

TRENDS

in the Texas Farm and Ranch

LAND MARKET

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Summary

This report of the 1965 Texas land market activity is based on information obtained from 26 sample counties in 16 of the 17 type-of-farming areas. In each sample county, specific data were obtained from warranty deed records of all bona fide sales containing 20 or more acres located outside corporate limits of towns. General information was obtained from persons having knowledge of local land market activity.

Before World War II agricultural land prices and net farm and ranch income were positively correlated. An increase in net income was soon followed by an increase in land prices, and a decrease in net income resulted in a decrease in land prices. Post World War II land market activity has shown that agricultural land prices consistently increased while farm and ranch net income fluctuated and actually declined. In 1965, agricultural land prices for the state were 189 percent higher than in 1947 while net farm and ranch income was 15 percent lower.

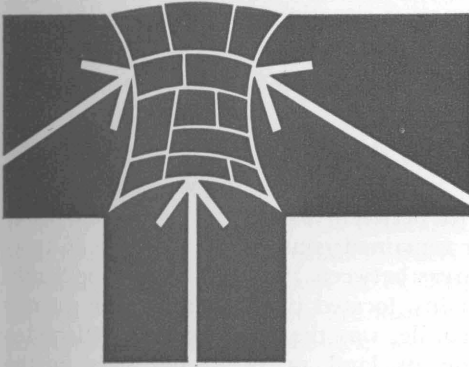
This relationship indicates a strong demand by buyers for agricultural land, to be used for non-agricultural purposes. Many of today's buyers use agricultural land for part-time farms, rural homesites, tax avoidance, investment, speculation, status and outdoor recreation.

Although agricultural land prices in general seem to be closely related to factors external to agriculture, land prices in four type-of-farming areas are closely related to agricultural productivity and net income. These areas are the Northern High Plains, Southern High Plains, Upper Rio Grande Valley and Lower Rio Grande Valley.

Results of the 1965 land market activity follow: (1) average land price was \$156 per acre, 16 percent above the 1963 average, (2) volume of sales was 30 percent below the 1963 average, (3) 60 percent of all land sales were mortgaged, (4) the seller was the principal lender, (5) mortgage interest rates ranged from 4½ to 10 percent, (6) Veterans Land Board was used in approximately 2 percent of all land transactions and has ceased to be a factor that strengthens demand in the Texas land market, (7) all or some of the mineral rights were retained by the seller in 58 percent of all land transactions, (8) out-of-county buyers were involved in 35 percent of all land transactions and (9) 18 percent of all buyers were residents of Dallas, Harris, Tarrant and Taylor counties.

This study is designed to provide general information relating to trends of the above factors. The results have certain limitations and depict only trends of land market activity over time in each type of farming area. The data do not reflect the average land price of any particular farm or ranch and should not be used, except as a general guide, where seeking values for specific properties.

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TRENDS

in the Texas Farm and Ranch

LAND MARKET

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DURING THE PAST 20 YEARS, the nature of the Texas agricultural land market has experienced drastic changes. In many areas, land use has shifted from traditional agricultural use to multiple use or to uses external to agriculture. Before World War II, buyers viewed agricultural land almost entirely as a necessary ingredient in the production of an agricultural commodity. Land values were determined by the contribution land made to total production and net income.

Following World War II, the land market reflected an interest by buyers in agricultural land as a consumption good as well as a production good. Buyers began paying prices in excess of the agricultural productivity value and using the land for part-time farms, rural homesites, tax avoidance, investment, speculation, status and recreation. This additional demand for agricultural land has resulted in a consistent yearly increase in land prices. In 1965, the weighted state average land price was \$156 per acre, 189 percent higher than in 1947, while the net farm and ranch income was approximately 15 percent lower than it was 18 years earlier.

This report is the result of a continuing endeavor to keep abreast of Texas farm and ranch land market activity and to maintain current indices of land prices, volume of land sales, credit sales and mineral activity.

Twenty-six sample counties located in 16 of the 17 Texas type-of-farming areas were selected for this study. The 17 areas are delineated in Figure 1. In each of the sample counties, information was obtained from warranty deed records of all bona fide transfers of 20 or more acres of agricultural land during 1965. Some 1,000 land transfers were analyzed.

Additional information was obtained from real estate brokers, county agricultural agents, county clerks and other persons having knowledge of land market activity in each of the 26 sample counties. Specific information was solicited as to reasons for purchase and sale of land, proposed use of land, the extent of speculation and the influence of mineral activity, recreation and urbanization. This information aided in analyzing and interpreting the data obtained from warranty deed records.

