of Mexican independence in 1821, the settlement's growth and prosperity were revived; and by 1823, its population had increased to nearly 5,000. Military strife returned to the city with the war for Texas independence, and San Antonio's tradition as a military stronghold was upheld when 179 Texans perished in defense of the Alamo against the assaults of 6,000 Mexican soldiers.

A small number of Anglo-American adventurers and colonizers had drifted in and out of San Antonio before the Texas revolution; and during the revolution proper, the city was occupied by Texas troops for several months. Nevertheless, Anglo-American culture did not gain a foothold in the Mexican city until after the winning of Texas independence, when San Antonio became a western outpost of the new republic and, subsequently, a southern outpost of the United States. Thereafter, its population began a sharp upward movement.

San Antonio's economy, which previously had been built squarely upon livestock enterprises and the importance of the city as a military stronghold, began to show changes in the 1840's. During this period, there occurred a heavy influx of German immigrants, who introduced new customs, new businesses, and a greater zeal for intensive land cultivation. The beginnings of the brewing industry in San Antonio date back to this period. Military operations declined in importance, but San Antonio developed further as a major cattle center. After the Civil War, the city became the point of departure for the cattle drives which carried herds from the vast south Texas range country to midwestern markets, and the coming of the first railroad in 1877 added further impetus to San Antonio's development as a cattle capital.

The development of railroads also brought a flood of adventurers, settlers, and business promoters to the booming cattle city; and between 1870 and 1890, the population of San Antonio swelled from 12,000 to 38,000. At the same time, improved transportation facilities spelled the beginning of the city's modern industrial underpinning. It became feasible to exploit the area's stone and gravel deposits, and in 1880 the first cement factory west of the Mississippi River was constructed: San Antonio rose rapidly to a position of prominence as a supplier of building materials. Industries related to agriculture, such as flour milling and farm implements manufacturing, also began to flourish, and the city's brewing industry expanded sharply. Lumber was brought in from surrounding points, and woodworking became an important industry. By 1900, the population of San Antonio had risen to 53,000, making it the largest city in the State by a considerable margin. In the same year, the population of Bexar County was 69,000.

The development of the San Antonio economy since 1900 has featured mixed trends. The over-all expansion of the local economy has continued at a rapid rate, but industrial growth has lagged behind that in the State as a whole. By far the most powerful growth stimulant to San Antonio since 1900 has been the establishment and expansion of a ring of defense installations, which restored the city's former role as a military center of outstanding importance.

The marked expansion in military activities occasioned by United States participation in the two World Wars, by the advent of military aviation, and by the present-day defense requirements necessitated by international tensions has affected San Antonio probably as much as any other city in the Nation. Military spending in the area spurted sharply when the United States entered World War I; it continued to increase as military aviation bases were constructed after the end of that war; and World War II occasioned a further rise in the volume of local military expenditures. Reflecting largely the major impact of wartime military activities in the area, the population of the San Antonio metropolitan area leaped from 338,000 in 1940 to 500,000 in 1950 to show a gain of 48 percent.

San Antonio's history is not altogether martial, however. By virtue of its geographic location, its early settlement and growth, and its rail connections with eastern points, the city also jumped to an early lead as the principal distribution center for south Texas. With the improvement of railway service and the development of modern motor transport facilities after 1900, the boundaries of the city's retail and wholesale trade territories gradually were rolled back so that, today, the city stands as a major distribution center for south and southwest Texas, the southern portion of west Texas, and much of central Texas.

Although San Antonio is not a major petroleum center, oil and natural gas also have played an important role in its development. Plans to search for oil in Bexar County began as early as 1866, and by 1889, there were two producing oil wells and one natural gas well in the county. The first commercially successful field, however, was developed in the years between 1911 and 1915; subsequently, other fields were developed within the county. The discovery of more important oil and gas fields in adjoining Atascosa County (beginning in 1913) and in nearby Caldwell County (beginning in 1922) accelerated the search for oil and gas in south Texas, with San Antonio becoming the headquarters for hundreds of oil operators and producers. In addition, San Antonio's economy received a strong boost from the organization and growth of a multitude of businesses directly related to petroleum exploration and production — businesses such as oil well equipment manufacturing and distribution firms, oil field hauling companies, oil brokers, geologic map services, refineries, oil well service firms, drilling contractors, and geophysical survey equipment manufacturers.

Even though the strength of San Antonio's economy has derived largely from the city's importance as an agricultural, military, and distribution center, recent years have witnessed the broadening of its industrial base. Those industries which traditionally have been important in the city's economy — including brewing, food processing, metal fabrication, and woodworking — have expanded sharply to meet the growing postwar markets. Moreover, a number of new industries have been attracted to the city by the abundant labor supply, mild climate, and other industrial attractions. Particularly noteworthy in the area's recent industrial development have been the establishment and growth of a sizable garment industry, the initiation of lithium production and the manufacture of insecticides, the origination of important aircraft manufacturing and service plants, San Antonio's emergence as an outstanding medical center, and its marked growth as a research and development center.

Natural Resources

San Antonio's economic growth is explained largely in terms of location and climate. The city's site originally was selected as a convenient stopover between Spanish settlements in Mexico and in east Texas; subsequently, its proximity to the Mexican border made it a logical choice as a military outpost for the United States. Locational factors also contributed to the city's growth during the era of large cattle drives from south Texas to the Midwest, and its central location in south Texas contributed to its emergence as the principal trade and distribution center in the area.

Although San Antonio serves as the headquarters for hundreds of oil and gas operators and producers, Bexar County has relatively small petroleum deposits. Since 1889, crude production in Bexar County has amounted to about 17 million barrels, or approximately 1 percent of crude production in the State; and the county's present oil reserves are very small. The natural gas reserves of Bexar County are of somewhat greater importance, and gas production in the county currently is running at an annual rate of approximately 3 million cubic feet. Far richer gas and oil fields are located within a short distance from San Antonio, however, thus providing the link which explains the city's identification with the petroleum industry. Most of the crude oil produced in the San Antonio area is refined at installations along the Gulf Coast, but refineries located within Bexar County are equipped to handle slightly more than 6,000 barrels per day.

Bexar County is rich in stone, clay, and sand and gravel deposits. The county leads the State in the production of stone, with most of the output being in the form of crushed limestone for roadstone, concrete, and railroad ballast. Clay is mined from open pits for use in the manufacture of building brick, heavy clay products, and lighter ceramic tiles. Bexar County's clay production is the fifth largest in the State. The county also is a leading producer of cement, having abundant deposits of limestone rock suitable for its manufacture.

The land resources of the San Antonio metropolitan area present a contrasting picture. Bexar County consists of 1,247 square miles, the soils in the southern and eastern portion of which are rich blackland clays and sandy loams suitable for intensive cultivation. In the western and northern sections of the county, the topography is rough and hilly, with thin limestone soils that are used primarily for livestock ranges.

One of San Antonio's outstanding resources is its climate, and the mild weather which this area enjoys undoubtedly has accounted for much of the city's success in attracting the five military aviation bases surrounding it. In addition, San Antonio's climate has enhanced the city's attractiveness to tourists, enabled the city to become one of the Southwest's favorite retirement spots, and served as a lure to industries and research facilities.

San Antonio's location on the edge of the Gulf Coastal Plain results in a modified subtropical climate. Normal mean temperatures range from 51° in January to 84° in August, and below-freezing temperatures occur on an average of only 13 days each year. Northerly winds prevail during most of the winter, while there are southeasterly winds from the Gulf of Mexico during the summertime. The relative humidity generally rises to around 80 percent in the early morning hours and declines to 50 percent by late afternoon.

Skies over San Antonio are generally cloudless. The city receives more than 70 percent of the possible amount of sunshine during the summer months and about 50 percent during the winter months. Particularly during the summer, low stratus clouds frequently develop during the later part of the night. These clouds commonly dissipate before noon, and clear skies prevail rather consistently in the afternoon.

Precipitation in the San Antonio area is fairly well distributed throughout the year, but the heaviest amounts occur during April and May in the spring and during September in the fall. The normal annual rainfall is 28 inches. Hail of damaging intensity seldom occurs, and measurable snow falls only once in 3 or 4 years.

Water, one of the most valuable resources in Texas, exists underground in abundance within the greater portion of the San Antonio area. In fact, the city has never experienced a serious water supply problem. San Antonio's water is obtained from an underground reservoir in the Edwards limestone formations of the Balcones fault zone, within which the city is located. Recharge to the reservoir reflects partially the direct infiltration of precipitation, but most of the recharge occurs as a result of channel and seepage losses from streams originating in the extreme southeast portion of the Edwards Plateau — streams that cross the limestone outcrops immediately below the Balcones Escarpment, which marks the southern end of this plateau. The long-time (1937-57) average recharge to this reservoir is estimated at 465,000 acre-feet per annum, or 415 million gallons per day; of this amount, approximately 200 million gallons per day may be perennially available for withdrawal in Bexar County.

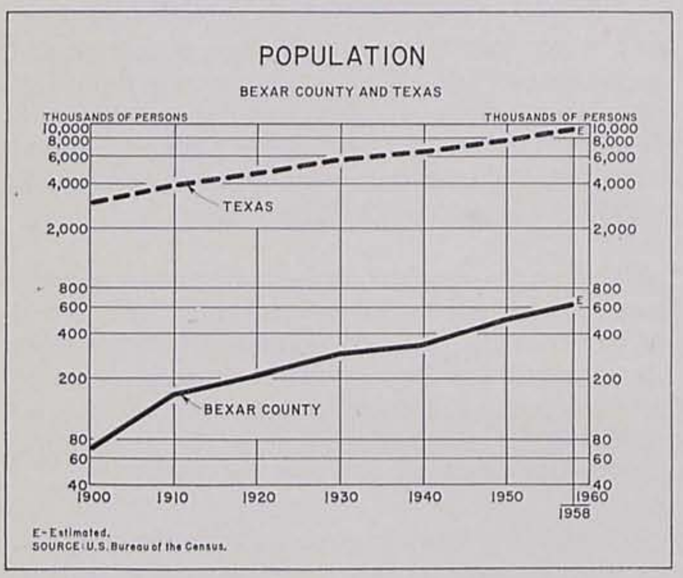
The storage capacity of this underground reservoir is not known. However, the occurrence of drought periods, in which the recharge to the reservoir has fallen substantially below the long-time average and even below the rate of withdrawals from the reservoir, has not occasioned serious water problems or the imposition of restrictions on water usage within the city.

Although San Antonio presently is comfortably situated with respect to the near-term adequacy of its water supply, it is possible that future problems may arise from a reduction in the annual rate of recharge caused by land management practices north of the fault zone — paralleled by expanded municipal usage in response to population growth, greater industrial usage, and increased irrigation in the areas overlying the reservoir within Uvalde, Medina, and Bexar Counties. In view of the possibility of a water supply problem at some time in the future, the city is attempting to secure rights to the water that will be impounded behind Canyon Dam in Comal County. A second approach to the potential water problem has been the creation of the Edwards Underground Water District, which has the authority to build recharge dams designed to divert a greater portion of flood runoff into the underground reservoir.

Human Resources and Cultural Environment

The current population of the San Antonio metropolitan area is approximately 640,000. Of the 1950 population (499,000), about 7 percent consisted of Negroes, 86 percent was native-born whites, and 7 percent was foreign-born whites. The last group consisted almost exclusively of Latin Americans, who constitute between 35 and 40 percent of the Bexar County population.

The median age of the San Antonio area's population in 1950 was 27, representing a slightly younger population than the State's population as a whole. In 1950 the median number of school years completed by San Antonio's adult population was 9.1, or only slightly below the state-wide median of 9.3.



San Antonio's civilian labor force, which numbers approximately 210,000, is recruited primarily from the immediate area. Because of the general sparsity of population outside Bexar County, additions to the labor force from the surrounding area are not of substantial importance. However, many skilled workers and technicians who terminate their military service in San Antonio choose to remain in the city permanently as civilian workers. There is also a small but steady stream of workers who migrate to San Antonio to enjoy the healthful climate and to escape colder weather in other parts of the country. With respect to the number of work stoppages and the resultant man-hour losses, San Antonio has one of the most favorable records in the Southwest.

Unemployment as a percentage of the labor force is consistently low in San Antonio, as contrasted with the state and national averages, but labor is abundant. This seeming paradox results from the fact that the San Antonio labor force is highly responsive to increased job opportunities and higher wages, and such developments tend to elicit prompt rises in the size of the labor force. To a large extent, this variability reflects the entry of female workers into the labor force. Factory employment is prized by San Antonio workers, and new manufacturing establishments moving into the area commonly receive employment applications far in excess of the number of jobs to be filled. Keen competition for factory employment enables employers to be selective in filling positions.

