TEXAS BUSINESS REVIEW

A MONTHLY SUMMARY OF THE BUSINESS AND ECONOMIC CONDITIONS IN TEXAS

BUREAU OF BUSINESS RESEARCH THE UNIVERSITY OF TEXAS

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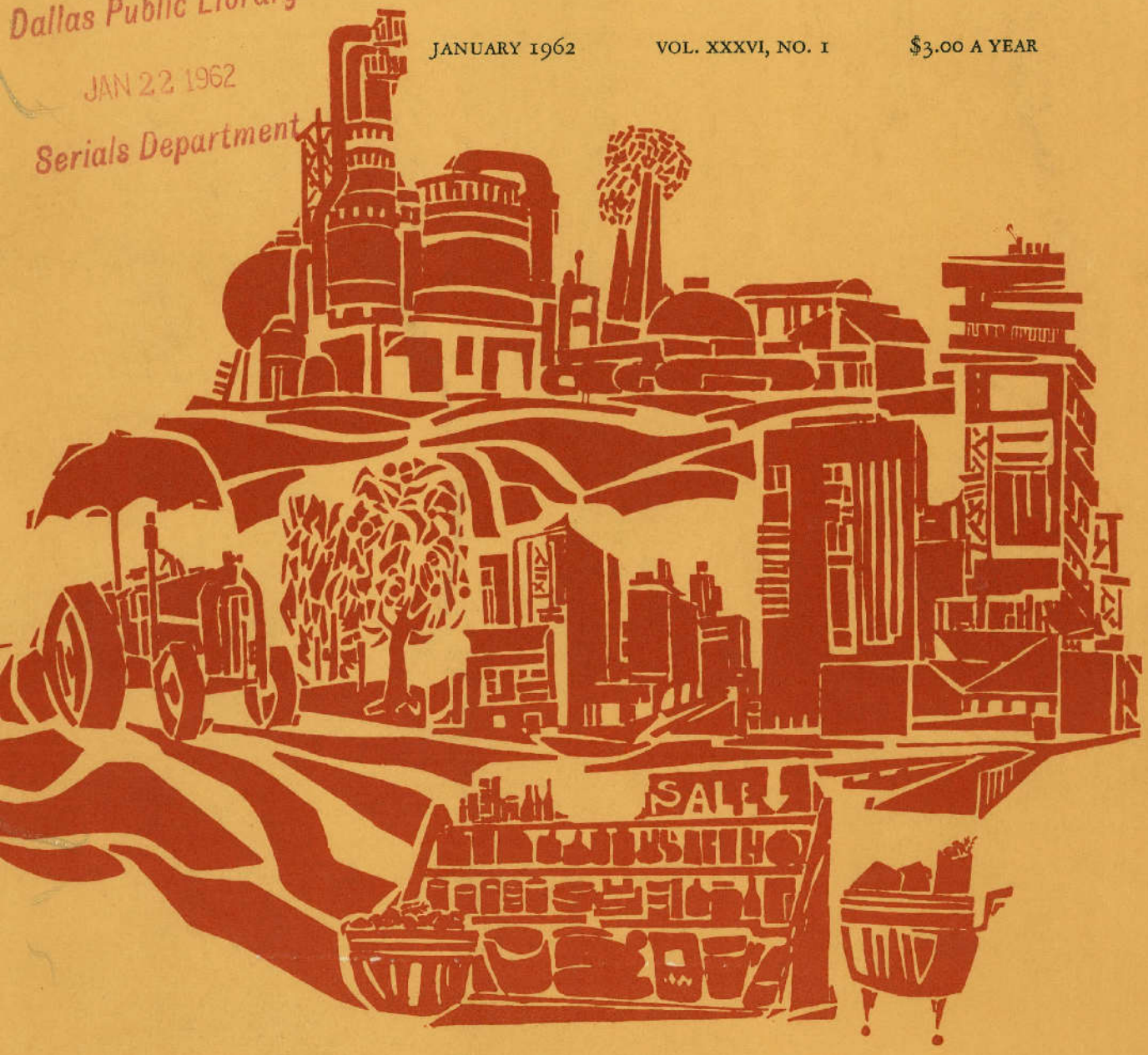

A PRIMER OF URBAN ECOLOGY *by* Robert H. Ryan / FALLOUT SHELTERS: CONSTRUCTION BOON *by* Charles O. Bettinger / LP GOES THE RURAL ROUTE *by* James D. Gordon

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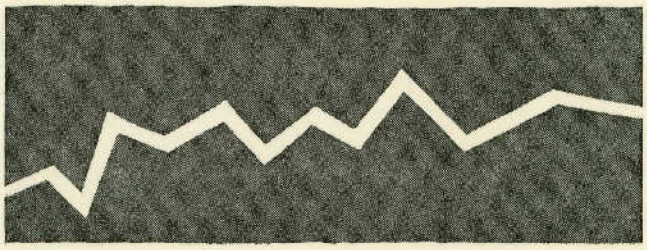

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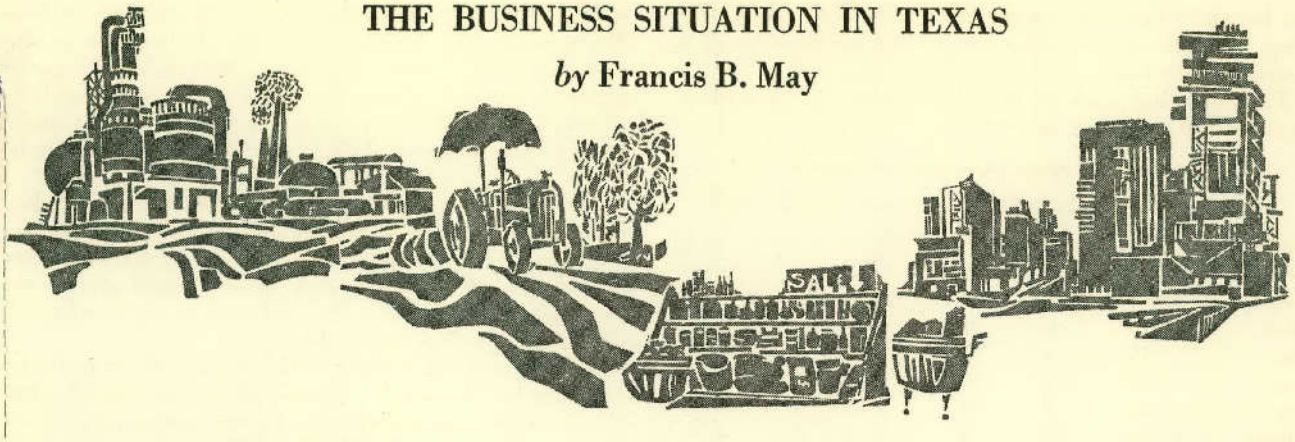
THE BUSINESS SITUATION IN TEXAS

by **Francis B. May**

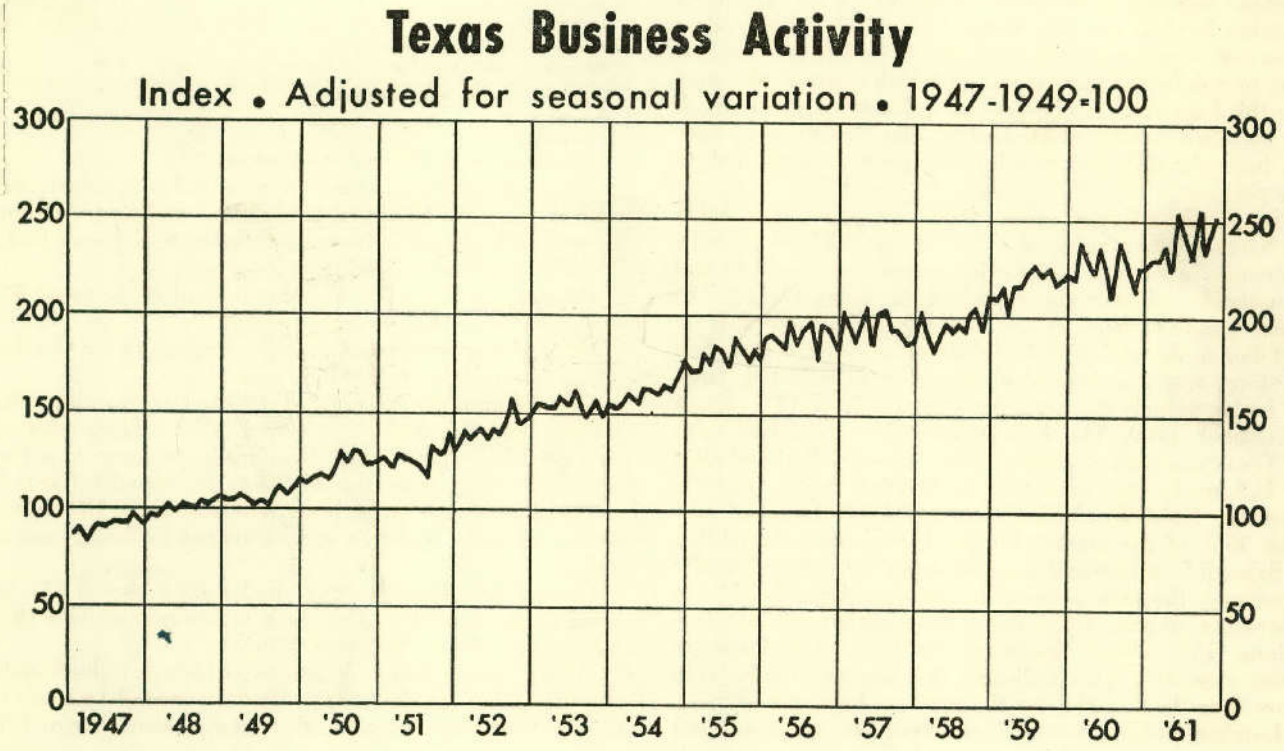


T THE BEGINNING OF 1961, THE STATE AND NATIONAL ECONnies were near the bottom of a mild recession that began May 1960. At that time there was a general feeling that ere would be a recovery in the latter part of the year but at it would be a mild one. To what extent have these exctations been realized?

As far as Texas is concerned, the recovery has been more gorous than was expected. The seasonally adjusted Index Texas Business Activity reached an all-time high of 6% of the 1947–49 average in August of this year. It opped sharply in September but rose again in October. or the first three quarters of this year, the index averaged % above the first three quarters of 1960. If a comparison months is made for the first ten months of the two years, ery month of 1961 except February was above the corsponding month of 1960. This is a good record for a year which proration clamped tighter on the oil industry, one the state's large employers and one of its high wage dustries.

Despite a continuation of 8-day allowables for November, the seasonally adjusted index of crude pretroleum production rose 1%. At 109.2% of the 1947–49 average monthly volume of production, the index was 2% above November 1960. The increase was due to allowables granted to new wells and variations in producing rates of old wells.

The steady decline in the number of producing days allowed explains the small increase of the index of production over the base period. The index reached its post-World War II peak of 138.5 in May 1957. It has declined irregularly to its present value during the intervening months. This has caused declining employment in oil and gas production from a peak of more than 125,000 jobs to the current level of 112,500. This is a reduction of more than 12,500 jobs. The current average weekly wage paid oil and gas field production workers is $112.74. At this average wage, the loss is equivalent to the elimination of a weekly payroll of $1,409,250 or an annual wage bill of $73,281,000. It is small wonder that the state's economy



has begun to experience a declining growth rate at a time when new job opportunities are needed to take care of a growing labor force.

The following table shows the number of producing days allowed in each of the past several years:

NUMBER OF PRODUCING DAYS ALLOWED

	1957	1958	1959	1960	1961	1962
January	16	12	12	10	9	9
February	15	11	11	10	8	–
March	18	9	12	10	10	–
April	16	8	11	9	9	–
May	16	8	12	8	8	–
June	15	8	10	8	8	–
July	13	9	9	8	8	–
August	13	11	9	8	8	–
September	13	12	9	8	8	–
October	12	11	9	8	8	–
November	12	11	9	8	8	–
December	12	12	10	9	9	–
	—	—	—	—	—	—
Total	171	122	123	104	101	9

Seasonally adjusted total electric power consumption declined 1% in November. At 429% of the 1947–49 average rate of consumption, the index was 12% above November 1960. The decline was caused by a drop in residential and commercial consumption. Industrial power consumption rose 5% over October to a level 10% above November 1960.

Seasonally adjusted sales of ordinary life insurance rose 5% in November after rising to a new high value in October. This makes November the second record-breaking month for this index.

The seasonally adjusted index of total retail sales in Texas rose again in November. At 110% of the 1957–59 average monthly volume the index was 1.9% above its October level. It was 6% above its November 1960 value. This rise, coming after a 3.8% rise in October, points the way to a definite improvement in fourth quarter sales over the third quarter. It gives added color to expectations of an excellent volume of December sales. Increases in sales of both durable and nondurable goods contributed to the rise.

Seasonally adjusted sales of durable goods rose 1.8% in November to a value of 112% of the 1957–59 average. Increases in sales of automotive stores and furniture and household appliance stores pushed the index higher. The usual seasonal drop in sales of automotive stores from October to November is 1%. November sales of this class of stores rose 2% instead of dropping as expected. Sales of motor vehicle dealers rose 4% to a level 17% above November 1960. The improvement in automobile sales in Texas was part of a nationwide increase. National sales of U.S.-made cars amounted to 585,000 units, up 10% from the 530,600 sold in November 1960. Compact cars took 35% of the market for the U.S.-made automobiles.

Sales of furniture and household appliance stores usually experience the same percentage of seasonal decline, 1% in November, as automotive stores. Instead they rose 5% to a volume 13% above November 1960. Sales of furniture stores rose 4%. This indicates that appliance sales rose more than the 5% rise for the combined groups.

Lumber, building material, and hardware stores suffered a 12% decline in November. This is more than the usual 9% seasonal drop. Despite the fall in volume, sales for these stores were 10% above November 1960. Sales of farm implements were 6% above November of last year. Hardware store sales were 5% above November 1960. Sales of lumber and building material dealers were 12% above November 1960.

November sales of nondurable goods were 2.8% above October after seasonal adjustment. Greater than seasonal increases in sales of apparel, drug stores, food stores, general merchandise stores, and "other" retail stores were responsible for the rise. November sales of nondurables were 2% above November of last year.

Sales of apparel stores rose 8% in November instead of experiencing the usual 1% seasonal decline. Family clothing stores and women's ready-to-wear did particularly well with increases of 18% and 10%. Men's and boys' clothing stores also had a 10% increase in sales. Shoe stores had a 4% rise in volume of business.

SELECTED BAROMETERS OF TEXAS BUSINESS
(1947–49 = 100)

Index	Nov 1961	Oct 1961	Nov 1960	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
Texas business activity	251	243	226	+ 3	+ 11
Miscellaneous freight carloadings in S.W. district	62	79	74	— 22	— 16
Crude petroleum production	109.2*	107.6r	107.3	+ 1	+ 2
Crude oil runs to stills	140	151	145	— 7	— 3
Total electric power consumption	429*	433r	384r	— 1	+ 12
Industrial power consumption	419*	398r	380r	+ 5	+ 10
Bank debits	298	289	270	+ 3	+ 10
Ordinary life insurance sales	487	463	453	+ 5	+ 8
Total retail sales (1957–59=100)	110*	108r	104r	+ 2	+ 6
Durable-goods sales (1957–59=100)	112*	110r	98r	+ 2	+ 14
Nondurable-goods sales (1957–59=100)	110*	107r	108r	+ 3	+ 2
Urban building permits issued (1957–59=100)	119.7	113.9	98.8	+ 5	+ 21
Residential (1957–59=100)	115.0	114.5	90.2	**	+ 27
Nonresidential (1957–59=100)	127.1	116.8	115.1	+ 9	+ 10
Average weekly hours manufacturing (1957–59=100)	100.8*	101.2r	97.5	**	+ 3

Adjusted for seasonal variation.
* Preliminary.
r Revised.
** Change is less than one-half of one percent.

Drug stores had a 3% increase instead of the usual 5% seasonal decline in sales in November.

Sales of food stores in November held up to the October volume instead of dropping the usual 3%.

Sales of gasoline and service stations dropped 3%. This is more than the usual 1% seasonal decline. These sales are measured in dollar volume. Gasoline price wars caused by surplus refining capacity and efforts to expand markets in terms of gallonage undoubtedly contributed to the overall decline. Profits, however, are measured in dollars not in gallons.

General merchandise stores had a sales rise of 8% instead of the usual 2%. The rise was due entirely to a 10% increase in sales of department stores.

"Other" retail stores—a category which includes florists, nurseries, and jewelry stores—had an overall increase of 8% in November instead of the usual seasonal rise of 1%.

A PRIMER OF URBAN ECOLOGY

by Robert H. Ryan

SINCE THE WORLD'S FIRST POPULATION SHIFT—OUT OF EDEN —people have been moving, on a variety of pretexts but for a very few basic reasons. These reasons, in fact, might be reduced to two:

> Primarily they move to make a living, or a better living. Secondarily they seek a pleasant environment.

In many ways, not all of them readily apparent, urban places, from hamlets to megalopolises, generally serve both of those needs better than rural areas. However, towns and cities do not all offer economic, social, and aesthetic rewards in equal measure. As sources of income rise and fall, so do the cities that depend upon that income.

It is clear from common experience that no one moves in order to accommodate a statistical formula that appears to predict his movement. Consider the cases of four hypothetical but familiar Texas families:

Houston Bowie: Houston and his wife, now in their late fifties, have farmed a small tract of poor East Texas land since 1929. Both they and the land are nearly exhausted. Yet, Houston hoped his three children might stay and perhaps improve the farm. But all three left the farm and farming. One took a job at a brick factory in the county seat; the other two moved to Dallas.

Asuncion Garza: Garza and his wife were born in northern Mexico and migrated to Texas in their teens. They live in a small South Texas town where it is not always possible for them to remember that they were worse off in their native *pueblo*. There are seven Garza children. One moved to Detroit and later to California, where he works as a machinist's helper. One has returned to Mexico and is employed as an industrial laborer in Monterrey. Five are still at home and do not expect to leave unless they hear of promising job openings elsewhere.

Jim Jefferson: The Jeffersons moved to Odessa from Oklahoma. Rather, they were moved, by the major oil company that employs Jim as a petroleum geologist. For a time he was busy charting new geologic horizons in the Permian basin oil fields. But exploration has declined sharply in the area. At 61, Jim faces retirement from the company. They will probably leave Odessa, Jim thinks. His wife adds that wherever they move they will be looking for a warm climate and pleasant recreational facilities.

Sylvia Spriegel: Sylvia is young, unmarried, a talented dress designer who moved to Dallas from New York, bringing her widowed mother with her. She is trying to interest her two brothers, still in the East, in coming to Texas to establish a small sportswear manufacturing plant in one of the satellite towns near Dallas. She thinks the wage rates for female labor may be lower there than in the metropolitan area.

These four cases illustrate all the basic determinants of population change, and they hint at the element of indeterminacy, as well. The Bowies, Houston and his wife, are still clinging to a dwindling resource, their farm. It produces barely enough to sustain them, not enough to afford the mechanization and soil improvement that would increase its resource value. The Bowies will stay, though, for the rest of their lives, partly out of the inertia that comes with advancing age, partly for lack of skills that would make them more productive elsewhere. Even the ghost towns of the Far West are inhabited by a few old miners who worked the veins of silver long since exhausted.