LIMITATIONS OF THIS STUDY

A study conducted utilizing sample data gathered from public sources has certain limitations. The study does not propose to reflect the average price of any particular farm or ranch and it would be improper to rely upon the price data as reflecting the market value of even a part of a county. Many more small properties are sold than large properties in most areas during a given year. Because small properties usually bring more per acre than large properties the price is influenced upward. The data are not useful for determining value based upon an agricultural productivity concept but rather reflect market value for broad general areas.

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TEXAS LAND MARKET

Factors considered relevant to a general analysis of Texas land market activity are per acre price, volume of land sales, size, mineral activity, availability of credit, interest rates, Veterans Land Board activity and land use. The importance of each factor varies among geographic regions of the state; therefore, no attempt was made to isolate and quantify each factor or to rate the factors as to a cause and effect relationship. The purpose was to depict the actual land market situation that existed in 1965 and to compare it to previous years for trends and future predictions.

Per Acre Price

Table 1 lists the average per acre sales price in each type-of-farming area and the weighted state per acre sales price between 1947-49 and 1965. Land prices increased or remained constant in 14 of the 16 type-of-farming areas between 1963 and 1965. The Southern High Plains, located in the southwestern quarter of the Panhandle, was the only area that reflected a slight decline in land prices. Land sales in the Mountains and Basins, located south and west of the Pecos River, were not available in sufficient quantity to derive an average land price for 1965.

From 1947-49 to 1965, the relationship between average per acre land price and volume of land sales was that of an inverse correlation, land prices have consistently increased while the volume of sales¹ has

¹Volume of sales is the number of land transfers and does not represent total acreage.

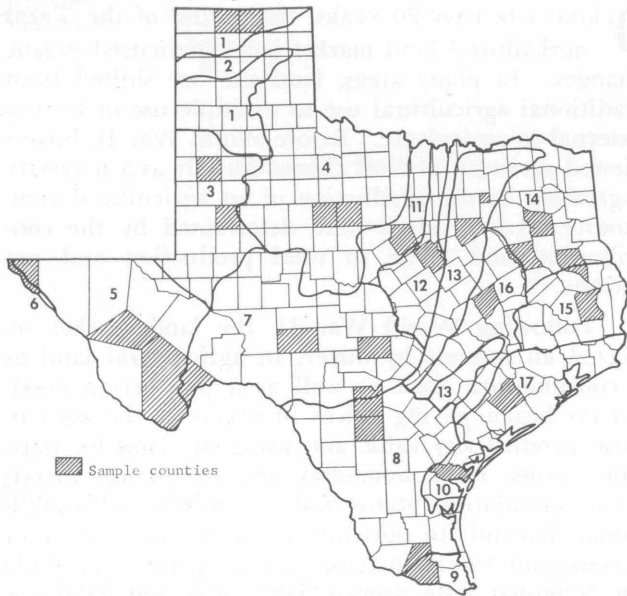


Figure 1. The 26 sample counties, by type-of-farming areas, in the 1965 study of farm and land prices. The 17 areas follow:

- | | |
|--------------------------------------|----------------------------|
| 1. Northern High Plains | 9. Lower Rio Grande Valley |
| 2. Canadian Breaks | 10. Coastal Bend |
| 3. Southern High Plains | 11. West Cross Timbers |
| 4. Rolling Plains and Prairies | 12. Grand Prairie |
| 5. Mountains and Basins | 13. Blackland |
| 6. Upper Rio Grande Valley | 14. East Texas Farming |
| 7. Edwards Plateau and Central Basin | 15. East Texas Timber |
| 8. South Texas Plain | 16. Post Oak |
| | 17. Coast Prairie |

