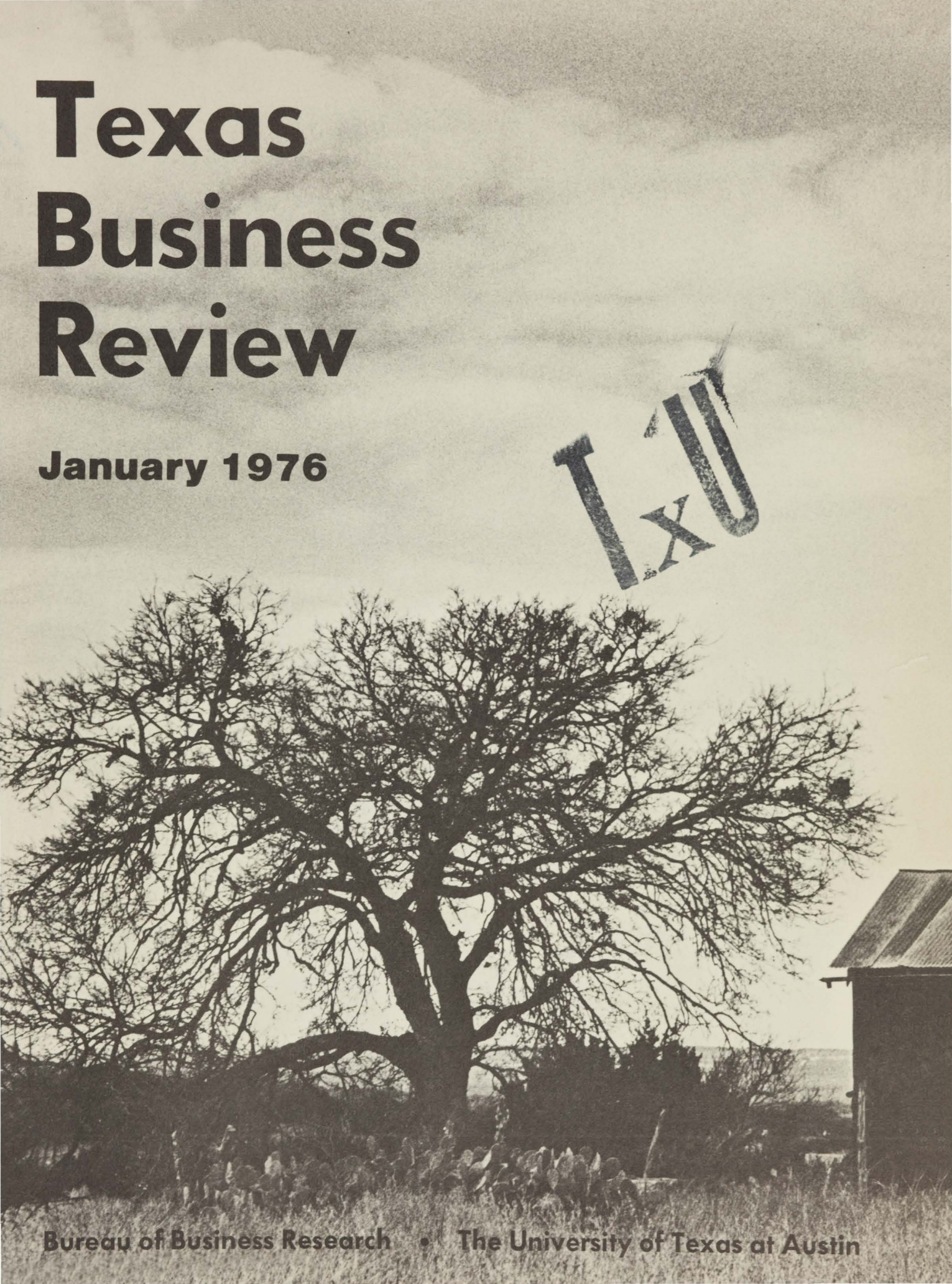
Texas Business Review

January 1976



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TEXAS BUSINESS REVIEW

VOL. L, NO. 1, JANUARY 1976

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Cover: Scene near Lake Travis photographed by Chip Pitcairn, journalism student, The University of Texas at Austin.

Published monthly by the Bureau of Business Research, Graduate School of Business, The University of Texas at Austin, Austin, Texas 78712. Second-class postage paid at Austin, Texas. Subscription, $4.00 a year; individual copies 35 cents.

Reprints of feature articles are available from the Bureau at ten cents each.

The *Texas Business Review* is indexed in *Marketing Information Guide* and *Public Affairs Information Service* and is available on microfilm from University Microfilms.

The Bureau of Business Research is a member of the Association for University Business and Economic Research.

US ISSN 0040-4209

The Business Situation in Texas

Robert M. Lockwood

Texans began 1976 with the hope of strengthening the newer elements of the Texas economy and with some promise of rising slowly out of a recession that has never affected Texas as dramatically as it has other states. Texas ended 1975, however, with the prospect of losing some of the regional advantages that have accelerated the industrialization of the state and buffered the effects of recession.

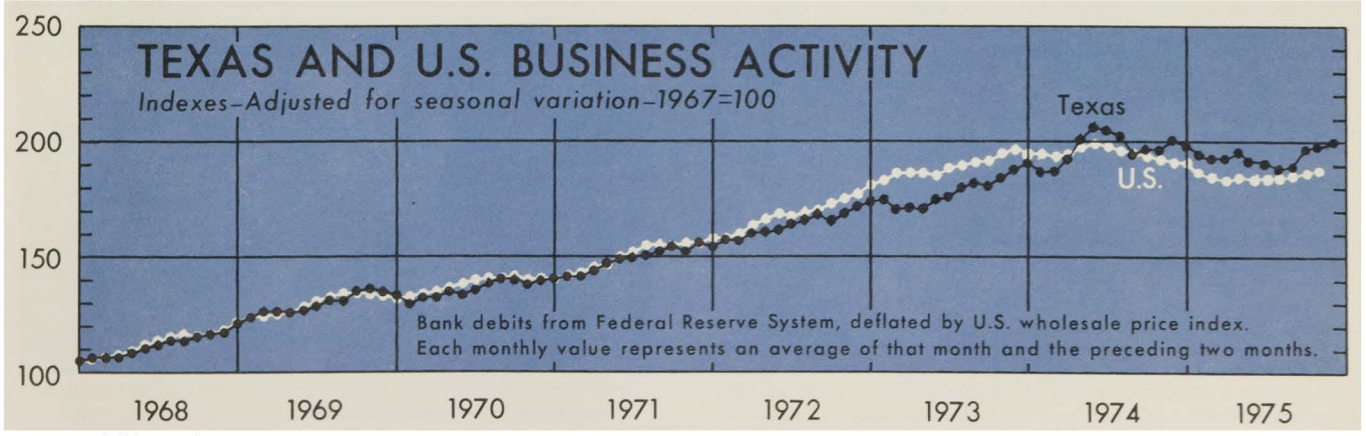
Primary Production

Primary production—agriculture and mining—remains much more significant in Texas than in most states. The state lost an estimated 2,000 farms last year, but Texas reflects national trends by producing more crops and livestock from fewer and larger farms. Mining in Texas still means oil and gas extraction, despite the growing significance of lignite and uranium. Both the agriculture and petroleum industries have changed though, and their long-run and even their immediate significance for the prosperity of Texas are quite different from their past importance.

A single but significant example of such change was dramatized recently when the U.S. Department of Agriculture, dissatisfied with Texas efforts to eradicate brucellosis (a type of contagious abortion in cattle), threatened to impose a hotly disputed quarantine early in January. The quarantine would prevent most Texas-bred cattle from leaving the state. Texas has about 200,000 cattle breeders. About 12,000 of them raise purebred animals, and some 2,000 ship stock overseas. Besides the loss of millions in export earnings, a year-long quarantine would cost the state up to $3.7 million in federal benefits earmarked for brucellosis control in Texas during 1976. Nor would stockmen, shippers, brokers, and others be the only groups affected by a quarantine. Livestock show promoters fear that out-of-state exhibitors might not risk bringing their animals into Texas during a quarantine. The large, prestige stock shows in Fort Worth, San Antonio, and Dallas especially would be affected.

In addition to farming and ranching, oil and gas production still affects many more Texans than those involved in finding and producing oil. The thousands of royalty owners have always constituted a significant economic and political bloc. The smaller and more established interests probably dominate the royalty ownership of the older producing properties in the state, those affected much more by changing oil prices and production costs than by the climate and technology of exploration. Yet oil and gas production still affects every Texan through the state and local tax structures. The picture presented by these taxes is misleadingly favorable, however. Oil and gas production tax receipts rose between fiscal years 1973 and 1975 despite production declines. Oil and gas prices rose so rapidly during this period that tax receipts doubled. More than 40 percent of the gain in total state tax receipts from 1973 to 1975 was attributable to petroleum production taxes, and all of their increase was attributable to price rises. Oil and gas taxes contributed 11.7 percent of all state taxes in fiscal 1973 and 18.1 percent in fiscal 1975. Oil and gas are clearly declining resources in Texas, but public revenue dependence on their extraction is increasing rather than declining.

A study of the qualities that make states attractive business environments was completed recently by a Dun and Bradstreet affiliate. The study received wide publicity in the Texas press, because the authors found that Texas was regarded by businessmen as having the most favorable climate for business in the nation. Many of the qualities cited by respondents are or have been favorable for both consumers and businessmen. Some of these



The Last Hundred Years

Robert M. Lockwood

1875 Durham cattle introduced.
1875 First National Bank in Dallas established.
1875 Modern, large-scale irrigation begins along Pecos River.
1875 First barbed wire sold (Gainesville).
1876 Hereford cattle introduced.
1876 Houston National Bank founded.
1876 Feb. 15. Constitution of 1876 ratified.
1876 Mar. 16. Dallas Savings and Loan Association founded.
1876 July 19. Railroad reaches Fort Worth.
1876 Sept. 21. First ocean-going steamship navigates Buffalo Bayou to Clinton, 7 miles below Houston.
1876 Oct. 4. Texas A&M College (now Univ.) opens.
1877 Hide hunters kill off last of Texas buffalo herd.
1877 Feb. 15. Northwest Texas (later Texas and Southwestern) Cattle Raisers' Association formed.
1877 Mar. 1. Railroad reaches San Antonio.
1877 Apr. 23. First National Bank of Fort Worth founded.
1878 National Bank of Commerce (Dallas) opens.
1878 Texas Star Flour Mills (Galveston) begins operating.
1880 Dallas Homestead and Loan Association organized.
1880 Feb. 19. *Houston Post* begins publication.
1880 Aug. 30. First passenger train makes Houston-New Orleans run.
1881 Jan. 20. *San Antonio Light* begins publication.
1882 Bewley Mills established (Fort Worth).
1882 Knights of Labor organize first Texas local.
1882 Jan. 15. First through freight train arrives in Houston from San Francisco.
1883 El Paso Smelting Works (acquired 1889 by American Smelter & Refining Co.) opens.
1883 H. Dittlinger Roller Mills Co. (New Braunfels) founded.
1883 Knights of Labor call general strike in Galveston and Houston.
1883 Sept. 15. UT-Austin opens.
1884 Feb. 27. State of Texas begins iron manufacturing (New Birmingham, Cherokee County).
1885 Oct. 1. *Dallas Morning News* established.
1886 Mar.-May. Great Southwest Strike.
1886 Oct. Dallas State Fair and Exposition opens.
1887 Cameron Mills established (now Cargill, Inc., Dallas).
1888 Dallas Cotton Mills built.
1888 *Dallas Times-Herald* begins publishing.
1890 Jan. 19. Fort Worth Union Stockyards opens.
1891 Flour exports begin (Galveston).
1891 Apr. 3. Texas Railroad Commission created.
1892 Dec. 17. Electric power plant begins operating in Houston. This or one in Galveston was first central electric station in Texas.
1893 Lake McDonald (now Lake Austin), first large reservoir project, completed.
1894 June 9. First significant oil discovery (Corsicana).
1895 Brahman cattle introduced.
1897 First large-scale rice irrigation begins (Jefferson County).
1898 Dec. 25. First successful commercial oil refinery goes onstream.
1899 Right of workers to organize and form trade unions established by law.
1899 Mar. 3. U.S. Congress approves Houston Ship Channel project.
1899 Mar. 29. First petroleum regulation law enacted.
1900 Sept. 8-9. Hurricane and tidal wave strike Galveston, costing perhaps 8,000 lives and shifting balance of commercial power inland to Houston.
1901 Gulf Refining (now Gulf Oil) Co. builds Port Arthur refinery.
1901 Jan. 10. Spindletop oil field discovered.
1901 June. First oil-burning locomotive sold.
1901 Oct. 14. *Houston Chronicle* established.
1903 First Texas Good Roads Association formed.
1903 Swift and Armour packing houses open.
1904 Constitution of 1876 amended to allow formation of state banks.
1906 Feb. 1. *Fort Worth Star* begins publishing.
1907 Oct. 20. Intercity bus service begins (between Colorado City and Snyder).
1908 Completion of 15-mile channel connecting Neches and Sabine Rivers with Port Arthur canal and establishing port of Beaumont.
1908 Robertson Insurance Law (repealed 1963) requires insurance companies operating in Texas to invest three fourths of their reserves in the state.
1908 Texas Co. (now Texaco, Inc.) organized.
1910 First long-distance natural gas pipeline in Texas completed (between Clay County and Fort Worth/Dallas).
1911 First commercial sulfate pulp kraft paper made from southern pine (Orange).
1913 Dallas becomes headquarters for 11th Federal Reserve Dist.
1913 First eight-hour and child-labor laws enacted.
1913 First home-rule law passed.
1913 State Board of Water Engineers (now Texas Water Development Board) established.
1914 Galveston Bay-Corpus Christi canal completed.
1914 Nov. 10. Houston Ship Channel and Turning Basin opened to deepwater traffic.
1916 Anderson, Clayton & Co. moves headquarters from Oklahoma City to Houston, builds first major cotton warehouse.
1917 Apr. 4. State Highway Department (now Department of Highways and Public Transportation) created.
1917 June 21. Humble Oil & Refining Co. (now Exxon USA) chartered.
1917 Aug. 21. Adoption of constitutional amendment providing basis of legislation relating to water conservation and control.
1917 Texas Workmen's Compensation Act passed.
1918 First refinery built on Houston Ship Channel.