As a result of San Antonio's relatively narrow industrial base, the labor force is not, as a general rule, broadly skilled. In certain types of employment, however, highly skilled labor is available. This availability is particularly evident in the case of aircraft repair work, a field in which a large number of Government employees have become highly proficient. In addition, the personnel terminating their military service in San Antonio have a wide variety of skills in the areas of medicine and medical research, aeronautics and aeronautical research, electronics, and other fields for which special training is provided in the Armed Forces. As a leading scientific and industrial research center, the city also has a relatively large group of professional scientists and researchers whose skills are available to businesses in the area.

While the bulk of the San Antonio labor force is relatively low in skills at the present time, good progress in developing skills has been made during the past two decades. Moreover, the experience during this period suggests that the labor force is capable of achieving proficiency in skilled occupations over a fairly short period of time. During World War II, for example, the San Antonio schools and the Federal Government cooperated in training almost 20,000 workers for mechanical jobs at the Kelly Field maintenance depot, and the success of this project encouraged the growth and broadening of vocational training programs in the city's high schools.

Several of the schools in the area offer comprehensive programs in vocational training as an integral part of school work, and night school courses on the precollege level presently accommodate more than 4,000 students of industrial training and distributive education. Furthermore, school authorities in San Antonio are prepared to cooperate with new businesses and industries moving into the city by setting up separate classes to train workers for jobs requiring special skills and training not included in the over-all vocational education program.

San Antonio's cultural, educational, and recreational facilities are among the most outstanding in the Southwest. The city is widely acclaimed as a cultural center. It maintains one of the finest public libraries in the State; its symphony orchestra is highly rated; and its week-long Grand Opera Festival features world-famous stars from New York and European opera houses. Moreover, numerous museums and art galleries — some of which rank among the foremost galleries in the Southwest — are located in San Antonio; and the San Antonio Little Theater is one of the most outstanding of its kind in the Nation.

The city's public education system is highly rated. In addition to the public schools, there are also a large number of private schools, military academies, and schools of music and art. San Antonio also has six institutions of higher learning. San Antonio College and Trinity University are coeducational institutions. St. Mary's University is primarily for male students, while Our Lady of the Lake College and Incarnate Word College are girls' schools. St. Philip's College, a publicly supported junior college, also is located in the city. The combined enrollment of these institutions of higher learning is approximately 12,000. San Antonio's prestige as an education center was further enhanced when the Texas Legislature recently selected the city as the location for a new medical branch of the University of Texas.

In keeping with San Antonio's emphasis on outdoor living, recreational facilities are abundant. There are numerous parks in the city, the most famous of which is Brackenridge Park. Here are located one of the outstanding zoos in the United States and a complete aquarium. In addition to the parks and playgrounds maintained by the city, there are a large number of municipally owned swimming pools, tennis courts, baseball and softball diamonds, and golf courses. Privately owned golf courses and polo fields also are available. Nearby Medina Lake and Lake McQueeny offer excellent fishing and boating facilities, and numerous dude ranches in the hill country above San Antonio afford further recreational opportunities. The abundance of wild game, such as deer, quail, and turkey, within a short distance from the city offers excellent hunting prospects for sportsmen.

Discussion of the cultural environment and living conditions in San Antonio would not be complete without mentioning two of the city's outstanding characteristics — cleanliness and an atmosphere of leisure. The Spanish influence permeates virtually every facet of life in San Antonio, but perhaps nowhere is it more noticeable than in the relaxed, leisurely pace at which the city lives. This characteristic, combined with the city's climate and cleanliness, makes San Antonio one of the most desirable residential cities in the Nation. San Antonio won the National Cleanest City contest in its population category in 1952, 1953, 1954, 1955, and 1958; it placed third in 1951, 1956, and 1957. Moreover, in 1954, San Antonio received the Grand National Award for cleanliness, in competition with cities in all population categories.

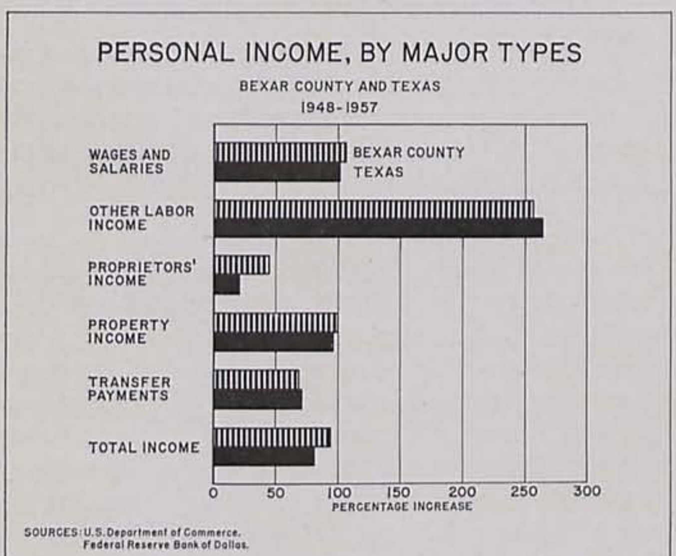
Employment and Income

The structure of the San Antonio economy is best indicated by the distribution of employment and personal income for the metropolitan area, viewed from the perspective of economic changes which occurred in the 1940's and 1950's.

The San Antonio economy experienced its most rapid growth during the 1940's, when a sharp expansion in military activities in the area produced growth in population and employment at rates approximately double the state-wide averages. The metropolitan population rose 48 percent between 1940 and 1950, in contrast with a state-wide gain of only 20 percent. During the same period, the labor force (including military personnel) increased 41 percent, also approximately double the State's 21-percent advance. However, the civilian sector of San Antonio's economy advanced less rapidly; civilian nonagricultural employment in Bexar County rose 38 percent between 1940 and 1950, or from 112,000 to 155,000 — compared with a state-wide gain of over 50 percent.

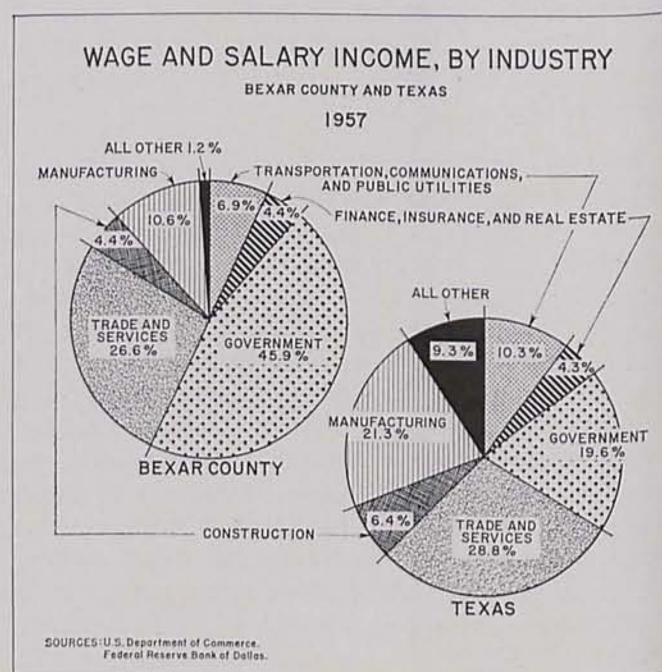
San Antonio's rate of growth moderated slightly after 1950, reflecting principally the cessation of pronounced military expansion in the area. This factor, plus the related slowing of the area's population growth, led to only a small increase in construction employment between 1950 and early 1959 and to a slower rate of growth in trade employment. Moreover, San Antonio has not shared fully in the State's industrial expansion since 1950: Its rate of increase in manufacturing employment is considerably less than the state-wide gain. Although the rate of growth in other types of employment, particularly government employment, has remained strong since 1950, the advances in these categories have not been sufficient to prevent moderation in the rate of civilian employment growth. Nevertheless, it should be noted that the slowing of the rate of civilian employment growth during the 1950-59 period was less in San Antonio than in the State as a whole, and the city's post-1950 growth in civilian nonagricultural employment has been about equal to the state-wide gain.

Moreover, total personal income in metropolitan San Antonio rose from $530 million in 1948 to $1,036 million in 1957, reflecting a 96-percent increase. During the same period, personal income in the State increased 81 percent, or from $9,054 million to $16,364 million.



That the San Antonio economy is built largely on the foundation of trade, government, and services is emphasized by the distribution of nonagricultural wage and salary employment. Reflecting basically the concentration in these areas, 87 percent of the civilian nonagricultural employment in San Antonio is comprised of nonmanufacturing workers. Trade accounts for 25 percent of nonagricultural employment in San Antonio, and civilian government workers, 28 percent — or much higher than the state average; service employment, at 14 percent, also is larger than the average for the State. Trade, government, and service employment, accounting for 116,400 employees, amounts to slightly more than three-fourths of total nonmanufacturing employment in metropolitan San Antonio. In contrast, the comparable figure on a state-wide basis is only 68 percent.

The narrowness of San Antonio's industrial base is indicated by the fact that only 23,000 wage and salary workers, or 13 percent of nonagricultural wage and salary employment, are engaged in manufacturing. Except with respect to mining employment, which is of much less importance in San Antonio than in the State, the relative importance of most other types of nonagricultural employment in the metropolitan area falls roughly in line with the state pattern.



The dominant position which government occupies in the San Antonio economy is emphasized by the source distribution of income. In 1957, total personal income in Bexar County was $1,036 million, or 6.3 percent of the state total. Wage and salary payments represented 72 percent of the area's gross income, in contrast with an average of 65 percent for the State; and almost 46 percent of all Bexar County wage and salary payments consisted of government payrolls. In fact, Bexar County alone accounts for almost 17 percent of total government wage and salary payments in the State. Manufacturing payrolls represent only 11 percent of wage and salary payments in Bexar County, compared with a state-wide average of 21 percent and still higher percentage contributions in most other large urban areas in Texas.

Proprietors' income and property income are of smaller relative importance in metropolitan San Antonio than in the State as a whole. Receipts from transfer payments (such as Social Security payments, direct relief, military pensions, unemployment compensation, etc.) are relatively more important, however, reflecting in part the popularity of San Antonio as a retirement center.

Principal Economic Activities

The San Antonio economy derives its greatest strength from government activities in the immediate area. Government, trade, and services are the dominant factors in the local economy. Manufacturing and agriculture provide supporting economic strength.

GOVERNMENT

San Antonio has the usual complement of state and Federal field offices which, together with municipal, county, and special district agencies, generally account for a fairly large number of government employees in major urban areas. In addition, San Antonio has one of the largest concentrations of military personnel in the Nation and one of the largest civilian-staffed aircraft maintenance depots in the world.

The dominant role of government, particularly military installations, is a tradition in San Antonio. Fort Sam Houston — the city's oldest military post — dates from 1879, when the Federal Government's quartermaster depot was transferred from the Alamo; and as early as 1891, the post was disbursing more than $1 million annually in the local area. Nevertheless, the major impact of military operations upon the city's economy was yet to come. The United States entry into World War I brought about a sharp expansion in both the areal size and the military complement of Fort Sam Houston. In 1917, Camp Wilson and Leon Springs Officers' Training Camp were established, and San Antonio was selected as the site for two additional military posts. The Nation's first great flying center, Kelly Field, was established there to train pilots for World War I; and construction on a second field, Brooks Air Base, was begun in the same year. By the end of World War I, San Antonio had become one of the leading military centers in the Nation, with a local economy dominated by Government expenditures for payrolls, subsistence, and other expenses related to the military.

After World War I, San Antonio's importance as a military center continued to grow. Randolph Field was located there in 1928, making the city the military aviation capital of the world; and by the 1930's, the volume of Government spending in the city for military purposes had risen to $20 million annually. With World War II, the military population swelled in excess of 100,000, and still another air base, Lackland Air Force Base, was created.

Since the end of World War II, military establishments have continued to play a dominant role in San Antonio's economy. The bases established prior to 1945 have been retained as permanent peacetime installations, and, in some cases, major expansion programs have been undertaken. Furthermore, the postwar period has witnessed the establishment of even more military activities in metropolitan San Antonio: Brooke Army Medical Center, the largest medical installation in the U. S. Army; Medina Base; and the U. S. Air Force School of Aviation Medicine.

Thus, there presently are no less than seven major military installations in metropolitan San Antonio, ranging in size from the mammoth Kelly Air Force Base to Medina Base, a relatively small defense installation. Of varying sizes between these two extremes are Lackland Air Force Base, Fort Sam Houston, Brooks Air Force Base, Randolph Air Force Base, and Camp Bullis (a satellite base headquartered at Fort Sam Houston). Located on the post of Fort Sam Houston are two major and unrelated activities: Brooke Army Medical Center, which is directly under the Surgeon General, Department of the Army; and Headquarters, Fourth U. S. Army, which commands all Army field units and related installations within the five-state area of Texas, Louisiana, Oklahoma, Arkansas, and New Mexico.