The Bowie children, on the other hand, have gone to town to help *make* new resources. For resources are not resources until man does something to make them so.* Nevertheless, certain raw materials and ways of transportation, as well as human labor, are prerequisite to resource-making. Where these raw materials and means of shipping occur in fortuitous patterns, the human labor will come. The first major cities of the United States were seaports, where goods were traded, packed for reshipment, and sometimes manufactured: Boston, New York, Philadelphia, Baltimore. The next generation of cities grew up on navigable rivers: New Orleans, St. Louis, Pittsburgh, and others. The third generation were mostly railroad towns. Today, with a more flexible, more extensive transportation network, the rapidly growing cities are those with ready access to material or energy resources and those that serve as central markets for regions well endowed with those resources.

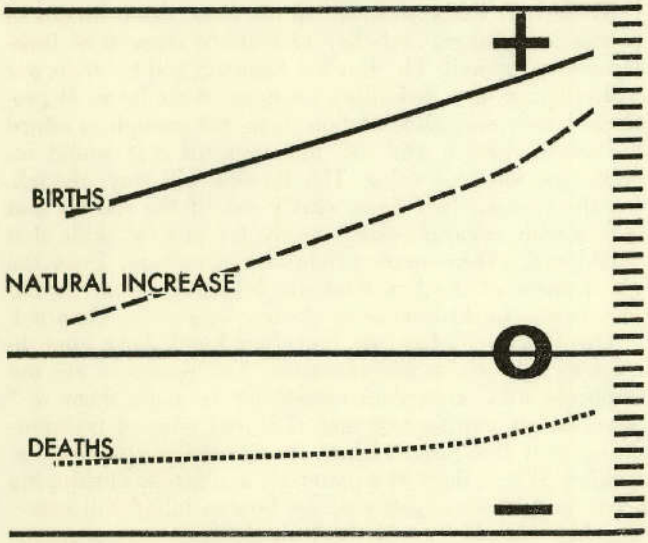
Mr. and Mrs. Asuncion Garza, of South Texas, have done more than their share to swell the state's population; five of their children are still in Texas. What is more, the children are likely, according to life expectancy tables, to live longer than their parents. A rising birth rate combines with a declining death rate to give an even faster-rising *rate of natural increase*, as illustrated on the chart below. For the nation as a whole, if one disregards the relatively small immigration, this *rate of natural increase* is equivalent to population growth. But for an individual city or state, this is not so. If better jobs appear elsewhere, the Garza children will not stay in Texas but will migrate. The American people today are astonishingly mobile; thus, some cities with high birth rates are declining in population, while others with low birth rates are growing. Ob-

* This thesis is discussed at length by Woytinsky and Woytinsky (pp. 312–412) and by Zimmermann (pp. 3–142). See accompanying booklist.

viously one cannot draw conclusions regarding the future of an area from its present population size or characteristics.

Between 1940 and 1950, Texas population gained 1,163,407 by natural increase, only 132,900 by net migration into the state. This latter figure, though, conceals the fact that many more persons than 132,900 moved into Texas during the decade—and many left Texas. It is these two components, natural increase and net migration, that add up to overall population growth, as the next chart indicates.

Of course the rate of natural increase is not the same in all cities. It depends largely upon the proportion of residents within the childbearing ages, roughly 15 to 45. This proportion varies more widely than one might expect, and



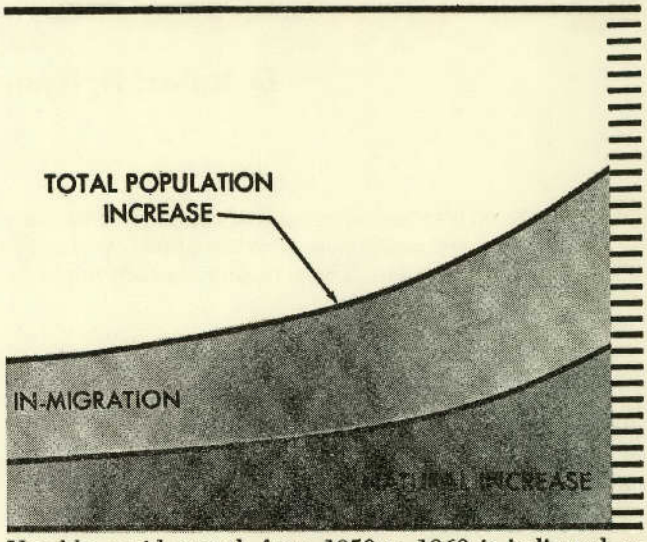
some of the "old towns" of East Texas are in some danger of extinction as most of their youngsters leave as soon as they finish school. Thus, a close analysis of the age composition of the population is necessary to accuracy in forecasting.

Nationwide, a broad shift in age distribution has been seen in recent years. Sociologists Conrad and Irene Taeuber have written on the relative shrinkage of that part of the population in the productive years from 15 to 65.* As they point out, the young and the aged today make up increasingly large proportions of the total population, with profound economic and social effects. Concentrating on the lower end of the age scale, market analysts have promoted the sale of "teen-age products" and have adapted advertising of still other products to readers in that age group.

At the other end of the scale are petroleum geologist Jim Jefferson, his wife, and millions like them. They are potential retiree-migrants. With increasing numbers of oldsters in the population and generally larger retirement incomes than in the past, some significant new trends are taking shape. The 65+ group is traditionally the most stable in the population, the least likely to move. Yet, in several recent years Texas, Louisiana, and Florida drew relatively more newcomers over 65 than in any other age group. All three of these southern states are of course popular retirement havens. On the other hand, the 65+ residents were the quickest to depart from such states as Delaware, Illinois, Massachusetts, New York, New Jersey, Pennsylvania, and several other high-income northeastern states.

The Jim Jeffersons, like the Houston Bowies, are victims of a shift in resource flow. Odessa, where the Jeffersons live, is the central city of the only Standard Metropolitan Area in all Texas that declined in population from 1960 to 1961 (according to The University of Texas Population Research Center, which developed the estimates tabulated on these pages). The Odessa area decline presumably resulted mainly from loss of employment due to cutbacks in oil exploration and production.

Development of a new resource pattern commonly brings a spectacular population influx during its early stages.



Notably rapid growth from 1950 to 1960 is indicated on the accompanying map for the West Texas oil centers, Odessa, Midland, Andrews, and Kermit. But eventually the rate of growth must decline, even though the actual population may not. Margaret Gordon remarks, rather wistfully one might think, that the rush to California may slow as that state's rich pudding of resources has to be sliced progressively thinner to feed its swelling population.*

Some students of regional science would refer to young Sylvia Spriegel, the dress designer, as a "city founder," if she is successful in establishing an apparel factory. Not that she will be starting her own city. She will, however, be adding a new economic module to the city she chooses as her plant site.

Sylvia's revenue from the sale of dresses will come almost entirely from outside the area where she manufactures them, and the largest share of this revenue will be distributed among her employees. These workers will then spend most of their wages in local establishments: barber shops, garages, groceries, clothing stores, and so forth. This circle of local businesses will depend partly, some of them perhaps wholly, on income from Sylvia's enterprise. And many of them will have to increase their payrolls to serve the needs of Sylvia's workers. By injecting new economic support into the community, the apparel factory will tend to increase the population. Or, if some other local industries are moribund, Sylvia's payroll may support some

* Taeuber and Taeuber, p. 324. See accompanying booklist.

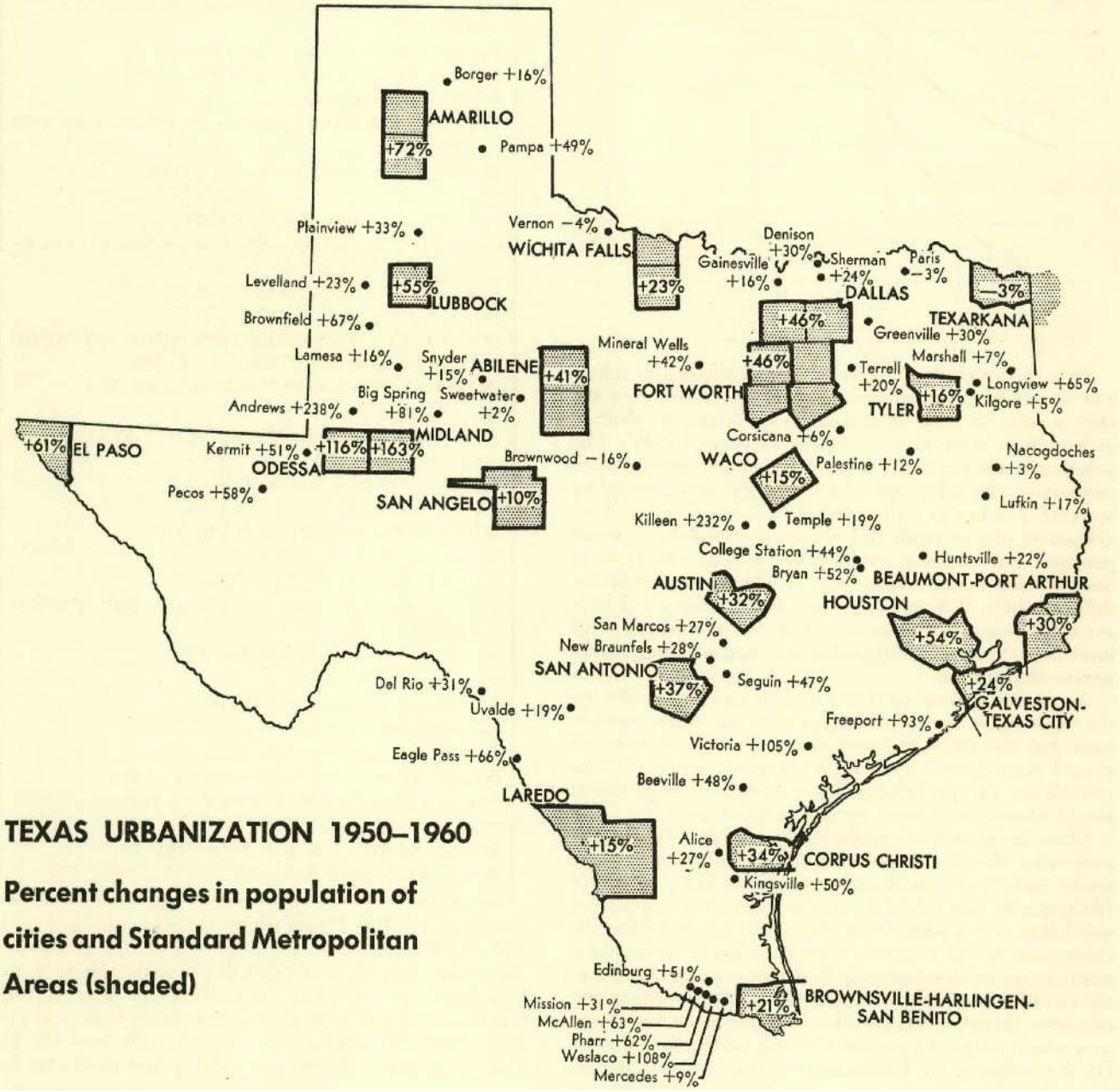
* Gordon, p. 24. See accompanying booklist.

of their discharged workers and keep the population from declining.

Who could have guessed, though, that an apparel factory would spring up in the city Sylvia chooses? The answer is, almost anyone with a thorough knowledge of resources and industrial economics might foresee a development of this kind. The town has an underemployed female labor force; a relatively low wage scale; two vacant industrial buildings for lease; and a short, first-class highway to Dallas, Southwestern center of apparel wholesaling. The probability of local apparel manufacturing is clear to those who would look closely.

No city is self-sufficient. If one tries to visualize a city or small area that produces all its own bread and meat, motion pictures, diamond rings, automobiles and gasoline, and books, this point becomes quite clear. Evidently there can be no such place. Even the largest cities—entire nations, for that matter—must buy from outside many of the goods they consume. To buy these, the city must earn exchange credit. This is accomplished by producing more of certain goods, like Sylvia's dresses, and more of certain services than the local residents require.

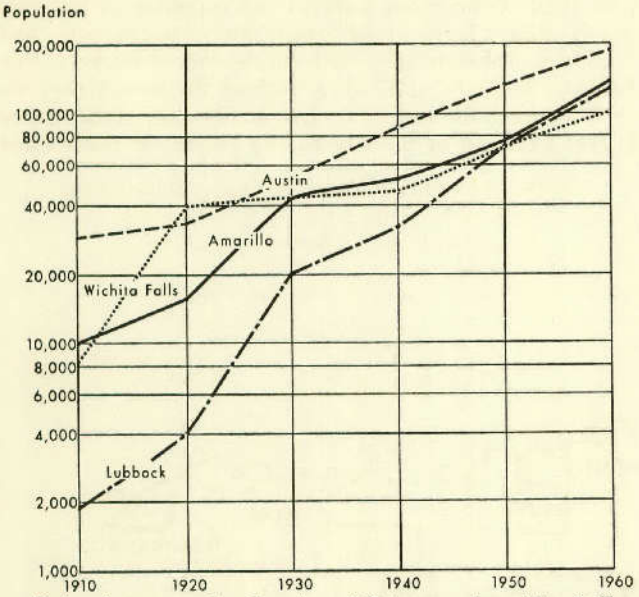
These surplus-producing facilities are called "basic industries" by most analysts. Their workers are paid from revenue that originates outside the city. Some of the money they earn is saved in local financial institutions and helps provide employment for banks and savings and loan personnel. Some is used to buy homes and thus to help support local construction workers and suppliers of building goods. Some is spent in retail stores, restaurants, and laundries. Subsequently, the local *dependent* workers—the bankers, builders, and bakers—spend the money they receive in much the same way. Eventually most of the money is sent back out of the city to buy goods not made there



TEXAS URBANIZATION 1950–1960

Percent changes in population of cities and Standard Metropolitan Areas (shaded)

and services not performed there. But in the meantime the recirculated earnings of each basic industrial worker have provided support for about two workers not in basic industry, that is, two *dependent* workers. In addition, the earnings of each employed person, whether in basic or dependent industry, support two or three persons not in the labor force—children, housewives, retired persons. The ratios of basic to dependent workers and of all workers to nonworkers vary with certain key characteristics of the city, but gross changes in these ratios can generally be foreseen.



Take, for example, the city of Odessa, where Jim Jefferson lives. Tremendous expansion of oil activity in the Odessa area brought in thousands of petroleum drilling and production workers during the 1930's and 1940's. The population was typical of boom areas: many basic-industry employees, the oil people, but relatively few dependent workers. The fast growth of the oil business outstripped development of new retail and wholesale establishments and personal and business services. For a time, the ratio of basic to dependent employment in Odessa was radically different from that in most cities. But by the late 1950's enough dependent businesses had been established to serve local needs that the relationship was approaching an apparent equilibrium.

An analyst forecasting the population of Odessa during the years when dependent employment was disproportionately low should have taken that fact into account and should have based some of his expectation of further growth on the probability that dependent employment would ultimately assume normal proportions.

Often the growth of population in an area is forecast by projecting the past population trend according to some statistical formula, usually a logistic curve. The chart above illustrates the potential danger of assuming that population will follow such a path. Of the Texas cities indicated on the chart, only Austin has come close to following this pseudo-normal line of development. And this is probably due to the fact that the growth of Austin, the state government and educational center, has been keyed to the growth of Texas as a whole rather than to the rise of a particular industry. On the contrary, the Lubbock curve traces clearly the development of High Plains irrigated agriculture and trade; and the Wichita Falls curve, most irregular of all, soars during the early years of North Texas oil development, then lags until the economic push of World War II. Most logistic-curve formulas assume that population will grow at an evenly decreasing rate and gradually level off. This idea incorporates the general validity and particular haz-

A POPULATION BOOKLIST

Recent studies of population trends and regional science

Richard B. Andrews
MECHANICS OF THE URBAN ECONOMIC BASE
A series of twelve articles in *Land Economics*, vols. 29–32 (1953–56).

Hans Blumenfeld
THE ECONOMIC BASE OF THE METROPOLIS
An article in the *Journal of the American Institute of Planners*, 21: 114–32 (1955).

Otis Dudley Duncan *et al.*
METROPOLIS AND REGION
Baltimore: The Johns Hopkins Press, 1960.

Margaret S. Gordon
EMPLOYMENT EXPANSION AND POPULATION GROWTH
The California Experience, 1900–1950
Berkeley: University of California Press, 1954.

P. M. Hauser and O. D. Duncan, editors
THE STUDY OF POPULATION: AN INVENTORY AND APPRAISAL
Chicago: University of Chicago Press, 1959.

Walter Isard
LOCATION AND SPACE-ECONOMY
Cambridge: The Technology Press of the Massachusetts Institute of Technology, and
New York: John Wiley & Sons, Inc., 1956.

Everett S. Lee *et al.*
POPULATION REDISTRIBUTION AND ECONOMIC GROWTH, UNITED STATES, 1870–1950
Philadelphia: American Philosophical Society, 1957.

Harvey S. Perloff
EDUCATION FOR PLANNING: CITY, STATE, AND REGIONAL
Baltimore: The Johns Hopkins Press, 1957.

J. J. Spengler and O. D. Duncan, editors
POPULATION THEORY AND POLICY
Glencoe, Ill.: Free Press, 1956.

Conrad Taeuber and Irene B. Taeuber
THE CHANGING POPULATION OF THE UNITED STATES
New York: John Wiley & Sons, Inc., 1958.

Edward Ullman
AMERICAN COMMODITY FLOW
Seattle: University of Washington Press, 1957.

W. E. Woytinsky and E. S. Woytinsky
WORLD POPULATION AND PRODUCTION
New York: The Twentieth Century Fund, 1953.

Erich W. Zimmermann
WORLD RESOURCES AND INDUSTRIES
New York: Harper & Bros., 1951.

ards of most truisms. It tends to be true, that is, only if nothing exceptional takes place to deflect progress from its neatly logistic course. And as often as not, something exceptional does take place.

Rather than being based on analyses of population data as such, forecasts published by The University of Texas Bureau of Business Research and many similar agencies elsewhere have been made in the light of actual and potential economic development. The belief underlying these studies is that small-area population forecasting is concerned far more with economics than with biology. These are the steps taken in a forecast founded on this assumption:

1. Basic employment in the city or small area is measured, sometimes through examination of employment statistics already gathered, sometimes through questioning all local employers. The objective, either way, is to find out how much of the local income derives from out-of-town purchases. A large oil refinery in a small town would presumably ship virtually all its product to external markets. Its payroll, then, would be allocated entirely to the column of basic industries. On the other hand, if a large department store made 20% of its sales to out-of-town customers, just 20% of its employees would be classified as basic.
2. Taking into account the relative wage rates in the various basic and dependent industries of the city, the number of dependent workers supported by each basic worker and the number of nonworkers supported by each worker would be determined.
3. Through a critical study of the area resource pattern and of national industrial and economic trends, a growth potential is assigned each of the local basic industries. For example, the probable number of workers in local steel mills might be projected to 1975. Or if there seemed strong promise of the development of new industries not currently represented in the city, a conservative estimate of that industry's potential employment would be established.
4. On the basis of the probable overall industrial growth and the population-supporting strength of each industry represented, the total population in one or several future years would then be computed.

Obviously the accuracy of this economic-base forecast would depend upon the preciseness of the input data—the measures of current employment and income. Even more critical would be the estimating of future industrial growth. These estimates, upon which the whole structure of the forecast rests, must be made after thorough examination of the resources available to local industry, both now and in the foreseeable future. Allowance must be made here for technological progress that may make resources of materials now useless. (In just this way, Minnesota taconite, formerly a worthless mineral, has *become* iron ore in recent years.) All forecasts of course may be invalidated by the discovery of unsuspected resources or ways of using them or by cataclysmic changes in the economy, like those often brought about by major wars. But these imponderables do not invalidate the conceptual framework of economic base studies, they only limit the accuracy and comprehensiveness of the information on which the studies are founded.