1918 Dec. 13. Panhandle gas field discovered.
1919 Jan. 29. Standard Oil Co. (New Jersey)—now Exxon—acquires 51 percent of Humble stock.
1920 Republic National Bank opens (Dallas).
1920 Cameron Iron Works, Inc., founded in Houston.
1920 Apr. 1. Federal decennial census reports first cities larger than 100,000—San Antonio, Dallas, and Houston.
1920 Fall. First radio station (WRR, Dallas) begins broadcasting.
1921 April. First large-scale helium extraction plant begins operating (Fort Worth).
1921 Apr. 5. Oil discovered in Panhandle.
1921 Apr. 21. Humble Oil & Refining Co. (now Exxon USA) Baytown refinery formally opens.
1922 Darco (now ICI United States, Ltd.) opens Marshall plant using East Texas lignite to make activated carbon.
1923 May 28. Oil discovered in Permian Basin.
1924 Jan. 1. State Highway Department (now Department of Highways and Public Transportation) begins maintaining all state highways.
1925 Construction of coordinated highway system begins.
1926 May 12. Commercial aviation begins with first airmail service between Dallas/Fort Worth and Chicago.
1928 First City National Bank (Houston) opens.
1928 Feb. 26. First airmail arrives in Houston.
1928 Oct. 1. Humble Oil & Refining Co. (now Exxon USA) shifts to six-day workweek.
1931 American Smelter and Refining Co. (now Asarco, Inc.) begins operating El Paso copper smelter.
1931 Aug. 17. Gov. Ross Sterling orders East Texas oil field closed, places National Guard in control.
1934 Gulf Intracoastal Waterway completed between New Orleans and Galveston and Houston.
1934 Todd Shipyards Corp. built (Galveston).
1934 Oct. Southern Alkali Corp. opens Corpus Christi plant.
1934 Texas Quality Network (TQN) formed with four radio stations.
1935 Gulf Intracoastal Waterway reaches Houston.
1936 American Zinc Co., Inc., completes zinc smelter (Dumas).
1936 Texas Unemployment Compensation Act passed.
1937 Champion Paper & Fibre Co. opens Pasadena plant.
1937 Dec. First large-scale hydroelectricity production (Lake Austin).
1938 Fair Labor Standards Act passed.
1938 First commercial natural gas cycling plant built.
1939 Texas Soil Conservation Law enacted.
1939 Sept. 1. State Department of Public Welfare organized.
1940 Dow Chemical Co. opens in Freeport.
1940 Intracoastal Waterway reaches Corpus Christi.
1940 Jan. 17. First commercial run of southern pine newsprint produced by Southland Paper Mills, Inc. (Lufkin).
1940 Apr. 1. Federal decennial census reports that Texas population has become more than half urban.
1941 Gulf Intracoastal Waterway completed between Galveston and Corpus Christi.
1941 Apr. 7. North American Aviation, Inc., dedicates plant near Dallas.
1942 Lone Star Steel Co. (subsid. Northwest Industries, Inc.) completes steel mill (Lone Star).
1942 Apr. 5. Tin Processing Corp. begins operating only tin smelter in Western Hemisphere treating Bolivian ores (Texas City).
1942 Apr. 17. First aircraft completed at Consolidated Vultee Aircraft Corp. (Convair), Fort Worth.
1942 Apr. 25. Sheffield Steel Co. (now Armco Steel Corp.) completes first large, fully integrated steel mill in Southwest (Houston).
1942 Dec. 31. Big Inch crude-oil pipeline completed (Longview to Pennsylvania and New Jersey).
1943 Mar. First synthetic rubber components produced.
1946 Texas Instruments, Inc., founded (Dallas).
1947 Texas Right to Work Act passed.
1947 Apr. 16. Explosion of *SS Grandcamp* at Texas City sets off series of explosions, causing more than 3,500 casualties and property damage of $50 million-plus.
1948 Chance-Vought Div., United Aircraft, Inc. (now Vought Systems Div., LTV Aerospace Corp.) takes over North American plant (Grand Prairie).
1948 Sept. 29. First television station (WBAP-TV, Fort Worth) begins broadcasting.
1949 June 18. Last section of Gulf Intracoastal Waterway completed.
1950 Aluminum Co. of America opens Point Comfort works.
1952 Aluminum Co. of America opens Rockdale plant, reviving modern use of Texas lignite as power plant fuel.
1952 First recovered sulfur produced from natural gas in Permian Basin.
1952 Reynolds Metals Co. opens aluminum plant.
1953 May 22. Pres. Eisenhower signs quitclaim bill, giving Texas and other states title to their submerged coastal lands.
1954 General Motors Corp., G.M. Assembly Div. opens Arlington plant.
1954 Houston International Airport opens.
1954 July 3. Houston counts one millionth inhabitant.
1956 Houston annexes 140 sq. mi., increasing corporate area to 320 sq. mi.
1961 Sept. 19. NASA announces selection of Houston as site for space lab.
1962 July 2. NASA Manned Spacecraft Center begins operations in Clear Lake City.
1965 Apr. 9. Harris County Domed Stadium (Astrodome) opens.
1970 Feb. 1. Texas Minimum Wage Act becomes effective.
1970 Apr. 1. Federal decennial census reports first city of more than 1 million (Houston).
1973 Dallas/Fort Worth Regional Airport opens.
1974 Oct. Construction begins on first nuclear electric power plant.
1975 Texas Public Utilities Commission organized.

The Next Hundred Years

Robert H. Ryan

The twentieth century, now going into its final quarter, has already been branded as the petroleum century for the entire world and especially for Texas. The twenty-first century, by contrast, may be identified as a time of resource famine rather than wealth. The degree to which shortages will color life in Texas remains to be seen, but in an increasingly close-knit world economy, the problems of other lands, even other hemispheres, are no longer literally foreign affairs.

United Nations demographers have projected a trebling of the world population in the next hundred years. (In fact, they concede the possibility of a fourfold increase between now and 2075.) However, they look for little more than 40 percent growth in the United States and Canada and only 25 percent increase in the population of Western Europe. In other words, and in other figures, the population explosion is expected to continue in the areas of the world least able to support increased population: Africa, 520 percent; South Asia, 320 percent; Latin America, 300 percent.

How this alarming growth trend will impinge upon Texas remains to be seen. The widening gap in living standards between the have and have-not nations represents a political explosive more threatening than nuclear bombs. But apart from the political implications, the need for food products to support a global population of 12 billion will have sharp impact, especially in Texas, where food has been and will remain the most important product.

Though Texas has taken pride in its size and the broad sweep of its farmlands, the state now ranks fourth among all states in total farm marketings. With roughly four times the California farm acreage, Texas produced only 72 percent as much farm product income as California in 1974. On the other hand, Texas agriculture is more generously supported by the government than that of most states. With only 6 percent of the nation's farm marketing income, Texas received 15 percent of the total government farm payments in 1974.

Though much agricultural land in Texas is cursed by intermittent, even perennial, drouth, there are opportunities for improved production that will be made even more attractive by the inevitable increase in the value of farm products. In a world of food shortages it can be expected that food prices will tend to rise. (Admittedly it is uncertain how the underfed nations—where the need is greatest—will manage to pay for food imports from North America and Australia, the two surplus-producing continents.)

Additionally, the patterns of food production will tend to shift. In the past, Texas's most valuable agricultural output has been cattle. But cattle represent the most extravagant use of farm resources. A steer converts only 7 percent of its protein input into marketable meat; even hogs are more than twice as efficient as food producers. According to food economist Georg Borgstrom, the world's 1967 livestock population was consuming enough food to support more than 14 billion persons.

Inescapably, then, meat will continue its shift toward the category of luxuries. Even the diet of Texans will surely be influenced by that development.

Nor is the dairy cow an efficient food factory, and her heavily advertised contentment is ill founded. In fact, the means now exist to convert vegetable materials into high-protein human food without recourse to the animal conversion cycle. Much of the vegetable protein food now available is less than ideally palatable. But chemical engineers on the Austin campus of The University of Texas have long since produced synthetic milk of excellent quality. Provided with a diet of green leaves and a small tank of enzymes analogous with the digestive products of a living cow, the miniature "glass cow" produced a constant dribble of high-butterfat milk. The cost of the milk was reportedly somewhat higher than that of the dairy product, but improvement of technology and shifting economics might well threaten the livelihood, even the life, of Jerseys and Holsteins in the long term. Of course artificial milk substitutes made by other means are already widely marketed.

Still another revolutionary development in agriculture is the use of huge plastic bubbles to enclose farmlands and control the environment. Long since discussed at The University of Texas, this practice is now in use on a small scale and is increasing by a 10 percent annual rate, according to resource specialists at the New York consulting firm of Alexander & Alexander.

Before the last quarter of the twenty-first century, Texas will have the opportunity to benefit from these developments:

- Adaptation of crops to climates. Genetic engineering has not only enhanced yields but has already expanded the zones where such climate-specific crops as corn and soybeans can be grown. This broadening of crop horizons is certain to continue.
- Expansion of fish farming. Catfish ranching is already a significant industry in Texas. Inasmuch as fish convert feed to protein far more efficiently than land-based livestock, they represent an attractive compromise between extravagance and subsistence in diet.
- Conversion of solid wastes. Enormous quantities of both urban and farm waste materials can be used in production of fertilizers and even livestock feeds.
- Efficiencies in water use. Vitally important to Texas is the development of drouth-resistant crops and of means of distributing and applying irrigation water to better effect.

With good fortune, world food supplies may be expanded and stretched enough to cover growing needs until the time when world population is stabilized. In the meantime, Texas can play an increasingly important role in world food supply and also expand the economic returns from its agriculture.

Electronic Funds Transference

Development and Prospects

Lawrence L. Crum*

It was not until the middle 1960s that the commercial banking industry began to focus considerable attention on consumer-oriented electronic funds transference and to entertain seriously the concept of a payments system in which most payments would be made by electronically transmitted instructions. In the United States the payment media available to the general public had included wire transfer of funds by means of Western Union and other telegraphic services long before the Federal Reserve System, established in 1914, made provision for its member banks to conduct wire transfers of money balances within the system for their own purposes and, later, for the benefit of their customers. The use of such transfers was, however, limited throughout the first half of the twentieth century. Another step toward widespread use of electronic funds transfers occurred with the establishment of the Bank Wire in 1950; through it banks could accomplish immediate transfers of funds among institutions participating in a private line linking about two hundred large commercial banks. By the second half of the 1960s the concept of the "checkless, cashless society," or what is more appropriately called the "less-check, less-cash society," had become a leading subject at banking industry planning sessions.

Electronic banking issues were to place heavy demands upon the time and energies of planning and operations executives in many large banking organizations. Experimental payments-system projects using the expanded capabilities of computers, as well as new inventions and refinements in telecommunications equipment, were conceived during the latter half of the sixties by some of the more innovative individual banks and bankers' associations (especially clearing-house associations), working both alone and in conjunction with the Federal Reserve System. The Federal Reserve announced plans for substantially increasing the capacity of its system for wire transfers of funds, a change that involved construction of a major switching center at Culpeper, Virginia. This facility and most of the innovative payments-system projects planned during the sixties did not begin operations until the early 1970s.