TABLE 1. AVERAGE SALES PRICE OF FARM AND RANCH LAND, BY TYPE-OF-FARMING AREAS IN TEXAS, 1947-49, 1954, 1960, 1963, 1965

Type-of-farming areas ¹	1947-49	1954	1960	1963	1965	1947-49 to 1965	1954- 1965	1960- 1965	1963- 1965
	Dollars per acre					Percent change			
1. Northern High Plains	46	74	124	169	197	328	166	59	17
3. Southern High Plains	75	131	206	265	252	236	92	22	- 5
4. Rolling Plains and Prairies	52	74	100	98	128	146	73	28	31
5. Mountains and Basins	9	13	19	41	²	²	²	²	²
6. Upper Rio Grande Valley	737	823	1073	700	738	0	-10	-31	5
7. Edwards Plateau and Central Basin	30	71	65	99	112	273	58	72	13
8. South Texas Plain	46	85	78	107	116	152	36	48	8
9. Lower Rio Grande Valley	228	330	372	301	365	60	11	- 2	21
10. Coastal Bend	104	170	240	349	349	236	105	45	0
11. West Cross Timbers	32	63	79	110	124	288	97	57	13
12. Grand Prairie	33	66	82	106	130	294	97	58	23
13. Blackland	69	112	149	202	271	293	142	82	34
14. East Texas farming	33	53	81	118	142	330	168	43	20
15. East Texas timber	34	68	73	116	203	497	199	178	75
16. Post Oak	27	40	69	114	120	344	200	74	5
17. Coast Prairie	54	145	199	232	231	328	59	16	0
Weighted state average	54 ³	83 ³	106 ³	135 ³	156 ³	189	88	47	16

¹For detailed description of type-of-farming areas, see Texas Agricultural Experiment Station Bulletin 964, pps. 25-49.

²Insufficient number of bona fide transfers to derive an average land price for 1965.

³The procedure for computing the weighted state average was changed in 1965. A factor was determined for each type-of-farming area by size of the area in relation to the entire state, then multiplied by the weighted per acre price and totaled to derive the weighted state average for all years.

declined. The only deviation from this pattern was in 1963 when land prices and volume of sales were positively correlated. However, the relationship returned to the traditional pattern in 1965. The weighted state average land price was \$156 per acre in 1965, 189 percent higher than in 1947-49, while volume of sales were 60 percent lower, approximately the same as in 1935.

There was a decrease in volume of sales between 1963 and 1965 in all type-of-farming areas from which data were collected for this study. The total acreage transferred in the state decreased approximately 40 percent in this two-year period.

Size

As a result of large tracts of land being divided and sold in smaller units, the median size land sale in many areas of the state has decreased since 1954. Agricultural use of the smaller tracts of land is primarily that of enlargement of existing farms and ranches. The smaller tracts are also being used for part-time farms, rural homesites, status, investment, speculation and recreation. In this type of land market, small tracts with a variety of possible uses usually receive a higher per acre price than large units.

Mineral Activity

Mineral rights influence land prices and land market activity in some areas of the state as evidenced by the fact that sellers retained some or all of the mineral rights in 58 percent of the 1965 land transactions. This is approximately the same percentage as in 1960 and 1963, suggesting that mineral rights have not been responsible for a significant change in land prices or land market activity for the state as a whole. However, in five of the 16 type-of-farming areas mineral activity has been prominent for a number of years. Mineral rights are commonly divided and transferred separate from the land. In these localized land markets, land transferred with mineral rights commands a higher per acre price than land transferred without mineral rights.

In localized land markets of limited mineral activity, mineral rights seem to be automatically transferred with the land and have little influence on land prices or land market activity.

Sales Involving Credit

The availability of credit is closely associated with the volume of sales. Easy credit encourages sales while a tightening of credit usually results in a decrease in sales volume. For example, in 1960, 50 percent of the total land transactions were mortgaged. In 1963, 73 percent of the total land transactions were mortgaged, and volume of sales increased approximately 27 percent over the 1960 level. Then in 1965, mortgaged sales accounted for only 60 percent of total sales, and volume of sales decreased approximately 40 percent.

The seller was the principal lender in 1965, consistent with the trend since 1947-49. The seller, by handling the loan and mortgage, is in a position to obtain higher interest rates than commercial lending institutions, and provide himself with a guaranteed income for a specified period of time, thus creating a possible tax advantage. Buyers, in many cases can enter the market with a smaller down payment and less collateral than required by commercial lending institutions. Sellers competing with commercial lending institutions for mortgage loans act to increase the number of potential buyers and consequently increase the volume of sales.

Interest Rates

A change in mortgage interest rates could alter the demand for loans and be reflected in land market activity. Decreasing or low interest rates tend to encourage mortgage loans and increase land market activity. Increasing or high interest rates tend to discourage mortgage loans and restrict land market activity.

Mortgage interest rates in Texas have remained relatively stable between 1960 and 1965. It appears that interest rates have had little influence on land market activity between 1963 and 1965.