Perloff complains, with some justice, that elaborate planning of highways, cities, water resources, and the like is often built on flimsy and unqualified projections.* His point is well taken. Projections are not safely undertaken by small-city chambers of commerce unstaffed with professional industrial economists.

With care and expertise, however, it is possible to make a good guess as to where the Bowies, the Garzas, the Jeffersons, and the Spriegels—and all their children—may be living several years in the future. For, where a living is to be made and where some of the amenities are to be enjoyed, there will the population increase and the cities grow.

POPULATION ESTIMATES FOR STANDARD METROPOLITAN STATISTICAL AREAS IN TEXAS, APRIL 1, 1961

Prepared By The Population Research Center, Department of Sociology, The University of Texas

Standard metropolitan statistical areas	Estimated population, April 1, 1961	Est. percent growth, April 1, 1960–April 1, 1961	Standard metropolitan statistical areas	Estimated population, April 1, 1961	Est. percent growth, April 1, 1960–April 1, 1961
Abilene[1]	123,752	2.8	Galveston-Texas City[10]	142,504	1.5
Amarillo[2]	156,084	4.4	Houston[11]	1,261,411	1.5
Austin[3]	216,988	2.3	Laredo[12]	66,529	2.7
Beaumont-Port Arthur[4]	311,398	1.8	Lubbock[13]	160,933	3.0
Brownsville-Harlingen-San Benito[5]	153,959	1.9	Midland[14]	68,780	1.6
Corpus Christi[6]	223,099	0.7	Odessa[15]	90,993	—0.002
Dallas[7]	1,107,727	2.2	San Angelo[16]	66,438	2.8
El Paso[8]	323,828	3.1	San Antonio[17]	708,610	3.1
Fort Worth[9]	581,328	1.4	Texarkana[18]	60,306	0.6
			Tyler[19]	88,114	2.0
			Waco[20]	152,243	1.4
			Wichita Falls[21]	133,782	3.2

Counties included: [1]Jones and Taylor; [2]Potter and Randall; [3]Travis; [4]Jefferson and Orange; [5]Cameron; [6]Nueces; [7]Collin, Dallas, Denton, and Ellis; [8]El Paso; [9]Johnson and Tarrant; [10]Galveston; [11]Harris; [12]Webb; [13]Lubbock; [14]Midland; [15]Ector; [16]Tom Green; [17]Bexar; [18]Bowie; does not include Miller County, Arkansas; [19]Smith; [20]McLennan; [21]Archer and Wichita.

POPULATION ESTIMATES FOR URBANIZED AREAS IN TEXAS, APRIL 1, 1961

Prepared By The Population Research Center, Department of Sociology, The University of Texas

Urbanized areas	Estimated population, April 1, 1961	Est. percent growth, April 1, 1960–April 1, 1961	Urbanized areas	Estimated population, April 1, 1961	Est. percent growth, April 1, 1960–April 1, 1961
Abilene[1]	96,275	5.4	Houston	1,163,021	2.0
Amarillo[2]	145,158	5.2	Laredo	62,404	2.8
Austin	192,251	2.7	Lubbock	135,023	4.4
Beaumont	120,987	1.5	Midland	64,860	2.5
Corpus Christi[3]	177,141	1.3	Odessa	86,352	2.5
Dallas[4]	958,502	3.3	Port Arthur	119,441	2.6
El Paso	291,445	5.2	San Angelo	60,658	3.1
Fort Worth	512,751	2.0	San Antonio	664,676	3.5
Galveston-Texas City	121,128	2.2	Texarkana, Texas[5]	84,183	3.3
Harlingen-San Benito	64,663	4.9	Tyler	53,485	3.4
			Waco	118,750	2.2
			Wichita Falls[6]	107,293	5.1

[1]Excluding that part of the Urbanized Area in Jones County (1960 population 221).
[2]Includes both Potter and Randall counties.
[3]Excluding that part of the Urbanized Area in San Patricio County (1960 population 2,540).
[4]Excluding those parts of the Urbanized Area in Collin County (1960 population 3,756), Denton County (no inhabitants in 1960), and Tarrant County (1960 population 984).
[5]Excluding that part of the Urbanized Area in Miller County, Arkansas (1960 population 20,371).
[6]Excluding that part of the Urbanized Area in Archer County (no inhabitants in 1960).

* Perloff, p. 112. See accompanying booklist.

POPULATION ESTIMATES FOR TEXAS COUNTIES, APRIL 1, 1961

Prepared By The Population Research Center, Department of Sociology, The University of Texas

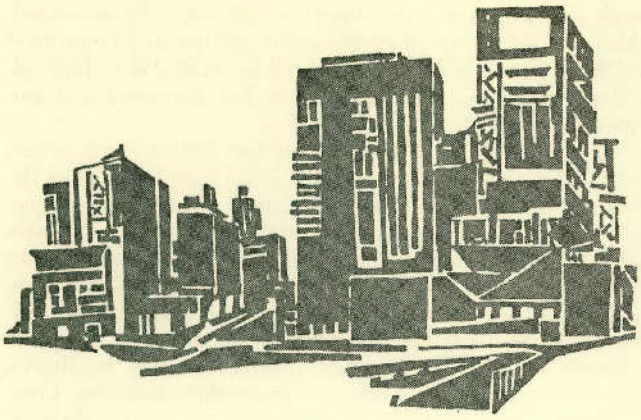
Population estimates for April 1, 1961, indicate that 1950–60 trends have not continued for 111 of the 254 Texas counties. The 1961 estimates shown in the accompanying table reveal that of the 143 counties which lost population between 1950 and 1960 no less than 94 registered an increase during 1960–61. The 49 remaining counties continued to lose population. Seventeen of the 111 counties which gained population between 1950 and 1960 experienced a loss during 1960–61.

Perhaps most significant is the fact that only 66 counties lost population between 1960 and 1961, as compared with 143 counties during 1950–60. However, there are only a few cases of sharp changes in population trends. Most counties which lost population between 1950 and 1960 either continued to lose or grew only slightly during 1960–61. Changes in population trends may have begun long before 1960, because the 1950 and 1960 census figures reveal only what happened over a decade. A large number of Texas counties suffered extreme drouth conditions during the decade and may have begun to recover only toward the end of the 1950's. The 1960–61 figures cannot be taken as indicative of a long-run trend but, generally, it appears likely that extreme differences in the growth rates of Texas counties do not prevail as much now as they did in the 1950–60 period.

Although there are numerous exceptions, certain geographical patterns appear in the 1950–60 and 1960–61 growth rates of Texas counties. Counties which have grown throughout the eleven year period, 1950–61, are concentrated in three areas of the state: the Gulf Coast region, the Northwestern, and in a belt of counties running from Cooke and Grayson to Travis and then curving southwest toward Maverick. Counties with an eleven year loss are scattered but tend to be concentrated in a wide zone running from southeast to northwest in the center of the state. Counties which lost population during 1950–60 but gained between 1960 and 1961 are also widely scattered, but they tend to concentrate in two broad belts —one running from the extreme northeastern part of the state toward the Valley and the other running from Collingsworth County toward the Valley. Nine of the seventeen counties which gained population between 1950 and 1960 but lost between 1960 and 1961 are concentrated in a zone running from Crockett County to Andrews County. Finally, practically all of the counties west of the Pecos gained population between 1960 and 1961, in contrast to the 1950–60 decade when roughly half of them lost population.

Counties	Estimated population, April 1, 1961	Est. percent growth, April 1, 1960–April 1, 1961
Anderson	28,470	1.1
Andrews	13,485	—0.1
Angelina	40,307	1.2
Aransas	7,253	3.5
Archer	6,204	1.5
Armstrong	2,049	4.2
Atascosa	18,998	0.9
Austin	13,821	0.3
Bailey	9,516	4.7
Bandera	3,959	1.7
Bastrop	16,934	0.1
Baylor	5,957	1.1
Bee	24,428	2.8
Bell	97,718	3.8
†Bexar	703,610	3.1
Blanco	3,569	—2.4
Borden	1,039	—3.4
Bosque	10,693	—1.1
Bowie	60,306	0.6
Brazoria	78,080	2.5
Brazos	45,638	1.7
Brewster	6,601	2.6
Briscoe	3,600	0.6
Brooks	8,634	0.3
Brown	25,127	1.6
Burleson	11,044	—1.2
Burnet	9,212	—0.6
Caldwell	17,890	1.0
Calhoun	17,021	2.6
Callahan	8,265	4.2
†Cameron	158,959	1.9
Camp	7,966	1.5
Carson	7,949	2.2
Cass	23,335	—0.7
Castro	9,118	2.1
Chambers	10,556	1.7
Cherokee	38,282	0.5
Childress	8,449	0.3
Clay	8,160	—2.3
Cochran	6,360	—0.9
Coke	3,572	—0.5
Coleman	12,428	—0.2
Collin	41,921	1.6
Collingsworth	6,401	2.0
Colorado	18,704	1.3
Comal	19,985	0.5
Comanche	12,047	1.5
Concho	3,792	3.3
Cooke	22,976	1.3
Coryell	25,016	4.4
Cottle	4,212	0.1
Crane	4,604	—2.0
Crockett	4,199	—0.2
Crosby	10,617	2.6
Culberson	2,830	1.3
Dallam	6,397	1.5
†Dallas	973,098	2.3
Dawson	19,696	2.7
Deaf Smith	13,840	5.0
Delta	5,579	—4.8
Denton	49,196	3.7
De Witt	20,875	0.9
Dickens	5,007	0.9
Dimmit	10,196	1.0
Donley	4,415	—0.8
Duval	13,535	1.0
Eastland	19,414	—0.6
Ector	90,993	—0.002
Edwards	2,266	—2.2
Ellis	43,512	0.8
†El Paso	323,828	3.1
Erath	16,372	0.8
Falls	20,980	—1.3
Fannin	23,741	—0.6
Fayette	20,309	—0.4
Fisher	8,014	1.9
Floyd	12,833	3.8
Foard	3,096	—0.9
Fort Bend	41,261	1.8
Franklin	5,109	0.2
Freestone	12,467	—0.5
Frio	10,218	1.0
Gaines	12,284	0.1
—Galveston	142,504	1.5
Garza	6,615	0.1
Gillespie	10,094	0.5
Glasscock	1,107	—1.0
Goliad	5,363	—1.2
Gonzales	17,652	—1.1
Gray	31,747	0.7
Grayson	74,112	1.5
Gregg	71,016	2.3
Grimes	12,682	—0.2
Guadalupe	29,137	0.4
Hale	37,661	2.3
Hall	7,466	2.0
Hamilton	8,381	—1.3
Hansford	6,423	3.5
Hardeman	8,222	—0.6
Hardin	25,052	1.7
†Harris	1,261,411	1.5
Harrison	45,458	—0.3
Hartley	2,315	6.6
Haskell	11,192	0.2
Hays	20,362	2.1
Hemphill	3,150	—1.1
Henderson	22,070	1.3
†Hidalgo	184,519	2.0
Hill	23,352	—1.3
Hockley	22,462	0.5
Hood	5,394	—0.9
Hopkins	18,779	1.0
Houston	19,517	0.7
Howard	40,835	1.7
Hudspeth	3,397	1.6
Hunt	39,819	1.1
Hutchinson	34,937	1.5
Irion	1,172	—0.9
Jack	7,383	—0.5
Jackson	14,174	1.0
Jasper	22,330	1.0
Jeff Davis	1,521	—3.9
†Jefferson	249,355	1.5
Jim Hogg	5,148	2.5
Jim Wells	34,766	0.6
Johnson	35,267	1.6
Jones	19,445	0.8
Karnes	15,118	0.8
Kaufman	29,941	0.03
Kendall	5,909	0.3
Kenedy	880	—0.5
Kent	1,748	1.2
Kerr	17,371	3.4
Kimble	3,971	0.7
King	630	—1.6
Kinney	2,485	1.3
Kleberg	30,969	3.1
Knox	7,842	—0.2
Lamar	34,249	0.04
Lamb	22,296	1.8
Lampasas	9,366	—0.6
La Salle	6,062	1.5
Lavaca	20,227	0.3
Lee	8,949	0.0
Leon	10,111	1.6
Liberty	32,013	1.3
Limestone	20,141	—1.3
Lipscomb	3,498	2.6
Live Oak	7,897	0.7
Llano	5,222	—0.3
Loving	230	1.8
†Lubbock	160,933	3.0
Lynn	11,013	0.9
McCulloch	8,783	—0.4
†McLennan	152,248	1.4
McMullen	1,152	3.2
Madison	6,879	1.9
Marion	7,877	—2.1
Martin	5,128	1.2
Mason	3,824	1.2
Matagorda	26,728	3.8
Maverick	15,010	3.5
Medina	19,079	0.9
Menard	3,084	2.4
Midland	63,780	1.6
Milam	22,096	—0.8
Mills	4,450	—0.4
Mitchell	11,416	1.4
Montague	14,902	0.1
Montgomery	27,115	1.0
Moore	14,559	—1.4
Morris	12,428	—1.2
Motley	3,014	5.0
Nacogdoches	23,439	1.4
Navarro	34,558	0.4
Newton	10,276	—0.9
Nolan	18,849	—0.6
†Nueces	223,099	0.7
Ochiltree	2,350	5.0
Oldham	2,058	6.7
Orange	62,048	2.8
Palo Pinto	20,562	0.2
Panola	16,885	0.1
Parker	23,164	1.2
Parmer	9,866	3.0
Pecos	12,114	1.3
Polk	13,966	0.3
—Potter	119,788	3.6
Presidio	5,534	1.4
Rains	3,003	0.3
Randall	36,301	7.0
Reagan	3,585	—5.2
Real	2,058	—1.0
Red River	15,638	—0.3
Reeves	17,665	0.1
Refugio	11,128	1.4
Roberts	1,064	—1.0
Robertson	16,042	—0.7
Rockwall	5,879	0.02
Runnels	15,014	—0.01
Rusk	38,551	0.4
Sabine	7,371	0.9
San Augustine	7,697	—0.3
San Jacinto	6,179	0.4
San Patricio	45,386	0.3
San Saba	6,492	1.7
Schleicher	2,867	2.7
Scurry	19,983	—1.9
Shackelford	3,993	0.1
Shelby	20,524	0.2
Sherman	2,753	5.7
Smith	88,114	2.0
Somervell	2,530	—1.8
Starr	17,731	3.5
Stephens	9,006	1.4
Sterling	1,173	—0.8
Stonewall	3,017	0.0
Sutton	3,756	0.5
Swisher	10,873	2.5
†Tarrant	546,061	1.4
—Taylor	104,307	3.2
Terrell	2,622	0.8
Terry	16,641	2.2
Throckmorton	2,773	0.2
Titus	16,946	1.0
Tom Green	66,438	2.3
†Travis	216,988	2.3
Trinity	7,550	0.1
Tyler	10,672	0.1
Upshur	19,937	0.7
Upton	6,183	—0.9
Uvalde	17,374	3.3
Val Verde	25,141	2.8
Van Zandt	19,311	1.2
Victoria	47,417	2.0
Walker	21,633	0.7
Waller	12,347	2.3
Ward	14,784	—0.9
Washington	19,101	—0.2
Webb	66,529	2.7
Wharton	38,221	0.2
Wheeler	7,937	—0.1
†Wichita	127,578	3.3
Wilbarger	18,068	1.3
Willacy	20,172	0.4
Williamson	35,172	0.4
Wilson	13,436	1.3
Winkler	13,528	—0.9
Wise	17,338	1.9
Wood	17,937	1.6
Yoakum	8,111	1.0
Young	17,048	—1.2
Zapata	4,312	—1.8
Zavala	12,803	0.9
All Counties	9,743,949	1.7

FALLOUT SHELTERS: CONSTRUCTION BOON



by **Charles O. Bettinger**

THE SUBJECT OF FALLOUT SHELTERS RATES AS THE NUMBER one conversational topic in the nation since the nuclear test explosions conducted by Russia in the past few months. The resumption of testing, the magnitude of the bombs involved, and the publicity given the Russian announcements have created a surge of interest in protection which overshadows anything the civil defense officials have been able to accomplish. As a result of this interest, pressure has been brought to bear on all levels of government for a revaluation of the situation and for specific proposals for action. Another immediate result of this public concern has been the recognition by the construction industry that the fallout shelter could be very good business indeed.

The problem seems to have such a complex answer that even major details have not yet been worked out satisfactorily. Perhaps the biggest question to resolve is to determine the type of shelter which should be specified. The simplest type is the shelter which provides for fallout protection only. This shelter is the most difficult to describe because its physical appearance can take any form, shape, or size. Included in this category would even be natural shelters such as caves, caverns, and tunnels. This fallout shelter serves one purpose only: as a shield from radioactive dust particles that might contaminate the air after an atomic or hydrogen explosion.

The materials used in a man-made shelter of this type consist of many elements, with the products of greater density offering the most protection. Clay brick, concrete block, sand, and dirt are commonly used for this purpose.

Shelters offering fallout protection only are usually much less expensive than the second type of shelter which offers blast and fire protection as well as fallout safety. Even in a shelter with some blast and fire protection, the effect is limited to the exact pressure specifications of the individual shelter and its relation to ground zero or point of explosion. At ground zero to almost a three-mile radius, shelter is of little use because of the tremendous heat, the explosive force, and direct radiation. In the case of a larger bomb, the destroyed area has an even greater radius.

Fallout, however, is not restricted to a few miles, but can be wind-borne for thousands of miles with deadly effect. Fallout danger is at a maximum if the bomb is exploded at ground level where radioactive dust is sucked up by the explosion and blown to other areas. Conversely, radioactive fallout is at a minimum when the bomb is exploded in the atmosphere. Proximity to a high priority military or industrial target might dictate that a shelter provide blast and fire protection, whereas a reasonable distance may permit some kind of fallout protection only.

Another basic controversy in fallout shelter construction is the practical one involving cost. Advocates of group shelters say that the construction expense per person can be greatly reduced below that of a family shelter. Recent experiments on group blast- and fire-resistant shelters have placed the cost of group shelters at approximately $200 per person. One shelter tested withstood a pressure of 35 pounds per square inch as blast protection and was insulated for protection against fire to a reasonable degree. It was equipped with food, water, medicine, generators, batteries, and radiation detectors. Cost estimates of similar protection in a family shelter were more than double those in the group shelter on the same per-person basis.

The government attitude toward shelters originally leaned toward family shelters as demonstrated by the booklet, *The Family Fallout Shelter* published by the Department of Defense, Office of Civil Defense. More recently, this stand is being reversed because of the high construction costs involved. A new publication being prepared is said to emphasize other types of shelters including group shelters and natural shelters. Some families have decided to pool finances and build a stronger shelter for the same cost. Others have included shelter provisions in a new home with plans to use the shelter area as a den, playroom, or even a spare bedroom for guests.

The possible effect of shelter construction on the building industry in Texas can be shown by using the conservative estimate of $200 per person and multiplying it by the state's population of nearly 10 million persons. With only one shelter per person this total would exceed $2 billion. However, it is generally acknowledged that more than one shelter per person will be needed for adequate protection at home, work, and school.

To illustrate the effect that such construction could have on a single industry, the construction of 10,000 family shelters made of standard brick for six persons would require approximately 45 million brick. Similar estimates could be calculated for concrete block, iron and steel, wood, and other structural products. Needless to say, the potential boost to the entire industry is great indeed.