The combined military population of bases in San Antonio is around 50,000, and the number of civilian employees working on the bases is approximately 33,000. About 60 percent of the civilian employees who work at these military establishments are employed at Kelly Air Force Base, which is the Air Force's inspection and repair center for B-52 bombers and F-102 fighter planes. In addition, Kelly Air Force Base overhauls several types of aircraft engines. As the Air Force's "big airplane" depot, the base's shops overhauled B-36's, now process B-52's, and are projected to overhaul B-58's. As one of the largest supply bases, Kelly also is responsible for furnishing aircraft parts and engines on a world-wide basis. This responsibility necessitates the handling of more than 500,000 items, for which 7.5 million square feet of inside storage space are utilized. As a part of its general work program, Kelly Air Force Base also is engaged in an extensive electronics repair program which includes highly classified electronics research, as well as the repair and maintenance of such intricate electronic equipment as aircraft communications systems, firing systems, and radar.

The combined military and civilian payrolls of the military installations in metropolitan San Antonio total approximately $270 million annually, or about one-fourth of total personal income. This sum is more than three times the payroll of all manufacturers in the area, is more than twice the payroll of the trade establishments, and is about five times the area's income from tourist expenditures. Nevertheless, even these impressive comparisons do not indicate fully the contribution of the military to San Antonio's economy.

Local purchases of goods and services by military establishments in the metropolitan area total approximately $40 million annually, providing a direct stimulus to manufacturers and wholesalers in many different lines. Kelly Air Force Base accounts for the largest volume of local purchases, and its expenditures in San Antonio reflect primarily the purchase of raw materials and durable goods required for its aircraft-overhauling operations. At most of the other bases, expenditures for food, appliances, utility services, contract maintenance, and repair parts dominate the local purchases list.

In addition to direct payrolls and expenditures for local purchases, the presence of a large number of military dependents and retired military personnel in San Antonio further boosts the volume of Government payments which are directly or indirectly associated with the military function. Including these payments as military expenditures, it is probable that the total for military spending in metropolitan San Antonio comes to slightly more than $340 million annually, or about one-third of the personal income received in the area.

The existence of a large military population poses no particular problems for San Antonio. The city is virtually ringed by military installations, but they are not situated so as to present significant barriers to the city's areal growth. Cooperation between local civilian and military authorities is excellent, and relations between the military and civilian populations are smooth. Moreover, for all its dependence upon military expenditures and its large military population, San Antonio does not give the visual impression of being a "military town." This situation results partially from the fact that most of the military installations in the area are staffed largely by career personnel, many of whom have settled permanently in San Antonio with their families. Roughly 25 percent of the military personnel in San Antonio live in private homes and apartments, and many others live in on-base family dwellings. Of the number who live off base, almost one-half have purchased homes in San Antonio.

The importance of the role of government in the San Antonio economy is indicated by the fact that nearly 49,200 civilian wage and salary workers, or 28 percent of nonagricultural employment in Bexar County, have government jobs. Moreover, government wage and salary payments amounted to $349 million in 1957, which is almost 46 percent of total wage and salary payments to Bexar County residents. The disparity between employment and income statistics in this case reflects the exclusion of military personnel from employment totals, whereas military salaries comprise a significant portion of personal income in the metropolitan area.

The dependence of the San Antonio economy upon military expenditures is a source of concern to only a small proportion of the city's businessmen. The majority consider the role of the military in the local economy to be an element of stability. All of the military bases in the area are permanent peacetime installations, and there is nothing in the foreseeable future that would indicate either contraction or material expansion of existing facilities. Thus, while military installations are expected to remain a strong influence on the San Antonio economy, it is not expected that they will provide as strong growth stimulants as formerly.

TRADE

Trade traditionally has been an important support to San Antonio's economic growth, since the city is ideally located to serve as the wholesale and retail distribution center for the expanding south Texas economy. Furthermore, the city is situated favorably for the development of strong trade ties with Mexico. The current volume of Mexican trade handled in and through San Antonio is only moderate, but further increases are expected.

In terms of the volume of sales, San Antonio presently ranks as the State's fourth largest wholesale trade center; and in the wholesale distribution of certain types of products, notably fresh fruits and vegetables, it ranks first. In 1954 (the date of the latest Census of Business), San Antonio had 800 wholesale trade establishments, which reported a combined employment of almost 11,000 and a combined payroll of $38 million. Wholesale trade sales in 1954 totaled $610 million, or slightly more than 5 percent of the state total.

Merchant wholesalers account for almost 80 percent of the number of wholesale trade establishments in the area but handle only 61 percent of the volume of wholesale trade. The structure of the wholesale trade industry is indicated by the relative importance of the type of products distributed by San Antonio's merchant wholesalers. The principal types of wholesaling in the San Antonio area are related to servicing the food requirements of the south Texas population, and 27 percent of the merchant wholesalers' sales are made by distributors of edible farm products and by grocery, confectionery, and meat wholesalers. Although San Antonio itself is not heavily industrialized, the city serves as south Texas' leading wholesaler and distributor of commercial and industrial machines, equipment, and supplies; and wholesale sales of these products rank second only to sales of food. The city also serves as headquarters for some of the State's largest wholesalers of electrical appliances and lumber and lumber products, and wholesale sales in these lines also loom large in the local wholesale trade industry.

Almost 40 percent of San Antonio's wholesale trade sales are made by manufacturers' sales branches and offices, merchandise agents and brokers, petroleum bulk plants and gas facilities, and assemblers of farm products. In 1954, these wholesalers had combined sales of $239 million and an annual payroll of $10 million.

Reflecting metropolitan San Antonio's rapid population growth, as well as increases in population and income in its retail trade territory, retail sales rose from $386 million in 1948 to $553 million in 1954, showing a gain of approximately 43 percent. Over this same period, retail sales in the entire State rose 39 percent. In 1954, San Antonio was the fourth largest retail trade center in Texas, accounting for 6 percent of the State's total retail sales. Retail sales in metropolitan San Antonio have continued to advance since 1954.

As in other cities, retail sales in San Antonio are concentrated at food stores, automotive and automotive supplies stores, and general merchandise outlets. In 1954, sales at food stores accounted for 23 percent of total retail sales; sales of automobiles and automobile accessories, 18 percent; and sales at general merchandise stores, 14 percent.

The almost universal shift of a substantial volume of retail trade from central shopping districts to suburban shopping centers has not been as pronounced in San Antonio as in most other cities of comparable size. Large suburban shopping centers are not numerous in San Antonio, and with only a few exceptions (notably sales of food), retail sales continue to be concentrated in the Central Business District. There are indications, however, that the nationwide trend toward suburban shopping may only now be taking hold in the city to any appreciable extent.

Although there are five separately incorporated cities — Terrell Hills, Olmos Park, Alamo Heights, Castle Hills, and Balcones Heights — within the corporate limits of the city of San Antonio and a number of small trade centers in rural areas in other parts of Bexar County, virtually all of the retail trade in metropolitan San Antonio is conducted by retail outlets in the city of San Antonio. In 1954, 96 percent of the retail trade in the metropolitan area was concentrated within the city limits of San Antonio proper; 3 percent occurred in the satellite communities inside the city; and 1 percent occurred in other parts of the county.

The number of retail establishments in metropolitan San Antonio in 1954 was 5,513, only 64 percent of which had payrolls. Thus, for a large urban center, San Antonio has a relatively high proportion of small, family-staffed retail outlets. In 1954 the payroll of retail establishments amounted to $63 million, and 29,000 workers were employed in retail trade.

The total number of employees working in both wholesale and retail trade is 43,300 and absorbs 25 percent of the wage and salary employment in San Antonio. At $133 million in 1957, wage and salary payments to workers in wholesale and retail trade accounted for 13 percent of gross personal income in the metropolitan area.

SERVICES

For a number of reasons, the service industry is considerably more important in the economy of San Antonio than of many other urban areas. Basically, the importance of services in San Antonio stems from the fact that the city is an important tourist center. In addition, the existence of a large military population tends to support a larger service industry, and San Antonio's position as a leading convention, medical, and research center has added further to the development and support of a diversified service industry.

The 1954 Census of Business indicates that 2,621 selected service establishments in metropolitan San Antonio reported a combined employment of 11,000 and a combined payroll of $23 million in that year. The importance of the tourist business to the San Antonio economy is indicated by the fact that hotels and motels accounted for approximately 16 percent of the total receipts of the service establishments classified, while amusement and recreational facilities accounted for an additional 15 percent.

San Antonio's tourist trade, which presently contributes about $50 million annually to local income, has several facets. By far the greatest attractions are the city's ancient forts and missions, the most widely known of which is the Alamo. In addition, the scenic beauty of the San Antonio River and the zoo, aquarium, and park facilities attract a large number of visitors each year. The city benefits both directly and indirectly from tourist expenditures in the ranching country immediately northwest of San Antonio, where summer camps and health and pleasure resorts are numerous. San Antonio also is the Southwest's gateway to Mexico and accommodates thousands of tourists who stop en route to or from that country. Moreover, many Mexican nationals regularly visit the city for shopping, mediical care, and other purposes. Income from tourism in San Antonio is further augmented by visitors of military personnel in the area.

Conventions and other special events in San Antonio account for a relatively large percentage of tourist expenditures. The colorful Fiesta de San Jacinto and the San Antonio Livestock Exposition celebration, two of San Antonio's most outstanding annual events, usually draw around 200,000 visitors, and conventions held in the city attract more than 100,000 visitors annually. The abundance of convention facilities, coupled with the mild climate and leisurely atmosphere, has made San Antonio one of the leading convention centers in the Southwest. At the present time, these facilities are being expanded even further, creating new prestige for the city and encouraging the greater development of San Antonio as a tourist and convention center.

In addition to the usual complement of professional services, San Antonio has some of the largest and finest research organizations in the Nation and is developing into an outstanding medical center. A number of the research organizations are governmental, but the city also is distinguished by its private research firms. One of these, the Southwest Research Institute, is among the Nation's largest independent research facilities, employing a staff of more than 600 and having an annual budget of almost $6 million. Its area of inquiry is broad, including research in the natural and physical sciences, many phases of engineering, and industrial economics. The facilities currently are being utilized by many of the largest corporations in America.

San Antonio's emphasis upon scientific, industrial, and economic research has led to the creation of Science City, a 2,500-acre tract expressly planned for the location of scientific institutions, research laboratories for private industries, and plants for technical manufacturing, as well as residential areas. The Southwest Research Center comprises 1,500 acres of this tract, and already located there are the Southwest Research Institute, the Southwest Foundation for Research and Education, the Army Ordnance Corps' Lubricants Research Laboratory, and the Southwest Agricultural Institute.

San Antonio's emergence as an outstanding medical center dates largely from the end of World War II, although the city was distinguished by its private medical facilities at a much earlier date. A number of factors have contributed to the city's gains in the direction of becoming a medical center, but perhaps the most important was the selection of San Antonio as the site for Brooke Army Medical Center, which occupies more than 80 percent of the area in Fort Sam Houston. This center conducts all basic Army medical training, and one of its units, the Army's only Medical Service School, conducts nearly all advanced training for technicians and all medical military training for Army Medical Service officers. Another of the center's units, Brooke Army Hospital, conducts postgraduate medical education. Medical research also plays an important role in the activities of Brooke Army Medical Center. In particular, the Surgical Research Unit's work in the treatment of burns is among the most advanced projects in the entire field of medical research.

As an aeromedical research center, San Antonio has received national attention. The establishment of the U. S. Air Force School of Aviation Medicine, currently located at Randolph Air Force Base but soon to move into new quarters at Brooks Air Force Base, marked another step in the city's progress toward becoming a major medical center. Other important steps have been the approval of San Antonio as the site for the University of Texas Medical School Branch, an increasing number of new and expanding civilian hospitals, a new Air Force hospital at Lackland Air Force Base, and the initiation of important research in medicine at the Southwest Research Institute.

These factors combine to provide an unusually large pool of skilled medical personnel, including many military personnel who retire or otherwise elect to return to civilian life, thereby laying the basis for further expansion in private medical and medical research facilities in the area.

Personal services, business services, and repair services comprise the remaining components of San Antonio's important service industry. The types of business services that are particularly important in the local economy are aerial mapping, advertising services, and services in accommodation of the south Texas petroleum industry, for which San Antonio serves as the commercial capital.