The primary motivation for developing automated clearing houses, as well as a partial motivation for developing other features of electronic funds transference, has been to reduce the massive volume of paperwork associated with the current payments system and to lower the costs of making payments by discouraging the use of the highly labor-intensive, and thus expensive, check payment method. By 1966 total check volume was already growing at an annual rate of 6 to 7 percent.[1] The cost of processing all checks cleared in 1966 (20 billion items) was estimated to be $3.5 billion.[2] Additional impetus for the improvement of paper-handling systems and the development of the electronic alternative to paper in the execution and recording of payment transactions was provided by *The Outlook for the Nation's Check Payments System: 1970-1980*, a report prepared by Arthur D. Little, Inc., for the American Bankers Association and submitted to it in late 1970. Several months later, the long-awaited report of the Monetary and Payments System Committee of the American Bankers Association (MAPS Report) was published. The committee declared that the existing payments system would remain viable at least through 1980 but, with a particular view to cost considerations, strongly advised the investigation of alternate means of funds transference.

Retail credit cards, issued in great profusion by commercial banks during the latter half of the 1960s, conditioned consumers to changes in the payments system and familiarized them with techniques that would become essential in electronic funds transference. However, instead of contributing to a reduction in the volume of paperwork associated with payment transactions, credit cards increased the volume of paper and necessary paper processing. In the commercial banking industry the principal sources of progress toward a comprehensive electronic funds transfer system became the research on automated facilities for handling (1) direct payment of corporate wages and salaries through crediting employee bank accounts and (2) preauthorized payment by banks of individuals' recurrent bills (such as insurance premiums, mortgage payments, and utility bills). Automated clearing houses have been developed in close conjunction with bankers' plans for the conduct of an imminently growing volume of direct credits and preauthorized-debit payments.

Though commercial banks have been the leaders in the overall development of electronic funds transfer facilities in the United States, other types of financial institutions, competing strongly with the commercial banks to lay the foundations for "complete family financial service centers," have become increasingly active during the 1970s. Most notable among these nonbank financial institutions are the deposit-type thrift institutions—savings and loan associations and mutual savings banks. Savings and loan associations preceded other financial institutions in providing for electronic point-of-sale terminals in retail stores through which certain funds transfers for depositors can be made (though savings and loan associations did not conduct the

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first pilot projects of financial institutions involving such facilities). In addition to the commercial banks and deposit-type thrift institutions using these units and other forms of "customer electronic terminals" in various types of locations, some of the larger credit unions have recently taken steps to provide their members with remote-terminal access to their facilities. So far, though, the number of financial institutions of all types operating remote customer terminals for funds transference is relatively small.

The Development of Automated Clearing Houses

Automated clearing houses are an integral feature of the electronic funds transfer system that is beginning to emerge. An automated clearing house is a facility that performs interinstitutional clearing of paperless entries for participating banks (or banks, nonbank financial institutions, and possibly other participating organizations).[2] Paperless entries are, of course, debits and credits to deposit accounts; they replace checks and other written payment orders and appear on magnetic tape or some other electronic data processing medium. The automated clearing houses employ batch-processing computer methods. Most of them have been or are being formed by commercial banks, though in some instances other financial institutions have been invited to assume membership; automated clearing houses are generally operated by Federal Reserve banks, but the rules and procedures of operation are developed by the member institutions that serve the public.[3]

In the comprehensive electronic funds transfer system of the future, commercial banks will presumably be obliged to share the operation of the payments mechanism with various other institutions serving the public but are likely to retain their predominance in the payments system.[4]

The first major achievements in the development of operating standards, computer software, and legal arrangements for an automated clearing house can be traced to the SCOPE banking project begun in California in 1968. SCOPE (the acronym for Special Committee on Paperless Entries) involved the joint efforts of the San Francisco and Los Angeles Clearing House Associations—serving about 100 banks—and the Federal Reserve Bank of San Francisco. From their work evolved the automated clearing houses in San Francisco and Los Angeles, both of which commenced operations in October 1972. The research and experimentation of the SCOPE project also provided a basis for the implementation of the automated clearing-house operations in Georgia, Minnesota, and other states.[5] The source of the Georgia Automated Clearing House, which became operational in May 1973, was the Atlanta-based COPE, or Committee on Paperless Entries, project. Like the SCOPE project, it was concerned with research and development work for automated direct credits, especially payroll deposits, and automated preauthorized debits—specifically bill payment services. The COPE project also was concerned with the application of automated clearing methods to the processing of delayed payments by individuals in cases where there was no standing preauthorized arrangement with the payee company to directly debit the individual's bank account.

Preauthorized payment transactions are by nature appropriate for computer batch processing in clearing operations. Payment transactions of the preauthorized direct credit and preauthorized debit types, considered more fully below, also presumably require minimal operational changes in the present payments system to implement automated clearing activities. The periodic recurrence of direct payroll deposits and insurance premium and mortgage installment payments, for example, helps to ensure a sufficient volume of payments for which such clearing could be used immediately to encourage the banks in a given region to support the establishment of or otherwise participate in an automated clearing function.

Most of the general concepts and many of the methods of automated clearing operations that apply to the types of payments just considered presumably apply to other types of payments. The total volume of payments that will be processed by automated clearing houses is expected to rise substantially in the next several years.

Eight regional automated clearing houses were already in operation in the United States at the end of July of this year, and twelve other regions were committed to implementation of automated clearing houses. Ten of these institutions were scheduled to become operational in 1975, including the Southwestern Automated Clearing House Association, organized in the Dallas-Fort Worth area.

In May 1975 a task force of the Houston Clearing House Association recommended the creation of an automated clearing house that would serve the Houston-area banking community. It suggested affiliation of the Houston-area banks with the Southwestern Automated Clearing House Association as the preferred approach; the broad regional organization that was envisioned would entail lower costs per member institution than the alternative of multiple automated clearing houses in the southwestern United States. By early fall of 1975 arrangements had been made for the Houston planning group to join forces with the Southwestern Automated Clearing House Association. The original geographical scope and details of implementation of the Southwestern Automated Clearing House Association were modified substantially. The clearing house will serve the Eleventh Federal Reserve District, which includes all of Texas and parts of Arizona, New Mexico, Oklahoma, and Louisiana; efforts to attract additional members have recently intensified. Implementation of its operations will be deferred until the new automated clearing-house software system from SCOPE becomes available on a nationwide basis, tentatively in the second quarter of 1976; April 1, 1976, has been set as the date for commencement of operations. In planning the implementation of operations, the Southwestern Automated Clearing House group will work closely with the National Association of Clearing House Associations, established in July 1974 to develop standards for the exchange of paperless entries among regional clearing houses and to pursue promotional efforts.

The operations of some of the automated clearing houses have been limited to one type of transaction thus

far—direct deposits (principally payroll deposits)—but these institutions are planning to clear for other types of payment transactions in the near future. Under the direct payroll deposit plan, an employer, instead of preparing and distributing checks to his employees each pay period, transmits salary information on his employees to his bank via magnetic tape (punched cards are still used in some instances). His bank charges his demand-deposit account for the total amount, credits the accounts of the employees who maintain accounts at that bank, and forwards the remaining credit entries to the automated clearing house, with most of the necessary operations being conducted electronically even today. The automated clearing house makes the appropriate debit and credits to member banks and transmits payroll entries to other employee banks to be credited to individual employee accounts. With these automated clearing operations the direct payroll deposit plan is a less expensive and more secure means of paying employees than the paycheck method. Direct transfers of salary payments to employee bank accounts were being made by some corporations and other employers before the advent of automated clearing houses, but the use of this technique was restricted because the service could be provided only to those employees who held their checking accounts at the same bank as the employer (unless the employer was willing to deal directly with a large number of employee banks). Among the very large employers presently making direct payroll deposits and realizing the benefits of automated clearing operations in this respect is the United States Air Force.

These methods for handling direct payroll deposits may also be applied to other types of recurrent credits to depositor accounts, including interest, dividend, and retirement payments. The federal government began the first phase of a program for direct deposit of Social Security payments in Georgia in October 1974; the service was made available in Florida several months later and has recently been extended nationwide. Many banks, deposit-type thrift institutions, and credit unions are now exhorting their depositors or members who receive Social Security benefits to take advantage of the direct-deposit service. The operations in Georgia and Florida will employ electronic funds transference beginning in early 1976; this pilot project is expected to afford preparation for the electronic processing of the direct deposit of Social Security payments throughout the nation. The government's interest in such application of electronic payment methods is obvious and has provided incentive to financial centers across the nation to proceed with the development of automated clearing-house facilities.[6] This application of automated clearing services could involve fifty million monthly payments nationwide.

Preauthorized bill payments, the second general type of domestic payment transaction to which automated clearing-house services are being applied, involve an arrangement under which a customer gives a company standing authority to charge his bank account periodically to pay recurrent bills as they come due. For many years the service has been successfully applied to payment of insurance premiums and certain other types of regularly recurring bills that do not vary in amount. Before the advent of automated clearing houses, the companies involved had to deal individually with numerous customer banks; with automated clearing facilities, each such company simply transmits to its own bank a list of the payments to be collected from customers, together with a list of banks and customer account numbers at those banks. The company's bank account is credited for the total amount; accounts of any of the company's customers that are held at that bank are debited for the appropriate amounts; and the bank sends information regarding the remainder of the debits to the automated clearing house, which effects settlement between the company's bank and the other banks via account entries and transmits the information to the latter banks; these banks in turn debit the accounts of the individual customers (bill payers). Not only private companies but also government agencies might offer bill payers the option of the preauthorization payment arrangement in the future. Besides the replacement of check handling with much less expensive electronic processing, the advantages to the payee organizations may include faster availability of funds and lower per-item processing charges by their banks.[7] Advantages to the bill payers include the convenience of the payment arrangement, elimination of the expense of checks and the postage, and avoidance of penalties for late payment of bills.

Market research reveals that where recurrent payments are not readily predictable in amount, bill payers are reluctant to preauthorize payments and thus surrender a degree of control over their finances.[8] The bill payment service which the COPE project developed to accommodate situations where the periodic amounts vary is known as "bill check." If and when the customer of a company chooses, he may make a payment on a periodic bill by signing the bill stub and returning it to the company, thus granting the company a one-time authorization to arrange a charge to his bank account for the amount specified on this "bill check." The customer retains control of the timing and amount of the direct debits to his account; however, the convenience and total savings to him in paying bills are not as great as under a preauthorized debit arrangement. The processing of "bill check" entries through automated clearing-house facilities is identical to that for the preauthorized bill payment entries. The "bill check" payment service is similar to services that giro payments systems have long provided in Europe, but with a substantially lower degree of automation in the operations. The "bill check" payment service offers a high potential for development in the United States during the next decade.

A discussion of automated clearing-house developments in the United States thus far would not be complete without reference to the systems that have been designed to handle international payments exclusively. In April 1970, more than two years before the automated clearing houses in California became operational, the New York Clearing House Association began operation of an automated clearing house to handle electronic funds transfers for international customers of its nine member banks. Membership in the Clearing House Interbank Payment System, or CHIPS,

has grown to fifty-seven institutions in five years; the newer members include commercial banks that do not belong to the New York Clearing House Association, branches and agencies of foreign banks, and foreign business subsidiaries of U.S. banks (Edge Act corporations) that are based in New York City.[9] CHIPS now clears more than 25,000 items each day among the member institutions (half again as many as in 1970), representing transactions with a total value averaging more than $43 billion. It has been evaluated as a system that "speeds up payment transfers and minimizes error by translating the coded information entered into appropriate account titles and addresses, all of which are typed back automatically on the terminal of the paying bank, checked, approved, and then released to the payee's bank."[10] CHIPS has demonstrated that over a meaningful time span a group of banks can implement successfully and sustain a cooperative system of electronic interchange of payments information, at least for limited usage.

Presently in an advanced planning stage is a considerably more comprehensive private network for the electronic delivery of international banking messages—SWIFT (standing for Society for Worldwide Interbank Financial Telecommunications). This system, incorporated in May 1973, will switch payments messages among approximately 273 banks intially, including 35 U.S. banks, almost two thirds of which are now participating in CHIPS. The SWIFT system is expected to be faster, more economical, more reliable, and more convenient than Telex, mail service, or other methods of international communications that presently carry information to CHIPS participants from overseas.[11] The interfacing of CHIPS and the SWIFT system is apparently already under study.

*

To be continued in a later issue.

Notes

[1] *A Techno-Economic Study of Methods of Improving the Payments Mechanism*, report prepared for the Federal Reserve System Subcommittee on Improving the Payments Mechanism (Menlo Park, California: Stanford Research Institute, 1966), p. 11.