Recognizing this fact, steel companies and metal fabricators were quick to seize the opportunity. Steel companies such as Lone Star Steel, Armco Steel and others quickly organized new divisions and went into mass production. New companies making prefabricated shelters grew overnight. Fly-by-nighters, too, are taking advantage of the special situation for quick profits.

Now the Russians have eased off with their nuclear tests and the crisis has lessened, but the interest in protection still runs high. Except in isolated areas, the family fallout shelter will not get as much attention as the group shelter in the future. Yet many families still desire some protection at home and feel that this should be incorporated in the cost of the house. However, the expense of building a

family shelter near the site of an existing house will probably remain prohibitive for most of the population. Exceptions to this could occur in the event federal loans are made available at a nominal interest rate.

This possibility seems remote for the present, but some companies have made similar proposals to their employees for shelter construction. International Business Machines, for example, has offered interest-free loans to their employees of up to $1,000 for such projects. Many other businesses have established group shelters for employees and sometimes their families. Others have gone well underground to insure that business records are maintained in the event of attack.

ESTIMATED VALUE OF BUILDING AUTHORIZED

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

Classification	Nov 1961	Jan–Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Jan-Nov 1961 from Jan-Nov 1960
	(thousands of dollars)			
ALL PERMITS	$101,980	1,261,180	— 9	+ 6
New construction	92,118	1,125,022	— 9	+ 6
Residential (housekeeping)	52,193	648,728	— 14	+ 11
One-family dwellings	44,150	564,267	— 8	+ 3
Multiple-family dwellings	8,043	84,461	— 36	+113
Nonresidential buildings	39,925	476,294	— 1	— 1
Nonhousekeeping buildings (residential)	1,695	27,857	— 76	+ 21
Amusement buildings	693	7,922	+600	— 6
Churches	4,745	35,725	+ 53	— 13
Industrial buildings	2,604	33,212	— 65	— 7
Garages (commercial and private)	639	8,896	— 63	— 12
Service stations	1,105	10,956	+ 2	+ 13
Hospitals and institutions	2,568	46,149	+120	+ 20
Office-bank buildings	10,924	79,117	+ 73	— 11
Work and utilities	71	20,837	— 96	+ 20
Educational buildings	4,864	78,704	+ 27	— 14
Stores and mercantile buildings	6,136	96,019	+ 26	+ 4
Other buildings and structures	3,881	30,900	+134	+ 39
Additions, alterations, and repairs	9,862	136,158	— 6	+ 13

The current federal budget for civil defense is $207 million with almost half that amount ($93 million) designated for surveying and marking public buildings that can be used as shelters. Over one-fourth of this amount will be used for shelter equipment and supplies and another $38 million on warning and detection systems and on research and development.

After the federal shelter inventory search, the budget will probably be greatly enlarged to modify existing structures. Expectations of the most optimistic are that this current budget will serve to locate 50 million possible shelter spaces—enough for less than one-fourth of the population. In addition to a larger budget, other aids to provide shelter protection might come in the form of tax incentives such as deductions given to business and individuals for shelter construction. The need for shelter does exist, and a nationwide policy will probably emerge in the near future.

Other government action might occur at the state level. For instance, Governor Rockefeller has urged that the State of New York pass a compulsory shelter-building program for that state. Wisconsin officials have exempted shelters from local property taxes as an incentive. Others have considered state income tax exemptions in the amount of the shelter constructed or some smaller set amount. Many of these programs will be tabled as group shelters get the spotlight. Preference is being given to group shelters on a government basis, not for the improved protection during an actual attack, but for additional facilities such as equipment and supplies that could be provided. Also, special skills and talents in the group could be utilized in the post-attack which would not be available to individual families that might be caught half-prepared and isolated.

At any rate the future market for shelter construction will depend upon all levels of the government as well as the individual. Due to the nature of shelters and their respective physical characteristics, this market will be highly diversified as to type of materials used and the contracting units which will build them. Smaller contractors and companies will be able to enter the market for the family shelter as they have in the past few months. Some of these will provide inadequate structures and eventually be driven out by the quality builders who know their business. Compotential buyer who will value information about shelters, hundreds of new companies springing up overnight to meet this new demand. Much of this growth has just served to confuse the shelter buyer, forcing him to make a decision between different materials and supplies.

This has caused the potential buyer in many instances to just look and not buy in the midst of his confusion. The marketing of family shelters must be oriented toward the potential buyer who will value information about shelters about the fallout and blast protection which is offered, about survival measures, and about the corresponding costs of each. An explanation that even a hole in the ground covered with sandbags will offer some fallout protection might be necessary. However, it should be emphasized that the average family probably does not want to have anything so unsightly in their back yard. Therefore, a happy medium must be reached by the buyer which will agree with his income and current budget. The buyer should be completely informed as to what he is getting as well as what he is not getting in the form of protection.

Group shelters will receive the attention of the larger contractors and companies, and heavy structural products will benefit from group shelter construction. One company is already offering a basic group shelter for 200 to 400 persons for $15,000. Livermore, California is currently considering a bond issue to build a $2 million shelter for the city's entire population of 16,000. Conversion of institutional basements or underground parking lots seems a logical approach since the major costs of conversion are for medical supplies, water, ventilation, food supplies, and sanitary systems. Additional construction costs are sometimes encountered in this situation if the building is strengthened structurally for more blast protection. Many buildings with some protection can be modified to reduce fallout radiation greatly. For example, window exposures which provide very little fallout protection may be modified with a variety of shields which reduce radiation penetration.

The fallout shelter is indeed a challenge to the construction industry. To those who help in solving the problems of shelter construction and the unique market involved, a good profit will be reaped. To others who fail to meet the challenge, it could prove to be only a costly venture.

LP GOES THE RURAL ROUTE

by James D. Gordon

NEVER AGAIN WILL THE MOST PRODUCTIVE FARMER BE THE one who simply rises earliest, plows deepest, knows intuitively what weather to prepare for and puts in the most hours pampering his crops and stock. Agriculture is progressively demanding a more technical approach, denying reliance upon tradition or custom. The individual farm owner, while still beset with the age-old problem of nature's inconsistency, must now be versed in genetics hybridization, chemistry, governmental policy, nutrition, mechanics, economics, and so on endlessly. Granted, not all farmers are so qualified, but those neglecting these subjects are most prevalent among the enormous farm exodus of the past half century.

Nor has this trend ceased. The obvious implication is that the land left behind is being absorbed by larger farms. The absorbers are, needless to say, expanding in size while dwindling in numbers. The following statistical testimony should suffice: 50 years ago Texas had 420,000 farms and ranches averaging 265 acres in size, while at present there are only 225,000 averaging 630 acres. This constitutes a 45% decrease in numbers and more than a doubling in average size. Moreover, the per-acre value of the land comprising Texas farms has catapulted 600% during the same period.

In sum, the typical Texas farm owner of today has invested in land alone an amount practically ten times as great as did his counterpart of a half century ago. At the same time, farmers are being subjected to a major and prolonged profit squeeze seldom paralleled in times past. Thus, the majority of farm owners have with little hesitation adopted new methods to increase or insure productivity. Obvious examples are fertilization and soil conservation. But, while related practices may enhance land value and/or crop yields, they give the farmer no assurance that the use made of his land—his choice of products—is sufficient to return the maximum profits possible.

Yet a tool has been developed which caters to such demands, though it is, regrettably, a rather mysterious subject to the vast majority of farmers. While not the panacea that some profess, it has proved itself effective in numerous instances since its recent inception. The technique is variously labeled linear programming (LP), activity analysis, or mathematical programming. Though many are repelled by its apparent complexity, in essence it is simply a highly formalized system of farm planning or land budgeting.

Linear Programming as a Mathematical Method of Budgeting

The budget analogy is worthy of elaboration for it may well remove at least a portion of the mystery which enshrouds the concept of linear programming. The budget, defined as an estimation of income and expenses for a given period of time, may rightfully claim linear programming as its offspring. The inheritance is significant. The two methods utilize the same general technique. Both necessitate the assumption of linearity. Stated negatively, neither functions properly if a constant input-output ratio does not exist. Were either method employed, it would be assumed that both revenue and expense incurred would double if production of slaughter calves was increased from 50 to 100 or corn from 10 to 20 acres.

The essence of the dissimilarity arises in the computational methods employed. Further, the budget infrequently considers more than two alternative production plans. It leaves all other possibilities unexamined. Typically, the conventional budget demands the maximum use of some single resource, almost invariably land but perhaps labor or capital.

Consider a Texas Blackland farmer who devotes the maximum amount of available land to the production of corn, maize, and cotton. Though such a plan fully exhausts the one resource—land, there remains an excess of both labor and capital. The situation appears to him ideal for the installation of a feedlot operation. Such a decision necessitates the reduction of one of the original crop allocations so that small grains may be produced to be included in the livestock ration. The chance that this final combination of products will maximize profits is infinitesimally small. Moreover, an attempt to prepare individual budgets for every possible combination of crops and livestock would require an inconceivable amount of time.

Linear programming assumes the otherwise impractical task of determining that particular assembly of enterprises which utilizes existing resources in the most effective manner. It will designate the combination which is superior to all others, a chore which budgeting does not normally attempt to undertake. In brief, linear programming permits the simultaneous consideration of numerous activities as well as their interrelations and demands upon existing resources.

The linear programming solution requires an elaborate procedure of trials and retrials. This process of iteration begins with a workable budget and with each successive reallocation it assures an improvement, i.e., a greater profit, until an optimal status has been attained.

Linear programming should be considered for use only on relatively large scale problems. If a problem is subject to budgeting, the more complex technique should be avoided.

Linear programming is the more efficient procedure only where the number of restricting resources and possible enterprises and techniques are large, particularly if answers must be precise.

Identity of a Problem Susceptible to Linear Programming

The following list of conditions summarizes those features which combined provide a basis for the application of linear programming.

1. The problem must involve the maximization or minimization of a specified activity. This could be an analysis of profit opportunities or an attempt to discover a plan incurring a minimum cost.

2. Only one objective may be sought. This is usually a plan which maximizes profits.

3. There must be alternative courses of action available. If a farmer is unwilling or incapable of considering any crop save peanuts and abhors livestock and poultry, his dilemma is not subject to mathematical treatment.

4. Resources must be limited to the extent that not all of the alternative projects may be performed most effectively. If land, labor, and capital are in such abundance that all activities may be sustained, linear programming is ineffective.

5. A linear relationship among the variables is necessitated. The matter of a constant input-output ratio has been discussed.

6. An assumption of independence must be made. Resource requirements and net profit must be the same whether an individual activity functions alone or is combined with other farm enterprises.

7. Finally, all data is required to be in numerical terms.

This may appear to be an unrealistic assembly of prerequisites. Nevertheless, most farm problems which evolve from efficiency consciousness may be made to comply with each of these conditions.

Primary Applications

As has been persistently asserted, linear programming facilitates the most efficient use of farm resources. The prerequisite conditions have been enumerated and the essential data specified. Having complied, the farmer may then proceed to apply linear programming to any one of the following inquiries:

LP in Practice

The ensuing are intended to illustrate typical, though simplified, instances in which this technique has been successfully applied. While only 5 crops are considered in the first illustration, the latter problems treat as many as 25 or more activities. Further, there is herein no attempt made to enable the reader actually to compute an optimum program. The procedure normally employed is as tedious as it is time consuming. Were it not for the ability of electronic computers to assume this burden, linear programming could seldom be considered a practical approach to an allocation problem.

Example 1.

A farmer, familiar with the production of cotton, alfalfa, barley, sugar beets, and potatoes, purchased a 150 acre farm in Deaf Smith County and requested a program which would utilize his resources in the most profitable manner. He indicated that the only factors which would restrict the production plan were: (1) the number of acres available, (2) the amount of water available during different periods of the season, and (3) the size of the acreage allotment of cotton. However, in addition to these absolute limitations, the farmer decided voluntarily to restrict his potato acreage to not more than 50 acres because of the extreme variability of potato prices. His cotton acreage allotment was 60 acres and the water limitations were 2,200 acre-inches during period 1, 2,100 for period 2, and 730 for period 3. The resource requirements of the various crops were as follows:

Item	*Cotton*	*Potatoes*	*Alfalfa*	*Sugar beets*	*Barley*
Cropland	1	1	1	1	1
Water, period 1	4.0	13.3	15.8	13.0	6.3
Water, period 2	16.6	0	22.2	42.7	0
Water, period 3	7.8	0	11.1	3.3	0
Net cash return	$207	$200	$86	$136	$29

The final iteration in the solution process indicated that profits would be maximized if the following plan were employed: 5 acres of barley, 16 acres of sugar beets, 19 acres of alfalfa, 60 acres of cotton, and 50 acres of potatoes. Inserting these figures into the linear function, the actual profit figure is deduced.

$$\$207\ (60) + \$200\ (50) + \$86\ (19) + \$136\ (16) + \$29\ (5) = \$26{,}375.00$$

With this program, only one resource was in excess supply, 755 units of water during period 1.

Example 2.

This problem, encountered by a North Texas stockman, involves the selection of a livestock enterprise which will fit a given cropping system. The farm under analysis consists of 320 acres, half in corn and a quarter each in oats and an alfalfa-brome grass mixture. Two men provide 480 labor hours per month. However, the amount which may be applied to livestock is that which remains after crop requirements have been met.

Consideration is to be given 5 operations: spring litter hogs, x_1; fall litter hogs, x_2; full-feed drylot cattle, x_3; full-feed pasture cattle, x_4; and delayed-feeding cattle, x_5. In addition, the production cost occasioned by the use of corn, (x_6); protein feed, (x_7); and the purchase of feeder calves, (x_8), would be taken into account. From the foregoing, the net income equation may be constructed by introducing expected prices: $I = \$305x_1 + \$280x_2 + \$370x_3 + \$355x_4 + \$355x_5 - \$1.48x_6 - \$0.47x_7 - \$130x_8$

A refined solution necessitates the formulation of 19 restraints. Twelve of these are created by the monthly labor supply. The January restriction typifies each of these relationships. The labor consumed during this month by the livestock operations may not exceed 420 hours. Each unit of x_1 requires 1.4 hours, x_2 1.8 hours, x_3 1.4 hours, and x_4 and x_5 1.4 hours. Hence, the January inequality

$$1.4x_1 + 1.8x_2 + 1.5x_3 + 1.4x_4 + 1.4x_5 \leq 420.$$

The 80 acres of alfalfa-brome grass, which may be utilized as either pasture or hay, creates a restriction for each of the three two-month periods during which grass

1. Best combination of (a) crops, (b) livestock, (c) both.
2. Best or least cost technique (a) type of mechanization, (b) strains and quality of livestock or crops.
3. Optimum assembly of all factors considered as a unit.

The more common of these procedures is the all-inclusive analysis. A program thus intended may inspect 25 or more possible activities. A realistic examination may demand that individual crops be compared using various types and grades of seed, a number of fertilizer applications, or with several unique irrigational plans. Livestock requires equivalent elaboration concerning the numerous feeding programs, each with a specific duration and feed mix. Yet, if several resources have specific limits, linear programming will designate the one optimal combination.

The sophisticated practitioner of the linear programming method, upon confronting a problem area, will immediately assemble the relevant information into two divisions. Likewise, he will acknowledge an indispensable condition which all activities must meet. This initial arrangement facilitates the computational process. The ensuing discussion lists each of these three necessary components.

1. The Linear Function. Of ultimate concern is that sum denoted by the letter Z, for this represents the amount to be maximized (profit) or minimized (cost). If maximum profit is the objective of a farmer who has proposed corn and maize as alternatives to cotton, the linear function would be (net profit per acre of cotton) × (acres of cotton) + (net profit per acre of corn) × (acres of corn) + (net profit per acre of maize) × (acres of maize) = Z.

2. Resource Restrictions. If, in the above, land was the only limitation upon productivity capacity, a pencil would be a more appropriate tool than a computer. However, few farmers are so fortunate. Were this not the case, linear programming for farms would be a superfluous activity.

3. Nonnegativity Condition. The mathematical gymnastics of the iterative computation requires every problem to specify that all of the variables (each activity to which resources may be allocated) be equal to or greater than zero. The method used to compute the optimal solution has no appreciation for the fact that the farmer is incapable of planting, for example, −20 acres of cotton. Were this requirement deleted, the final solution would invite programs providing for negative allocations.

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would be provided. For example, no more than 5,200 pasture days may be consumed between April 15 and June 15. The unit pasture acre signifies the amount of pasture required per day to sustain a cow receiving no other feed. These units convert to a ton of hay at a rate of 50 to 1. Computing the pasture-day demands made by each activity during the same period and introducing them as coefficients, the following inequality is obtained:

$$16x_1 + 0x_2 + 0x_3 + 12x_4 + 35x_5 \leq 5{,}200$$

Thus, the restraints associated with the limited quantities of labor and pasture have been imposed. The remaining requirements are stated as equalities—sums which must be identical to other sums. These pertain to the utilization of the corn, protein feed, and feeder calves purchased as well as hay produced. The quantities produced or purchased may neither exceed nor fall short of the amounts consumed. The condition for calf purchases affords an example. The number of animals demanded in the implementation of systems x_3, x_4, and x_5 should be reflected in x_8, the number bought. Therefore,

$$x_3 + x_4 + x_5 - x_8 = 0.$$

In less time than it took the farmer to slop his pigs, an electronic digital computer emitted the following advice: profits would be maximized with 3 litters of fall pigs, x_2, and 72 cattle conforming with system x_4. The employment of these two activities incurred 4,302 units of x_6, 14,370 of x_7 and 72 of x_8. Consequently, profits were projected to be $10,080 if this optimum allocation of resources was installed.

Example 3.

A somewhat more elaborate model, this illustration sought for a Blackland farmer the most profitable combination of 27 possible activities in the face of 20 restraints. Resources included 240 acres of cropland plus the labor of two men at a uniform rate of 480 hours per month.

Of the 11 livestock activities to be considered, one through four are systems of handling hogs, five and six are methods of feeding 400-pound calves, seven and eight are feeding systems for 650-pound yearling steers, nine is a yearling heifer feed plan, and ten and eleven are a beef-cow and dairy-cow enterprise, respectively. Activities 12 through 19 represent various crop rotation plans. Costs for each include both production and soil conservation expenses. Activity 20 is for supplement buying, 21 grain buying, and 22 indicates grain selling. Activities 23 through 25 are associated with various hay-making activities. Finally, 26 signifies calf selling, and 27 calf buying.

Individual restrictions on labor, 1 through 12, are constructed for each month. Next, the solution must assume that the quantity of supplement purchased is equated with the amount consumed by the livestock. This is accomplished in an equation, restraint 13. In a like manner, equations 14 through 19 treat grain, hay, pasture, and calf purchases. Imposed by the final restriction, 20, is the limit of land available.

In the deduction of an optimal combination of the 27 activities, the computer whirled through 39 iterations. The exercise lasted twenty-five minutes. The machine then yielded the following program:

Livestock	**Number**
(1) Two-litter system of hogs	43
(5) Calves on pasture	40
(7) Yearling steers on pasture	48
(9) Yearling heifers—dry lot	23
Crops	**Acres**
Corn-corn-oats, clover-clover rotation, contoured	12
Corn-corn-oats-clover rotation, contoured	228
Bushels of corn equivalent sold	160.7
Hundredweight of supplement purchased	712.7

Substituting these values into the profit equation, the net income is determined to be $22,200.