Almost 23,300 wage and salary workers, or 14 percent of civilian nonagricultural wage and salary employment in metropolitan San Antonio, are employed in the service industry. This industry provides 9 percent, or $70 million, of the area's personal income from wages and salaries.

Supporting Economic Activities

San Antonio's economy, featuring government, trade, and service activities as the principal economic pursuits, reflects the existence of a large population which is essentially both nonindustrial and nonagricultural. Nevertheless, both manufacturing and agriculture have contributed substantially to San Antonio's progress, and they continue to provide significant support to the local economy.

MANUFACTURING

The manufacturing sector of San Antonio's economy is relatively small, but the supporting economic strength that it provides is important. The relatively modest role of manufacturing is indicated by the fact that manufacturing provides employment for slightly less than 23,000 wage and salary workers. Thus, manufacturing employment comprises only 13 percent of total civilian employment in Bexar County, whereas the state-wide average is nearly 20 percent. Wage and salary payments to manufacturing workers totaled almost $81 million in 1957, or only 11 percent of the county's personal income from wages and salaries. This relatively small percentage is influenced not only by the low proportion of manufacturing workers in metropolitan San Antonio but also by the low wage and salary scale. In March 1959, the average hourly earnings of manufacturing workers in Bexar County amounted to $1.60, or almost 25 percent below the state-wide average and even further below the averages in most other large urban centers.

AVERAGE WEEKLY AND HOURLY EARNINGS OF MANUFACTURING WORKERS, MARCH 1959

Bexar County and Texas

Type of manufacturing	Average weekly earnings[p]		Average hourly earnings[p]	
	Bexar County	Texas	Bexar County	Texas
Total..............	$65.12	$88.40	$1.60	$2.13
Durable goods.......	65.94	88.20	1.57	2.10
Nondurable goods....	64.40	88.56	1.61	2.16

p — Preliminary.
SOURCE: Texas Employment Commission.

Most of metropolitan San Antonio's manufacturing facilities are distributed randomly throughout the city proper, with little concentration in particular spots. However, the recent creation of new industrial districts is likely to encourage the concentration of new manufacturing establishments in the northeastern and eastern sections of the city.

San Antonio's manufacturing activities reflect little concentration along individual lines. In terms of employment, the largest local manufacturing industry is food processing, followed in importance by the manufacture of apparel. Other locally important manufacturing activities are printing and publishing and the production of machinery, fabricated metal products, and products made of stone, clay, and glass. As a group, these five types of manufacturing employ more than three-fourths of metropolitan San Antonio's manufacturing wage and salary workers.

San Antonio's most important manufacturing industry — the food industry — employs approximately 7,800 wage and salary workers, or 34 percent of all manufacturing wage and salary employment in the county. The origin and growth of the food industry are explained primarily in terms of locational factors, particularly with reference to the proximity of raw mate-

WAGE AND SALARY EMPLOYMENT, MARCH 1959, AND INCOME, 1957, FROM SECONDARY ECONOMIC ACTIVITIES

Bexar County

Activity	WAGE AND SALARY WORKERS			WAGE AND SALARY INCOME		
	Number	Percent of county total	Percent of Texas activity	Amount (In thousands of dollars)	Percent of county total	Percent of Texas activity
Manufacturing	22,772	13.1	4.7	80,500	10.6	3.5
Agriculture[1]	4,671	2.3	1.3	5,200	.6	.5
Construction	12,519	7.2	7.5	34,000	4.4	5.0
Transportation, communications, and utilities	9,906	5.7	4.5	52,000	6.9	4.7
Finance, insurance, and real estate	9,634	5.6	8.5	34,000	4.4	7.4
Mining	1,863	1.1	1.5	6,600	.9	.9

[1] Includes farm proprietors' employment and income, with percentages of county totals based on wage and salary and proprietor components combined.

SOURCES: Texas Employment Commission.
Federal Reserve Bank of Dallas.

rials, but other factors also have been important. San Antonio's location in the heart of the south Texas ranching country has led to the development of a sizable meatpacking industry. In terms of employment, meatpacking and the preparation of meat products are the most important component of the area's food industry, accounting for more than 1,700 wage and salary workers.

A second important component of San Antonio's food industry is the manufacture of beverages. Although this manufacturing activity provides employment to somewhat fewer workers than the meatpacking industry, the contribution of beverage manufacturing to the area's personal income is slightly larger, reflecting higher average wages and salaries. Brewing, which dominates the beverage-manufacturing industry in San Antonio, dates back to the 1840's, when there was a heavy influx of German immigrants. Subsequently, the area has proved to be an ideal location for serving the Texas market, and San Antonio's brewing industry has expanded sharply. Although it is located considerably south of both the geographical and the population center of Texas, San Antonio is approximately in the center of the area of heaviest beer consumption. This fact, plus the purity of San Antonio's water and an ample availability of labor, has contributed to making San Antonio the leader in the State's brewing industry. As a group, the beverage industry in Bexar County employs more than 1,600 wage and salary workers.

In addition to meatpacking and brewing, other important components of San Antonio's food industry are flour milling, the manufacture of bakery products, pecan shelling and packaging, and the manufacture of Mexican foods.

The garment industry, San Antonio's second largest manufacturing industry, provides employment for approximately 3,200 wage and salary workers, most of whom are female workers. Many of the local garment manufacturers serve national and international markets; their location in the area stemmed originally from the abundance of skilled handworkers, whose artistry rivaled that found in the Orient, the Philippine Islands, and Puerto Rico. In the early days of the San Antonio garment industry, most of the work was done in the workers' homes. As time passed, however, established producers converted to machine-made goods, and additional garment manufacturers moved into the area. Raw materials are drawn from the Southwest to only a limited extent, and most manufacturers rely heavily upon textiles from the South and Middle Atlantic States. The local garment industry concentrates primarily upon the production of work clothing and sportswear, with the largest output in apparel for men and boys. The manufacture of children's and infants' outerwear also is important, but high-style garments and garments requiring intricate workmanship are not manufactured in significant volume.

The printing and publishing industry, accounting for 2,300 workers, represents the third largest source of manufacturing employment in Bexar County. Most of the workers engaged in printing and publishing are employed by the leading San Antonio newspapers, but the relatively high ranking of this type of employment also reflects the existence of bookbinding services in the county and the central role which San Antonio plays as a printing center for south Texas business and industry.

As the primary positions of the food, garment, and printing industries suggest, light industry and the production of nondurable goods dominate manufacturing activity in metropolitan San Antonio, accounting for 60 percent of manufacturing wage and salary employment. San Antonio is not located near the sources of most raw materials used in the manufacture of heavy goods. Moreover, it is located outside the heavily industrialized and densely populated regions of the State and outside the largest markets for heavy goods. Consequently, San Antonio has been at a competitive disadvantage in developing industries producing heavy industrial goods or consumer durables.

Although there are exceptions, many of the local manufacturers producing industrial or other heavy goods serve only the south Texas market, in which San

Antonio's locational disadvantage is either small or nonexistent. Production to meet only the needs of the south Texas market is particularly noticeable in the case of manufacturers of stone, clay, and glass products. This category of manufacturing provides employment for 1,500 wage and salary workers and is the second largest durable goods industry in metropolitan San Antonio. Cement production, clay and building stone production, and the manufacture of concrete pipes, drain tile, and other structural clay products account for the bulk of employment in this industry.

The production of fabricated metal products is San Antonio's most important durable goods industry, accounting for slightly more than 1,500 wage and salary workers. The manufacture of fabricated metal products in San Antonio involves mainly the production of aluminum doors and frames, structural and reinforcing steel, boilers, storage tanks, sewer rings and covers, prison equipment, and other iron and steel products. In general, the production of fabricated metal products is oriented toward the accommodation of the south Texas market. However, specialization along certain lines has enabled some producers to compete in national and international markets, especially manufacturers of prison equipment and producers of steel designed for use in the construction of refineries and chemical plants.

Production of machinery in the San Antonio area centers principally around the manufacture of road construction machinery, refrigerators, and air conditioners, but minor production of assorted types of other machinery also occurs. Virtually all of the area's machinery manufacturers were established when San Antonio was the largest city in the State and before the era of rapid industrialization in the northeastern and coastal regions of Texas. In fact, some of the city's largest machinery manufacturers originated as producers of windmills and harnesses. While locational factors have tended to restrict their present markets to south Texas, some machinery manufacturers — particularly those producing roadbuilding equipment, refrigerators, and air conditioners — have been able to compete effectively in national and international markets. Machinery production provides employment for approximately 1,400 wage and salary workers.

In terms of employment in durable goods manufacturing, San Antonio's producers of lumber and wood products, transportation equipment, and furniture and fixtures are of somewhat less importance. Of particular interest in the area are the manufacture of executive-type aircraft, an operation which has attained a position of national recognition in its field, and the production of lithium from ores imported from Africa. The location of the lithium industry in San Antono is related primarily to the availability of natural gas and limestone in the area.

AGRICULTURE

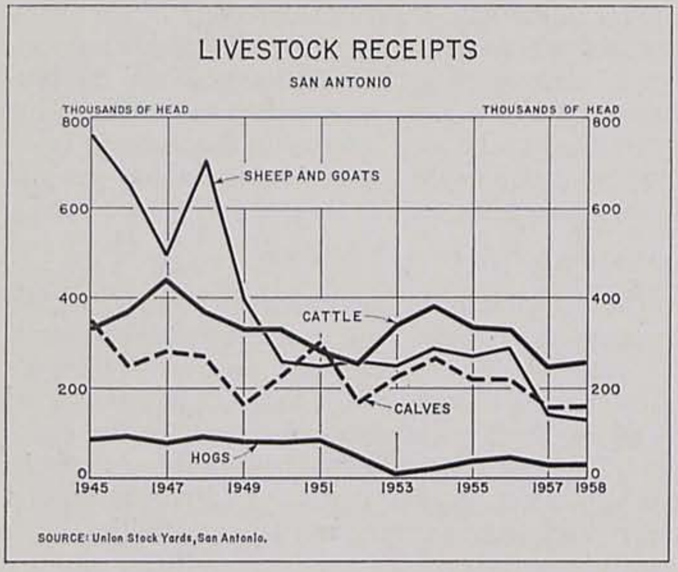
The contribution of agriculture to San Antonio's economic development and to the present structure of the economy is not accurately measured by county statistics alone. Traditionally, San Antonio has served as the marketing and shipping center for the entire south Texas agricultural region, where livestock, fruits and vegetables, pecans, cotton, grain sorghums, and other grain crops are raised in large quantities.

Even in terms of the direct support which metropolitan San Antonio's economy receives from local agricultural activity, agriculture is of significant importance. Approximately 4,700 workers are employed on farms in Bexar County. Farm wage and salary workers in the county receive an annual income of about $1.4 million, and farm proprietors' income amounts to an additional $3.8 million.

According to the latest Census of Agriculture, there were 2,772 farms in Bexar County in 1954, or 11 percent fewer than in 1950. The average size of farms in the county is approximately 192 acres, or substantially less than the state-wide average of almost 500 acres. Only 6 percent of Bexar County's farms were irrigated in 1954, but some advance has been made since that year.

Livestock and livestock products provide the principal source of farm income in Bexar County. In 1954 the value of all farm products sold amounted to $8.9 million, of which 78 percent represented the sale of livestock and livestock products. Within this category, there was a fairly even distribution between the value of dairy products sold and the value of livestock and other livestock products marketed. The livestock population of Bexar County farms in late 1954 included 64,000 cattle, 11,000 sheep, 9,000 swine, and 9,000 goats.

The value of all crops sold in Bexar County in 1954 was $2 million, or 22 percent of the value of all farm products sold. Marketed field crops other than vegetables, fruits, and nuts had a value of $867,000, representing mainly the value of marketed corn, cotton,



and grain sorghums. The value of vegetable crops marketed in 1954 was approximately $715,000, while the value of various horticultural specialties marketed was $388,000.

San Antonio's stockyards serve as the major marketing center for the south and south-central Texas ranching country, which provides a sizable portion of the State's beef output, much of the sheep production, and the majority of the goats raised in the State. Since 1945, when the local stockyards handled over 1.5 million animals, livestock receipts have trended downward, paralleling the nationwide decentralization of livestock marketing. In 1958 the San Antonio stockyards handled about 595,000 animals. The decline in livestock receipts has occurred principally in sheep numbers and reflects a net state-wide decrease in sheep production, influenced partially by drought conditions during much of the past decade. Drought conditions, plus the development of local auction markets throughout San Antonio's trade territory, also have reduced the number of cattle, hogs, and goats marketed at San Antonio's stockyards.