[2] Cf. Allen H. Lipis, *Automated Clearing Houses: An In-Depth Analysis* (Atlanta, Georgia: Atlanta Payments Project, 1974), p. 249.

[3] *Ibid.*

[4] See, e. g., Lawrence L. Crum and Dennis W. Richardson, *Competition for the Commercial Banking Industry in the Establishment and Operation of an Electronic Payments System* (Washington, D.C.: American Bankers Association, 1971).

[5] "Major Events in Evolution of EFTS Are Occurring with Rising Frequency," *Banking: Journal of the American Bankers Association* 67 (May 1975): 82.

[6] *Ibid.*, p. 114.

[7] Lipis, *Automated Clearing Houses*, p. 7.

[8] *Ibid.*, p. 3.

[9] "Banking Gets in the CHIPS," in *Morgan Guaranty Survey*, May 1975, p. 12.

[10] *Ibid.*, p. 13.

[11] *Ibid.*, p. 14.

Texas Construction

Four Decades of Change

Bryan Adair

A historical review of Texas housing data indicates that the state has made significant advances in comfort and convenience during the past four decades.

Between 1880 and 1940 a rural-to-urban migration trend of about 6 percent per decade was established, but with the outbreak of World War II this trend changed dramatically. In 1940 45.4 percent of the state's population was urban based, while in 1950 59.8 percent lived in urban areas, a change of 14.4 percent or more than double the previous sixty-year trend. In 1950 the urban/rural ratio of Texas was almost identical to that of the nation, while only ten years before 11 percent fewer Texas inhabitants lived in towns and cities of 2,500 or greater population. The dramatic shift between 1940 and 1950 was continued at an even greater rate during the 1950s. By 1960 Texas had an urban concentration about 10 percent greater than that of the nation as a whole. Since 1960 the state has maintained the greater concentration, but the lead has not been increased appreciably.

The dramatic shift in urban concentration in Texas between 1940 and 1960 is indicative of a radical transformation of the state's economy. In 1940 the economy was primarily an extractive one, depending heavily on the marketing of agricultural and petroleum products. But the increased production required by the war demonstrated the economic potential of the state.

Housing Standards

Along with this transformation in the economy came significant improvements in standards of housing. In 1940 only 55.6 percent of Texas home units had running water in the house; in the nation the figure was 69.9 percent. By 1970 97.4 percent of all home units in the state had running water; in the nation the percentage was 97.5. Housing in both the nation and the state has improved in the areas of health, sanitation, convenience, and comfort. Texas was significantly behind the nation in the adoption of modern electrical and plumbing facilities, particularly those in which central distribution and collection points are used.

The ratio of population per dwelling units to the number of dwelling units has steadily decreased during the past forty years, both in Texas and in the nation. The rate of decline for both sets of figures has tended to slow in recent years and may level out at about three persons per unit in future years. Some ethnic groups in Texas characteristically have large families, and these groups increase the average

Estimated Values of Building Authorized in Texas[#]

Classification	Nov[p] 1975 (thousands	Jan-Nov[p] 1975 of dollars)	Percent change Nov 1975 from Oct 1975	Percent change Jan-Nov 1975 from Jan-Nov 1974
All Permits	220,925	3,124,851	– 29	– 6
New construction	188,483	2,732,694	– 31	– 6
Residential				
(housekeeping)	96,821	1,251,785	– 30	2
One-family dwellings	84,649	1,052,740	– 22	21
Multiple-family dwellings	12,172	199,045	– 59	– 44
Nonresidential	91,662	1,480,909	– 31	– 12
Hotels, motels, and tourist courts	3,743	24,544	602	– 2
Amusement buildings	3,796	38,984	97	– 5
Churches	5,647	66,122	– 12	42
Industrial buildings	8,277	125,370	– 50	– 19
Garages (commercial and private)	861	16,566	– 12	– 65
Service stations and repair garages	835	7,801	– 34	– 17
Hospitals and institutions	2,025	182,856	– 88	8
Office-bank buildings	7,663	300,331	– 66	16
Works and utilities	19,405	153,429	589	16
Educational buildings	6,446	242,634	– 79	– 27
Stores and mercantile buildings	25,003	233,507	– 1	– 32
Other buildings and structures	7,961	88,433	14	– 33
Additions, alterations, and repairs	32,442	392,157	– 19	– 4
SMSA vs. non-SMSA				
Total SMSA[†]	190,640	2,810,935	– 32	– 7
Central cities	134,155	1,919,361	– 31	– 12
Outside central cities	56,485	891,574	– 35	7
Total non-SMSA	30,285	313,913	**	6
10,000 to 50,000 population	18,625	163,965	22	**
Less than 10,000 population	11,660	149,948	– 21	13

[#]Only building for which permits were issued within the incorporated area of a city is included. Federal contracts and public housing are not included.
[p]Preliminary.
**Change is less than one half of 1 percent.
[†]Standard metropolitan statistical area as defined in 1973 Census.
Source: Bureau of Business Research in cooperation with the Bureau of the Census, U.S. Department of Commerce.

number of persons occupying a single housing unit. The trends in the average number of persons living in a housing unit for both Texas and the United States are closely parallel, indicating that both are affected by similar exogenous influences.

Types of Housing

Texas has a greater percentage of single-family dwellings than does the nation. The two series of numbers are sufficiently different to indicate that at least some patterns of living in Texas vary appreciably from the national norm. On the other hand, the two series have tended to fluctuate in a parallel manner during the past few decades. In years prior to 1940, the rural and smaller urban area population was almost completely housed in single-family dwellings. Apartments were more likely to be found in the more

November Statistics in Review

A review of the several Texas construction authorization indexes reveals that while a general but moderate revival appeared to be at hand during mid-year 1975, the overall performance has not even met the volume levels reached during the same period of 1974. The eleven-month dollar average index of total construction authorized was down 5 percent from the year before. Index values for only five months of 1975 exceeded the monthly average of 1974. If figures were corrected for inflationary influences, the performance would be even less favorable.

In dollar terms, residential construction in the state was 6 percent higher during the first eleven months of 1975 than during the same period of 1974. Six months of the period exceeded the 1974 monthly average. Although the drop between October and November 1975 was large (35 percent), the November figure is only 6 percent below the 1974 monthly average and 55 percent above the figure for November 1974. The recent Texas experience mirrors that of the nation since there was a 7 percent drop in single-family housing starts in the United States from October to November.

Nonresidential building authorizations tend to be erratic in nature and are difficult to adjust seasonally. As a result, single-month observations may hold little meaning in themselves, but if numbers are grouped into periods of several months, per month averages can be meaningfully compared. Monthly averages for June-August and July-September 1975 exceeded the monthly average for the entire year of 1974, while similar averages for three-month spans of 1974 would show that six of the possible twelve averages would exceed the year's average. Overall, the eleven-month nonresidential authorization index average for 1975 is 13 percent below the same period of 1974.

The index of additions, alterations, and repairs is not adjusted for seasonal variation. The eleven-month average for 1975 fell 4 percent from the same period of the previous year. Index numbers for four months (May, June, July, and October) of 1975 substantially exceeded the 1974 monthly average, and the May-June index numbers also exceeded those of the previous year.

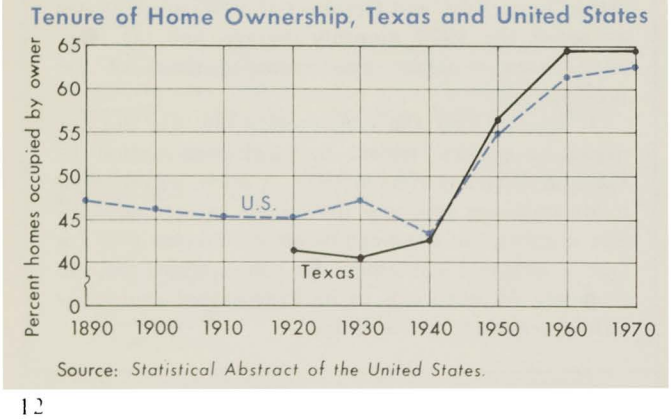
It appears that the construction industry did not expect a general revival in total construction to materialize at any time in 1975. A few relatively high index numbers appeared during the spring and summer months, but these can be attributed partly to the lack of seasonal adjustment for some figures and the tendency for seasonals to be exaggerated somewhat during periods of uncertainty.

Home Conveniences, Texas and United States, 1940 and 1970

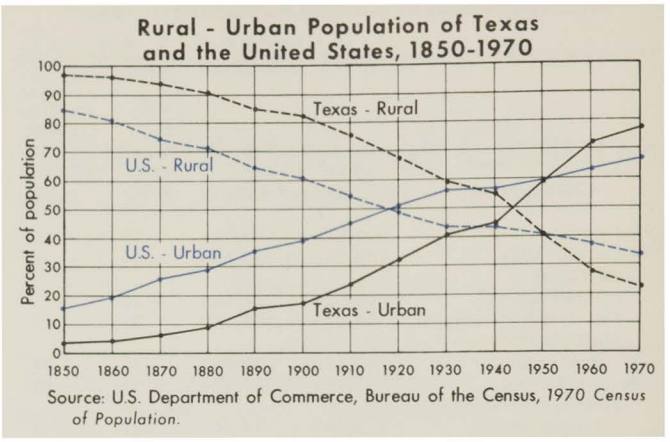
Item	Percent of homes			
	Texas		United States	
	1940	1970	1940	1970
Plumbing				
Running water in unit	55.6	97.4	69.9	97.5
Flush toilet in structure[1]	45.9	95.6	64.7	96.0
Bathtub or shower in structure[1]	47.2	95.1	60.9	95.2
Power and kitchen facilities				
Electric lights	59.0	98.0+	78.7	98.0+
Mechanical refrigeration	35.9		44.1	
Complete kitchen facilities[2]		94.3		95.6
Communication				
Radio in house	66.9	98.0+	62.1	98.0+
Telephone (may receive calls)		82.3		87.0

[1] Items may be shared by more than one household unit.
[2] Includes cooking stove, mechanical refrigerator, and sink with running water.
Source: *Census of Housing*, 1940, 1970.

concentrated urban areas. This was largely true in both Texas and in other states. But in Texas, the growth in urban centers occurred after the institutionalization of the automobile into the society. The availability of private transportation allowed the expansion of single-family housing into the suburbs, which were the primary growth areas in the years following World War II. Older cities in other parts of the nation grew large before the advent of the automobile. These cities were more likely to have residential housing areas built along public transportation corridors. During the past forty years the concentration of single-family dwellings in Texas has varied between 80 and 90 percent of the total, while the national average has varied between about 66 and 76 percent. Both series rose significantly between 1950 and 1960 but then dropped between 1960 and 1970. In Texas there was a significant expansion of single-family units in the suburbs during the fifties and early sixties, but after 1966 the number of multifamily units authorized for construction increased rapidly. Many new families, rather than renting or purchasing older single-family homes, moved directly into new apartments. During the 1960s young single people, especially students, increasingly preferred apartments over dormitories and other concentrated



Source: *Statistical Abstract of the United States.*

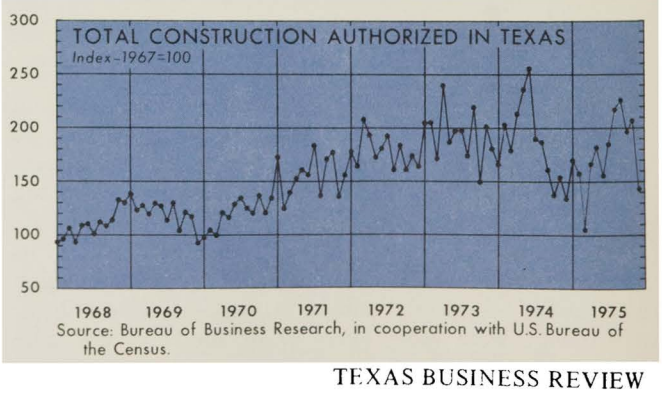


Source: U.S. Department of Commerce, Bureau of the Census, *1970 Census of Population.*

living quarters as more of them were able to maintain their own personal transportation means.

The proportion of multifamily dwellings in Texas was about the same in 1940 as in 1970; however, the character of multifamily housing involved may be somewhat different. In 1970 most of the occupants of multifamily housing lived one family to a unit, while in 1940 it was far more common for a large home, originally designed for single-family occupancy, to contain two or more nuclear families.

Nationally, the percentage of owner-occupied homes gradually dropped between 1890 and 1940, but since then the percentage has increased almost 20 percent. There have been similar but more dramatic changes in Texas since the 1930s. In 1930 state figures for home ownership trailed national figures by more than 7 percent, but the lead had been narrowed appreciably by 1940. In that year 28.2 percent of the housing stock in Texas was less than ten years old, while in the nation only 15.9 percent had been built during the previous decade. By 1950 Texas home ownership had surpassed that of the nation, and by 1960 64.8 percent of all homes in the state were owned by their occupants. Even with the shift to apartments during the late 1960s, the proportion of owner-occupied homes in Texas remained constant, indicating that the portion of renter-occupied, single-family housing fell. The changes in tenure of homes in the state closely paralleled the increasing urbanization of the state. Both are related to the increased industrialization stimulated largely by the war and by the favorable business environment of the state.