Restrictions upon the ability to produce have various origins but all focus upon the triad of land, labor, and capital. Each of these resources may be subject to any number of influences, the more frequent of which are indicated in the following:

LAND

1. no more available for either sale or lease
2. government regulation on crop acreage
3. pasture lands incapable of cultivation
4. fertility of soil insufficient for raising certain crops
5. leases stipulating the extent to which particular crops can be grown

LABOR

1. dependence upon family labor
2. help available only during certain seasons, as with migrant labor or school children
3. other required activities which limit time available

CAPITAL

1. limits on credit obtainable
2. individual policy
3. funds available for some activities but not others

Again, the restrictions prevailing upon a particular problem are the limits of available resources. Yet only in isolated cases will the final plan utilize 100% of every resource at the farmer's disposal. For this reason the restrictions are normally written as inequalities, meaning that the total demands made upon land, labor, or capital must be equal to or less than the amount available of each. For example, consider a farmer who is capable of mustering 1,200 hours of labor during the growing season and has chosen wheat and oats as possible crops. He calculates that an acre of wheat while requiring 5 hours of labor will yield 25 bushels, or .2 hours per bushel. Oats, on the other hand, average 30 bushels and use 3 hours of labor, or .1 hours per bushel. The labor restriction would therefore be stated: .2 hours (per bushel of wheat) + .1 hours (per bushel of oats) $\leqslant$ 1,200 hours. With few exceptions, all restrictions, whether on land, labor, or capital, are formulated in an equivalent manner.

Increasing the Scope

Determined agricultural economists, eagerly engaged in developing the capabilities of linear programming, have succeeded in adapting it to a progressively greater range of practical farm problems. A fundamental impediment to the utility of this technique had previously been that resources were in fact seldom subject to absolute restrictions. This was particularly evident with regard to capital and labor. As a consequence, farm economists have busied themselves in the perfection of methods which derive optimum plans for each of a series of different resource levels. This is necessitated because of the fact that an alteration of any one restriction will most likely change the optimum plan.

Similarly, the inability of economists to provide reliable price projections precipitated the development of methods to determine the best plans at various price ranges. A parallel technique for varying per acre yields has also been implemented. Perhaps the ultimate device in practical programming is a method which allows consideration of risk aversion. This approach attempts to compensate for factors which the farmer has no way of predicting, such as the implications of bad weather, machine breakdowns, or the disability of a laborer.

Professional Applicators

The practice of planning farm operations through linear programming has in the past several years emerged from the journals of university agricultural economists and has been assumed by enterprising farm consulting services. Certainly, mathematical programming provides an impressive supplement to the battery of tools intended to augment efficient farm management. Sporting IBM electronic computers, one such firm assures a prospective client that after a thorough analysis of the farm plant, they will provide an optimum plan which will normally increase operating profits by 25% and frequently as much as 33%. Upon request, they will furnish a $100 per day consultant to ascertain sufficient information to feed their computers.

The firm asserts that linear programming, as "agriculture's most advanced analysis technique," is designed to put farm or ranch operations on a business-like basis. The primary objective is to indicate to the farm owner "how to use his resources—land, labor, and capital—to the best possible advantage."

In proceeding with the formulation of a precision plan, several steps are necessitated. First, consideration must be given both the farm's resources and every influencing factor such as climate, soils, credit, type and location of markets, topography, machinery and facilities. Next, the analyst should derive all of the adapted farm income opportunities. An enduring program demands the careful determination of revenue and expense projections for each enterprise system. Finally, the information is coded into punched cards and devoured by a computer. The result is invariably, they profess, a more efficient and more profitable farm operation.

Nor has professional programming been restricted to individual farms. The entire 900 square-mile area of Sherman County on the northern border of the Panhandle was the site of a recent regional development program. Linear programming facilitated formulations for county-wide plans of alternating livestock and cropping enterprises. A typical farm was set up in several areas of the county and optimum plans of resource allocation computed for each. Working both with farmers and Extension Service specialists, the consultants provided (1) detailed cost and return budgets for each of 30–40 activities, and (2) a table of the amounts of resources—land, labor, and capital—that each activity required to produce $1,000 of income. Optimum plans for the typical farms were calculated for as many as a dozen levels of capital. Thus, as input-output data were quite similar for each of the areas surrounding the model farms, individual programming was unnecessary.

Various enterprises have been engaged in agricultural development programming since the mid-1940's. However, the Sherman County project was the first attempt at employing linear programming and computer analysis. The availability of this technique has provided no small impetus to further large-scale endeavors.

Local Business Conditions

As a reader's guide to better utility of retail sales data, an average per cent change from the preceding month has been computed for each month of the year. This percent change is marked with a dagger (†) following that figure. The next percent change represents the actual change from the preceding month. A large variation in the normal seasonal from the actual figure represents an abnormal month. This third percent change is the percent change for the identical period the preceding year showing the change between the two years. Postal receipt information which is marked by an asterisk (*) indicates cash receipts received during the four-week postal accounting period ending December 8, 1961, and the percent changes from the preceding period and the comparable period in the previous year. Annual postal data are for 13 four-week periods falling closest within 1960 and 1961 calendar years. Changes less than one-half of one percent are marked with a double asterisk (**). Houston and Waco retail sales information are reported in cooperation with the University of Houston Center for Research in Business and Economics and Baylor Bureau of Business Research, respectively. End-of-month deposits as reported represent money on deposit in individual demand deposit accounts on the last day of the month. All population figures are final 1960 census data. Figures under Texarkana with the following symbol (§) are for Texarkana, Texas, only.

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
ABILENE (pop. 90,368)			
Retail sales	— 1†	+ 2	— 1
Apparel stores	— 1†	— 7	— 14
Automotive stores	— 1†	**	+ 3
Drug stores	— 5†	+ 1	— 1
Food stores	— 3†	— 3	— 4
General merchandise stores	+ 2†	+ 9	+ 4
Lumber, building material, and hardware stores	— 9†	+ 5	— 7
Postal receipts* $	121,025	+ 13	+ 4
Building permits, less federal contracts $	814,439	— 62	— 46
Bank debits (thousands) $	110,021	+ 1	+ 4
End-of-month deposits (thousands) ‡ $	70,764	— 1	+ 10
Annual rate of deposit turnover	18.6	— 1	+ 12
Employment (area)	86,800	+ 2	+ 16
Manufacturing employment (area)	4,140	+ 5	+ 27
Percent unemployed (area)	5.1	— 4	— 12
ALICE (pop. 20,861)			
Retail sales			
Lumber, building material, and hardware stores	— 9†	— 2	+ 9
Postal receipts* $	16,596	+ 13	+ 5
Building permits, less federal contracts $	165,191	+ 7	+ 22
ALPINE (pop. 4,740)			
Postal receipts* $	4,582	+ 15	**
Building permits, less federal contracts $	1,600	+256	.....
Bank debits (thousands) $	8,026	— 5	+ 14
End-of-month deposits (thousands) ‡ $	4,072	— 1	+ 5
Annual rate of deposit turnover	8.9	— 8	+ 9
AMARILLO (pop. 137,969)			
Retail sales	— 1†	**	— 9
Apparel stores	— 1†	+ 12	— 8
Automotive stores	— 1†	— 3	— 13
Eating and drinking places	— 6†	— 8	— 6
Furniture and household appliance stores	— 1†	— 4	— 11
Postal receipts* $	209,882	+ 1	— 3
Building permits, less federal contracts $	2,660,925	+ 56	+ 49
Bank debits (thousands) $	237,717	— 4	+ 6
End-of-month deposits (thousands) ‡ $	117,055	— 2	— 1
Annual rate of deposit turnover	24.1	— 2	+ 5
Employment (area)	52,100	**	— 4
Manufacturing employment (area)	4,810	**	— 20
Percent unemployed (area)	5.6	+ 30	+ 30
ANDREWS (pop. 11,135)			
Postal receipts* $	8,798	+ 61	+ 12
Building permits, less federal contracts $	139,810	+ 19	+ 59
Bank debits (thousands) $	4,915	— 7	— 9
End-of-month deposits (thousands) ‡ $	10,192	+ 8	+ 7
Annual rate of deposit turnover	6.0	— 21	— 13
ARANSAS PASS (pop. 6,956)			
Postal receipts* $	4,498	+ 13	— 6
Building permits, less federal contracts $	14,000	+ 39	+ 57
Bank debits (thousands) $	4,843	— 13	+ 14
End-of-month deposits (thousands) ‡ $	5,470	+ 3	+ 24
Annual rate of deposit turnover	10.3	— 17	— 6
ARLINGTON (pop. 44,775)			
Retail sales			
Lumber, building material, and hardware stores	— 9†	— 22	— 2
Postal receipts* $	45,021	+ 11	**
Building permits, less federal contracts $	1,141,696	+ 1	+ 73
Bank debits (thousands) $	32,861	**	+ 17
End-of-month deposits (thousands) ‡ $	21,725	**	+ 9
Annual rate of deposit turnover	18.1	— 3	+ 9
Employment (area)	216,200	**	+ 2
Manufacturing employment (area)	51,250	— 1	— 4
Percent unemployed (area)	5.3	+ 8	**
ATHENS (7,086)			
Postal receipts* $	6,550	— 5	— 2
Bank debits (thousands) $	7,933	— 15	+ 7
End-of-month deposits (thousands) ‡ $	7,977	— 6	— 1
Annual rate of deposit turnover	11.6	— 14	+ 5
AUSTIN (pop. 186,545)			
Retail sales	— 1†	+ 4	**
Apparel stores	— 1†	— 2	— 2
Automotive stores	— 1†	+ 2	+ 8
Drug stores	— 5†	— 1	+ 2
Eating and drinking places	— 6†	— 6	+ 5
Food stores	— 3†	— 9	+ 2
Furniture and household appliance stores	— 1†	— 1	+ 3
Lumber, building material, and hardware stores	— 9†	— 6	— 4
Postal receipts* $	394,757	+ 2	+ 6
Building permits, less federal contracts $	6,454,809	+ 59	+149
Bank debits (thousands) $	229,154	— 10	+ 11
End-of-month deposits (thousands) ‡ $	160,975	+ 5	+ 13
Annual rate of deposit turnover	17.5	— 12	+ 1
Employment (area)	80,400	**	+ 6
Manufacturing employment (area)	5,600	+ 1	— 6
Percent unemployed (area)	3.9	+ 11	— 7

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
BAY CITY (pop. 11,656)			
Retail sales			
Automotive stores	— 1†	+ 12	+ 4
Postal receipts* $	13,371	+ 13	+ 8
Bank debits (thousands) $	15,716	— 10	+ 16
End-of-month deposits (thousands)‡ $	24,161	+ 3	+ 15
Annual rate of deposit turnover	7.9	— 16	+ 1
BAYTOWN (pop. 28,159)			
Postal receipts* $	25,527	— 1	+ 3
Building permits, less federal contracts $	453,085	+ 15	+153
Bank debits (thousands) $	23,972	— 3	+ 13
End-of-month deposits (thousands)‡ $	24,213	+ 1	+ 16
Annual rate of deposit turnover	11.9	— 4	+ 5
Employment (area)	513,900	— 1	+ 1
Manufacturing employment (area)	93,900	**	**
Percent unemployed (area)	4.5	+ 7	— 4
BEAUMONT (pop. 119,175)			
Retail sales	— 1†	**	+ 22
Apparel stores	— 1†	+ 15	+ 13
Automotive stores	— 1†	— 7	+ 37
Furniture and household appliance stores	— 1†	— 7	— 26
Lumber, building material, and hardware stores	— 9†	— 16	+ 5
Postal receipts* $	126,067	+ 9	— 8
Building permits, less federal contracts $	5,400,573	— 8	+179
Bank debits (thousands) $	176,693	**	+ 9
End-of-month deposits (thousands)‡ $	105,623	+ 2	— 1
Annual rate of deposit turnover	20.8	— 3	+ 7
Employment (area)	105,200	— 3	— 1
Manufacturing employment (area)	30,420	— 11	— 10
Percent unemployed (area)	6.9	+ 17	+ 5
BEEVILLE (pop. 13,811)			
Retail sales			
Lumber, building material, and hardware stores	— 9†	— 4	+ 4
Postal receipts* $	12,897	+ 21	+ 1
Building permits, less federal contracts $	67,280	— 29	+ 94
Bank debits (thousands) $	9,707	+ 1	+ 4
End-of-month deposits (thousands)‡ $	13,893	+ 2	+ 5
Annual rate of deposit turnover	8.5	— 2	— 1
BELLAIRE (pop. 19,872)			
Postal receipts* $	36,641	+ 8	+ 1
Building permits, less federal contracts $	159,480	+121	+104
Bank debits (thousands) $	13,052	— 5	.....
End-of-month deposits (thousands)‡ $	9,154	— 1	.....
Annual rate of deposit turnover	17.0	— 5	.....
Employment (area)	513,900	— 1	+ 1
Manufacturing employment (area)	93,900	**	**
Percent unemployed (area)	4.5	+ 7	— 4
BIG SPRING (pop. 31,230)			
Retail sales			
Furniture and household appliance stores	— 1†	— 6	+ 23
Lumber, building material, and hardware stores	— 9†	— 13	+ 3
Postal receipts* $	31,934	**	+ 6
Building permits, less federal contracts $	350,881	— 48	+113
Bank debits (thousands) $	45,703	+ 7	+ 8
End-of-month deposits (thousands)‡ $	28,305	— 1	+ 1
Annual rate of deposit turnover	19.2	+ 2	+ 5
BISHOP (pop. 3,722)			
Postal receipts* $	2,446	— 8	— 14
Building permits, less federal contracts $	3,700	— 63	.....
Bank debits (thousands) $	2,183	— 20	+ 11
End-of-month deposits (thousands)‡ $	3,125	— 9	+ 19
Annual rate of deposit turnover	8.0	— 14	— 8

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
BRADY (pop. 5,338)			
Postal receipts* $	4,951	+ 11	+ 6
Building permits, less federal contracts $	15,800	— 66	— 65
Bank debits (thousands) $	4,552	— 13	**
End-of-month deposits (thousands)‡ $	7,610	— 1	+ 9
Annual rate of deposit turnover	7.1	— 15	— 9
BRENHAM (pop. 7,740)			
Postal receipts* $	8,190	+ 7	— 6
Building permits, less federal contracts $	111,498	+256	+323
Bank debits (thousands) $	10,456	— 16	+ 10
End-of-month deposits (thousands)‡ $	13,145	— 8	+ 4
Annual rate of deposit turnover	9.4	— 17	+ 6
BROWNSVILLE (pop. 48,040)			
Retail sales	— 1†	— 8	— 10
Automotive stores	— 1†	— 14	— 24
Lumber, building material, and hardware stores	— 9†	— 15	+ 28
Postal receipts* $	30,363	— 1	— 1
Building permits, less federal contracts $	412,006	+183	+184
Bank debits (thousands) $	31,024	— 12	— 9
End-of-month deposits (thousands)‡ $	20,085	— 3	— 5
Annual rate of deposit turnover	18.3	— 12	— 6
BROWNWOOD (pop. 16,974)			
Retail sales			
Apparel stores	— 1†	— 1	— 5
Furniture and household appliance stores	— 1†	+ 47	+ 14
Postal receipts* $	26,289	+ 21	— 6
Building permits, less federal contracts $	21,300	— 43	— 40
Bank debits (thousands) $	15,314	— 7	+ 10
End-of-month deposits (thousands)‡ $	13,448	+ 4	+ 5
Annual rate of deposit turnover	13.9	— 9	+ 8
BRYAN (pop. 27,542)			
Retail sales	— 1†	+ 5	+ 1
Food stores	— 3†	**	— 8
Postal receipts* $	21,480	— 7	— 8
Building permits, less federal contracts $	57,874	— 64	— 62
Bank debits (thousands) $	26,147	— 17	+ 13
End-of-month deposits (thousands)‡ $	17,875	— 1	+ 10
Annual rate of deposit turnover	17.5	— 18	**
CALDWELL (pop. 2,204)			
Postal receipts* $	2,536	+ 14	— 7
Bank debits (thousands) $	2,613	— 6	+ 14
End-of-month deposits (thousands)‡ $	4,314	+ 8	+ 5
Annual rate of deposit turnover	7.4	— 11	+ 10
CAMERON (pop. 5,640)			
Postal receipts* $	6,376	+ 38	+ 22
Building permits, less federal contracts $	30,859	+236	+482
Bank debits (thousands) $	5,522	— 8	+ 12
End-of-month deposits (thousands)‡ $	5,185	— 5	+ 7
Annual rate of deposit turnover	12.4	— 2	+ 15
CANYON (pop. 5,864)			
Bank debits (thousands) $	6,261	— 4	.....
End-of-month deposits (thousands)‡ $	6,674	— 3	.....
Annual rate of deposit turnover	11.1	— 11	.....
CARROLLTON (pop. 4,242)			
Building permits, less federal contracts $	576,716	+204	+930
Bank debits (thousands) $	3,564	— 9	— 8
End-of-month deposits (thousands)‡ $	2,411	— 4	+ 6
Annual rate of deposit turnover	17.4	— 8	— 13
CHILDRESS (pop. 6,399)			
Postal receipts* $	5,482	— 11	— 30
Building permits, less federal contracts $	31,475	— 26	+272
Bank debits (thousands) $	11,885	+ 17	.....
End-of-month deposits (thousands)‡ $	7,913	+ 10	.....
Annual rate of deposit turnover	18.8	+ 3	.....