Veterans Land Board

Since its beginning, the Veterans Land Board has been responsible for 34,500 land transfers involving 2 million acres of land. Veterans Land Board activity is restricted to the extent that a maximum of \$7,500 can be loaned only to Texas veterans. In the ranching area of Texas, characterized by large land holdings, the Veterans Land Board is inactive. In other areas of diversified land use, characterized by small land holdings, the Veterans Land Board strengthens the demand for land. Veterans Land Board activity increased between 1960 and 1963, accounting for a portion of the increase in volume of sales during this period. The reverse was true between 1963 and 1965: Veterans Land Board activity decreased, accounting for a portion of the decrease in the volume of sales during this period.

The primary reason for the decrease of Veterans Land Board activity during 1965 was the lack of funds. As of December 1, 1965, the new application loan program was terminated. Loans were approved for existing applications only on the basis of repayment to the revolving fund. For all practical purposes, the Veterans Land Board has ceased to be a factor in the Texas land market.

Land Use

A change in land use from traditional agriculture to multiple use or to a higher and better use is usually accompanied by an increase in land value. For example, nearly 28 million acres of land used for agricultural production are also leased for wild game hunting. Multiple use of these acres produces income

from both sources, and these lands should command a higher price than comparable land deriving income from only one source.

Land use patterns and land ownership patterns are changing as a result of the large number of sales to out-of-county and urban residents. In 1965, 35 percent of all sales in the 26 sample counties were to out-of-county buyers. Eighteen percent of all sales were to buyers in Dallas, Harris, Tarrant and Taylor counties. Land ownership patterns seem to be changing from local ownership to absentee ownership.

Many land markets have felt the impact of the urban demand for land. This impact on land market activity has been reflected through increases in land prices. In some counties located near large metropolitan areas, up to 65 percent of the 1965 land transfers involved out-of-county buyers.

DIVERGENCE OF NET INCOME AND LAND PRICES

Traditionally, land prices and net farm and ranch income have moved in the same direction with a time lag of 1 or 2 years. An increase in net farm or ranch income would result in increased land prices. Conversely, a decrease in net income would result in a reduction in land prices. Following 1947-49, this trend was reversed. Land prices consistently increased while net income fluctuated and actually declined. Compared to 1947-49, land prices in 1965 were 189 percent higher while net income was approximately 15 percent lower. This expanding gap between land prices and net income indicates that agricultural land

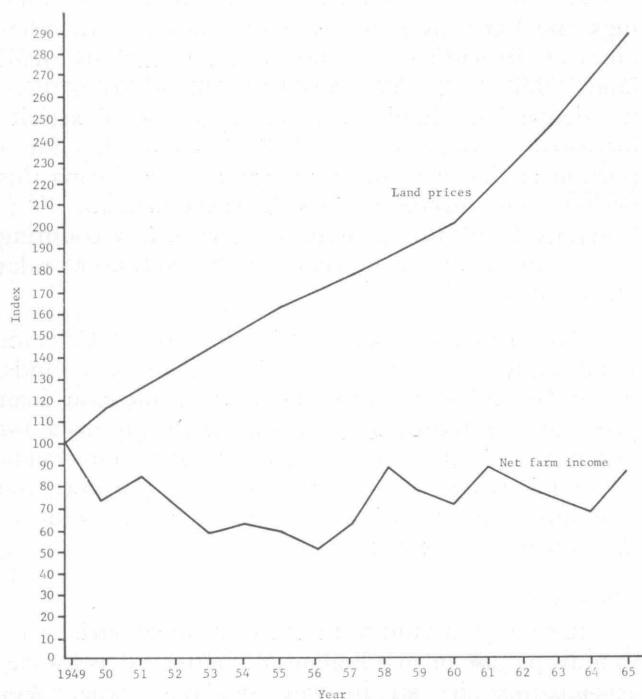


Figure 2. Index of Texas farm and ranch land prices and net farm income, 1949-65. Base for land prices, 1947-49 = 100. Base for net farm income, 1949 = 100.

TABLE 2. RATIO OF FARM AND RANCH LAND PRICE TO NET FARM INCOME, EXPRESSED IN NUMBER OF YEARS OF NET INCOME REQUIRED TO PAY FOR LAND 1947-49, 1960, 1963 AND 1965¹

Items	1947-49	1960	1963	1965
	--- Years ---			
Cotton farms, Blackland Prairie	4.4	14.4	9.0	10.7
Cotton farms, (irrigated), High Plains	3.6	6.6	6.9	7.8
Cotton farms (nonirrigated), High Plains	3.7	6.3	7.1	8.4
Wheat-grain sorghum farms, Southern Plains	4.7	6.0	14.7	9.4
Winter wheat farms, Southern Plains	4.4	7.0	9.7	10.0
Cattle ranches, Southwest	12.0	17.0	26.0	25.0

¹Much of the data used for these calculations obtained from "Farms Costs and Returns . . . Commercial Farms by Type, Size and Location," Bulletin 230, ERS, USDA, Washington, D. C. Revised June 1966.

prices in general are not determined by agricultural productivity but are increasingly influenced by factors external to agriculture, Figure 2.