Other Economic Features

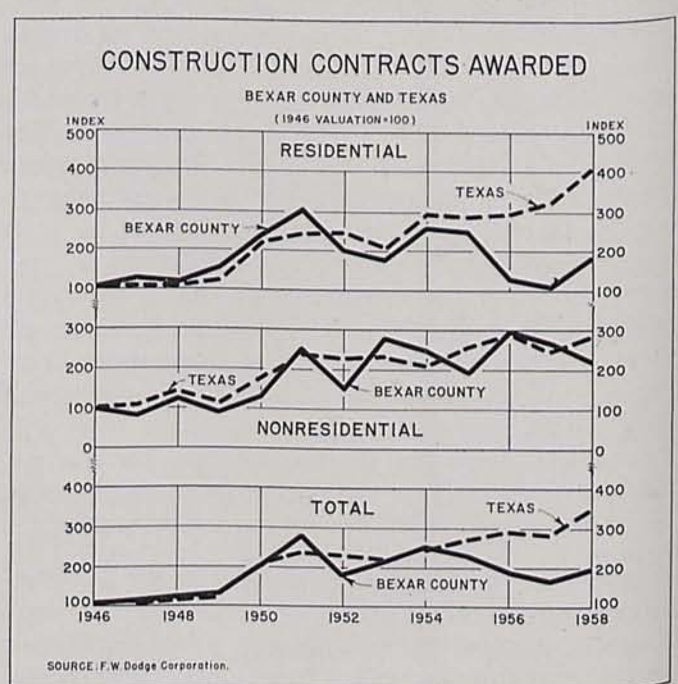
As in other areas of concentrated population, a number of industries have grown up in San Antonio to service the financial, housing, transportation, and other requirements of business, industry, and the general public. These derivative pursuits are of considerable importance in San Antonio, particularly the areas of construction, transportation, finance and insurance, and utilities.

CONSTRUCTION

Metropolitan San Antonio's construction industry received its sharpest impetus during World War II and again in 1951, when a marked expansion of military facilities in the area boosted building activity to unusually high levels. Although military construction has declined in recent years, much of the slack has been taken up by increased building of residential and business properties, as well as such public projects as schools and streets.

Exclusive of contracts for military construction and public works, the value of construction contracts awarded in Bexar County in 1958 amounted to approximately $78 million; about 62 percent was for residential building. Much of the recent residential construction activity has been located in the northern, southeastern, and southwestern sections of the city. There are no natural barriers to the city's growth.

Traditionally, industrial construction has tended to be of less relative importance in San Antonio than in most other major population centers, but the recent creation of industrial districts along new transportation routes may buoy industrial construction activity. Moreover, an expanded program of public construction projects is certain to stimulate the volume of total construction over the next few years. Outstanding among these projects are a comprehensive network of



expressways, which will facilitate intracity transportation, and programs for street improvements, storm drainage, public school construction, and public utility improvements. An extensive urban planning program, including an urban renewal project for a section near the downtown area, also is under way. Military construction is holding fairly stable at a much lower level than the postwar peak of approximately $88 million attained in 1951.

TRANSPORTATION

Most of the 6,700 wage and salary workers in San Antonio's transportation industry are employed by railroads, truck lines, and airlines operating in the area. San Antonio is served by three major rail lines, which provide direct connections to the northeastern, eastern, and western sections of the United States. In addition, two of these lines provide connections with the principal cities in Mexico through the border cities of Laredo, Eagle Pass, and Brownsville. San Antonio does not generate a large amount of outbound railway cargo, but the volume of incoming cargo is substantial. Much of this traffic is for the Government and is related to the maintenance of the military establishments in the area.

Services of five airlines link San Antonio directly with the East and West Coasts and South America, and complete connecting services facilitate the rapid transport of cargo and passengers to and from all other major points in the Nation. In 1958, more than 240,000 passengers and approximately 4,000 tons of cargo emplaned at the San Antonio International Airport. The public and private airport facilities in the city are among the finest in the Southwest, and runways presently are being extended to accommodate jet airliners.

Approximately 30 truck lines with terminals in San Antonio serve all of the State and connect with lines serving all parts of the Nation. Truck service between San Antonio and the coastal ports of Houston, Galveston, and Corpus Christi is especially important in terms of volume. Excellent truck service is permitted by the major highways (including five United States highways) which extend in all directions from San Antonio.

Bus service and street conditions represent aspects of an intracity transportation problem that has received considerable attention in recent years. At the present time, however, steps are being taken to facilitate the intracity movement of automobiles, buses, and trucks. After many years under private management, the San Antonio transit system has been acquired by the city, and improvements in bus service are planned. With respect to street conditions in San Antonio, extensive repairs are needed, and long-range efforts are being made to correct this problem. In contrast with these aspects of weakness in the intracity transportation system, the planned network of loops and expressways in and around the city (much of which is already under construction) will represent, upon completion, one of the most comprehensive and well-integrated transportation systems in the State.

FINANCE AND INSURANCE

In addition to its importance as a financial center, San Antonio has a concentration of insurance offices, including a number of head offices and an even larger number of regional branch offices of insurance firms operating in Texas.

Bexar County is served by 20 commercial banks, including one private bank. All of these are located in the Central Business District of San Antonio, on nearby military reservations, or in suburban business districts. There are no banks in the county's rural communities. At the end of 1958, the area's banking establishments had total assets of $713 million and total deposits of $661 million.

San Antonio long has served as a leading financial center in south Texas, but growth of financial aggregates and banking facilities in recent years has been especially noteworthy. From 1939 to 1945, total de-

DEPOSITS AND LOANS AND INVESTMENTS

ALL BANKS IN BEXAR COUNTY

SOURCES: Rand McNally Bankers Directory, Federal Reserve Bank of Dallas.

posits at the banks in metropolitan San Antonio rose from approximately $106 million to $406 million; and since the latter year, deposits have risen an additional $256 million. Annual debits of all banks in San Antonio have shown an even sharper gain since 1945, rising about 325 percent to reach a 1958 total of almost $6.5 billion.

The nonindustrial character of San Antonio's economic foundation is shown in several aspects of banking operations in the city. San Antonio's banks receive proportionately more of their funds from individuals, and proportionately less from businesses, than do banks in other leading cities in the Southwest. Moreover, time deposits (including savings accounts) are of greater relative importance in San Antonio than in other southwestern cities, reflecting largely the significance of individual savings accounts and time deposits of governmental units. At the larger banks in San Antonio, time deposits comprise about one-third of total deposits, compared with a figure of generally less than one-fourth at other leading banks in the Eleventh Federal Reserve District.

San Antonio's banks perform correspondent banking services for commercial banks located throughout south Texas, as well as in other areas; but, as a percentage of total deposits, the volume of interbank balances is relatively less important at banks in San Antonio than at banks located in other leading centers in the Eleventh District. Reflecting largely San Antonio's banking and trade connections with Mexico, however, foreign balances held with local banks are of greater relative importance in San Antonio than in other leading cities in the Southwest.

In addition to serving as the commercial banking center for south Texas, San Antonio is also the site of a branch office of the Federal Reserve Bank of Dallas. The territory served by this branch consists of 55 counties in south and southwest Texas, in which 94 member banks are located. At the close of 1958, these banks had total assets of approximately $1.5 billion. Since its establishment in 1927, the Federal Reserve Bank Branch at San Antonio has experienced marked growth; in 1958, it handled checks aggregating almost $9.5 billion.

Savings and loan associations and insurance companies also have made important contributions to San Antonio's financial position. Seven savings and loan associations operate in the metropolitan area; at the end of 1958, their combined assets totaled approximately $182 million. More than 50 insurance companies also are headquartered in the city. In terms of assets, life insurance companies and casualty and surety companies are of greatest importance, but San Antonio also has a significant concentration of fraternal benefit societies.

UTILITIES

The San Antonio electric, gas, and water utilities are publicly owned. The city acquired the electric utility in 1942, and since that time, the management has succeeded in improving the electric system to the point where it is highly ranked in terms of efficiency and low-cost operations. The utility's operation is managed by the City Public Service Board, which consists of four private citizens and the city's mayor. Members of this board select their own replacements, thus creating a semiautonomous policy-making group. In all major respects, the electric utility has been operated along the same lines as a privately owned utility.

The city's electricity-generating equipment, consisting of nine generators at present, is modern and efficient. A new 100,000-kilowatt generator was installed at one plant location in May 1958, and a second generator was installed at another plant location a year later. A third 100,000-kilowatt unit is scheduled for installation by the spring of 1961. The present generating capacity of the electric system is 546,000 kilowatts, and the city has a firm commitment for an additional 60,000 kilowatts from the Lower Colorado River Authority. In contrast, the peak load in 1958 was 360,000 kilowatts, and the utility is planning for a peak load of 420,000 kilowatts in 1959. San Antonio's rates for electricity are relatively low. In particular, rates for industrial users compare very favorably with those in industrial sections of the country.

As in the case of the electric utility, San Antonio's municipally owned gas utility is under the supervision and direction of the City Public Service Board. The utility purchases gas produced in south Texas and distributes it to residential, commercial, and industrial users in the city. San Antonio is favorably located with respect to the availability of natural gas as a source of energy, since approximately one-third of the State's natural gas reserves are located within 150 miles of the city. As a result, rates are favorable, and there is no practical limit to the volume of gas that can be made available. The proximity of San Antonio to natural gas fields also obviates the necessity for compressor stations, which are not needed to produce the high delivery pressures required by various industrial users.

San Antonio's water supply, being filtered and purified by the limestone formation from which it is drawn, does not require expensive treatment and storage. In fact, the city's water does not come into contact with either light or surface air until it is drawn from the consumer's faucet. Thus, water rates are favorable. The water is drawn from artesian wells owned by the city, but many office buildings, hotels, and industries maintain their own wells to accommodate their individual water needs. Most of these wells are between 800 and 1,400 feet in depth.

Problems

The tapering off of Federal Government expenditures at a relatively high level lends considerable stability to the San Antonio economy but also raises questions as to the ability of the local economy to expand with the same vigor shown in the war and immediately postwar periods. Since the beginning of World War II, San Antonio's economic gains have been very largely related to the expansion of Government payrolls in the area. While the present outlook does not indicate reductions in the volume of Government expenditures in San Antonio, it does appear likely that future growth in employment and income must depend primarily upon autonomous expansion in the private sector of the economy. Thus, to maintain its past rate of growth, San Antonio would need to look to further development in the areas of industry, trade, and services.

One of the problems with which San Antonio must deal in fostering expansion in the private sector of the economy is an attitude of complacency with respect to the city's growth. More than a decade of rapid growth that was induced and supported largely by expansion in governmental activities has not been conducive to the development of aggressiveness in attracting new business and industry to the area. In recent years, considerable progress has been made along these lines, but additional efforts will be required if the private sector of the economy is to inherit the expansive role formerly played by Government.

Industrial activity also has tended to lag in San Antonio because of the city's inland location and its distance from concentrated industrial and consumer markets. In the future, as in the past, the city is likely to experience difficulty in attracting manufacturing activities in which freight costs comprise an important component of total costs. San Antonio is located neither near the source of raw materials used in the production of heavy goods nor near a concentrated market for their consumption. Moreover, the city's inland location offers further obstacles to the growth of heavy manufacturing activities. Consequently, the production of heavy manufactured items likely will continue to be confined to a modest volume, associated with the demands generated by a relatively thin regional market. While a number of producers of heavy goods in the area have been able to develop national and international markets, it is not expected that their success will induce other heavy goods manufacturers to locate there.

With respect to the development of light manufacturing, however, San Antonio is in a favorable position; and further development along these lines could count heavily in replacing the growth stimulus formerly provided by rising Government expenditures. An abundant supply of labor and favorable living and working conditions are the principal attractions for light manufacturing activities. In this connection, it is relevant to point out the reputation of San Antonio's labor force for superior manual dexterity. While this skill is valuable in many different types of light manufacturing, it is especially important in such industries as electronics — a field which, with active leadership on the part of businessmen and city officials, could develop into a major industry in the area. In addition to the skills of San Antonio's civilian labor force, the stream of retired and discharged military personnel from the military bases in San Antonio, many of whom seek to remain in the city permanently, makes the electronics industry a natural candidate for local cultivation and development.

The development of important research facilities in San Antonio, already well advanced, furnishes another avenue along which the city may expand to offset the diminishing role of Government spending as a major growth stimulus. San Antonio's climate, its favorable living conditions, its existing pool of professional scientists and research personnel, and its proximity to the library and research facilities of the University of Texas combine to make it an attractive center for many types of research activities, including medical research. The preparation of a 2,500-acre tract expressly planned for plants engaged in research, development, and technical manufacturing — along with the flexibility of arrangements under which laboratories and laboratory space are available in this research center — indicates the extent to which development of research facilities is emphasized.