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
CISCO (pop. 4,499)			
Postal receipts*	$ 4,554	+ 21	**
Bank debits (thousands)	$ 3,273	— 7	+ 3
End-of-month deposits (thousands)‡	$ 3,910	**	— 3
Annual rate of deposit turnover	10.1	— 8	+ 4
CLEBURNE (pop. 15,381)			
Postal receipts*	$ 16,779	+ 20	+ 6
Building permits, less federal contracts	$ 100,439	+133	.....
Bank debits (thousands)	$ 10,208	— 3	**
End-of-month deposits (thousands)‡	$ 11,691	**	+ 2
Annual rate of deposit turnover	10.5	— 8	— 2
Employment (area)	451,100	**	+ 3
Manufacturing employment (area)	96,100	+ 2	+ 3
Percent unemployed (area)	4.3	+ 8	— 4
CLUTE (pop. 4,501)			
Postal receipts*	$ 2,420	+ 34	+ 11
Building permits, less federal contracts	$ 52,600	— 47	+ 46
Bank debits (thousands)	$ 1,299	— 35	— 9
End-of-month deposits (thousands)‡	$ 1,797	+ 13	+ 33
Annual rate of deposit turnover	9.2	— 42	— 32
COLLEGE STATION (pop. 11,396)			
Postal receipts*	$ 17,808	— 2	+ 44
Building permits, less federal contracts	$ 78,888	+109	.....
Bank debits (thousands)	$ 3,793	— 4	+ 11
Annual rate of deposit turnover	16.8	**	— 3
End-of-month deposits (thousands)‡	$ 2,696	— 1	+ 12
COLORADO CITY (pop. 6,457)			
Retail sales			
Lumber, building material, and hardware stores	— 9†	— 4	— 23
Postal receipts*	$ 6,580	+ 28	+ 8
Bank debits (thousands)	$ 7,356	+ 18	— 4
End-of-month deposits (thousands)‡	$ 6,195	+ 8	— 19
Annual rate of deposit turnover	14.5	+ 10	+ 15
COPPERAS COVE (pop. 4,567)			
Postal receipts*	$ 3,028	+ 33	+ 8
Building permits, less federal contracts	$ 368,400	+ 28	+399
Bank debits (thousands)	$ 1,062	**	+ 54
End-of-month deposits (thousands)‡	$ 739	+ 3	— 11
Annual rate of deposit turnover	17.5	+ 2	+ 55
CORPUS CHRISTI (pop. 167,690)			
Retail sales	— 1†	+ 6	+ 19
Apparel stores	— 1†	+ 17	+ 8
Automotive stores	— 1†	+ 6	+ 20
Nurseries	.....	— 15	— 6
Postal receipts*	$ 172,783	+ 4	— 4
Building permits, less federal contracts	$ 1,354,345	— 22	+ 54
Bank debits (thousands)	$ 209,238	+ 6	+ 11
End-of-month deposits (thousands)‡	$ 112,363	— 5	+ 4
Annual rate of deposit turnover	21.7	+ 4	+ 4
Employment (area)	64,200	**	**
Manufacturing employment (area)	8,500	**	**
Percent unemployed (area)	5.7	+ 10	— 16
CORSICANA (pop. 20,344)			
Postal receipts*	$ 95,107	+155	— 1
Building permits, less federal contracts	$ 22,200	— 65	+ 71
Bank debits (thousands)	$ 18,749	— 7	+ 17
End-of-month deposits (thousands)‡	$ 20,872	**	+ 4
Annual rate of deposit turnover	11.0	— 10	+ 13
CRYSTAL CITY (pop. 9,101)			
Postal receipts*	$ 2,798	— 18	— 5
Building permits, less federal contracts	$ 28,350	— 62	+ 37
Bank debits (thousands)	$ 2,834	+ 2	+ 15
End-of-month deposits (thousands)‡	$ 2,929	— 2	+ 17
Annual rate of deposit turnover	11.5	— 6	— 2

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
DALLAS (pop. 679,684)			
Retail sales	+ 3†	+ 7	+ 8
Apparel stores	— 1†	+ 20	+ 5
Automotive stores	+ 7†	+ 5	+ 28
Eating and drinking places	— 15†	— 12	— 3
Florists	+ 3†	+ 7	+ 7
Food stores	+ 1†	— 3	+ 2
Furniture and household appliance stores	— 1†	— 1	+ 12
General merchandise stores	+ 6†	+ 22	**
Lumber, building material, and hardware stores	— 14†	— 7	+ 18
Nurseries	.....	+ 4	+ 4
Office, store, and school supply dealers	**	— 2	+ 2
Postal receipts*	$ 2,575,206	+ 7	— 1
Building permits, less federal contracts	$ 11,860,854	— 30	+ 25
Bank debits (thousands)	$ 3,107,190	— 3	+ 9
End-of-month deposits (thousands)‡	$ 1,249,869	**	+ 3
Annual rate of deposit turnover	29.8	— 5	+ 1
Employment (area)	451,100	**	+ 3
Manufacturing employment (area)	96,100	+ 2	+ 3
Percent unemployed (area)	4.3	+ 8	— 4
DEER PARK (pop. 4,865)			
Postal receipts*	$ 4,454	— 9	— 3
Building permits, less federal contracts	$ 66,550	— 74	+178
Bank debits (thousands)	$ 3,524	+ 11	+ 33
End-of-month deposits (thousands)‡	$ 2,168	— 6	+ 46
Annual rate of deposit turnover	18.9	— 2	— 5
Employment (area)	513,900	— 1	+ 1
Manufacturing employment (area)	93,900	**	**
Percent unemployed (area)	4.5	+ 7	— 4
DEL RIO (pop. 18,612)			
Retail sales			
Lumber, building material, and hardware stores	— 9†	— 4	— 11
Postal receipts*	$ 12,785	+ 14	— 7
Building permits, less federal contracts	$ 58,606	— 1	+ 12
Bank debits (thousands)	$ 9,673	— 3	+ 2
End-of-month deposits (thousands)‡	$ 13,381	— 3	+ 5
Annual rate of deposit turnover	8.6	— 2	— 3
DENISON (pop. 22,748)			
Retail sales	— 1†	+ 1	— 2
Automotive stores	— 5†	+ 17	+ 26
Postal receipts*	$ 21,658	+ 13	— 5
Building permits, less federal contracts	$ 325,744	+ 73	+ 35
Bank debits (thousands)	$ 15,861	+ 1	— 4
End-of-month deposits (thousands)‡	$ 14,302	— 1	+ 2
Annual rate of deposit turnover	12.8	+ 2	— 7
DENTON (pop. 26,844)			
Postal receipts*	$ 34,744	— 10	+ 4
Building permits, less federal contracts	$ 326,400	— 26	— 18
Bank debits (thousands)	$ 20,029	— 11	+ 9
End-of-month deposits (thousands)‡	$ 22,768	— 1	+ 14
Annual rate of deposit turnover	10.5	— 15	— 7
Employment (area)	451,100	**	+ 3
Manufacturing employment (area)	96,100	+ 2	+ 3
Percent unemployed (area)	4.3	+ 8	— 4
DONNA (pop. 7,522)			
Postal receipts*	$ 3,476	+ 9	— 2
Building permits, less federal contracts	$ 16,515	+ 4	— 49
Bank debits (thousands)	$ 2,495	— 1	+ 12
End-of-month deposits (thousands)‡	$ 2,974	+ 1	+ 6
Annual rate of deposit turnover	10.1	— 4	+ 7
EDINBURG (pop. 18,706)			
Postal receipts*	$ 11,918	+ 24	— 4
Building permits, less federal contracts	$ 104,475	— 9	+ 12
Bank debits (thousands)	$ 17,483	+ 32	+ 21
End-of-month deposits (thousands)‡	$ 8,609	— 13	— 7
Annual rate of deposit turnover	22.6	+ 27	+ 21

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
ELECTRA (pop. 4,759)			
Postal receipts*	$ 4,207	+ 12	+ 5
Bank debits (thousands)	$ 2,623	+ 8	+ 1
End-of-month deposits (thousands) ‡	$ 3,391	+ 2	+ 31
Annual rate of deposit turnover	9.4	+ 1	— 14
EL PASO (pop. 276,687)			
Retail sales			
Automotive stores	— 1†	— 28	**
Postal receipts*	$ 318,947	+ 7	— 8
Building permits, less federal contracts	$ 8,478,693	+ 4	— 31
Bank debits (thousands)	$ 377,045	+ 6	+ 6
End-of-month deposits (thousands) ‡	$ 179,551	— 1	+ 6
Annual rate of deposit turnover	25.1	+ 2	**
Employment (area)	98,300	**	+ 2
Manufacturing employment (area)	14,150	— 1	+ 1
Percent unemployed (area)	4.3	+ 13	— 9
ENNIS (pop. 9,347)			
Building permits, less federal contracts	$ 40,813	+ 71	— 27
Bank debits (thousands)	$ 7,619	— 14	+ 9
End-of-month deposits (thousands) ‡	$ 7,676	**	+ 3
Annual rate of deposit turnover	11.9	— 14	+ 8
FORT STOCKTON (pop. 6,373)			
Bank debits (thousands)	$ 5,402	— 15	.....
End-of-month deposits (thousands) ‡	$ 5,044	— 1	.....
Annual rate of deposit turnover	12.8	— 16	.....
FORT WORTH (pop. 356,268)			
Retail sales	**†	+ 4	+ 3
Apparel stores	— 7†	— 2	+ 5
Automotive stores	+ 6†	+ 3	+ 17
Drug stores	— 3†	+ 5	+ 18
Eating and drinking places	— 8†	— 9	— 5
Food stores	— 7†	— 2	— 8
Furniture and household appliance stores	— 3†	+ 16	— 11
Gasoline and service stations	— 2†	— 4	+ 13
General merchandise stores	+ 14†	+ 15	+ 5
Lumber, building material, and hardware stores	— 14†	— 13	+ 9
Postal receipts*	$ 840,289	+ 2	+ 6
Building permits, less federal contracts	$ 2,035,827	+ 3	— 47
Bank debits (thousands)	$ 804,973	— 2	+ 9
End-of-month deposits (thousands) ‡	$ 387,705	— 1	+ 1
Annual rate of deposit turnover	24.7	— 3	+ 8
Employment (area)	216,200	**	+ 2
Manfacturing employment (area)	51,250	— 1	— 4
Percent unemployed (area)	5.3	+ 8	**
FREDERICKSBURG (pop. 4,629)			
Retail sales	— 1†	— 5	+ 8
Food stores	— 3†	+ 6	+ 6
General merchandise stores	+ 2†	+ 11	+ 5
Postal receipts*	$ 6,314	+ 48	+ 7
Building permits, less federal contracts	$ 82,400	+100	+ 35
Bank debits (thousands)	$ 8,126	**	+ 16
End-of-month deposits (thousands) ‡	$ 8,290	— 3	+ 4
Annual rate of deposit turnover	11.6	+ 3	+ 12
GALVESTON (pop. 67,175)			
Retail sales	— 1†	— 3	+ 29
Apparel stores	— 1†	— 3	+ 9
Food stores	— 3†	— 8	— 3
Postal receipts*	$ 86,588	**	— 6
Building permits, less federal contracts	$ 876,537	— 75	+ 13
Bank debits (thousands)	$ 90,293	**	+ 5
End-of-month deposits (thousands) ‡	$ 65,433	+ 2	+ 12
Annual rate of deposit turnover	16.7	— 5	— 4
Employment (area)	52,600	**	**
Manufacturing employment (area)	10,600	**	— 1
Percent unemployed (area)	8.5	+ 9	+ 49
GAINESVILLE (pop. 13,083)			
Retail sales			
Apparel stores	— 1†	+ 80	+ 11
Furniture and household appliance stores	— 1†	+ 2	+ 10
Postal receipts*	$ 14,568	+ 11	— 5
Building permits, less federal contracts	$ 80,573	— 65	.....
GALENA PARK (pop. 10,852)			
Postal receipts*	$ 4,744	— 7	— 18
Building permits, less federal contracts	$ 11,600	— 85	+209
Bank debits (thousands)	$ 4,652	— 4	+ 16
End-of-month deposits (thousands) ‡	$ 2,845	— 8	.....
Annual rate of deposit turnover	18.8	— 8	.....
Employment (area)	513,900	— 1	+ 1
Manufacturing employment (area)	93,900	**	**
Percent unemployed (area)	4.5	+ 7	— 4
GARLAND (pop. 38,501)			
Retail sales			
Automotive stores	— 1†	— 14	+ 25
Drug stores	— 5†	— 2	+ 13
Postal receipts*	$ 31,387	— 8	+ 1
Building permits, less federal contracts	$ 2,198,277	+161	+ 57
Employment (area)	451,100	**	+ 3
Manufacturing employment (area)	96,100	+ 2	+ 3
Percent unemployed (area)	4.3	+ 8	— 4
GATESVILLE (pop. 4,626)			
Postal receipts*	$ 5,210	+ 37	+ 7
Bank debits (thousands)	$ 5,290	— 4	+ 8
End-of-month deposits (thousands) ‡	$ 5,646	— 3	+ 5
Annual rate of deposit turnover	11.1	— 5	+ 5
GIDDINGS (pop. 2,821)			
Postal receipts*	$ 3,569	+ 1	— 12
Bank debits (thousands)	$ 2,890	— 9	+ 13
End-of-month deposits (thousands) ‡	$ 3,985	+ 2	— 3
Annual rate of deposit turnover	8.8	— 11	+ 9
GLADEWATER (pop. 5,742)			
Postal receipts*	$ 6,470	+ 17	— 7
Building permits, less federal contracts	$ 64,700	+327	— 21
Bank debits (thousands)	$ 3,480	**	+ 9
End-of-month deposits (thousands) ‡	$ 5,625	— 7	+ 19
Annual rate of deposit turnover	7.1	— 5	— 10
Employment (area)	28,800	**	+ 1
Manufacturing employment (area)	5,740	**	+ 8
Percent unemployed (area)	3.6	+ 9	— 28
GOLDTHWAITE (pop. 1,383)			
Postal receipts*	$ 1,826	+ 4	— 25
Bank debits (thousands)	$ 2,883	— 8	— 2
End-of-month deposits (thousands) ‡	$ 3,889	— 1	+ 10
Annual rate of deposit turnover	8.9	— 9	— 12
GRAHAM (pop. 8,505)			
Postal receipts*	$ 7,838	— 9	— 8
Building permits, less federal contracts	$ 14,520	+128	— 72
Bank debits (thousands)	$ 8,727	— 1	+ 6
End-of-month deposits (thousands) ‡	$ 10,379	— 1	**
Annual rate of deposit turnover	10.1	— 1	+ 4
GREENVILLE (pop. 19,087)			
Retail sales	— 1†	+ 6	+ 16
Apparel stores	— 1†	— 15	+ 2
Automotive stores	— 1†	+ 26	+ 38
Drug stores	— 5†	+ 5	+ 13
Lumber, building material, and hardware stores	— 9†	— 23	— 13
Postal receipts*	$ 31,320	+ 37	— 1
Building permits, less federal contracts	$ 120,415	— 33	— 13
Bank debits (thousands)	$ 15,194	— 9	— 6
End-of-month deposits (thousands) ‡	$ 16,849	+ 2	+ 7
Annual rate of deposit turnover	10.9	— 11	— 10

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
GRANBURY (pop. 2,227)			
Postal receipts*	$ 4,600	+119	— 8
Bank debits (thousands)	$ 1,488	— 3	.....
End-of-month deposits (thousands)‡	$ 2,086	+ 7	.....
Annual rate of deposit turnover	8.9	— 4	.....
GRAND PRAIRIE (pop. 30,386)			
Postal receipts*	$ 24,663	+ 24	— 4
Building permits, less federal contracts	$ 602,670	+ 21	+138
Bank debits (thousands)	$ 15,616	— 18	+ 17
End-of-month deposits (thousands)‡	$ 10,186	— 28	+ 12
Annual rate of deposit turnover	15.4	— 13	+ 18
Employment (area)	451,100	**	+ 3
Manufacturing employment (area)	96,100	+ 2	+ 3
Percent unemployed (area)	4.8	+ 8	— 4
HALE CENTER (pop. 2,196)			
Postal receipts*	$ 2,095	+ 20	+ 5
Building permits, less federal contracts	$ 22,500	+ 74	+423
Bank debits (thousands)	$ 4,211	+ 9	— 6
End-of-month deposits (thousands)‡	$ 4,663	+ 17	+ 11
Annual rate of deposit turnover	11.7	— 7	— 19
HARLINGEN (pop. 41,207)			
Retail sales			
Automotive stores	— 1†	— 5	— 1
Postal receipts*	$ 37,585	+ 5	— 18
Building permits, less federal contracts	$ 1,709,550	+1901	+310
Bank debits (thousands)	$ 37,724	+ 4	— 1
End-of-month deposits (thousands)‡	$ 27,443	— 5	+ 4
Annual rate of deposit turnover	16.1	+ 6	— 5
HEMPSTEAD (pop. 1,505)			
Postal receipts*	$ 4,398	— 46	+ 9
Bank debits (thousands)	$ 1,461	+ 24	+ 34
End-of-month deposits (thousands)‡	$ 1,914	+ 1	— 2
Annual rate of deposit turnover	9.2	+ 21	+ 42
HENDERSON (pop. 9,666)			
Retail sales			
Food stores	— 3†	— 4	— 12
Postal receipts*	$ 11,551	+ 45	+ 8
Building permits, less federal contracts	$ 48,425	— 37	— 62
Bank debits (thousands)	$ 7,077	— 13	— 1
End-of-month deposits (thousands)‡	$ 15,920	+ 1	+ 2
Annual rate of deposit turnover	5.4	— 14	**
HEREFORD (pop. 7,652)			
Postal receipts*	$ 9,549	+ 5	+ 8
Building permits, less federal contracts	$ 57,700	— 25	— 67
Bank debits (thousands)	$ 15,350	+ 7	— 5
End-of-month deposits (thousands)‡	$ 12,624	**	+ 11
Annual rate of deposit turnover	14.6	+ 1	— 16
HOUSTON (pop. 938,219)			
Retail sales	— 2†	— 4	+ 13
Apparel stores	+ 2†	+ 6	+ 20
Automotive stores	— 5†	— 14	+ 22
Drug stores	— 1†	+ 6	+ 11
Eating and drinking places	— 3†	**	+ 1
Food stores	— 2†	— 1	+ 8
Furniture and household appliance stores	+ 2†	+ 13	+ 27
Gasoline and service stations	**†	— 5	— 1
General merchandise stores	+ 1†	— 5	+ 12
Liquor stores	**†	+ 10	+ 16
Lumber, building material, and hardware stores	— 11†	— 28	+ 12
Postal receipts*	$ 1,881,000	+ 15	+ 2
Building permits, less federal contracts	$15,554,638	— 38	+ 8
Bank debits (thousands)	$ 2,871,002	+ 1	+ 14
End-of-month deposits (thousands)‡	$ 1,352,593	— 1	+ 2
Annual rate of deposit turnover	25.4	+ 1	+ 9
Employment (area)	513,900	— 1	+ 1
Manufacturing employment (area)	93,900	**	**
Percent unemployed (area)	4.5	+ 7	— 4

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
HUMBLE (pop. 1,711)			
Building permits, less federal contracts	$ 1,000	— 90	— 93
Bank debits (thousands)	$ 2,212	— 6	+ 23
End-of-month deposits (thousands)‡	$ 2,500	+ 1	— 15
Annual rate of deposit turnover	10.6	— 7	+ 45
JACKSONVILLE (pop. 9,590)			
Postal receipts*	$ 19,569	**	+ 11
Building permits, less federal contracts	$ 420,000	+1028	+ 10
Bank debits (thousands)	$ 11,470	— 7	+ 23
End-of-month deposits (thousands)‡	$ 9,204	— 2	+ 8
Annual rate of deposit turnover	14.8	— 8	+ 13
JASPER (pop. 4,889)			
Retail sales	— 1†	+ 7	+ 6
Automotive stores	— 1†	+ 18	+ 8
Postal receipts*	$ 7,182	**	— 15
Building permits, less federal contracts	$ 24,000	— 89	.....
Bank debits (thousands)	$ 8,140	+ 1	+ 9
End-of-month deposits (thousands)‡	$ 8,444	— 2	— 1
Annual rate of deposit turnover	11.4	+ 2	+ 9
JUSTIN (pop. 622)			
Postal receipts*	$ 620	+ 13	— 9
Building permits, less federal contracts	$ 15,000	.....	.....
Bank debits (thousands)	$ 1,293	— 2	+ 8
End-of-month deposits (thousands)‡	$ 855	— 2	+ 16
Annual rate of deposit turnover	17.9	— 9	— 7
KATY (pop. 1,569)			
Building permits, less federal contracts	$ 7,500	— 21	+ 7
Bank debits (thousands)	$ 1,990	— 19	+ 18
End-of-month deposits (thousands)‡	$ 2,012	— 8	— 8
Annual rate of deposit turnover	11.4	— 28	+ 16
KENEDY (pop. 4,301)			
Retail sales			
Lumber, building material, and hardware stores	— 9†	+ 2	+ 26
Postal receipts*	$ 4,138	+ 9	+ 8
Building permits, less federal contracts	$ 80,500	+683	+178
KILGORE (pop. 10,092)			
Postal receipts*	$ 14,838	+ 12	— 3
Building permits, less federal contracts	$ 136,527	+ 51	+720
Bank debits (thousands)	$ 12,087	— 10	+ 4
End-of-month deposits (thousands)‡	$ 14,897	+ 2	+ 7
Annual rate of deposit turnover	9.8	— 10	— 1
Employment (area)	28,800	**	+ 1
Manufacturing employment (area)	5,740	**	+ 8
Percent unemployed (area)	3.6	+ 9	— 28
KILLEEN (pop. 23,377)			
Postal receipts*	$ 34,115	+ 22	+ 2
Building permits, less federal contracts	$ 305,721	+ 2	+ 58
Bank debts (thousands)	$ 11,154	+ 8	+ 22
End-of-month deposits (thousands)‡	$ 8,975	**	+ 15
Annual rate of deposit turnover	14.9	— 3	+ 6
KINGSVILLE (pop. 25,297)			
Postal receipts*	$ 14,753	+ 14	— 4
Building permits, less federal contracts	$ 101,369	+ 5	— 42
Bank debits (thousands)	$ 10,583	— 2	+ 8
End-of-month deposits (thousands)‡	$ 13,072	+ 1	+ 7
Annual rate of deposit turnover	9.8	— 4	+ 1
LA MARQUE (pop. 13,969)			
Postal receipts*	$ 11,109	+ 95	+ 32
Building permits, less federal contracts	$ 41,290	— 39	+710
Bank debits (thousands)	$ 7,898	— 5	+ 24
End-of-month deposits (thousands)‡	$ 6,376	— 1	+ 25
Annual rate of deposit turnover	14.8	— 12	+ 3
Employment (area)	52,600	**	**
Manufacturing employment (area)	10,600	**	— 1
Percent unemployed (area)	3.5	+ 9	+ 49