Source: Bureau of Business Research, in cooperation with U.S. Bureau of the Census.

Texas Business Log
November 1975

4 *The Soviet government* has been negotiating with Earth Resources Corp. for about 18 months to buy the Dallas firm's new technology for improving recovery of copper from oxide ores.

7 *Panhandle Eastern Pipe Line Co.*, Houston, wants to acquire Youghiogheny and Ohio Coal Co., Cleveland, for stock valued at about $74 million.

10 *Tracor, Inc.*, Austin, says that recent production contracts for countermeasures dispensers systems being developed for tactical aircraft now total about $1.6 million.

11 *El Paso Electric Co.* interest in Arizona nuclear power station may drive up El Paso electric rates to three times present levels in 10 years, according to Evern Wall, El Paso president.

12 *Insurance industry* recommends 12.3 percent rise in workmen's compensation insurance rates effective next March 1. State actuaries suggest a 7.1 percent overall rate increase.

Offshore Petroleum, Houston, is planning a 35-million-gallon/year methanol plant off the Gulf Coast and is looking for buyers of the methanol, to be used as a fuel substitute for propane and natural gas.

Good Hope Industries, Inc., will sell its 205-mile South Texas gas pipeline system to a subsidiary of Houston Oil & Minerals for about $27.5 million. Because of bankruptcy and pending reorganization, Good Hope had to shelve its partially completed ammonia plant at Ingleside, near Corpus Christi.

13 *William Stewart of the Texas Air Control Board* predicts dirtier air over Texas in the next 25 years as natural gas is replaced as a boiler fuel by coal and fuel oil.

14 *The 21 Texas banks* with 20 percent or more of their capital invested in New York City bonds and other obligations are among the smaller banks in the state, according to a *Houston Chronicle* survey.

Texas AFL-CIO President Harry Hubbard says consumer loan ceilings should be lowered. A credit researcher hired by the Association of Consumer Finance Companies says that Texas rates are unrealistically low already.

15 *Two fiscal experts* conclude that the general debt picture for Texas municipalities looks better today than in the past. They studied the 26 largest cities, which include half of the Texas population.

16 *Kirby Lumber Corp.*, Houston, and other timber firms are moving toward increasing use of wood waste to power their mills, according to John Robinson, manager of environmental services for Kirby.

17 *Texas Railroad Commission* rules that Lo-Vaca Gathering Co. can sell any surplus natural gas it has to out-of-state customers, provided each deal is approved by TRC.

18 *House Speaker Bill Clayton* says that he has urged Federal Power Commission approval of a plan to move Alaskan crude oil from California to Texas in idle natural gas pipelines.

18 *Two state environmental specialists* predict eventual mandatory allocation of ground water in Texas.

Brown & Sharpe Manufacturing Co., maker of twist drills and dial indicators, will close Denton plant on February 28, 1976, idling 91 employees.

Lone Star Gas Co., Dallas, announces average rise of 12.8 percent in natural gas rates for more than 3,300 industrial consumers.

Jack S. Blanton, president of Texas Mid-Continent Oil and Gas Association, estimates that the rollback in crude oil prices provided in legislation approved by a congressional conference committee will cost the Texas economy $1.4 billion per year.

19 *Central States Diversified, Inc.*, San Antonio, formally opens new industrial packaging manufacturing plant with potential 200 jobs.

20 *Texas Railroad Commission* sets December statewide oil production allowable at 100 percent for nearly all major fields. December is the 45th consecutive month of virtually all-out production.

Independent truckers' group strikes lower Rio Grande Valley produce crop, demanding negotiations with shippers over alleged "ripoffs" by middlemen brokers.

Father of Texas water plan, Excecutive Director Harry Burleigh, Texas Water Development Board, recently accompanied federal water development specialists to the Soviet Union to advise Russians on the feasibility of contemplated plan for huge irrigation canal system to blunt Russian droughts.

21 *Iranian government names Bell Helicopter Co.*, Fort Worth, as partner in joint venture to establish modern helicopter industry in Iran.

Dr. Arnold Krammer, Texas A&M historian-chemist, is sifting Nazi documents stored since World War II in hopes of finding usable data on synthetic fuels technology.

Even if fuel charges stop rising today, Texas electric utilities will collect about $900 million in automatic fuel adjustment charges over the next year, according to an electric utility source quoted by the *Dallas Morning News*.

23 *Kaufman rancher Dale Pugh*, president of Bison Hybrid International Association, believes that in 15 years 80 percent of U.S. cattle will have some bison blood.

24 *Texas Air Control Board* announces that federal government is turning over to the state the management of the air-sampling program in Texas.

Atlantic-Richfield Co. plans to close Corpus Christi offices and move 50-65 employees to Houston.

Tenneco, Inc., Houston, will offer $14.4 million to acquire all outstanding shares of British manufacturer-marketer of auto replacement parts.

25 *Motorola Inc.*, Seguin, will increase 1,050-member work force to about 1,500.

26 *Texas Water Quality Board* approves two new waste discharge permits, criticized at earlier public hearings, for Exxon refinery at Baytown and Texasgulf sulfur mine in Wharton County.

Robert M. Lockwood

Five Decades of Bureau Publications

Apr. 1927 *Texas Business Review.* First issue.
Jan. 1933 *Directory of Texas Manufacturers.* First edition.
Jul. 1950 *Building Construction in Texas.* First issue. (Previously issued as *Building Permits Issued in Texas Cities,* from 1949.)
Feb. 1951 *Texas Industrial Expansion.* First issue.
1951 *Texas Trade and Professional Associations and Other Selected Organizations.* First edition.
1963 *Atlas of Texas.* First edition. (First issued as *Texas Resources and Industries: Selected Maps of Distribution,* 1955.)
Jun. 1966 *Economic Indicators.* First issue.
1970 *Atlas of Mexico.* First edition.

Bureau of Business Research
1926-1976

Local Business Conditions

Statistical data compiled by Mildred Anderson and Constance Cooledge, statisticians, *and Kay Davis*, statistical technician.

The following section reports business conditions first by metropolitan areas, second by cities, listed under their counties. Standard metropolitan statistical areas (SMSAs) include one or more entire counties, as shown. All SMSAs are designated as such by the U.S. Bureau of the Census. Population figures are from the 1970 Census and 1973 estimates by the Bureau of the Census.

Building permit data are collected from municipalities by the Bureau of Business Research in cooperation with the Bureau of the Census. They represent only building authorizations within city limits and exclude federal contracts and public works projects, such as highways, waterways, and reservoirs. Building statistics for the latest month are subject to revision.

Bank debit statistics for SMSAs and for most central metropolitan cities are collected by the Federal Reserve Bank of Dallas. Most other bank debits figures shown are collected from cooperating banks by the Bureau of Business Research; the published figures represent all banks in the city shown.

Employment estimates include only wage and salary workers and are compiled by the Texas Employment Commission in cooperation with the U.S. Bureau of Labor Statistics.

Footnote symbols are defined on pages 16 and 24.

Indicators of Local Business Conditions for Texas Standard Metropolitan Statistical Areas

Reported area and indicator	Nov 1975	Percent change from Oct 1975	Percent change from Nov 1974
ABILENE SMSA			
Callahan, Jones, and Taylor Counties; population: 122,164 (1970); 127,300 (1973 est.)			
Urban building permits (dollars)	2,011,724	5	45
Bank debits, seas. adj. ($1,000)	392,679#	8	20
Nonfarm employment	41,280	**	1
Manufacturing employment	6,420	– 2	– 9
Unemployed (percent)	4.2	– 2	56
AMARILLO SMSA			
Potter and Randall Counties; population: 144,396 (1970); 150,400 (1973 est.)			
Urban building permits (dollars)	4,285,303	– 53	32
Bank debits, seas. adj. ($1,000)	1,011,343	2	8
Nonfarm employment	62,690	**	4
Manufacturing employment	8,030	3	24
Unemployed (percent)	4.0	– 5	21
AUSTIN SMSA			
Hays and Travis Counties; population: 323,158 (1970); 373,000 (1973 est.)			
Urban building permits (dollars)	10,840,300	15	– 23
Bank debits, seas. adj. ($1,000)	2,242,886#	– 6	37
Nonfarm emp loyment	169,450	**	3
Manufacturing employment	14,850	1	– 1
Unemployed (percent)	5.5	4	45
BEAUMONT-PORT ARTHUR-ORANGE SMSA			
Hardin, Jefferson, and Orange Counties; population: 345,939 (1970); 347,900 (1973 est.)			
Urban building permits (dollars)	5,328,740	– 24	37
Bank debits, seas. adj. ($1,000)	957,105#	3	2
Nonfarm employment	124,300	**	– 4
Manufacturing employment	40,650	– 1	– 3
Unemployed (percent)	8.8	– 3	47
BROWNSVILLE-HARLINGEN-SAN BENITO SMSA			
Cameron County; population: 140,368 (1970); 158,900 (1973 est.)			
Urban building permits (dollars)	2,883,384	– 13	32
Bank debits, seas. adj. ($1,000)	399,575	14	33
Nonfarm employment	46,870	2	**
Manufacturing employment	9,030	2	– 9
Unemployed (percent)	12.1	19	21
BRYAN-COLLEGE STATION SMSA			
Brazos County; population: 57,978 (1970); 64,500 (1973 est.)			
Urban building permits (dollars)	1,084,021	– 68	270
BRYAN-COLLEGE STATION SMSA (continued)			
Bank debits, seas. adj. ($1,000)	168,893	– 1	14
(Monthly employment reports are not available for the Bryan-College Station SMSA.)			
CORPUS CHRISTI SMSA			
Nueces and San Patricio Counties; population: 284,832 (1970); 301,100 (1973 est.)			
Urban building permits (dollars)	3,799,405	60	38
Bank debits, seas. adj. ($1,000)	1,112,664	9	22
Nonfarm employment	98,600	1	1
Manufacturing employment	11,400	**	– 4
Unemployed (percent)	7.4	1	3
DALLAS-FORT WORTH SMSA			
Collin, Dallas, Denton, Ellis, Hood, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties; population: 2,377,979 (1970); 2,441,800 (1973 est.)			
Urban building permits (dollars)	36,031,474	– 40	– 19
Bank debits, seas. adj. ($1,000)	25,158,159#	3	– 14
Nonfarm employment	1,088,300	**	– 1
Manufacturing employment	240,700	**	– 2
Unemployed (percent)	5.4	**	26
EL PASO SMSA			
El Paso County; population: 359,291 (1970); 391,700 (1973 est.)			
Urban building permits (dollars)	8,939,747	12	– 22
Bank debits, seas. adj. ($1,000)	1,272,767	5	2
Nonfarm employment	129,950	– 1	– 1
Manufacturing employment	28,850	– 5	– 1
Unemployed (percent)	10.2	4	44
GALVESTON-TEXAS CITY SMSA			
Galveston County; population: 169,812 (1970); 177,600 (1973 est.)			
Urban building permits (dollars)	1,587,690	– 55	12
Bank debits, seas. adj. ($1,000)	432,111	– 1	1
Nonfarm employment	61,180	**	4
Manufacturing employment	12,130	– 2	3
Unemployed (percent)	5.8	– 2	12
HOUSTON SMSA			
Brazoria, Fort Bend, Harris, Liberty, Montgomery, and Waller Counties; population: 1,999,316 (1970); 2,138,400 (1973 est.)			
Urban building permits (dollars)	49,160,383	– 50	– 12
Bank debits, seas. adj. ($1,000)	24,896,118#	9	16