The ratio of per acre agricultural land prices to average per acre farm and ranch income varies widely among the various type-of-farming areas. Six geographic areas were selected to express the ratio of land prices to net income for specific years since 1947-49. This ratio shows the length of time required to pay for land if all net income were used for this purpose. For example, the net income of wheat-grain sorghum farmers in the Southern Plains increased between 1963 and 1965. Using 1963 net income, it would require 14.7 years to pay for an average wheat-grain sorghum farm. Using 1965 net income, the time requirement would be reduced to 9.4 years, Table 2.

LAND MARKET ACTIVITY IN TYPE-OF-FARMING AREAS

Factors which describe the actual land market situation in each type-of-farming area are per acre price, credit sales, principal mortgage lenders, volume of sales and mineral rights, Tables 3 and 4. No attempt was made to quantify the influence of these factors on land market activity or on per acre price.

The following analysis of land market activity by type-of-farming area includes a general description of each area, identification of primary agricultural enterprises and factors deemed responsible for changes in land market activity.

Northern High Plains

This area is composed of all or parts of the 18 most northern counties on the High Plains. The soils are primarily dark brown and reddish brown clay and clay loams. Agricultural characteristics include a subhumid climate, low and erratic rainfall, a short growing season and the shortest frost-free period of any part of the state. Primary agricultural enter-

TABLE 3. LAND SALES DATA BY TYPE-OF-FARMING AREA IN TEXAS, 1960, 1963 AND 1965

Type-of-farming area	Per acre price			Proportion of sales mortgaged		
	1960	1963	1965	1960	1963	1965
	Dollars			Percent		
1. Northern High Plains	124	169	197	45	40	47
3. Southern High Plains	206	265	252	52	75	64
4. Rolling Plains and Prairies	100	98	128	58	76	60
5. Mountains and Basins	19	41	¹	45	89	¹
6. Upper Rio Grande Valley	1073	700	738	50	60	75
7. Edwards Plateau and Central Basin	65	99	112	67	73	65
8. South Texas Plain	78	107	116	40	73	82
9. Lower Rio Grande Valley	372	301	365	68	80	70
10. Coastal Bend	240	349	349	30	75	50
11. West Cross Timbers	79	110	124	52	70	78
12. Grand Prairie	82	106	130	74	70	70
13. Blackland	149	202	271	52	79	64
14. East Texas Farming	81	118	142	39	70	55
15. East Texas Timber	73	116	203	10	56	45
16. Post Oak	69	114	120	53	81	70
17. Coast Prairie	119	232	231	64	78	67

¹Insufficient data.

prises are livestock, cotton, grain sorghum, small grain, vegetables and wheat.

Volume of sales decreased approximately 25 percent while land prices increased 17 percent between 1963 and 1965. Fifty-five percent of the land transactions were made to out-of-county buyers. Forty-seven percent of all sales were mortgaged, and 67 percent of these mortgages were handled by the seller. Much of the increase in land values is attributed to irrigation development north of the Canadian River.

Southern High Plains

Eighteen counties located in the southwestern quarter of the Panhandle make up the Southern High

Plains type-of-farming area. This area is characterized by clay loam and fine sandy soils, an average annual rainfall that varies from 20 inches in the northeastern part to about 15 inches in the southern and western parts, an average frost-free period ranging from 200 to 220 days and a flat topography sloping gently to the southeast. Influential metropolitan areas are Lubbock, Midland and Odessa. Agricultural enterprises are primarily cotton, livestock, grain sorghum and cash grain.