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
KIRBYVILLE (pop. 1,660)			
Postal receipts*	$ 3,326	— 6	— 15
Bank debits (thousands)	$ 2,129	— 4	.....
End-of-month deposits (thousands)‡	$ 2,421	— 6	.....
Annual rate of deposit turnover	10.2	— 6	.....
LA FERIA (pop. 3,047)			
Postal receipts*	$ 2,346	+ 11	**
Building permits, less federal contracts	$ 10,700	— 26	+265
Bank debits (thousands)	$ 1,409	+ 2	+ 13
End-of-month deposits (thousands)‡	$ 1,399	— 7	**
Annual rate of deposit turnover	11.6	+ 10	+ 9
LAMESA (pop. 12,438)			
Retail sales			
Automotive stores	— 1†	— 21	— 15
Drug stores	— 5†	— 18	— 3
Postal receipts*	$ 13,650	— 11	— 12
Building permits, less federal contracts	$ 207,700	+ 72	+ 82
Bank debits (thousands)	$ 34,240	— 9	— 13
End-of-month deposits (thousands)‡	$ 23,151	+ 6	+ 15
Annual rate of deposit turnover	18.2	— 24	— 25
LAMPASAS (pop. 5,061)			
Postal receipts*	$ 6,253	+ 40	+ 13
Building permits, less federal contracts	$ 92,000	+ 90	+283
Bank debits (thousands)	$ 6,483	— 4	+ 6
End-of-month deposits (thousands)‡	$ 6,660	— 1	+ 13
Annual rate of deposit turnover	11.6	— 6	— 5
LAREDO (pop. 60,678)			
Postal receipts*	$ 32,214	— 6	— 11
Building permits, less federal contracts	$ 118,365	+148	+ 4
Bank debits (thousands)	$ 26,673	— 3	+ 8
End-of-month deposits (thousands)‡	$ 22,454	**	+ 4
Annual rate of deposit turnover	14.3	— 5	— 1
LEVELLAND (pop. 10,153)			
Postal receipts*	$ 8,486	+ 6	— 6
Building permits, less federal contracts	$ 120,450	+136	— 32
Bank debits (thousands)	$ 18,039	+ 13	.....
End-of-month deposits (thousands)‡	$ 12,557	+ 9	.....
Annual rate of deposit turnover	18.0	— 5	.....
LLANO (pop. 2,656)			
Postal receipts*	$ 2,411	— 5	**
Building permits, less federal contracts	$ 8,650	.....	+ 44
Bank debits (thousands)	$ 3,493	— 18	**
End-of-month deposits (thousands)‡	$ 4,241	+ 1	+ 2
Annual rate of deposit turnover	9.9	— 20	— 2
LOCKHART (pop. 6,084)			
Retail sales			
Food stores	— 3†	+ 1	**
Postal receipts*	$ 4,272	+109	— 12
Building permits, less federal contracts	12,515	+158	— 22
Bank debits (thousands)	$ 4,426	— 2	**
End-of-month deposits (thousands)‡	$ 5,665	— 4	+ 6
Annual rate of deposit turnover	9.2	**	— 6
LONGVIEW (pop. 40,050)			
Retail sales			
Lumber, building material, and hardware stores	— 9†	— 6	+ 30
Postal receipts*	$ 54,793	+ 15	+ 6
Building permits, less federal contracts	$ 1,080,662	+ 53	+ 84
Employment (area)	28,800	**	+ 1
Manufacturing employment (area)	5,740	**	+ 8
Percent unemployed (area)	3.6	+ 9	— 28
LOS FRESNOS (pop. 1,289)			
Building permits, less federal contracts	$ 7,000	— 37	— 26
Bank debits (thousands)	$ 1,173	+ 10	+ 17
End-of-month deposits (thousands)‡	$ 1,535	— 6	+ 8
Annual rate of deposit turnover	8.9	+ 14	+ 8

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
LOWER RIO GRANDE VALLEY (pop. 352,086) (Cameron, Willacy, and Hidalgo Counties)			
Retail sales	— 1†	+ 4	+ 1
Apparel stores	— 1†	+ 5	+ 3
Automotive stores	— 1†	+ 8	+ 5
Drug stores	— 5†	+ 8	— 11
Food stores	— 3†	+ 2	**
Furniture and household appliance stores	— 1†	+ 17	— 10
General merchandise stores	+ 2†	+ 2	+ 2
Lumber, building material, and hardware stores	— 9†	— 27	+ 15
Postal receipts*	$	+ 40	— 7
Building permits, less federal contracts	$	+203	+138
Bank debits (thousands)	$	**	+ 2
End-of-month deposits (thousands)‡	$	— 4	+ 3
Annual rate of deposit turnover	15.3	+ 2	— 2
LUBBOCK (pop. 128,691)			
Retail sales	— 1†	+ 18	+ 18
Apparel stores	— 1†	+ 6	+ 6
Automotive stores	— 1†	+ 21	+ 36
Furniture and household appliance stores	— 1†	+ 21	+ 40
Postal receipts*	$ 176,073	+ 1	**
Building permits, less federal contracts	$ 2,849,100	— 21	+ 13
Bank debits (thousands)	$ 270,600	+ 28	+ 11
End-of-month deposits (thousands)‡	$ 126,858	+ 5	+ 9
Annual rate of deposit turnover	26.3	+ 14	— 1
Employment (area)	52,000	+ 1	— 5
Manufacturing employment (area)	5,370	**	— 4
Percent unemployed (area)	4.7	+ 7	+ 38
LUFKIN (pop. 17,641)			
Retail sales			
Automotive stores	— 1†	— 9	— 17
Postal receipts*	$ 22,952	+ 16	— 16
Building permits, less federal contracts	$ 69,020	— 44	+ 99
Bank debits (thousands)	$ 24,163	— 3	+ 11
End-of-month deposits (thousands)‡	$ 27,761	+ 5	+ 8
Annual rate of deposit turnover	10.7	— 7	+ 3
McALLEN (pop. 32,728)			
Retail sales	— 1†	+ 19	+ 8
Automotive stores	— 1†	+ 34	+ 26
Postal receipts*	$ 31,887	+ 12	— 1
Building permits, less federal contracts	$ 301,062	+ 31	+ 56
Bank debits (thousands)	$ 26,019	— 2	+ 8
End-of-month deposits (thousands)‡	$ 19,569	— 6	+ 7
Annual rate of deposit turnover	15.5	+ 5	— 3
McCAMEY (pop. 3,375)			
Postal receipts*	$ 2,640	— 6	— 19
Bank debits (thousands)	$ 2,012	— 2	+ 21
End-of-month deposits (thousands)‡	$ 2,105	— 6	+ 6
Annual rate of deposit turnover	11.1	+ 6	+ 13
McGREGOR (pop. 4,642)			
Building permits, less federal contracts	$ 28,563	+116	— 79
Bank debits (thousands)	$ 2,996	+ 3	+ 41
End-of-month deposits (thousands)‡	$ 4,979	— 6	+ 1
Annual rate of deposit turnover	7.0	+ 1	+ 35
MARSHALL (pop. 23,846)			
Retail sales	— 1†	— 4	— 3
Apparel stores	— 1†	— 11	— 4
Postal receipts*	$ 25,388	+ 9	— 11
Building permits, less federal contracts	$ 72,137	— 77	— 52
Bank debits (thousands)	$ 16,462	— 5	+ 6
End-of-month deposits (thousands)‡	$ 21,567	+ 1	+ 8
Annual rate of deposit turnover	9.2	— 10	— 7

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
McKINNEY (pop. 13,763)			
Postal receipts*	$ 11,995	+ 2	— 10
Building permits, less federal contracts	$ 91,950	— 68	— 5
Bank debits (thousands)	$ 10,815	— 21	+ 7
End-of-month deposits (thousands)‡	$ 9,448	— 6	+ 2
Annual rate of deposit turnover	13.3	— 20	+ 4
MERCEDES (pop. 10,943)			
Postal receipts*	$ 4,925	— 2	— 45
Building permits, less federal contracts	$ 34,745	+ 27	+ 79
Bank debits (thousands)	$ 5,162	**	+ 1
End-of-month deposits (thousands)‡	$ 3,916	— 4	— 1
Annual rate of deposit turnover	15.5	+ 5	**
MESQUITE (pop. 27,526)			
Postal receipts*	$ 10,225	— 17	— 7
Building permits, less federal contracts	$ 1,895,304	+144	+348
Bank debits (thousands)	$ 6,263	+ 3	+ 13
End-of-month deposits (thousands)‡	$ 6,931	+ 44	+ 22
Annual rate of deposit turnover	12.8	— 21	+ 9
Employment (area)	451,100	**	+ 3
Manufacturing employment (area)	96,100	+ 2	+ 3
Percent unemployed (area)	4.8	+ 8	— 4
MEXIA (pop. 6,121)			
Postal receipts*	$ 5,566	+ 15	— 7
Building permits, less federal contracts	$ 14,000	.....	+126
Bank debits (thousands)	$ 3,678	— 9	+ 13
End-of-month deposits (thousands)‡	$ 4,719	— 1	+ 3
Annual rate of deposit turnover	9.3	— 9	+ 12
MIDLAND (pop. 62,625)			
Retail sales			
Drug stores	— 5†	+ 8	+ 17
Postal receipts	$ 94,074	+ 6	+ 25
Building permits, less federal contracts	$ 1,464,785	+ 22	+ 27
Bank debits (thousands)	$ 119,534	+ 1	+ 21
End-of-month deposits (thousands)‡	$ 105,629	+ 3	+ 15
Annual rate of deposit turnover	14.1	— 5	+ 3
Employment (area)	54,400	**	+ 2
Manufacturing employment (area)	2,330	+ 2	+ 1
Percent unemployed (area)	3.3	+ 22	— 23
MIDLOTHIAN (pop. 1,521)			
Building permits, less federal contracts	$ 74,715	+ 79	+ 42
Bank debits (thousands)	$ 1,202	— 22	+ 11
End-of-month deposits (thousands)‡	$ 1,703	— 6	+ 7
Annual rate of deposit turnover	8.2	— 22	+ 1
MISSION (pop. 14,081)			
Postal receipts*	$ 12,352	+ 56	+ 19
Building permits, less federal contracts	$ 46,350	— 41	+ 7
Bank debits (thousands)	$ 9,986	**	+ 3
End-of-month deposits (thousands)‡	$ 8,594	**	+ 3
Annual rate of deposit turnover	14.0	**	— 1
MONAHANS (pop. 8,567)			
Postal receipts*	$ 8,888	+ 17	+ 1
Building permits, less federal contracts	$ 29,490	— 76	+ 55
Bank debits (thousands)	$ 10,583	+ 7	+ 14
End-of-month deposits (thousands)‡	$ 8,279	— 5	+ 11
Annual rate of deposit turnover	15.0	+ 3	+ 1
MUENSTER (pop. 1,190)			
Postal receipts*	$ 1,246	— 40	— 46
Building permits, less federal contracts	$ 3,000	— 96	— 75
Bank debits (thousands)	$ 2,111	+ 1	+ 17
End-of-month deposits (thousands)‡	$ 1,840	+ 1	+ 4
Annual rate of deposit turnover	13.9	+ 1	+ 18
NEDERLAND (pop. 12,036)			
Bank debits (thousands)	$ 5,138	+ 3	.....
End-of-month deposits (thousands)‡	$ 3,754	— 3	.....
Annual rate of deposit turnover	15.7	+ 20	.....

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
NACOGDOCHES (pop. 12,674)			
Retail sales			
Apparel stores	— 1†	+ 12	+ 18
Postal receipts*	$ 18,400	+ 20	+ 2
Building permits, less federal contracts	$ 1,838,605	+1846	+6269
Bank debits (thousands)	$ 16,192	+ 7	+ 18
End-of-month deposits (thousands)‡	$ 15,488	**	+ 6
Annual rate of deposit turnover	12.6	+ 7	+ 12
NEW BRAUNFELS (pop. 15,631)			
Postal receipts*	$ 23,575	+ 25	— 5
Building permits, less federal contracts	$ 98,855	+ 32	— 44
Bank debits (thousands)	$ 9,297	— 12	— 6
End-of-month deposits (thousands)‡	$ 11,813	**	**
Annual rate of deposit turnover	9.9	— 9	— 7
ODESSA (pop. 80,338)			
Postal receipts*	$ 81,372	+ 27	— 1
Building permits, less federal contracts	$ 655,078	— 38	— 11
Bank debits (thousands)	$ 72,767	— 1	**
End-of-month deposits (thousands)‡	$ 65,442	— 5	— 4
Annual rate of deposit turnover	13.0	+ 2	— 1
Employment (area)	54,400	**	+ 2
Manufacturing employment (area)	2,330	+ 2	+ 1
Percent unemployed (area)	3.3	+ 22	— 23
ORANGE (pop. 25,605)			
Retail sales			
Apparel stores	— 1†	+ 3	+ 7
Postal receipts*	$ 26,768	+ 7	— 7
Building permits, less federal contracts	$ 128,872	— 48	— 29
Bank debits (thousands)	$ 29,102	+ 4	+ 8
End-of-month deposits (thousands)‡	$ 22,504	+ 2	+ 6
Annual rate of deposit turnover	15.6	— 1	+ 2
Employment (area)	105,200	— 3	— 1
Manufacturing employment (area)	30,420	— 11	— 10
Percent unemployed (area)	6.9	+ 17	+ 5
PALESTINE (pop. 13,974)			
Postal receipts*	$ 18,318	+ 26	+ 20
Building permits, less federal contracts	$ 215,459	— 64	+ 46
Bank debits (thousands)	$ 12,468	.....	+ 16
End-of-month deposits (thousands)‡	$ 14,538	.....	+ 3
PAMPA (pop. 24,664)			
Retail sales	— 1†	— 2	— 7
Automotive stores	— 1†	— 5	— 8
Eating and drinking places	— 6†	— 14	— 10
Food stores	— 3†	**	— 12
Lumber, building material, and hardware stores	— 9†	— 8	— 3
Postal receipts*	$ 25,767	+ 18	— 7
Building permits, less federal contracts	$ 64,850	— 17	— 26
Bank debits (thousands)	$ 23,731	— 1	+ 3
End-of-month deposits (thousands)‡	$ 22,477	+ 2	— 12
Annual rate of deposit turnover	12.8	— 4	+ 19
PARIS (pop. 20,977)			
Retail sales	— 1†	+ 6	+ 12
Apparel stores	— 1†	— 11	— 7
Automotive stores	— 1†	+ 12	+ 15
Lumber, building material, and hardware stores	— 9†	— 15	+ 36
Postal receipts*	$ 21,067	+ 17	— 8
Building permits, less federal contracts	$ 274,586	+ 42	+ 36
Bank debits (thousands)	$ 18,552	— 9	+ 11
End-of-month deposits (thousands)‡	$ 14,132	— 2	+ 4
Annual rate of deposit turnover	15.6	— 14	+ 23
PHARR (pop. 14,106)			
Postal receipts*	$ 6,574	+ 3	+ 1
Bank debits (thousands)	$ 3,614	— 2	— 6
End-of-month deposits (thousands)‡	$ 3,377	— 1	— 12
Annual rate of deposit turnover	12.8	— 1	+ 3

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
PASADENA (pop. 58,737)			
Postal receipts*	$ 35,839	**	— 8
Building permits, less federal contracts	$ 1,089,850	+ 19	+ 93
Bank debits (thousands)	$ 44,167	+ 10	+ 29
End-of-month deposits (thousands)‡	$ 23,559	— 3	— 1
Annual rate of deposit turnover	22.2	+ 6	+ 26
Employment (area)	513,900	— 1	+ 1
Manufacturing employment (area)	93,900	**	**
Percent unemployed (area)	4.5	+ 7	— 4
PILOT POINT (pop. 1,254)			
Building permits, less federal contracts	$ 400	— 98	— 91
Bank debits (thousands)	$ 970	— 29	.....
End-of month deposits (thousands)‡	$ 1,718	— 3	.....
Annual rate of deposit turnover	6.7	— 29	.....
PLAINVIEW (pop. 18,735)			
Retail sales			
Apparel stores	— 1†	+ 5	+ 1
Automotive stores	— 1†	+ 14	+ 2
Postal receipts*	$ 21,765	+ 4	+ 7
Building permits, less federal contracts	$ 252,450	— 67	— 54
Bank debits (thousands)	$ 38,816	+ 7	— 12
End-of-month deposits (thousands)‡	$ 24,855	+ 5	— 1
Annual rate of deposit turnover	19.2	+ 1	— 15
PLANO (pop. 3,695)			
Postal receipts*	$ 4,313	— 14	+ 24
Building permits, less federal contracts	$ 438,225	— 11	+375
Bank debits (thousands)	$ 2,125	— 7	+ 48
End-of-month deposits (thousands)‡	$ 2,181	+ 5	+ 14
Annual rate of deposit turnover	12.0	— 2	+ 36
PORT ARTHUR (pop. 66,676)			
Retail sales	— 1†	+ 6	— 4
Apparel stores	— 1†	+ 1	— 5
Automotive stores	— 1†	+ 24	— 11
Food stores	— 3†	+ 2	— 4
Furniture and household appliance stores	— 1†	+ 1	+ 11
Gasoline and service stations	— 1†	— 2	+ 5
Postal receipts*	$ 64,580	+ 16	— 5
Building permits, less federal contracts	$ 231,020	— 62	— 1
Bank debits (thousands)	$ 63,756	— 4	+ 5
End-of-month deposits (thousands)‡	$ 46,331	**	+ 3
Annual rate of deposit turnover	16.6	— 7	**
Employment (area)	105,200	— 3	— 1
Manufacturing employment (area)	30,420	— 11	— 10
Percent unemployed (area)	6.9	+ 17	+ 5
PORT ISABEL (pop. 3,575)			
Postal receipts*	$ 2,014	+ 29	+ 3
Building permits, less federal contracts	$ 3,854	+ 62	— 71
Bank debits (thousands)	$ 1,058	— 7	+103
End-of-month deposits (thousands)‡	$ 894	— 3	+ 63
Annual rate of deposit turnover	14.0	— 9	+ 11
PORT NECHES (pop. 8,696)			
Postal receipts*	$ 6,074	— 30	— 12
Building permits, less federal contracts	$ 42,249	— 78	— 64
Bank debits (thousands)	$ 7,239	— 12	— 17
End-of-month deposits (thousands)‡	$ 5,668	+ 3	.....
Annual rate of deposit turnover	15.5	— 5	.....
RAYMONDVILLE (pop. 9,385)			
Postal receipts*	$ 5,347	— 4	— 15
Building permits, less federal contracts	$ 10,800	+ 18	— 68
Bank debits (thousands)	$ 5,958	— 5	— 6
End-of-month deposits (thousands)‡	$ 8,351	— 1	+ 6
Annual rate of deposit turnover	8.5	— 3	— 10