Reported area and indicator	Nov 1975	Percent change from Oct 1975	Percent change from Nov 1974
HOUSTON SMSA (continued)			
Nonfarm employment	1,010,800	**	3
Manufacturing employment	175,400	1	**
Unemployed (percent)	4.9	– 4	11
KILLEEN-TEMPLE SMSA			
Bell and Coryell Counties; population: 159,794 (1970); 191,600 (1973 est.)			
Urban building permits (dollars)	4,154,651	– 49	98
Bank debits, seas. adj. ($1,000)	252,304	– 1	16
(Monthly employment reports are not available for the Killeen-Temple SMSA.)			
LAREDO SMSA			
Webb County; population: 72,859 (1970); 81,200 (1973 est.)			
Urban building permits (dollars)	788,256	3	390
Bank debits, seas. adj. ($1,000)	177,250	– 7	15
Nonfarm employment	22,720	**	2
Manufacturing employment	1,480	1	– 11
Unemployed (percent)	17.8	7	– 3
LONGVIEW SMSA			
Gregg and Harrison Counties; population: 120,770 (1970); 122,300 (1973 est.)			
Urban building permits (dollars)	2,920,520	– 2	– 25
Bank debits ($1,000)	283,894	– 10	21
Nonfarm employment	46,950	**	– 2
Manufacturing employment	14,970	**	– 4
Unemployed (percent)	8.0	**	57
LUBBOCK SMSA			
Lubbock County; population: 179,295 (1970); 191,700 (1973 est.)			
Urban building permits (dollars)	5,268,872	– 60	88
Bank debits, seas. adj. ($1,000)	796,994	– 11	19
Nonfarm employment	73,400	1	2
Manufacturing employment	10,410	**	2
Unemployed (percent)	4.1	– 5	32
McALLEN-PHARR-EDINBURG SMSA			
Hidalgo County; population: 181,535 (1970); 207,100 (1973 est.)			
Urban building permits (dollars)	2,660,198	– 52	– 60
Bank debits, seas. adj. ($1,000)	425,835	1	22
Nonfarm employment	51,540	3	4
Manufacturing employment	6,360	10	4
Unemployed (percent)	9.9	2	– 10
MIDLAND SMSA			
Midland County; population: 65,433 (1970); 65,900 (1973 est.)			
Urban building permits (dollars)	3,296,550	3	– 50
Bank debits, seas. adj. ($1,000)	502,736	– 2	36
Nonfarm employment	67,880	**	2
Manufacturing employment	7,550	**	– 5
Unemployed (percent)	3.5	– 5	13
(Employment data are reported for the combined Midland and Odessa SMSAs since employment figures for Midland and Ector Counties, composing one labor-market area, are recorded in combined form by the Texas Employment Commission.)			
ODESSA SMSA			
Ector County; population: 91,805 (1970); 93,300 (1973 est.)			
Urban building permits (dollars)	2,755,629	– 27	– 46
Bank debits, seas. adj. ($1,000)	507,325	1	96
Nonfarm employment	67,880	**	2
Manufacturing employment	7,550	**	– 5
Unemployed (percent)	3.5	– 5	13
(Employment data are reported for the combined Midland and Odessa SMSAs since employment figures for Midland and Ector Counties, composing one labor-market area, are recorded in combined form by the Texas Employment Commission.)			
SAN ANGELO SMSA			
Tom Green County; population: 71,047 (1970); 72,900 (1973 est.)			
Urban building permits (dollars)	682,634	– 53	– 59
Bank debits, seas. adj. ($1,000)	281,401	– 4	21
Nonfarm employment	25,730	**	– 1
Manufacturing employment	5,190	– 1	– 6
Unemployed (percent)	4.1	– 9	17
SAN ANTONIO SMSA			
Bexar, Comal, and Guadalupe Counties; population: 888,179 (1970); 957,600 (1973 est.)			
Urban building permits (dollars)	13,580,289	20	4
Bank debits, seas. adj. ($1,000)	3,191,270#	2	27
Nonfarm employment	308,250	**	**
Manufacturing employment	38,000	1	– 6
Unemployed (percent)	9.2	– 2	42
SHERMAN-DENISON SMSA			
Grayson County; population: 83,225 (1970); 77,800 (1973 est.)			
Urban building permits (dollars)	268,245	– 61	– 5
Bank debits, seas. adj. ($1,000)	156,947	– 4	22
Nonfarm employment	27,120	**	– 5
Manufacturing employment	9,180	**	– 10
Unemployed (percent)	12.0	2	62
TEXARKANA SMSA			
Bowie County, Texas, and Miller County, Arkansas; population: 101,198 (1970); 102,900 (1973 est.)			
Urban building permits (dollars)	282,913	– 43	– 15
Bank debits, seas. adj. ($1,000)	211,894	**	14
Nonfarm employment	38,740	**	2
Manufacturing employment	8,210	– 2	– 2
Unemployed (percent)	8.9	– 4	24
(Since the Texarkana SMSA includes Bowie County in Texas and Miller County in Arkansas, all data, including population, refer to the two-county region.)			
TYLER SMSA			
Smith County; population: 97,096 (1970); 103,900 (1973 est.)			
Urban building permits (dollars)	1,330,795	– 59	36
Bank debits, seas. adj. ($1,000)	342,482	– 4	15
Nonfarm employment	37,850	1	– 4
Manufacturing employment	10,560	1	– 14
Unemployed (percent)	8.2	4	34
WACO SMSA			
McLennan County; population: 147,553 (1970); 152,800 (1973 est.)			
Urban building permits (dollars)	680,515	– 79	– 74
Bank debits, seas. adj. ($1,000)	503,298	– 9	24
Nonfarm employment	56,350	**	– 1
Manufacturing employment	12,490	**	– 6
Unemployed (percent)	7.2	**	33
WICHITA FALLS SMSA			
Clay and Wichita Counties; population: 129,941 (1970); 129,700 (1973 est.)			
Urban building permits (dollars)	1,640,876	– 21	112
Bank debits, seas. adj. ($1,000)	410,447#	– 5	– 6
Nonfarm employment	45,260	1	1
Manufacturing employment	6,540	**	– 7
Unemployed (percent)	5.6	6	56

**Absolute change is less than one half of 1 percent.
#Bank debit reports are based on the 1970 census definition for standard metropolitan statistical areas.

Indicators of Local Business Conditions for Individual Texas Municipalities

COUNTY City	Population		Urban building permits			Bank debits		
				Percent change from			Percent change from	
	1970	1973 (est.)	Nov 1975 (dollars)	Oct 1975	Nov 1974	Nov 1975 (thousands of dollars)	Oct 1975	Nov 1974
ANDERSON	27,789	30,200						
Palestine	14,525		221,064	9	74	...	...	...
ANDREWS	10,372	10,900						
Andrews	8,625		3,195	– 87	– 95	12,626	– 17	5
ANGELINA	49,349	53,900						
Lufkin	23,049		2,835,011	286	334	...	...	...
ARANSAS	8,902	10,000						
Aransas Pass (see San Patricio)								
ATASCOSA	18,696	19,800						
Pleasanton	5,407		...	...	...	8,984	– 10	12
AUSTIN	13,831	14,100						
Bellville	2,371		30,500	– 31	103	10,843	– 20	– 9
BAILEY	8,487	8,400						
Muleshoe	4,525		...	...	...	26,628	– 15	– 3
BASTROP	17,297	19,600						
Smithville	2,959		85,170	18	531	4,024	– 15	25
BEE	22,737	24,000						
Beeville	13,506		231,340	...	142	34,137	– 8	17
BELL	124,483	148,600						
(in Killeen-Temple SMSA)								
Bartlett (see Williamson)								
Belton	8,696		88,200	– 60	262	...	...	...
Harker Heights	4,216		530,612	108	67	...	...	...
Killeen	35,507		2,309,003	59	140	68,490	– 12	17
Temple	33,431		1,125,513	– 74	210	112,242	– 9	6
BEXAR	830,460	892,000						
(in San Antonio SMSA)								
San Antonio	654,153		12,478,452	36	4	2,847,833	– 11	23
BOWIE	67,813	68,800						
(in Texarkana SMSA)								
Texarkana	52,179		272,241	– 18	16	175,546	– 13	13
BRAZORIA	108,312	114,400						
(in Houston SMSA)								
Angleton	9,770		...	...	...	28,671	– 10	16
Clute	6,023		112,100	– 93	26	8,528	– 10	1
Freeport	11,997		39,265	11	– 72	...	...	...
Pearland	6,444		1,681,700	81	99	15,748	– 15	22
BRAZOS	57,978	64,500						
(constitutes Bryan-College Station SMSA)								
Bryan	33,719		474,722	– 68	346	137,530	– 8	14
College Station	17,676		609,299	– 68	226	24,335	3	20
BREWSTER	7,780	8,500						
Alpine	5,971		126,000	465	...	8,659	7	24
BROWN	25,877	28,100						
Brownwood	17,368		103,100	– 58	– 42	...	...	...
BURLESON	9,999	10,700						
Caldwell	2,308		...	...	...	6,351	– 4	19
BURNET	11,420	14,900						
Marble Falls	2,209		...	...	...	16,615	– 23	2
CALDWELL	21,178	20,200						
Lockhart	6,489		44,255	– 63	171	12,709	– 19	14

COUNTY City	Population		Urban building permits			Bank debits		
				Percent change from			Percent change from	
	1970	1973 (est.)	Nov 1975 (dollars)	Oct 1975	Nov 1974	Nov 1975 (thousands of dollars)	Oct 1975	Nov 1974
CALHOUN	17,831	17,800						
Point Comfort	1,446		1,200	...	− 94	2,076	− 7	6
Port Lavaca	10,491		...	...	...	33,883	− 15	3
Seadrift	1,092		10,100	39	...	1,806	− 21	− 5
CAMERON	140,368	158,900						
(constitutes Brownsville-Harlingen-San Benito SMSA)								
Brownsville	52,522		1,645,891	− 2	59	137,592	− 10	16
Harlingen	33,503		537,334	− 54	− 47	162,099	14	11
La Feria	2,642		41,700	224	...	3,574	− 22	4
Los Fresnos	1,297		...	...	...	4,265	5	30
Port Isabel	3,067		336,494	418	...	7,812	− 22	− 10
San Benito	15,176		290,275	− 27	135	13,565	− 12	22
CASTRO	10,394	9,600						
Dimmitt	4,327		...	...	...	37,587	− 3	3
CHEROKEE	32,008	34,100						
Jacksonville	9,734		79,800	− 6	271	36,077	− 9	3
COLEMAN	10,288	9,800						
Coleman	5,608		0	...	...	...	...	...
COLLIN	66,920	79,500						
(in Dallas-Fort Worth SMSA)								
McKinney	15,193		34,950	− 78	− 36	20,071	− 16	7
Plano	17,872		4,431,976	− 10	8	52,985	− 17	53
COLORADO	17,638	16,800						
Eagle Lake	3,587		...	...	...	10,095	**	− 10
COMAL	24,165	28,300						
(in San Antonio SMSA)								
New Braunfels	17,859		508,267	98	97	29,216	− 22	− 9
COOKE	23,471	24,200						
Gainesville	13,830		211,447	− 6	169	33,350	− 14	40
Muenster	1,411		0	...	...	4,899	− 22	− 6
CORYELL	35,311	43,000						
(in Killeen-Temple SMSA)								
Copperas Cove	10,818		71,323	− 96	− 83	11,861	− 7	17
Gatesville	4,683		...	...	...	13,642	− 8	20
CRANE	4,172	4,100						
Crane	3,427		20,000	799	...	6,201	31	41
DALLAS	1,327,321	1,350,800						
(in Dallas-Fort Worth SMSA)								
Carrollton	13,855		1,158,476	− 60	206	44,063	− 10	35
Dallas	844,401		16,863,357	− 21	58	17,792,959	− 12	− 19
Farmers Branch	27,492		759,129	− 52	11	40,544	− 13	27
Garland	81,437		2,944,246	...	**	108,711	− 14	13
Grand Prairie	50,904		1,380,177	− 2	83	39,218	− 15	5
Irving	97,260		1,453,556	342	180	110,660	− 12	− 17
Lancaster	10,522		237,500	211	...	...	...	...
Mesquite	55,131		2,540,375	612	363	30,448	− 29	− 1
Richardson	48,582		1,737,773	11	− 51	138,581	− 9	14
Seagoville	4,390		119,280	− 22	287	12,836	− 16	9
DAWSON	16,604	16,300						
Lamesa	11,559		148,900	42	...	29,961	− 15	19
DEAF SMITH	18,999	18,700						
Hereford	13,414		635,625	83	...	...	...	...
DENTON	75,633	91,300						
(in Dallas-Fort Worth SMSA)								
Denton	39,874		...	...	...	98,976	− 25	− 21
Justin	741		0	...	...	2,272	− 17	− 2
Lewisville	9,264		380,073	− 52	− 13	28,608	− 12	10
Pilot Point	1,663		20,200	− 6	− 21	3,608	− 13	57