Because San Antonio is not located in a thickly populated region, expansion of wholesale and retail trade activities is not likely to provide dramatic growth stimulants, although further growth probably will parallel advances in the population and income of the San Antonio trade area. Efforts to attract a greater number of tourists to the city are having a stimulating effect upon the trade and service industry, however; and San Antonio's tourist business is likely to become an increasingly important source of income in the metropolitan area.

The present growth prospects of metropolitan San Antonio stem partially from the area's past failure to press for maximum development of its economic potential. This situation, in turn, partly reflects a conflict between the objective of promoting general expansion and economic growth, on the one hand, and, on the other, the objective of preserving the city's traditions, its color, and its distinctive way of life. While the city currently is exerting increasing efforts toward attracting industry and research, whether or not its growth potential will be fully exploited will depend largely upon the extent to which concerted action on the part of local business and civic leaders can be realized.

This is the third of a series of articles on the four largest cities in the Eleventh Federal Reserve District — Houston, Dallas, San Antonio, and Fort Worth. Additional copies of this article may be obtained by addressing a request to either:

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FEDERAL RESERVE BANK OF DALLAS
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DALLAS, TEXAS

BUSINESS REVIEW

BUSINESS, AGRICULTURAL, AND FINANCIAL CONDITIONS

Nonagricultural employment in the District states during April reflected an approximately normal seasonal rise and appears to have set a new record high for the month. Texas unemployment declined substantially to reach 4.6 percent of the labor force, compared with a rate of 5.6 percent in April 1958.

A more than seasonal rise over March carried April department store sales in the District to a record high for the month. The strength was primarily in durable goods lines, although sales of soft goods also were generally above a year ago. Department store inventories continued to rise in April and at the end of the month were at the highest level since November 1957. Registrations of new cars in the District's largest metropolitan areas were lower than in March but were up substantially over April 1958.

Generally favorable weather conditions prevailed in most sections of the District during May. Most of the intended acreages of spring crops have been seeded, except for a few late areas in northwestern sections. Winter wheat production in the District states is placed at one-third below that of last year. Pastures and ranges showed improvement during May, but additional moisture is needed to maintain forage development.

Industrial production in Texas was seasonally constant in April, as strength in manufacturing activity offset a decline in minerals output. The value of construction contract awards in the District states during March maintained a wide margin over a year earlier and was the highest March level of record.

Loan expansion was again a prominent feature of District banking activity during late April and May. The strong upward movement in consumer loans persisted, and business loans also showed continued strength. Deposits declined substantially at the District's weekly reporting member banks, necessitating bank liquidation of investments and reductions in cash accounts.

District crude oil production, runs to refinery stills, and stocks of refined products continued upward during May. Allowable production in Texas, which was raised to 12 producing days in May, has been cut back to 10 days in June. Imports of both refined products and crude oil declined further.

Department store sales during April in the Eleventh Federal Reserve District rose 4 percent over March and 10 percent over April last year. The seasonally adjusted sales index rose to 169 percent of the 1947-49 average, compared with 166 in March and 150 in April 1958. The record April sales — well above those in the same month in any past year — reflected, in part, the combined effects of intensive post-Easter promotions, continued fair weather, and the opening of several new department stores this spring. Cumulative sales for the first 4 months of this year were 10 percent greater than sales in the corresponding period of 1958.

Sales activity during April in the various metropolitan areas in the District for which separate data are available ranged from a year-to-year decrease of 5 per-

INDEXES OF DEPARTMENT STORE SALES AND STOCKS

Eleventh Federal Reserve District

(1947-49 = 100)

	SALES (Daily average)		STOCKS (End of month)	
Date	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1958: April	143r	150r	170r	164r
1959: February	126	162	163r	168r
March	151r	166r	178r	169r
April	157	169	182p	175p

r — Revised.
p — Preliminary.

DEPARTMENT STORE SALES AND STOCKS

(Percentage change in retail value)

	NET SALES			STOCKS (End of month)	
	April 1959 from		4 mos. 1959 comp. with 4 mos. 1958	April 1959 from	
Area	March 1959	April 1958		March 1959	April 1958
Total Eleventh District	4	10	10	3	7
Corpus Christi	—2	—5	4	1	4
Dallas	3	17	13	2	11
El Paso	3	4	8	—1	7
Fort Worth	5	6	11	10	2
Houston	10	16	11	7	14
San Antonio	—14	3	8	—2	5
Shreveport, La.	8	6	9	—1	6
Waco	7	8	11	5	4
Other cities	9	9	12	—2	2

SALES AT FURNITURE STORES AND HOUSEHOLD APPLIANCE STORES

(Percentage change in retail value)

	April 1959 from		4 mos. 1959 comp. with 4 mos. 1958
Line of trade by area	March 1959	April 1958	
FURNITURE STORES			
Total Eleventh District	5	17	6
Amarillo	25	44	25
Austin	0	14	18
Dallas	11	15	7
Houston	—3	22	—1
Lubbock	—3	19	25
San Antonio	—6	10	3
Shreveport, La.	3	12	7
Wichita Falls	15	42	26
Other cities	26	19	7
HOUSEHOLD APPLIANCE STORES			
Total Eleventh District	—11	35	—
Dallas	—4	37	—

cent in Corpus Christi, where heavy rains tended to depress sales this year, to an increase of 17 percent in Dallas. A 16-percent rise in sales occurred in Houston, while in the other areas, gains were less than 10 percent. Cumulative sales through April showed gains of 8 to 13 percent over 1958 in each of the eight metropolitan areas except Corpus Christi, where the decline in sales during April restricted the 1959 cumulative gain to 4 percent.

In contrast with the department store sales picture in recent months, the area of primary sales strength in April was consumer durable goods. April sales of major household appliances in the District rose 12 percent over a year earlier, while sales in both the radio, television set, and musical equipment category and the furniture and bedding category showed year-to-year gains of 21 percent. In general, sales of soft goods also were above April 1958. There were gains of 9 percent in sales of men's clothing and 6 percent in sales of women's and misses' dresses. Sales of women's and misses' accessories were unchanged from a year ago. The earlier date of Easter in 1959 tended to reduce the year-to-year gain in sales of soft goods during April. On the other hand, post-Easter promotional efforts emphasizing durable goods — coupled with warm weather, which stimulated sales of air-conditioning units — provided an expansive influence on sales of durable goods.

Department store inventories continued to rise in the District in April. At the end of the month, inventories were 3 percent higher than a month earlier and were 7 percent above a year earlier. The seasonally adjusted index of department store stocks rose to 175 percent of the 1947-49 average in April, which is up from 169 in March and 164 in April 1958. Inventories, although at their highest level since November 1957, have not risen as fast as sales. The ratio of month-end stocks on hand to monthly sales in April, as in each month since mid-1958, remained below the ratio for a year earlier. Further year-to-year increases in inventory levels at the District's reporting stores are indicated by the continuing high level of orders being placed for goods. Both new orders placed during April and orders outstanding at the end of the month declined about seasonally, but they registered gains of 18 percent and 37 percent, respectively, over April 1958.

Registrations of new cars in the four largest metropolitan areas in the District declined 5 percent in April but were 42 percent greater than in April 1958. In the individual areas, the year-to-year gains ranged from 47 percent in Fort Worth to 34 percent in San Antonio, with registrations in the Dallas and Houston areas reflecting gains of 42 percent and 43 percent, respectively. Cumulative figures for these four areas show that, through the end of April, registrations were 26 percent ahead of a year ago and were above the same period in any previous year except 1955.

Agricultural conditions in most of the District during the past month were relatively favorable, but in a few areas, hail and severe thunderstorms necessitated replanting of crops. In other sections, inadequate soil moisture continues to be a problem.

Wheat prospects in northwestern sections of the District received a boost as a result of general rains — measuring as much as an inch — throughout the area. Fields in the Panhandle have shown noticeable improvement; in the Low Rolling Plains, however, moisture generally came too late to be of material benefit. In the latter section, the crop is ripening fast and will soon be ready for harvest; in the Panhandle of Texas

WINTER WHEAT PRODUCTION

Five Southwestern States

(In thousands of bushels)

Area	1959 Indicated May 1	1958	Average 1948–57
Arizona	3,136	3,904	903
Louisiana	1,100	672	[1]806
New Mexico	2,670	3,724	1,652
Oklahoma	79,128	115,440	64,925
Texas	48,300	73,040	35,358
Total	134,334	196,780	103,644

[1] Short-time average.
SOURCE: United States Department of Agriculture.

and Oklahoma, wheat is well headed and, with higher temperatures, is maturing rapidly. In the Texas Blacklands, wheat and oats are ripening fast, and harvesting will soon begin. Winter wheat production in the District states as of May 1 totaled 134,334,000 bushels, or up about 4½ million bushels from the month-earlier estimate but about one-third below the excellent 1958 crop. Prospective output of wheat in each of the District states except Louisiana is indicated to be under a year ago.

The condition of feed crops in the District is particularly favorable. Corn in the Coastal Bend and earlier areas of south Texas is tasseling, and grain sorghums are heading. In the later sections northward from the Blacklands and in east Texas, corn is knee-high and is developing rapidly. Seeding of grain sorghums is well advanced in all sections of the District, and especially rapid progress is being made in the Texas High Plains.

COTTON ACREAGE, PRODUCTION, AND VALUE OF PRODUCTION

Five Southwestern States and United States

(In thousands)

Area	Acreage harvested 1958	Acreage harvested 1957	Bales produced[1] 1958	Bales produced[1] 1957	Value of lint and seed 1958	Value of lint and seed 1957
Arizona	377	352	734	763	$ 139,411	$ 145,644
Louisiana	364	440	297	348	52,681	60,442
New Mexico	176	183	301	236	57,757	43,031
Oklahoma	410	540	313	263	54,290	35,643
Texas	5,395	5,905	4,308	3,632	747,858	565,636
Total	6,722	7,420	5,953	5,242	$1,051,997	$ 850,396
United States	11,849	13,558	11,512	10,964	$2,117,160	$1,860,486

[1] 500 pounds gross weight.
SOURCE: United States Department of Agriculture.

The bulk of the intended cotton acreage in the District has been seeded. In most areas from the Texas Blacklands southward and eastward, the crop is up to a good stand; and hoeing, cultivating, and early season insect control are under way. In the later western areas, the crop is not as well advanced, but most seeding is complete in southern irrigated valleys of Arizona and New Mexico and in the Trans-Pecos area of Texas. Only a small amount of acreage remains to be planted in the Texas High Plains. Infestations from injurious cotton insects have remained generally light.

Revised estimates by the United States Department of Agriculture place the 1958 cotton crop in the District states at 5,953,000 bales, or 14 percent more than the output a year earlier. The crop, which was produced on 9 percent fewer acres, is valued at almost one-fourth more than in 1957. In Texas the value of the 1958 crop was about $748 million, or the highest since 1953.

Activity in commercial vegetable areas of the District increased during May as a result of relatively favorable planting and harvesting conditions. Onion harvest is active in most south Texas areas; in northern Texas and the Panhandle, the crop is making excellent growth. In the Lower Valley, tomatoes are moving in good volume, and shipping of sweet corn, cucumbers, carrots, okra, and snap beans continues. Production of spring-crop vegetables (excluding potatoes) in Texas is estimated, as of May 1, to be 27 percent below last year's crop. The reduced output reflects the prospects for lower yields for most crops and a 13-percent decline in acreage for harvest. Irish potato production in the State is indicated to be 14 percent under the 1958 outturn, as an expected decrease in the late-spring crop more than offset an increase for early spring potatoes.

Early May rains boosted prospects for pastures and ranges over a large part of the District, especially in eastern sections of New Mexico and western regions of Texas. Surplus forage is still available in most areas of the District from the Blacklands eastward, but in much of this area, rising temperatures are causing cool-season grasses and clovers to mature rapidly. Additional moisture is needed in far western sections of the District to maintain development of forage and to promote growth of summer forage species. Feed conditions as of May 1 in the major range states of the District were generally improved from a month earlier but were below those of a year ago.

The index of prices received by District farmers (as evidenced by Texas midmonth prices) for all commodities showed no change during the month ended April 15, 1959, but was 4 percent above the year-earlier level. The all-crops index advanced 1 percent during the month, but the gain was offset by slightly lower livestock and livestock products prices.

FINANCE

Deposit contraction at the District's weekly reporting member banks occasioned increased bank borrowings, investment liquidation, and reductions in cash accounts between April 15 and May 20. Both demand deposits and time accounts registered declines, but net demand deposit withdrawals totaling $82.4 million provided the major contractive influence. The decline in demand accounts was weighted heavily by a $115.1 million decrease in interbank balances. Deposits of individuals and businesses declined moderately, while Government balances rose. State and local governments reduced their time balances at the reporting banks by $9.1 million, and net withdrawals in this category largely accounted for the $9.3 million decline in time accounts.