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
ROBSTOWN (pop. 10,266)			
Postal receipts*	$ 6,872	+ 9	+ 84
Building permits, less federal contracts	$ 37,500	— 62	+ 13
Bank debits (thousands)	$ 9,028	— 10	+ 22
End-of-month deposits (thousands)‡	$ 10,764	— 7	+ 10
Annual rate of deposit turnover	9.7	— 8	+ 5
ROCKDALE (pop. 4,481)			
Postal receipts*	$ 4,718	+ 39	— 2
Building permits, less federal contracts	$ 5,980	+ 16	— 69
Bank debits (thousands)	$ 3,600	— 4	— 5
End-of-month deposits (thousands)‡	$ 5,422	— 1	— 3
Annual rate of deposit turnover	7.9	— 2	— 4
SAN ANGELO (pop. 58,815)			
Retail sales	— 1†	+ 7	— 3
Apparel stores	— 1†	+ 9	+ 15
Postal receipts*	$ 81,792	+ 11	+ 17
Building permits, less federal contracts	$ 346,325	— 40	+ 11
Bank debits (thousands)	$ 54,216	— 9	+ 6
End-of-month deposits (thousands)‡	$ 49,983	+ 2	+ 5
Annual rate of deposit turnover	13.2	— 10	+ 2
Employment (area)	19,700	— 1	— 3
Manufacturing employment (area)	2,710	— 1	— 11
Percent unemployed (area)	4.9	+ 9	— 9
SAN ANTONIO (pop. 587,718)			
Retail sales	+ 10†	**	+ 2
Apparel stores	+ 5†	+ 8	+ 5
Automotive stores	+ 3†	**	+ 4
Drug stores	— 6†	— 2	— 1
Eating and drinking places	— 1†	— 7	+ 2
Food stores	— 5†	— 3	— 5
Furniture and household appliance stores	+ 4†	+ 1	+ 6
Gasoline and service stations	— 3†	+ 2	— 2
General merchandise stores	— 5†	+ 3	+ 10
Lumber, building material, and hardware stores	— 11†	— 4	+ 15
Nurseries	.....	— 24	+ 11
Postal receipts*	$ 816,834	+ 13	+ 4
Building permits, less federal contracts	$ 4,538,110	**	+ 48
Bank debits (thousands)	$ 642,985	**	+ 13
End-of-month deposits (thousands)‡	$ 395,773	**	+ 5
Annual rate of deposit turnover	19.6	— 1	+ 8
Employment (area)	207,400	+ 1	+ 1
Manufacturing employment (area)	24,500	+ 5	— 4
Percent unemployed (area)	5.0	+ 4	+ 22
SAN JUAN (pop. 4,371)			
Postal receipts*	$ 3,065	+ 16	+ 6
Building permits less federal contracts	$ 9,860	— 82	— 56
Bank debits (thousands)	$ 2,158	+ 13	+ 19
End-of-month deposits (thousands)‡	$ 2,144	— 3	+ 2
Annual rate of deposit turnover	11.9	+ 11	+ 10
SAN MARCOS (pop. 12,713)			
Postal receipts*	$ 12,185	+ 24	+ 14
Building permits, less federal contracts	$ 29,550	+214	+937
Bank debits (thousands)	$ 6,310	— 19	**
End-of-month deposits (thousands)‡	$ 8,017	**	+ 1
Annual rate of deposit turnover	9.4	— 16	+ 1
SAN SABA (pop. 2,728)			
Bank debits (thousands)	$ 5,408	+ 1	+ 9
End-of-month deposits (thousands)‡	$ 5,029	**	+ 1
Annual rate of deposit turnover	12.9	**	+ 6
SEAGOVILLE (pop. 3,745)			
Postal receipts*	$ 2,838	+ 40	— 11
Building permits, less federal contracts	$ 375	— 99	— 98
Bank debits (thousands)	$ 1,990	— 1	+ 18
End-of-month deposits (thousands)‡	$ 1,274	— 4	+ 10
Annual rate of deposit turnover	18.4	— 2	+ 7

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
SEGUIN (pop. 14,299)			
Postal receipts*	$ 11,545	+ 12	— 5
Building permits, less federal contracts	$ 64,105	+ 22	— 6
Bank debits (thousands)	$ 9,923	— 3	+ 13
End-of-month deposits (thousands)‡	$ 14,633	**	+ 7
Annual rate of deposit turnover	8.1	— 5	+ 9
SHERMAN (pop. 24,988)			
Retail sales	— 1†	+ 1	+ 4
Automotive stores	— 1†	+ 6	— 3
Furniture and household appliance stores	— 1†	— 18	— 11
General merchandise stores	+ 2†	+ 22	+ 15
Postal receipts*	$ 35,881	+ 25	— 1
Building permits less federal contracts	$ 268,718	+121	+ 21
Bank debits (thousands)	$ 24,688	— 13	— 4
End-of-month deposits (thousands)‡	$ 19,800	+ 1	+ 8
Annual rate of deposit turnover	15.0	— 16	— 12
SILSBEE (pop. 6,277)			
Postal receipts*	$ 7,018	+ 6	+ 16
Bank debits (thousands)	$ 3,840	+ 1	+ 11
End-of-month deposits (thousands)‡	$ 5,269	— 1	+ 13
Annual rate of deposit turnover	8.7	**	— 1
SLATON (pop. 6,568)			
Postal receipts*	$ 3,798	— 9	+ 1
Building permits, less federal contracts	$ 11,850	— 73	— 95
Bank debits (thousands)	$ 4,569	+ 16	+ 10
End-of-month deposits (thousands)‡	$ 4,439	+ 11	+ 13
Annual rate of deposit turnover	13.0	+ 2	— 1
Employment (area)	52,000	+ 1	— 5
Manufacturing employment (area)	5,870	**	— 4
Percent unemployed (area)	4.7	+ 7	+ 38
SMITHVILLE (pop. 2,933)			
Postal receipts*	$ 1,941	— 1	— 16
Building permits, less federal contracts	$ 4,000	— 86	.....
Bank debits (thousands)	$ 1,138	+ 2	+ 8
End-of-month deposits (thousands)‡	$ 2,308	+ 3	+ 2
Annual rate of deposit turnover	6.0	— 2	+ 7
SNYDER (pop. 13,850)			
Postal receipts	$ 11,834	— 5	+ 22
Building permits, less federal contracts	$ 1,700	— 99	— 99+
Bank debits (thousands)	$ 14,518	+ 5	— 19
End-of-month deposits (thousands)‡	$ 18,767	— 1	+ 14
Annual rate of deposit turnover	9.2	— 3	— 21
SOUTH HOUSTON (pop. 7,523)			
Building permits, less federal contracts	$ 3,650	— 93	— 93
Bank debits (thousands)	$ 3,864	+ 4	+ 12
End-of-month deposits (thousands)‡	$ 2,843	— 2	+ 17
Annual rate of deposit turnover	16.2	+ 4	— 3
SULPHUR SPRINGS (pop. 9,160)			
Postal receipts*	$ 10,477	+ 29	+ 17
Building permits, less federal contracts	$ 35,435	— 66	+ 19
Bank debits (thousands)	$ 11,460	+ 2	+ 14
End-of-month deposits (thousands)‡	$ 13,651	**	+ 8
Annual rate of deposit turnover	10.1	**	+ 7
TEMPLE (pop. 30,419)			
Retail sales	— 1†	+ 2	— 2
Apparel stores	— 1†	+ 7	+ 5
Furniture and household appliance stores	— 1†	— 1	+ 2
Lumber, building material, and hardware stores	— 9†	— 7	— 9
Postal receipts*	$ 43,094	+ 22	+ 8
Building permits, less federal contracts	$ 702,125	+ 80	+ 94
Bank debits (thousands)	$ 25,097	— 4	+ 8

Local Business Conditions

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
SWEETWATER (pop. 13,914)			
Retail sales			
Automotive stores	— 1†	+ 13	— 11
Postal receipts*	$ 11,692	+ 23	**
Building permits, less federal contracts	$ 20,000	— 21	— 35
Bank debits (thousands)	$ 13,770	— 2	— 14
End-of-month deposits (thousands)‡	$ 10,283	— 3	— 5
Annual rate of deposit turnover	15.8	— 6	— 11
TAYLOR (pop. 9,434)			
Retail sales			
Automotive stores	— 1†	— 6	— 16
Postal receipts*	$ 8,849	+ 18	+ 1
Building permits, less federal contracts	$ 42,200	+ 6	+ 45
Bank debits (thousands)	$ 7,204	— 30	+ 4
End-of-month deposits (thousands)‡	$ 13,540	— 4	+ 7
Annual rate of deposit turnover	6.2	— 29	— 3
TERRELL (pop. 13,803)			
Postal receipts*	$ 8,737	+ 4	— 13
Building permits, less federal contracts	$ 125,570	+107	.....
Bank debits (thousands)	$ 7,507	— 6	+ 2
End-of-month deposits (thousands)‡	$ 7,523	— 5	+ 5
Annual rate of deposit turnover	11.7	— 7	— 4
TEXARKANA, TEX. (pop. 30,218)			
Retail sales			
Furniture and household appliance stores	— 1†	+ 8	+ 1
Postal receipts*§	$ 57,839	+ 2	**
Building permits, less federal contracts§	$ 277,865	+101	— 76
Bank debits (thousands)	$ 56,014	+ 2	+ 9
End-of-month deposits (thousands)‡§	$ 17,841	+ 1	+ 1
Annual rate of deposit turnover	16.8	+ 1	+ 8
Employment (area)	29,900	+ 1	+ 8
Manufacturing employment (area)	4,280	+ 3	+ 13
Percent unemployed (area)	7.6	+ 6	**
TEXAS CITY (pop. 32,065)			
Postal receipts*	$ 27,688	+ 39	+ 35
Building permits, less federal contracts	$ 1,975,845	+518	+524
Bank debits (thousands)	$ 27,118	+ 5	+ 39
End-of-month deposits (thousands)‡	$ 17,180	+ 10	+ 54
Annual rate of deposit turnover	19.9	— 7	— 5
Employment (area)	52,600	**	**
Manufacturing employment (area)	10,600	**	— 1
Percent unemployed (area)	8.5	+ 9	+ 49
TOMBALL (pop. 1,713)			
Bank debits (thousands)	$ 7,372	— 7	+ 9
End-of-month deposits (thousands)‡	$ 5,443	— 5	+ 16
Annual rate of deposit turnover	15.8	**	— 2
TYLER (pop. 51,230)			
Retail sales	— 1†	+ 4	+ 25
Apparel stores	— 1†	+ 7	+ 15
Florists	.....	— 4	+ 9
Postal receipts	$ 88,893	+ 3	+ 4
Building permits, less federal contracts	$ 525,135	+ 3	+ 50
Bank debits (thousands)	$ 93,241	+ 1	+ 11
End-of-month deposits (thousands)‡	$ 62,083	— 2	+ 9
Annual rate of deposit turnover	17.3	**	+ 3
UVALDE (pop. 10,293)			
Postal receipts*	$ 12,193	+ 66	+ 64
Building permits, less federal contracts	$ 82,681	— 33	+246
Bank debits (thousands)	$ 8,467	— 19	— 2
End-of-month deposits (thousands)‡	$ 8,978	— 4	+ 17
Annual rate of deposit turnover	11.1	— 17	— 18
VERNON (pop. 12,141)			
Postal receipts*	$ 13,451	+ 26	+ 6
Building permits, less federal contracts	$ 112,005	+219	+ 34
Bank debits (thousands)	$ 20,028	+ 12	+ 4
End-of-month deposits (thousands)‡	$ 19,865	+ 1	+ 3
Annual rate of deposit turnover	12.2	+ 9	+ 2

City and item	Nov 1961	Percent change: Nov 1961 from Oct 1961	Percent change: Nov 1961 from Nov 1960
VICTORIA (pop. 33,047)			
Retail sales	— 1†	+ 1	+ 14
Automotive stores	— 1†	+ 9	+ 11
Eating and drinking places	— 6†	— 8	— 11
Food stores	— 3†	— 1	+ 6
Furniture and household appliance stores	— 1†	— 6	+ 37
Postal receipts* $	37,313	+ 1	**
Building permits, less federal contracts $	1,948,790	+414	+424
Bank debits (thousands) $	59,660	— 2	+ 15
End-of-month deposits (thousands)‡ $	77,300	**	— 1
Annual rate of deposit turnover	9.3	— 3	+ 13
WACO (pop. 97,808)			
Retail sales	— 1†	+ 8	+ 3
Apparel stores	— 1†	+ 3	— 1
Florists	.....	+ 11	+ 13
General merchandise stores	+ 2†	+ 12	**
Lumber, building material, and hardware stores	— 9†	— 4	+ 9
Postal receipts* $	171,787	+ 9	— 1
Building permits, less federal contracts $	811,559	— 5	— 33
Bank debits (thousands) $	108,481	— 2	+ 6
End-of-month deposits (thousands)‡ $	71,316	+ 1	**
Annual rate of deposit turnover	18.4	— 5	+ 6
Employment (area)	48,100	— 1	— 1
Manufacturing employment (area)	9,710	— 1	— 3
Percent unemployed (area)	5.6	+ 17	+ 22
WAXAHACHIE (pop. 12,749)			
Postal receipts* $	14,099	+ 12	— 31
Building permits, less federal contracts $	14,220	— 92	— 77
Bank debits (thousands) $	10,909	— 11	+ 23
End-of-month deposits (thousands)‡ $	10,914	— 14	+ 16
Annual rate of deposit turnover	11.1	**	**
WESLACO (pop. 15,649)			
Postal receipts* $	9,122	+ 14	+ 7
Building permits, less federal contracts $	81,214	— 2	+ 35
Bank debits (thousands) $	6,129	— 10	+ 11
End-of-month deposits (thousands)‡ $	7,929	+ 9	+ 25
Annual rate of deposit turnover	9.7	— 11	— 7
WICHITA FALLS (pop. 101,724)			
Retail sales	— 1†	+ 5	+ 5
Apparel stores	— 1†	+ 11	+ 13
Automotive stores	— 1†	+ 8	+ 34
Food stores	— 3†	+ 2	— 10
Furniture and household appliance stores	— 1	— 1	— 3
Postal receipts $	130,208	+ 4	+ 7
Building permits, less federal contracts $	839,157	— 72	— 68
Bank debits (thousands) $	121,707	+ 4	+ 8
End-of-month deposits (thousands)‡ $	99,431	— 1	+ 3
Annual rate of deposit turnover	14.6	+ 7	+ 4
Employment (area)	45,350	**	+ 7
Manufacturing employment (area)	3,710	+ 2	+ 4
Percent unemployed (area)	5.3	+ 23	+ 4

BAROMETERS OF TEXAS BUSINESS

All figures are for Texas unless otherwise indicated. All indexes are based on the average months for 1947–49, except where indicated; all are adjusted for seasonal variation, except annual indexes. Employment estimates are Texas Employment Commission data in cooperation with the Bureau of Labor Statistics. The index of Texas Business Activity is based on bank debits in 20 cities, adjusted for price level. An asterisk (*) indicates preliminary data subject to revision. Revised data are marked (r).

	November 1961	October 1961	November 1960	Year-to-date average 1961	Year-to-date average 1960
GENERAL BUSINESS ACTIVITY					
Texas business activity, index	251	243	226	239	226
Miscellaneous freight carloadings in SW District, index	62	79	74	74	78
Ordinary life insurance sales, index	487	463	453	410	415
Wholesale prices in U.S., unadjusted index	118.8	118.7	119.6	119.1	119.5
Consumers' prices in Houston, unadjusted index	128.0	....	126.4	126.4	125.8
Consumers' prices in U.S., unadjusted index	128.3	128.4	127.4	127.8	126.4
Income payments to individuals in U.S. (billions, at seasonally adjusted annual rate)	$ 429.0	$ 425.2	$ 406.0	$ 415.5	$ 402.4
Business failures (number)	41	43	53	48	43
Newspaper lineage, index	173.8	166.8	169.8	167.4	173.3
TRADE					
Total retail sales, index, 1957–59=100	110*	108r	104r	.....	.....
Durable-goods sales, index, 1957–59=100	112*	110r	98r	.....	.....
Nondurable-goods sales, index, 1957–59=100	110*	107r	108r	.....	.....
Ratio of credit sales to net sales in department and apparel stores	65.6*	73.3*	65.7r	70.4*	70.6r
Ratio of collections to outstandings in department and apparel stores	40.7*	36.8*	41.1r	35.5*	36.3r
PRODUCTION					
Total electric power consumption, index	429*	433r	384r	419*	407r
Industrial electric power consumption, index	419*	398r	380r	389*	387r
Crude oil production, index	109.2*	107.6r	107.3r	109.1*	109.0r
Crude oil runs to stills, index	140	151	145	147	147
Industrial production in U.S., index	173	171	159	165	165
Texas industrial production—total index	178	180	172	175	173
Texas industrial production—manufacturing index	226	229	215	220	216
Texas industrial production—durable goods, index	267	271	251	257	250
Texas industrial production—nondurable goods, index	207	209	198	203	201
Texas mineral production, index	132	134	131	132	131
Average daily production per oil well	12.7	12.4	12.5	12.8	12.9
Construction authorized, index, 1957–59=100	119.7	113.9	98.8	112.9	104.9
Residential building, 1957–59=100	115.0	114.5	90.2	102.6	91.6
Nonresidential building, 1957–59=100	127.1	116.8	115.1	129.2	127.9
AGRICULTURE					
Prices received by farmers, unadjusted index, 1910–14=100	265	262	247	255	245
Prices paid by farmers in U.S., unadjusted index, 1910–14=100	301	301	297	301	299
Ratio of Texas farm prices received to U.S. prices paid by farmers	88	87	83	85	82
FINANCE					
Bank debits, index	298	289	270	285	270
Bank debits, U.S., index	285	275	246	264	242
Reporting member banks, Dallas Reserve District:					
Loans (millions)	$ 3,191	$ 3,162	$ 2,935	$ 3,050	$ 2,882
Loans and investments (millions)	$ 5,136	$ 5,139	$ 4,652	$ 4,977	$ 4,529
Adjusted demand deposits (millions)	$ 2,860	$ 2,793	$ 2,725	$ 2,761	$ 2,663
Revenue receipts of the State Comptroller (thousands)	$119,219	$ 88,735	$ 87,526	$105,948	$102,521
LABOR					
Total nonagricultural employment (thousands)	2,564.1*	2,570.4r	2,551.9r	2,545.5*	2,539.0r
Total manufacturing employment (thousands)	486.2*	489.1r	486.1r	484.3*	490.6r
Durable-goods employment (thousands)	233.3*	233.2r	227.5r	229.6*	233.1r
Nondurable goods employment (thousands)	252.9*	255.9r	258.6r	254.7*	257.6r
Average weekly hours (1957–59=100) manufacturing, index	100.8	101.2	98.9	99.8	99.9
Average weekly earnings—manufacturing, index	187.8	190.9	176.1	182.0	175.8

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