COUNTY City	Population		Urban building permits			Bank debits		
				Percent change from			Percent change from	
	1970	1973 (est.)	Nov 1975 (dollars)	Oct 1975	Nov 1974	Nov 1975 (thousands of dollars)	Oct 1975	Nov 1974
DE WITT	18,660	18,600						
Yoakum (see Lavaca)								
EASTLAND	18,092	18,800						
Cisco	4,160		...	...	...	5,212	– 25	15
ECTOR	91,805	93,300						
(constitutes Odessa SMSA)								
Odessa	78,380		2,755,629	– 27	– 46	...	...	...
ELLIS	46,638	49,000						
(in Dallas-Fort Worth SMSA)								
Midlothian	2,322		561,000	733	...	5,859	– 7	38
Waxahachie	13,452		167,300	192	46	29,271	– 25	13
EL PASO	359,291	391,700						
(constitutes El Paso SMSA)								
El Paso	322,261		8,883,933	12	– 23	1,150,583	– 8	– 2
ERATH	18,191	18,900						
Stephenville	9,277		211,700	51	284	27,689	– 11	14
FANNIN	22,705	23,400						
Bonham	7,698		85,600	94	– 24	21,639	– 19	17
FAYETTE	17,650	17,800						
Schulenburg	2,294		574,665	...	...	...	...	...
FORT BEND	52,314	64,200						
(in Houston SMSA)								
Richmond	5,777		439,600	11	236	...	...	...
Rosenberg	12,098		523,294	108	104	...	...	...
GAINES	11,593	11,200						
Seagraves	2,440		15,300	273	– 94	3,899	– 14	24
Seminole	5,007		4,700	– 98	– 22	26,740	– 26	3
GALVESTON	169,812	177,600						
(constitutes Galveston-Texas City SMSA)								
Dickinson	10,776		...	...	...	22,680	– 6	32
Galveston	61,809		794,939	– 27	– 8	222,131	– 17	– 16
La Marque	16,131		189,786	– 12	243	26,986	– 6	23
Texas City	38,908		602,965	– 49	80	49,743	– 13	14
GILLESPIE	10,553	11,100						
Fredericksburg	5,326		256,766	5	258	28,256	– 22	7
GONZALES	16,375	16,500						
Gonzales	5,854		16,500	– 57	– 61	34,034	– 19	17
Nixon	1,925		0	...	...	...	...	...
GRAY	26,949	25,100						
Pampa	21,726		145,500	– 68	– 60	49,909	– 21	2
GRAYSON	83,225	77,800						
(constitutes Sherman-Denison SMSA)								
Denison	24,923		25,300	– 95	21	49,213	– 22	31
Sherman	29,061		242,945	44	2	73,459	– 21	– 8
GREGG	75,929	78,100						
(in Longview SMSA)								
Gladewater	5,574		138,125	23	766	8,753	– 18	19
Kilgore	9,495		322,925	– 62	272	38,337	– 18	13
Longview	45,547		1,654,000	– 13	– 52	187,547	– 8	24
GUADALUPE	33,554	37,300						
(in San Antonio SMSA)								
Schertz	4,061		4,754	– 98	– 89	4,738	– 15	16
Seguin	15,934		216,713	– 37	160	37,331	– 12	4

COUNTY City	Population		Urban building permits			Bank debits		
				Percent change from			Percent change from	
	1970	1973 (est.)	Nov 1975 (dollars)	Oct 1975	Nov 1974	Nov 1975 (thousands of dollars)	Oct 1975	Nov 1974
HALE	34,137	35,900						
Hale Center	1,964		53,500	282	...	...	...	...
Plainview	19,096		602,500	– 45	121	91,829	– 19	– 2
HARDEMAN	6,795	6,200						
Quanah	3,948		50,000	– 89	...	7,386	– 9	6
HARDIN (in Beaumont-Port Arthur-Orange SMSA)	29,996	32,800						
Silsbee	7,271		...	...	...	22,332	– 12	8
HARRIS (in Houston SMSA)	1,741,912	1,835,900						
Baytown	43,980		912,210	– 28	223	138,981	– 12	26
Bellaire	19,009		104,842	– 17	233	98,385	– 7	7
Deer Park	12,773		1,274,251	– 15	626	31,820	– 10	39
Houston	1,232,802		38,549,973	– 47	– 13	20,353,529	– 9	11
Humble	3,278		...	...	...	14,415	– 9	– 1
La Porte	7,149		271,400	– 87	81	7,078	– 20	1
Pasadena	89,277		1,562,954	– 42	14	...	...	...
South Houston	11,527		126,594	– 49	...	...	...	...
Tomball	2,734		...	...	...	26,100	– 2	– 8
HARRISON (in Longview SMSA)	44,841	44,200						
Hallsville	1,038		...	...	...	2,650	– 35	5
Marshall	22,937		805,470	544	139	49,257	– 12	19
HASKELL	8,512	8,000						
Haskell	3,655		...	...	...	7,050	– 13	23
HAYS (in Austin SMSA)	27,642	33,700						
San Marcos	18,860		...	...	...	19,589	– 14	4
HENDERSON	26,466	29,600						
Athens	9,582		197,250	– 3	99	30,194	– 24	– 2
HIDALGO (constitutes McAllen-Pharr-Edinburg SMSA)	181,535	207,100						
Alamo	4,291		...	...	...	8,298	– 10	22
Donna	7,365		101,145	172	6	9,049	– 5	8
Edinburg	17,163		380,750	– 62	– 41	51,906	– 10	13
Elsa	4,400		47,150	– 33	...	11,366	– 15	– 9
McAllen	37,636		1,826,275	– 47	– 14	152,480	– 5	25
Mercedes	9,355		115,566	– 8	190	15,652	– 12	17
Mission	13,043		189,976	– 34	– 79	39,561	– 8	6
Pharr	15,829		189,312	– 22	109	9,223	– 16	– 2
San Juan	5,070		...	...	...	10,245	33	69
Weslaco	15,313		...	...	...	30,357	– 15	15
HOCKLEY	20,396	21,200						
Levelland	11,445		356,300	3	743	42,150	– 14	17
HOOD (in Dallas-Fort Worth SMSA)	6,368	8,600						
Granbury	2,473		...	...	...	7,336	– 2	56
HOPKINS	20,710	22,000						
Sulphur Springs	10,642		106,920	– 70	– 65	39,926	– 14	3
HOWARD	37,796	39,200						
Big Spring	28,735		512,220	206	– 21	111,747	...	15
HUNT	47,948	47,200						
Greenville	22,043		993,516	4	...	48,772	– 17	– 11
HUTCHINSON	24,443	25,800						
Borger	14,195		376,050	43	316	...	...	...

COUNTY City	Population		Urban building permits			Bank debits		
				Percent change from			Percent change from	
	1970	1973 (est.)	Nov 1975 (dollars)	Oct 1975	Nov 1974	Nov 1975 (thousands of dollars)	Oct 1975	Nov 1974
JACKSON	12,975	12,900						
Edna	5,332		98,370	92	25	18,291	15	36
JASPER	24,692	25,100						
Jasper	6,251		27,483	– 84	186	27,072	– 17	14
Kirbyville	1,869		...	...	...	5,302	– 14	6
JEFFERSON	244,773	241,700						
(in Beaumont-Port Arthur-Orange SMSA)								
Beaumont	115,919		3,174,499	– 25	32	540,689	– 11	– 7
Groves	18,067		126,622	– 78	35	29,732	– 23	1
Nederland	16,810		867,200	77	...	20,405	– 7	9
Port Arthur	57,371		695,552	30	357	132,655	– 16	18
Port Neches	10,894		216,339	– 65	44	29,122	– 20	– 3
JIM WELLS	33,032	33,700						
Alice	20,121		502,739	73	212	63,174	– 18	12
JOHNSON	45,769	52,500						
(in Dallas-Fort Worth SMSA)								
Burleson	7,713		318,920	– 12	143	15,413	– 12	6
KARNES	13,462	12,500						
Karnes City	2,926		25,000	– 33	– 17	7,558	– 9	33
KAUFMAN	32,392	35,500						
(in Dallas-Fort Worth SMSA)								
Terrell	14,182		154,545	– 81	– 92	...	...	...
KIMBLE	3,904	3,900						
Junction	2,654		0	...	...	5,648	– 19	13
KLEBERG	33,166	35,000						
Kingsville	28,711		127,280	– 55	96	77,055	13	108
LAMAR	36,062	36,900						
Paris	23,441		465,519	20	237	...	...	...
LAMB	17,770	17,300						
Littlefield	6,738		...	...	...	18,238	– 21	38
LAMPASAS	9,323	12,400						
Lampasas	5,922		30,800	– 83	– 64	15,900	– 12	10
LAVACA	17,903	18,200						
Hallettsville	2,712		76,040	...	...	9,402	– 8	20
Yoakum	5,755		8,450	– 95	– 92	19,230	**	12
LEE	8,048	8,900						
Giddings	2,783		94,750	214	...	13,498	– 2	30
LIBERTY	33,014	37,400						
(in Houston SMSA)								
Dayton	3,804		66,219	– 16	121	10,051	– 28	– 26
Liberty	5,591		93,050	– 60	– 19	...	...	...
LIMESTONE	18,100	19,100						
Mexia	5,943		153,900	55	575	14,089	– 25	– 3
LLANO	6,979	7,700						
Kingsland	1,262		...	...	...	10,705	– 18	50
Llano	2,608		24,000	– 80	...	14,717	10	– 10
LUBBOCK	179,295	191,700						
(constitutes Lubbock SMSA)								
Lubbock	149,101		5,236,872	– 60	87	717,587	– 17	17
Slaton	6,583		32,000	– 61	...	9,870	– 15	6
LYNN	9,107	9,300						
Tahoka	2,956		28,000	100	...	10,284	– 3	16
McCULLOCH	8,571	8,100						
Brady	5,557		78,000	– 43	51	14,027	– 28	13

COUNTY City	Population		Urban building permits			Bank debits		
				Percent change from			Percent change from	
	1970	1973 (est.)	Nov 1975 (dollars)	Oct 1975	Nov 1974	Nov 1975 (thousands of dollars)	Oct 1975	Nov 1974
McLENNAN	147,553	152,800						
(constitutes Waco SMSA)								
McGregor	4,365		0	...	...	8,023	– 18	10
Waco	95,326		591,065	– 57	– 74	428,210	– 19	20
MATAGORDA	27,913	27,600						
Bay City	11,733		162,467	– 33	– 85	46,051	– 14	– 11
MAVERICK	18,093	20,600						
Eagle Pass	15,364		448,200	174	...	20,958	– 9	36
MEDINA	20,249	20,900						
Castroville	1,893		7,670	– 57	– 39	2,640	– 14	– 3
Hondo	5,487		...	...	...	7,070	3	18
MIDLAND	65,433	65,900						
(constitutes Midland SMSA)								
Midland	59,463		3,296,550	3	– 50	433,175	– 16	34
MILAM	20,028	20,100						
Cameron	5,546		...	...	...	13,429	**	20
Rockdale	4,655		82,700	– 27	23	14,121	– 13	17
MILLS	4,212	4,400						
Goldthwaite	1,693		...	...	...	10,049	– 11	21
MITCHELL	9,073	8,500						
Colorado City	5,227		...	...	...	10,682	– 4	22
MONTGOMERY	49,479	71,200						
(in Houston SMSA)								
Conroe	11,969		212,625	...	502	85,916	– 1	33
MOORE	14,060	13,100						
Dumas	9,771		197,800	– 57	– 68	...	...	...
NACOGDOCHES	36,362	41,600						
Nacogdoches	22,544		574,750	– 44	255	...	...	...
NAVARRO	31,150	31,600						
Corsicana	19,972		239,987	– 7	86	55,158	– 9	11
NOLAN	16,220	16,600						
Sweetwater	12,020		194,365	– 14	123	28,985	– 16	15
NUECES	237,544	250,800						
(in Corpus Christi SMSA)								
Bishop	3,466		...	...	...	3,180	– 33	2
Corpus Christi	204,525		3,522,224	81	38	889,051	– 5	20
Port Aransas	1,218		...	...	...	1,382	– 3	– 21
Robstown	11,217		19,878	– 66	...	25,265	– 24	– 8
ORANGE	71,170	73,400						
(in Beaumont-Port Arthur-Orange SMSA)								
Orange	24,457		241,778	44	– 77	79,483	– 4	5
PALO PINTO	28,962	22,900						
Mineral Wells	18,411		37,150	– 42	– 89	32,939	– 13	– 2
PANOLA	15,894	16,400						
Carthage	5,392		29,500	– 86	– 56	7,568	– 12	11
PARMER	10,509	10,000						
Friona	3,111		49,900	– 45	...	26,877	– 19	8
PECOS	13,748	13,300						
Fort Stockton	8,283		58,200	– 79	– 89	...	...	...
POTTER	90,511	91,400						
(in Amarillo SMSA)								
Amarillo	127,010		4,285,303	– 27	37	865,398	– 14	4