Volume of sales decreased nearly 50 percent while per acre price declined 5 percent between 1963 and 1965. Agricultural land prices in this area are rather closely related to agricultural production, commodity

TABLE 4. LAND SALES DATA BY TYPE-OF-FARMING AREA IN TEXAS, 1960, 1963 AND 1965

Type-of-farming area	Principal lenders	Volume of 1963 and 1965 sales compared to 1960		Proportion of sellers retaining all mineral rights			
		1963	1965	1963	1960	1965	
		Percent					
1. Northern High Plains	Seller	200	191	55	50	38	
3. Southern High Plains	Seller	45	— 25	27	45	29	
4. Rolling Plains and Prairies	Seller	40	13	4	10	14	
5. Mountains and Basins	¹	64	¹	18	6	¹	
6. Upper Rio Grande Valley	Seller	— 50	— 20	10	10	25	
7. Edwards Plateau and Central Basin	Seller	30	2	2	2	0	
8. South Texas Plain	Seller	25	— 14	5	1	4	
9. Lower Rio Grande Valley	Seller	44	— 7	10	10	5	
10. Coastal Bend	Seller and insurance companies	60	— 60	10	3	0	
11. West Cross Timbers	Seller and banks	— 7	— 29	14	2	1	
12. Grand Prairie	Seller	23	0	3	1	0	
13. Blackland	Seller	65	— 10	8	1	0	
14. East Texas Farming	Seller and banks	0	— 23	16	24	30	
15. East Texas Timber	Seller and banks	12	— 32	¹	¹	20	
16. Post Oak	Seller and banks	44	— 50	2	1	7	
17. Coast Prairie	Seller	195	— 18	18	6	11	

¹Insufficient data.

prices and net income. The diminishing land market activity in 1965 is probably a reflection of the 1964 drouth, depleted irrigation water supplies and increased production costs. However, the 1965 net income position improved to approximately the 1963 level. Future land market activity will depend a great deal on cotton prices, production costs and availability of irrigation water.

Rolling Plains and Prairies

This area is composed of all or parts of 50 counties in North Central Texas east of the High Plains. There are wide differences in soils ranging from dark clays and clay loams to loose sands. The topography is cut sharply by many rivers and their tributaries providing some bottomland for cultivation. The climate is subhumid, and the average annual rainfall varies from 28 inches in the east to 22 inches in the west. The primary agricultural enterprises are livestock, cotton, grain sorghum and wheat. Good quality water is available only in limited portions of the area.

Per acre land prices increased 31 percent between 1963 and 1965 from \$98 to \$128, while volume of sales declined 20 percent. Sixty percent of the sales utilized credit with the seller handling the loan on 50 percent of these. A large portion of the increase in land prices was the result of urban and out-of-county influence. Forty-five percent of all buyers were out-of-county residents.

Upper Rio Grande Valley

This area is located in the most western portion of the state in El Paso and Hudspeth counties. It is the smallest type-of-farming area in Texas and is comprised of a narrow strip of alluvial soils extending about 75 miles along the Rio Grande river above and below El Paso. The climate is arid with an average annual rainfall of less than 10 inches. The average frost-free period is about 240 days.

The principal agricultural enterprises are cotton, alfalfa, vegetables, livestock and dairying. All crops in this area are irrigated.

The upper Rio Grande Valley is one of the regions of the state in which land prices are closely tied to agricultural production. Increases in net income or agricultural production are usually followed by increases in land prices. Few land units are transferred in any one year. The land sales data show a per acre price increase of 5 percent, from \$700 in 1963 to \$738 in 1965. The 1965 average of \$738 per acre is approximately the same as the 1947-49 average.

Edwards Plateau and Central Basin

Nearly 27 million acres spread over 30 counties located directly south of the Panhandle and extending south to the Rio Grande make up this area. The soils are shallow, stony clay loams; the topography

is rough and broken; the average annual rainfall ranges from 15 inches in the west to 30 inches in the east; and most of the area can be used only for grazing. Cattle, sheep and goats are the primary agricultural products. Less than 3 percent of the land is cultivated.

Per acre land price increased 13 percent between 1963 and 1965 from \$99 to \$112, while volume of sales declined approximately 20 percent. Out-of-county buyers accounted for 27 percent of the sales. Fifty percent of the sales involved tracts of land smaller than 150 acres, indicating that a large portion of the relatively small tracts of land probably will not be used for commercial agriculture.

Dense populations of deer and wild turkey inhabit the area providing an opportunity of multiple land use, ranching and hunting. Nearly 33 percent of the entire area, or 9 million acres of ranch land, was leased for hunting during the 1964-65 hunting season. In addition to hunting, 124,200 acres of private land and water are used for other forms of commercial outdoor recreation such as fishing, guest ranches, resorts, campgrounds and picnic grounds. Stable income from outdoor recreation enterprises and urban demand have been reflected in the land market and are responsible for a portion of the increase in land prices.

South Texas Plain

This area is made up of 21 of the southernmost counties of the state, including a large part of the Rio Grande Plain. The soils include dark clays, clay loams and sands. The topography is gently rolling, and the land is brush covered. The average annual rainfall ranges from 20 to 30 inches. Agricultural enterprises range from intensive irrigated vegetable and truck farms to extensive livestock operations.