As a result of these deposit drains, but also to finance an expansion in their loan accounts, the reporting banks liquidated $20.5 million of investments, reduced cash accounts by $22.0 million, and increased their bills payable by $59.8 million. Investment liquidation during the 5-week period was concentrated in Treasury notes, holdings of which decreased $44.5 million. All other investment categories showed small to moderate gains.

Loan expansion — a dominant characteristic of District banking for several months — was particularly noticeable in the business loan and consumer loan categories during the 5 weeks ended May 20. Continuing their strong upward movement, consumer-type loans advanced $16.7 million, compared with a decline of $10.0 million in the corresponding weeks of 1958. Continued strength in business loans also was indicated by the 5-week increase totaling $12.9 million. During the same period last year, business loans decreased $23.8 million. Real-estate loans also rose between April 15 and May 20, but declines were recorded for securities loans, agricultural loans, and interbank loans. The 5-week increase in all loan categories totaled $21.4 million, in contrast with substantial loan liquidation in the comparable weeks a year earlier.

Reserve positions of member banks in the District tightened moderately in April. Deposit expansion at the banks during the month produced a $1.8 million increase in required reserves, and this increase coincided with a $2.9 million decline in reserve balances. Consequently, average excess reserves of member banks decreased $4.7 million, or from $52.3 million in March

CONDITION STATISTICS OF WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES

Eleventh Federal Reserve District

(In thousands of dollars)

Item	May 20, 1959	April 15, 1959	May 21, 1958
ASSETS			
Commercial and industrial loans	$1,703,616	$1,690,695	$1,500,009
Agricultural loans	35,416	35,691	29,023
Loans to brokers and dealers in securities	16,390	21,721	30,501
Other loans for purchasing or carrying securities	182,834	185,569	180,060
Real-estate loans	223,925	221,543	211,060
Loans to banks	12,410	14,693	10,028
All other loans	691,067	674,385	626,729
Gross loans	2,865,658	2,844,297	2,587,410
Less reserves and unallocated charge-offs	48,999	48,921	45,293
Net loans	2,816,659	2,795,376	2,542,117
U. S. Treasury bills	88,830	74,482	80,218
U. S. Treasury certificates of indebtedness	97,784	97,653	91,451
U. S. Treasury notes	263,617	308,079	280,937
U. S. Government bonds (inc. gtd. obligations)	913,154	908,467	938,186
Other securities	355,006	350,210	299,906
Total investments	1,718,391	1,738,891	1,690,698
Cash items in process of collection	504,180	517,706	392,791
Balances with banks in the United States	477,091	468,433	538,253
Balances with banks in foreign countries	2,048	1,582	1,244
Currency and coin	48,603	48,034	47,275
Reserves with Federal Reserve Bank	555,881	574,096	580,192
Other assets	164,208	168,562	156,017
TOTAL ASSETS	6,287,061	6,312,680	5,948,587
LIABILITIES AND CAPITAL			
Demand deposits			
Individuals, partnerships, and corporations	2,920,367	2,939,386	2,735,324
United States Government	156,119	119,268	137,549
States and political subdivisions	265,432	242,816	221,596
Banks in the United States	888,466	1,003,520	945,298
Banks in foreign countries	15,845	16,270	17,296
Certified and officers' checks, etc.	64,590	71,939	48,169
Total demand deposits	4,310,819	4,393,199	4,105,232
Time deposits			
Individuals, partnerships, and corporations	1,095,196	1,095,093	1,005,794
United States Government	7,055	7,130	12,125
Postal savings	421	421	421
States and political subdivisions	178,826	187,916	240,597
Banks in the U. S. and foreign countries	1,643	1,920	1,538
Total time deposits	1,283,141	1,292,480	1,260,475
Total deposits	5,593,960	5,685,679	5,365,707
Bills payable, rediscounts, etc.	94,565	34,800	27,500
All other liabilities	69,262	67,386	70,643
Total capital accounts	529,274	524,815	484,737
TOTAL LIABILITIES AND CAPITAL	6,287,061	6,312,680	5,948,587

RESERVE POSITIONS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. In thousands of dollars)

Item	April 1959	March 1959	April 1958
RESERVE CITY BANKS			
Reserve balances	$ 550,359	$ 554,321	$553,441
Required reserves	547,068	548,479	545,015
Excess reserves	3,291	5,842	8,426
Borrowings	20,198	17,165	1,897
Free reserves	—16,907	—11,323	6,529
COUNTRY BANKS			
Reserve balances	457,045	455,987	439,214
Required reserves	412,765	409,540	378,957
Excess reserves	44,280	46,447	60,257
Borrowings	1,187	3,812	943
Free reserves	43,093	42,635	59,314
MEMBER BANKS			
Reserve balances	1,007,404	1,010,308	992,655
Required reserves	959,833	958,019	923,972
Excess reserves	47,571	52,289	68,683
Borrowings	21,385	20,977	2,840
Free reserves	26,186	31,312	65,843

to $47.6 million in April. Average borrowings from the Reserve Bank rose slightly during the month. The mild tightening of bank reserve positions in April was concentrated at reserve city banks. Country banks gained reserves during the month and reduced their borrowings from the Federal Reserve Bank.

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS

(In thousands of dollars)

Item	May 20, 1959	April 15, 1959	May 21, 1958
Total gold certificate reserves	$ 714,766	$ 734,016	$767,533
Discounts for member banks	12,200	16,625	8,000
Other discounts and advances	884	915	0
U. S. Government securities	1,033,955	1,021,330	937,880
Total earning assets	1,047,039	1,038,870	945,880
Member bank reserve deposits	954,771	966,060	968,381
Federal Reserve notes in actual circulation	764,468	764,116	710,342

Earning assets of the Federal Reserve Bank of Dallas rose $8.2 million during the 5 weeks ended May 20. The Bank's holdings of Government securities increased $12.6 million in response to net System purchases of Treasury bills, but other earning assets — discounts and advances — declined $4.4 million. On May 20 the Bank's holdings of Government securities were $96.1 million above the amount held a year ago, and discounts and advances were $5.1 million higher. Federal Reserve notes in actual circulation showed little net change between April 15 and May 20 but, on the latter date, remained almost 8 percent above the year-earlier level.

NEW MEMBER BANK

The Gulf Coast National Bank of Almeda, Almeda, Texas, a newly organized institution located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, opened for business May 1, 1959, as a member of the Federal Reserve System. The new member bank has capital of $100,000, surplus of $100,000, and undivided profits of $50,000. The officers are: W. W. McGar, President; Peter G. Brooks, Vice President; and H. F. Walthal, Cashier.

Demand for most petroleum products was roughly at anticipated levels in late April and early May. Refinery runs, particularly in the gulf coast area, were more than adequate to meet demand, resulting in further accumulation of refined products inventories. A sharp reduction in Texas crude oil production is scheduled during June.

Demand for major petroleum products declined seasonally during the 5 weeks ended May 15 but remained nearly 5 percent higher than a year ago. Gasoline demand has not been up to the anticipated level this spring, but demand for other products has at least equaled expectations. Gasoline demand, which averaged 4,109,000 barrels per day in the 5-week period, was only 2 percent higher than a year earlier, but demand for residual fuel oil averaged 12 percent higher. Demand for distillate oils declined sharply in April and May because of the termination of the heating season but remained nearly 6 percent greater than a year earlier. Total domestic and export demand for the four major petroleum products averaged 7,199,000 barrels per day in the 5 weeks ended May 15.

Crude runs to refinery stills in the United States declined contraseasonally during the first half of May to a level of 7,703,000 barrels per day, or 4 percent greater than a year ago. During the same period, District refineries, supplied by expanded crude production in the area, increased crude runs more than seasonally to 2,346,000 barrels per day.

The nationwide decline in the output of refined products during the first half of May resulted in a more moderate rise in stocks of refined products. On May 11, total stocks of major petroleum products were still 4 percent above the excessive supplies at the same time in 1958. Kerosene and distillate stocks exceeded last year's stocks by 11 percent, and gasoline stocks were up 4 percent from the high level a year ago. On the other hand, stocks of crude oil, at 259,088,000 barrels on May 16, were 5 percent lower than a year earlier.

Imports of both crude oil and refined products declined during April and early May. In the 5 weeks ended May 15, crude oil imports of 791,000 barrels per day were 9 percent less than during the preceding 5-week period and were 15 percent under a year earlier. Imports of refined products in the same period decreased 48 percent to a slightly lower level than a year ago.

Crude oil production in the United States averaged 7,184,000 barrels per day during the first half of May, representing increases of 1 percent over the April average and 15 percent over the average during May 1958. District crude oil production, which averaged 3,230,000 barrels per day during the first part of May, was 3 percent greater than during April and 25 percent greater than in May last year.

WELL COMPLETIONS

(Number of wells)

Area and type	April 1959	April 1958	January—April 1959	January—April 1958
ELEVENTH DISTRICT, TOTAL[1]	1,961	1,500	7,331	6,812
Oil well completions	1,190	871	4,361	4,019
Gas well completions	96	86	382	479
TEXAS, TOTAL[1]	1,718	1,314	6,345	5,819
Oil well completions	1,043	765	3,765	3,353
Gas well completions	66	60	260	303

[1] Includes dry holes and service wells.
SOURCE: *The Oil and Gas Journal.*

Industry nominations for June production, however, reflect concern over mounting stocks of refined products and the belief that May production schedules were excessive. As a result, Texas production in June will be limited to 10 days, compared with 12 days in May. Scheduled allowable production during June in both New Mexico and Louisiana is virtually unchanged from the May level.

Crude oil prices remained generally steady during April and the first half of May, but prices of refined products declined in some areas. Seasonal decreases occurred in prices of kerosene, distillates, and heavy fuel oils; but gasoline prices were unseasonably weak during the first half of May, particularly at gulf coast ports. Disappointing demand, high stocks, and heavy production contributed to an unfavorable market for gasoline.

The number of rotary rigs in operation and total well completions have improved impressively in recent weeks in the District and the Nation. In the 5 weeks ended May 11, the number of rotary rigs in operation in the United States averaged 8 percent greater than during the previous 5 weeks and 16 percent greater than a year earlier. The rate of drilling activity in the District states also has improved this spring, although not as much as the national average. Moreover, well completions are rising significantly. In the District in the 5 weeks ended May 9, 2,149 wells were completed, compared with 1,862 a year ago. The year-to-year rate of increase in District well completions nearly equaled the national average.

Employment in the District states continued to rise in April. The number of nonagricultural workers reflected an approximately normal seasonal rise of 26,300 to total 4,262,400, which compares with 4,178,200 a year earlier. The basic downward revision in employment estimates since the previous April high in 1957 has affected the comparability of the data, but the level of employment in April 1959 appears to have set a new record for the month. Trade and services and construction provided the largest gains during April. Manufacturing — led by the building materials and metalworking industries — and some other groups also showed increases over March.

NONAGRICULTURAL EMPLOYMENT

Five Southwestern States[1]

Type of employment	Number of persons: April 1959e	March 1959	April 1958r	Percent change April 1959 from: Mar. 1959	Apr. 1958
Total nonagricultural wage and salary workers	4,262,400	4,236,100	4,178,200	0.6	2.0
Manufacturing	769,600	766,600	756,500	.4	1.7
Nonmanufacturing	3,492,800	3,469,500	3,421,700	.7	2.1
Mining	252,500	250,100	254,400	1.0	—.7
Construction	317,800	313,300	293,200	1.4	8.4
Transportation and public utilities	390,900	392,200	395,400	—.3	—1.1
Trade	1,030,800	1,023,100	1,014,500	.8	1.6
Finance	189,000	187,400	183,800	.9	2.8
Service	501,000	494,200	492,400	1.4	1.8
Government	810,800	809,200	788,000	.2	2.9

[1] Arizona, Louisiana, New Mexico, Oklahoma, and Texas.
e — Estimated.
r — Revised.
SOURCES: State employment agencies.
Federal Reserve Bank of Dallas.

Unemployment in Texas declined another 15,100 workers during April to reach a level of 162,000, or 4.6 percent of the labor force. These measures of unemployment reflect improvement over the 199,400 total and 5.6-percent rate of a year ago, but they remain above the levels of April 1957. Claims for unemployment compensation in Texas continued downward to total 54,194 in mid-May, compared with 61,765 in mid-April.