COUNTY City	Population		Urban building permits			Bank debits		
				Percent change from			Percent change from	
	1970	1973 (est.)	Nov 1975 (dollars)	Oct 1975	Nov 1974	Nov 1975 (thousands of dollars)	Oct 1975	Nov 1974
RANDALL	53,885	59,000						
(in Amarillo SMSA)								
Amarillo (see Potter)								
Canyon	8,333		224,700	– 93	93	20,309	**	23
REEVES	16,526	16,000						
Pecos	12,682		2,426,125	...	...	42,157	**	43
REFUGIO	9,494	9,400						
Refugio	4,340		5,000	– 90	...	13,148	43	5
RUSK	34,102	35,500						
Henderson	10,187		270,401	...	– 2	45,213	– 1	37
Kilgore (see Gregg)								
SAN PATRICIO	47,288	50,300						
(in Corpus Christi SMSA)								
Aransas Pass	5,813		29,900	– 21	...	17,457	– 23	21
Sinton	5,563		74,781	45	286	15,051	– 26	– 2
SAN SABA	5,540	5,900						
San Saba	2,555		124,686	102	...	13,570	– 10	11
SCURRY	15,760	17,900						
Snyder	11,171		84,471	– 85	– 27	32,244	– 11	16
SHACKELFORD	3,323	3,300						
Albany	1,978		35,000	40	...	5,884	– 18	6
SHERMAN	3,657	3,300						
Stratford	2,139		6,500	– 92	...	19,815	– 14	21
SMITH	97,096	103,900						
(constitutes Tyler SMSA)								
Tyler	57,770		1,238,445	– 62	26	284,161	– 18	10
STEPHENS	8,414	8,100						
Breckenridge	5,944		12,600	– 95	– 91	...	...	...
SUTTON	3,175	3,300						
Sonora	2,149		96,800	40	– 11	7,275	4	29
TARRANT	716,317	714,600						
(in Dallas-Fort Worth SMSA)								
Arlington	90,643		...	...	...	158,417	– 14	12
Bedford	10,049		632,170	8	213	19,926	– 14	28
Burleson (see Johnson)								
Euless	19,316		289,180	209	33	20,407	– 11	41
Fort Worth	393,476		5,211,291	– 48	– 27	2,676,355	– 16	– 11
Grapevine	7,023		96,950	– 86	56	13,778	– 6	9
North Richland Hills	16,514		1,130,860	5	197	37,097	– 15	50
White Settlement	13,449		98,200	– 92	480	12,602	– 3	...
TAYLOR	97,853	102,400						
(in Abilene SMSA)								
Abilene	89,653		1,996,324	6	52	322,217	– 6	16
TERRY	14,118	14,400						
Brownfield	9,647		107,350	– 13	– 52	37,077	– 29	13
TITUS	16,702	17,600						
Mount Pleasant	8,877		...	...	...	38,272	– 6	1
TOM GREEN	71,047	72,900						
(constitutes San Angelo SMSA)								
San Angelo	63,884		682,634	– 53	– 59	250,470	– 16	17
TRAVIS	295,516	339,200						
(in Austin SMSA)								
Austin	251,808		10,840,300	21	– 22	2,276,588	– 2	37
UPSHUR	20,976	22,900						
Gladewater (see Gregg)								

COUNTY City	Population		Urban building permits			Bank debits		
				Percent change from			Percent change from	
	1970	1973 (est.)	Nov 1975 (dollars)	Oct 1975	Nov 1974	Nov 1975 (thousands of dollars)	Oct 1975	Nov 1974
UPTON	4,697	4,400						
McCamey	2,647		...	...	...	2,618	– 26	– 18
UVALDE	17,348	18,000						
Uvalde	10,764		118,146	– 52	– 29	38,763	– 13	– 2
VAL VERDE	27,471	29,400						
Del Rio	21,330		823,547	108	609	40,465	– 15	8
VICTORIA	53,766	55,800						
Victoria	41,349		1,235,967	20	38	...	...	...
WALKER	27,680	34,300						
Huntsville	17,610		170,800	– 49	34	41,269	– 10	7
WARD	13,019	12,600						
Monahans	8,333		28,275	– 87	39	22,559	– 14	5
WASHINGTON	18,842	19,300						
Brenham	8,922		836,351	370	43	42,526	– 17	18
WEBB	72,859	81,200						
(constitutes Laredo SMSA)								
Laredo	69,024		788,256	3	390	160,798	– 16	12
WHARTON	36,729	36,800						
El Campo	8,563		182,425	– 31	631	39,142	– 8	– 8
WICHITA	121,862	120,900						
(in Wichita Falls SMSA)								
Burkburnett	9,230		82,422	– 72	– 28	17,076	– 4	12
Iowa Park	5,796		145,279	62	11	...	...	...
Wichita Falls	97,564		1,495,597	– 12	183	335,576	– 18	– 10
WILBARGER	15,355	15,000						
Vernon	11,454		77,250	– 29	64	35,802	– 7	7
WILLACY	15,570	16,300						
Raymondville	7,987		37,300	– 54	21	20,375	– 12	22
WILLIAMSON	37,305	45,200						
Bartlett	1,622		...	...	...	2,599	1	26
Georgetown	6,395		137,787	– 19	– 3	16,099	– 15	– 8
Taylor	9,616		319,802	21	980	22,512	– 19	10
WINKLER	9,640	9,300						
Kermit	7,884		90,880	774	685	...	...	...
WISE	19,687	20,400						
(in Dallas-Fort Worth SMSA)								
Decatur	3,240		0	...	...	8,097	– 15	– 2
YOUNG	15,400	15,800						
Graham	7,477		537,800	– 17	152	...	...	...
Olney	3,624		50,662	400	– 62	9,965	– 24	6
ZAVALA	11,370	11,500						
Crystal City	8,104		...	...	...	7,494	– 16	10

** Absolute change is less than one half of 1 percent.
... No data, or inadequate basis for reporting.

Barometers of Texas Business

(All figures are for Texas unless otherwise indicated.)

ll indexes are based on the average months for 1967=100 except where other specification is made; all except annual indexes are adjusted for easonal variation unless otherwise noted. Employment estimates are compiled by the Texas Employment Commission in cooperation with the ureau of Labor Statistics of the U.S. Department of Labor. The symbols used below impose qualifications as indicated here: p–preliminary data ubject to revision; r–revised data; *–dollar totals for the fiscal year to date; †–employment data for wage and salary workers only.

	Nov 1975	Oct 1975	Nov 1974	Year-to-date average 1975	Year-to-date average 1974
GENERAL BUSINESS ACTIVITY					
Business activity (index)	190.3	200.7	201.3	194.0	198.7
Estimates of personal income (millions of dollars, seasonally adjusted)	$ 5,396.8[p]	$ 5,515.0[p]	$ 5,226.4[r]	$ 5,381.0	$ 4,967.0
Income payments to individuals in U.S. (billions, at seasonally adjusted annual rate)	$ 1,290.1[p]	$ 1,279.2[p]	$ 1,184.5[r]	$ 1,234.2	$ 1,146.9
Wholesale prices in U.S. (unadjusted index)	178.2	178.9	171.9	174.5	159.0
Consumer prices in Dallas (unadjusted index)	162.4	...	151.3	158.2	145.5
Consumer prices in U.S. (unadjusted index)	165.6	164.6	154.3	160.8	147.0
Business failures (number)	...	...	65	...	51
Business failures (liabilities, thousands)	$ ...	$ ...	$ 25,293	$ ...	$ 14,388
Sales of ordinary life insurance (index)	209.8	235.8	197.1	211.8	203.9
PRODUCTION					
Total electric power use (index)	183.0[p]	167.6[p]	178.6[r]	174.2	167.5
Residential electric power use (index)	222.4[p]	176.7[p]	211.3[r]	217.0	206.1
Industrial electric power use (index)	158.0[p]	152.4[p]	163.4[r]	149.1	152.9
Crude oil production (index)	109.7[p]	109.8[p]	112.3[r]	109.5	113.1
Average daily production per oil well (bbl.)	19.3	19.2	20.4	19.7	20.7
Crude oil processed by refineries (index)	...	128.1	129.0	...	122.7
Industrial production–total (index)	125.6[p]	124.9[p]	127.7[r]	122.7	127.0
Industrial production–total manufactures (index)	131.1[p]	130.3[p]	132.4[r]	126.5	130.9
Industrial production–durable manufactures (index)	132.1[p]	129.8[p]	134.9[r]	128.2	133.0
Industrial production–nondurable manufactures (index)	130.4[p]	130.6[p]	130.4[r]	125.1	129.3
Industrial production–mining (index)	108.1[p]	107.7[p]	111.4[r]	108.4	113.0
Industrial production–utilities (index)	160.5[p]	160.5[p]	169.5[r]	165.6	164.5
Industrial production in U.S. (index)	116.8[p]	116.6[p]	121.7[r]	120.9	124.9
Urban building permits issued (index)	141.0[p]	205.9[p]	131.9[r]	117.8	186.9
New residential building authorized (index)	145.2[p]	223.5[p]	93.8[r]	163.4	154.7
New residential units authorized (index)	55.9[p]	118.5[p]	50.3[r]	80.6	99.9
New nonresidential building authorized (unadjusted index)	125.8[p]	182.8[p]	160.5[r]	184.8	211.2
AGRICULTURE					
Prices received by farmers (unadjusted index)	184	187	183	177	197
Prices paid by farmers in U.S. (unadjusted index)	188	188	178	184	168
Ratio of Texas farm prices received to U.S. prices paid by farmers	98	99	103	96	118
FINANCE					
Bank debits (index)	339.1	359.0	346.1	338.7	316.6
Bank debits, U.S. (index)	...	302.6	288.0	...	259.5
Bank commercial loans outstanding (index)	184.8	185.7	188.7	184.4	177.2
Reporting member banks, Dallas Federal Reserve District					
Loans (millions)	$ 10,774	$ 10,678	$ 10,615	$ 10,591	$ 10,370
Loans and investments (millions)	$ 15,988	$ 15,796	$ 14,906	$ 15,433	$ 14,562
Adjusted demand deposits (millions)	$ 4,914	$ 4,745	$ 4,441	$ 4,661	$ 4,244
Revenue receipts of the state comptroller (thousands)	$ 556,600	$ 471,400	$ 510,359	$ 503,647	$ 447,403
Federal Internal Revenue collections (thousands)	$ 991.8	$ 1,357.9	$ 1,170.3	$ 5,296.6*	$ 4,992.0*
Securities registrations–original applications					
Mutual investment companies (thousands)	$ 43,807	$ 52,874	$ 53,793	$ 150,160*	$ 176,336*
All other corporate securities					
Texas companies (thousands)	$ 689	$ 9,220	$ 22,406	$ 21,151*	$ 30,825*
Other companies (thousands)	$ 5,914	$ 14,947	$ 3,882	$ 34,030*	$ 16,850*
Securities registration–renewals					
Mutual investment companies (thousands)	$ 29,046	$ 28,893	$ 32,849	$ 105,774*	$ 99,551*
Other corporate securities (thousands)	$ 0	$ 0	$ 387	$ 100*	$ 2,271*
LABOR					
Total nonagricultural employment (index)†	137.3[p]	137.1[p]	135.9[r]	135.5	133.6
Manufacturing employment (index)†	122.5[p]	122.0[p]	125.7[r]	120.4	125.2
Average weekly hours–manufacturing (index)†	98.9[p]	98.6[p]	97.3[r]	97.4	98.1
Average weekly earnings–manufacturing (index)†	165.7[p]	164.8[p]	155.1[r]	165.7	148.9
Total nonagricultural employment (thousands)†	4,469.0[p]	4,459.4[p]	4,422.3[r]	4,406.2	4,344.6
Total manufacturing employment (thousands)†	810.9[p]	808.8[p]	831.3[r]	799.4	831.1
Durable-goods employment (thousands)†	445.0[p]	443.8[p]	461.1[r]	442.0	462.3
Nondurable-goods employment (thousands)†	365.9[p]	365.0[p]	370.2[r]	356.7	368.9
Total civilian labor force in selected labor market areas (thousands)	4,171.3	4,151.0	4,052.0[r]	4,101.9	3,973.6
Nonagricultural employment in selected labor market areas (thousands)†	3,635.2	3,625.9	3,608.1[r]	3,579.8	3,549.2
Manufacturing employment in selected labor market areas (thousands)†	678.4	677.0	691.5[r]	665.1	691.1
Total unemployment in selected labor market areas (thousands)	263.0	263.7	206.2[r]	255.6	169.2
Percent of labor force unemployed in selected labor market areas	6.3	6.4	5.1[r]	6.2	4.2
Percent of total labor force unemployed	6.0	6.1	4.9[r]	6.1	4.2

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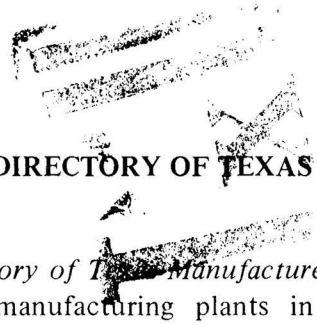

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