The 1965 per acre land prices increased 8 percent while the volume of sales decreased approximately 30 percent from 1963. Fifty percent of the sales were for tracts less than 200 acres, and 40 percent of the land transfers were to out-of-county buyers. Four million acres, 20 percent of this area, are leased annually for upland game hunting.

Increased per acre land prices seem to be a reflection of past irrigation development for cash crop production, multiple use of land for ranching and hunting and urban demand.

Lower Rio Grande Valley

The three southernmost counties, Cameron, Hidalgo and Willacy, comprise this area. The soils range from light sands in the north to dense clays along the Rio Grande, the climate is semi-tropical with an average frost-free period of more than 300 days and the topography is flat in the south and east to gently rolling in the northwest. Principal agricultural crops are cotton, small grain, livestock, citrus and vegetables.

The 1965 per acre land price was \$365, approximately the same as the 1960 per acre land price. Out-of-county buyers and out-of-state buyers accounted for 43 percent of all land transactions. Fifty percent of all sales were for tracts of land between 20 and 30 acres in size. The large number of out-of-county buyers and small-sized land sales have been common in this area for a number of years. These two factors alone would not significantly influence land values.

The Lower Rio Grande Valley is an area in which land prices are closely related to agricultural production and net income. Between 1960 and 1963, per acre land prices decreased 19 percent as a result of two successive years of severe winter and summer weather. Between 1963 and 1965, per acre land prices increased 21 percent as a result of increased yields and net income.

Coastal Bend

This area consists of seven counties along the Gulf of Mexico from below Corpus Christi to the northern boundary of Refugio County. The soils are dark clays and clay loams, the average annual rainfall is about 30 inches, the topography is relatively flat and the frost-free period is approximately 300 days. Agricultural enterprises are primarily cash crops and livestock.

Land market activity in the Coastal Bend area was approximately the same in 1965 as in 1963, so far as volume of sales, transfer of mineral rights and per acre land prices were concerned.

West Cross Timbers

Eight counties in North Central Texas make up this area. The soils range from sand to sandy loams, and the topography is gently rolling to rough stony. The average annual rainfall is about 30 inches, and the frost-free period is approximately 225 days. Primary agricultural enterprises are beef cattle, dairying, peanuts, fruits, pecans and poultry.

From 1963 to 1965, volume of sales decreased approximately 20 percent while per acre land prices increased 13 percent. Fifty percent of the transactions were for tracts of land less than 130 acres in size. Out-of-county buyers from Dallas, McLennan and Tarrant counties were responsible for 32 percent of the land transactions; 11 percent were residents of Tarrant County. Urban demand for land for part-time farms, speculation, investment, rural homesites and recreation was responsible for a large portion of the land price increase in 1965.

Grand Prairie

The Grand Prairie area is made up of all or parts of 22 counties in North Central Texas between the West Cross Timbers and Blackland type-of-farming areas. The soils are clays and clay loams, the topography is gently rolling prairie to stony soils on steep slopes, the average annual rainfall is 30 to 35 inches and the average growing season is 225 to 240

days. Agricultural enterprises are dairying, beef cattle, sheep and goats, cotton and small grains.

Volume of sales in 1965 decreased to the 1960 level, while per acre land prices were 58 percent higher than in 1960 and 23 percent higher than in 1963. Out-of-county buyers in 1963 accounted for 55 percent of all land transactions. Sixty-five percent of all sales in 1965 involved buyers from Tarrant, Dallas and McLennan counties. Thirty-two percent of all buyers were residents of Tarrant County.

This area is close enough to Dallas, Fort Worth and Waco to feel the impact of urban demand. A large portion of the 23 percent increase in per acre land price was the result of the urban demand for part-time farms, investment and recreation.

Blackland

The Blackland area is composed of all or parts of 25 counties in Central and North Central Texas. There is a range from blackland to light sandy to shallow stony soils, and the topography ranges from gently rolling to steep stony slopes. The various soil types allow a diversification of agricultural enterprises which include cotton, small grains, grazing crops, livestock, dairying, poultry and specialty crops.

Per acre land prices increased from \$149 in 1960 to \$202 in 1963 and to \$271 in 1965, an increase of 82 percent above the 1960 land prices. Out-of-county buyers have consistently accounted for approximately 50 percent of the annual sales. The same trend continued in 1965 with 40 percent of all sales going to buyers residing in Dallas county. Fifty percent of all sales involved 60 acres or less.