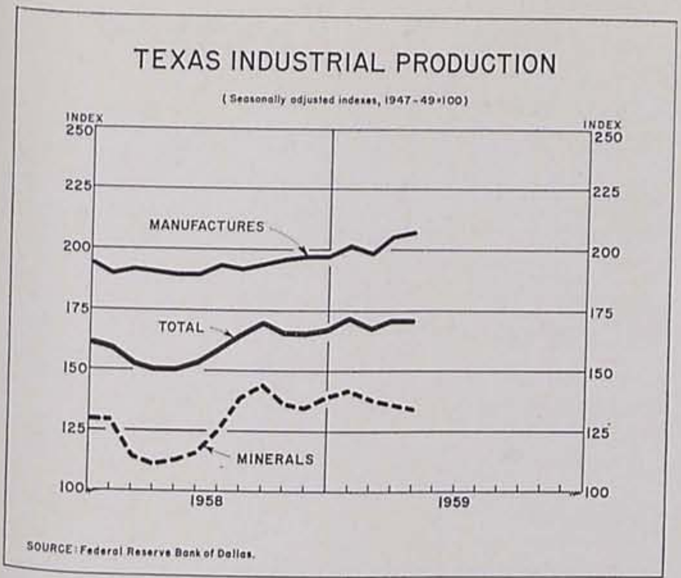
Industrial production in Texas during April held at the revised March index level of 170, which is only 3 points below the record high reached during 1957.

INDUSTRIAL PRODUCTION

(Seasonally adjusted indexes, 1947-49 = 100)

Area and type of index	April 1959p	March 1959	February 1959	April 1958
TEXAS				
Total industrial production	170	170	167	150r
Total manufactures	208	206	198	190r
Durable manufactures	242	242	237r	216r
Nondurable manufactures	192	189	180	179r
Minerals	134	136	137	111r
UNITED STATES				
Total industrial production	149	147	145	126
Total manufactures	152	150	148	128
Durable manufactures	164	160	157r	131
Nondurable manufactures	140	139	139	125
Minerals	123	122	124r	109

p — Preliminary.
r — Revised.
SOURCES: Board of Governors of the Federal Reserve System.
Federal Reserve Bank of Dallas.



Manufacturing activity continued strong during the month, but minerals production declined. In May, a turnaround in crude oil output provided an expansive influence on total production. Gains in general business activity in the District are reflected in the rising trend of electricity output. The level of this output in the south-central region during the first half of May was 17 percent higher than a year earlier, compared with year-to-year increases of 14 percent in April and 13 percent in March.

Texas manufacturing industries which have shown the largest increases in activity thus far in 1959 include those producing metals and metal products other than aircraft. The prospects for the aircraft industry continue to be improved by new military contracts. Recent awards include an $8 million contract to a Fort Worth plant for additional bombers and an award to a Dallas company for missiles work.

Building materials production is another sector of significant strength. Output of portland cement in Texas during the first quarter of the year, at 27 percent above a year ago, was at a record level for the period, and March production showed a year-to-year rise of 50 percent. Southern pine mills in the State operated at levels 10 percent above a year earlier during the first 3 months of 1959. Total southern pine production in the West South Central States of Arkansas, Louisiana, Oklahoma, and Texas reflected somewhat greater strength, reaching a March level of over 77 million board feet, or 24 percent more than in March 1958. In these same states during March, new orders for southern pine were over 85 million board feet — up 38 percent from a year ago — and retail sales of all types of lumber showed a year-to-year gain of 48 percent.

Construction contract awards in the District states during March, at $391 million, continued to maintain a year-to-year growth rate of around 26.5 percent. Awards in each of the first 3 months of the year were at the highest levels for these particular months since the series began in 1956. Both residential and nonresidential construction contracts showed advances over February and a year earlier, with residential awards maintaining a record pace for the season and nonresidential contracts somewhat below the level of March 1957.

The value of building permits issued in major District cities during April rose to a level 17 percent higher than a year earlier. The cumulative value of these permits during the first 4 months of the year was 20 percent more than in the corresponding period of 1958. Cities showing the largest rates of increase were Wichita Falls, Abilene, Lubbock, Dallas, Austin, and Amarillo.

The value of April nonresidential construction awards in Texas reflected an absence of large individual contracts and was down sharply from the high March level. Highway contracts scheduled to be let in the District states during 1959 indicate a moderate decline from 1958, with a sharp reduction in Oklahoma offsetting advances in the other states. National surveys of business plans for new plant and equipment point to new strength in this type of spending, with significant increases scheduled in the commercial category and the petroleum and chemical industries. The stimulating effects of these increases will be felt mainly outside the construction industry, as an expanding share of total manufacturing expenditures is planned for machinery and modernization, rather than buildings and enlarged capacity. Recently announced major building plans in the District include a firm decision to build a $15 million hotel at Houston and preliminary plans and site studies for several new chemical expansions in the gulf coast area.

General economic improvement in the District states has stimulated new business incorporations, which continue to run well above a year ago. New incorporations in April were 139 percent higher than a year earlier — compared with a national gain of 55 percent. Total personal income in the region recorded another seasonally adjusted gain in February and, at over $2.5 billion, was 6 percent above a year earlier.

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

(Dollar amounts in thousands)

Area	Debits to demand deposit accounts[1] April 1959	Percentage change from Mar. 1959	Percentage change from April 1958	Demand deposits[1] April 30, 1959	Annual rate of turnover April 1959	Annual rate of turnover Mar. 1959	Annual rate of turnover April 1958
ARIZONA							
Tucson	$ 218,279	—6	22	$ 132,780	20.4	22.6	19.9
LOUISIANA							
Monroe	74,299	—3	13	50,380	17.9	18.4	15.6
Shreveport	304,209	—3	15	196,667	18.6	19.9	16.9
NEW MEXICO							
Roswell	37,262	4	19	30,247	14.6	13.8	13.4
TEXAS							
Abilene	96,140	—2	17	63,026	18.2	18.5	16.6
Amarillo	219,209	—1	22	113,760	22.9	23.2	19.9
Austin	214,441	3	22	165,146	16.1	16.2	16.0
Beaumont	154,256	—2	8	103,724	17.8	17.8	15.7
Corpus Christi	191,502	2	9	117,048	20.0	19.9	19.0
Corsicana	15,185	—7	5	20,504	8.9	9.4	8.2
Dallas	2,444,312	—2	13	1,135,046	25.8	26.2	25.7
El Paso	335,519	—12	15	166,786	24.2	26.9	22.3
Fort Worth	759,499	—3	12	378,778	23.8	24.7	22.3
Galveston	93,723	7	10	62,579	17.8	16.6	15.0
Houston	2,485,303	9	11	1,243,598	23.9	21.5	22.4
Laredo	29,047	12	13	21,716	15.8	14.2	14.6
Lubbock	183,900	2	30	115,007	18.4	17.5	16.2
Port Arthur	64,023	11	—2	46,401	16.9	15.6	17.5
San Angelo	56,052	3	17	45,240	14.5	14.2	14.0
San Antonio	615,185	4	12	394,495	18.7	18.1	19.0
Texarkana[2]	21,520	0	12	16,123	15.6	15.1	14.0
Tyler	87,350	0	11	61,573	16.8	17.0	15.6
Waco	109,787	4	20	70,064	18.8	18.0	16.8
Wichita Falls	117,309	1	23	102,607	13.6	13.2	11.2
Total—24 cities	$8,927,311	1	13	$4,853,295	22.1	21.6	21.0

[1] Deposits of individuals, partnerships, and corporations and of states and political subdivisions.
[2] These figures include only one bank in Texarkana, Texas. Total debits for all banks in Texarkana, Texas-Arkansas, including one bank located in the Eighth District, amounted to $46,050,000 for the month of April 1959.

VALUE OF CONSTRUCTION CONTRACTS AWARDED

(In thousands of dollars)

Area and type	March 1959	February 1959	March 1958	January—March 1959	January—March 1958
FIVE SOUTHWESTERN STATES[1]	$ 391,263	$ 303,642	$ 309,605	$ 994,182	$ 784,025
Residential	180,395	147,945	121,817	488,301	331,093
All other	210,868	155,697	187,788	505,881	452,932
UNITED STATES	3,339,934	2,290,504	2,721,228	7,949,605	6,721,767
Residential	1,540,722	1,065,523	1,070,556	3,627,761	2,567,698
All other	1,799,212	1,224,981	1,650,672	4,321,844	4,154,069

[1] Arizona, Louisiana, New Mexico, Oklahoma, and Texas.
SOURCE: F. W. Dodge Corporation.

CRUDE OIL: DAILY AVERAGE PRODUCTION

(In thousands of barrels)

Area	April 1959[1]	March 1959[1]	April 1958[2]	Change from March 1959	Change from April 1958
ELEVENTH DISTRICT	3,148.5	3,214.0	2,636.3	—65.5	512.2
Texas	2,776.0	2,842.3	2,276.9	—66.3	499.1
Gulf Coast	517.2	533.7	441.8	—16.5	75.4
West Texas	1,237.2	1,271.7	970.3	—34.5	266.9
East Texas (proper)	153.3	158.7	118.3	—5.4	35.0
Panhandle	107.8	108.0	103.5	—.2	4.3
Rest of State	760.5	770.4	643.0	—9.9	117.5
Southeastern New Mexico	257.3	256.1	244.6	1.2	12.7
Northern Louisiana	115.2	115.6	114.8	—.4	.4
OUTSIDE ELEVENTH DISTRICT	3,978.5	3,962.0	3,651.4	16.5	327.1
UNITED STATES	7,127.0	7,176.0	6,287.7	—49.0	839.3

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

CONDITION STATISTICS OF ALL MEMBER BANKS

Eleventh Federal Reserve District

(In millions of dollars)

Item	April 29, 1959	March 25, 1959	April 30, 1958
ASSETS			
Loans and discounts	$ 4,593	$ 4,553	$ 4,172
United States Government obligations	2,665	2,603	2,572
Other securities	831	831	706
Reserves with Federal Reserve Bank	953	955	971
Cash in vault[e]	142	140	131
Balances with banks in the United States	954	999	1,107
Balances with banks in foreign countries[e]	3	3	2
Cash items in process of collection	507	506	477
Other assets[e]	241	256	242
TOTAL ASSETS[e]	10,889	10,846	10,380
LIABILITIES AND CAPITAL			
Demand deposits of banks	1,029	1,067	1,097
Other demand deposits	6,654	6,640	6,367
Time deposits	2,153	2,123	1,962
Total deposits	9,836	9,830	9,426
Borrowings[e]	67	33	31
Other liabilities[e]	91	93	96
Total capital accounts[e]	895	890	827
TOTAL LIABILITIES AND CAPITAL[e]	10,889	10,846	10,380

e — Estimated.

GROSS DEMAND AND TIME DEPOSITS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. In millions of dollars)

Date	GROSS DEMAND DEPOSITS Total	Reserve city banks	Country banks	TIME DEPOSITS Total	Reserve city banks	Country banks
1957: April	$7,412	$3,623	$3,789	$1,533	$ 808	$ 725
1958: April	7,502	3,677	3,825	1,916	1,033	883
December	7,999	3,931	4,068	2,088	1,125	963
1959: January	8,106	3,952	4,154	2,090	1,106	984
February	7,858	3,808	4,050	2,117	1,119	998
March	7,794	3,827	3,967	2,129	1,119	1,010
April	7,800	3,797	4,003	2,151	1,133	1,018

BUILDING PERMITS

Area	NUMBER April 1959	NUMBER 4 mos. 1959	VALUATION (Dollar amounts in thousands) April 1959	4 mos. 1959	Percentage change: April 1959 from Mar. 1959	April 1959 from April 1958	4 mos. 1959 comp. with 4 mos. 1958
ARIZONA							
Tucson	882	1,951	$ 3,028	$ 6,830	119	301	30
LOUISIANA							
Shreveport	477	1,765	2,296	9,518	14	57	6
TEXAS							
Abilene	282	1,034	2,209	9,729	—14	15	81
Amarillo	378	1,253	3,277	13,093	57	12	44
Austin	293	1,279	5,065	19,247	5	26	46
Beaumont	462	1,448	1,804	5,731	45	28	18
Corpus Christi	89	367	2,463	7,350	64	—9	—19
Dallas	2,656	9,010	17,547	65,067	—17	19	46
El Paso	673	2,439	5,741	21,255	—9	—7	8
Fort Worth	1,201	3,331	4,753	16,166	18	42	1
Galveston	166	454	283	1,031	6	—34	—2
Houston	1,740	6,264	19,233	72,645	—2	—4	1
Lubbock	286	1,286	5,290	19,030	44	75	68
Port Arthur	251	731	749	2,620	4	55	—54
San Antonio	1,611	5,832	7,013	22,152	23	15	21
Waco	227	861	1,427	5,005	36	56	26
Wichita Falls	131	579	684	4,701	—65	—1	122
Total—17 cities	11,805	39,884	$82,862	$301,170	4	17	20