The tremendous increase in per acre price was the result of urban demand for land for part-time farms, investment and recreation while a small portion was from the demand for farm enlargement.

East Texas Farming

The area consists of 24 counties in the extreme northeast corner of the state. The undulating to rolling topography is composed of low-fertility sandy soils. Since 1930, there has been a continuous shift in the type of agricultural enterprises conducted in this area from row crop farming to dairying, beef cattle, poultry, timber and specialty crops.

Per acre land prices increased from \$118 in 1963 to \$142 in 1965. Sixty percent of the sales in 1965 involved tracts of land less than 100 acres in size, indicating uses such as farm enlargement, part-time farms, speculation and recreation. Approximately 30 percent of the purchases were by out-of-county buyers with the largest number residing in Harris and Dallas counties. Demand for recreation land is concentrated primarily in the southern part of this area near Toledo Bend Reservoir and Sam Rayburn Reservoir.

East Texas Timber

The East Texas Timber area is composed of 12 counties in the southeastern portion of the state

directly south of the East Texas farming area. The soils are predominantly sandy except in river bottoms where the soils are heavier. The climate is humid, and the topography is undulating to rolling. Pine timber interspersed with hardwoods covers 75 to 80 percent of the land area. The primary agricultural enterprises are timber, beef cattle, dairying, poultry and some specialty crops.

Per acre land price increased 75 percent between 1963 and 1965, from \$116 to \$203. Fifty percent of the transactions involved tracts of land between 20 and 50 acres in size. Out-of-county buyers purchased 55 percent of all land sold, and 25 percent of all buyers resided in Harris County. A large portion of the per acre price increase was the result of urban demand for recreational land. The northern part of the area includes portions of Sam Rayburn Reservoir, Toledo Bend Reservoir and Lake Livingston. These three reservoirs, containing approximately 500,000 surface acres of water in a pine forest setting, have a tremendous appeal for outdoor recreation.

Post Oak

This area consists of nine counties lying within the hardwood covered portion of the East Texas Timberlands. Two main groups of low fertility sandy soils are typical of the upland area. One is deep sand with porous subsoils, and the other is shallow sandy loam with dense, slowly permeable subsoils. Several rivers—the Brazos, Colorado and Trinity—cross or border the area and provide well-drained productive bottomland. Agricultural enterprises include beef cattle, dairying, cotton, grain sorghum, corn, forage crops and some specialty crops. A large portion of the upland provides excellent deer habitat.

Per acre land prices increased 5 percent, from \$114 in 1963 to \$120 in 1965. Sixty-six percent of all

sales were to out-of-county buyers, and 40 percent of all buyers were from Harris County.

Fairly dense deer populations exist in portions of this nine-county area, attracting hunters from nearby metropolitan centers. During the 1964-65 season, approximately 35 percent of the entire area was leased for deer hunting. In Brazos County a study that quantitatively measured the influence of deer on land values showed that the presence of deer in shootable numbers has been reflected in land prices. Buyers have been paying \$10 to \$50 more per acre for land with deer than for comparable land without deer. It is assumed that land market activity in other Post Oak counties reflects some value for wildlife in land prices. Therefore, urban demand for land, deer, other forms of outdoor recreation, investment and speculation are responsible for the per acre land price increase since 1960.

Coast Prairie

The Coast Prairie is composed of 16 counties bordering the Gulf of Mexico and extending eastward from the Guadalupe River to the Louisiana border. The topography is low-lying and practically flat. The climate is humid, with annual rainfall ranging from 35 inches in the west to more than 50 inches in the east. A portion of the area is suited only for row crops and irrigated crops, while other land is suited only for grazing. The primary agricultural enterprises are rice, beef cattle, dairying, cotton, corn, grain sorghum and forage crops.

Although per acre land prices remained relatively stable between 1963 and 1965, an urban influence exists. Forty percent of the buyers were out-of-county residents who purchased tracts of land ranging from 25 to 2,000 acres. The urban participation in the land market was not reflected in increased land prices.

LIMITATIONS OF THIS STUDY

A study conducted utilizing sample data gathered from public sources has certain limitations. The study does not propose to reflect the average price of any particular farm or ranch and it would be improper to rely upon the price data as reflecting the market value of even a part of a county. Many more small properties are sold than large properties in most areas during a given year. Because small properties usually bring more per acre than large properties the price is influenced upward. The data are not useful for determining value based upon an agricultural productivity concept but rather reflect market value for broad general areas.

