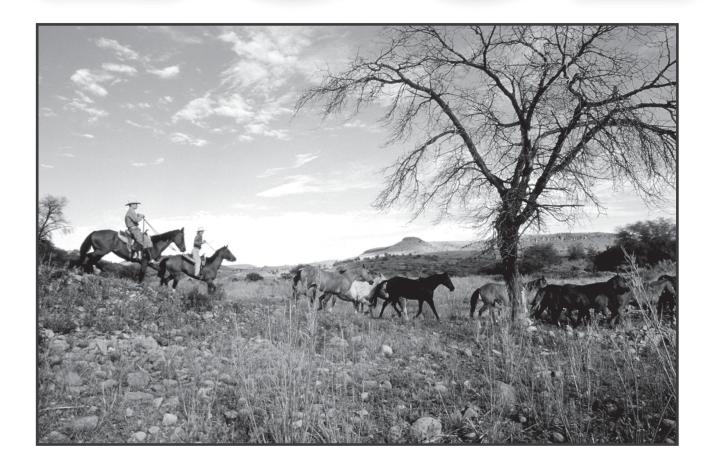
# Texas Rural Land Prices



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#### **Contents**

- 1 Figure 1. Texas Rural Land Weighted Median Price Per Acre
- 2 Figure 2. Very Important Buyer Motives Figure 3. Weighted Median Prices Per Acre Investment Returns
- **3** Figure 4. Net of Inflation Capital Gain Returns to Texas Rural Land Regional Developments
- 5 Figure 5. Texas Land Market Areas
- 6 Outlook for Texas Land Markets
- 7 Appendix A. Guide to Appendix Tables
- **9** Table 1. Nominal and Real Changes in the Weighted Average Price of Texas Rural Land, 1966–2001
- **10** Table 2. Capital Gain Investment Returns on Texas Rural Land
- 11 Table 3. Regional Trends in Texas Rural Land Markets 2000–2001: Price Per Acre
- 12 Table 4. Trends in Texas Rural Land Markets 2000–2001: Tract Size
- 13 Table 5. Trends in Texas Rural Land Markets 2000–2001: Volume of Sales
- **15** Appendix B. Texas Counties by Land Market Areas

# **Texas Rural Land Prices, 2001**

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Tables in this analysis contain statistics based on regional medians of prices paid for Texas rural lands. Approximately 4,000 reported transactions form the foundation for this analysis of general trends in Texas land markets.

The median is the middle price in a ranked list of prices. **Each individual Land Market Area listing in the tables relates to the median sale prices** for the indicated region. Because medians are not unduly influenced by extremely high or low prices, these medians provide a more stable indicator over time of typical properties using relatively small samples of sold properties.

The statewide trend analysis reflects changes in the weighted average of regional median land prices. The weighting process reflects the percentage of Texas rural land found in each land market area, as well as each regional median price.

Readers should use the statistics from the tables as an indicator of past general trends in Texas land markets. The data are highly aggregated and do not represent land prices or values of any particular farm, ranch or tract. However, the statistics do provide a general guide to land market developments. Readers should not regard the reported statistics as a substitute for an appraisal or market study of current local sales regarding the value of any particular farm or ranch.

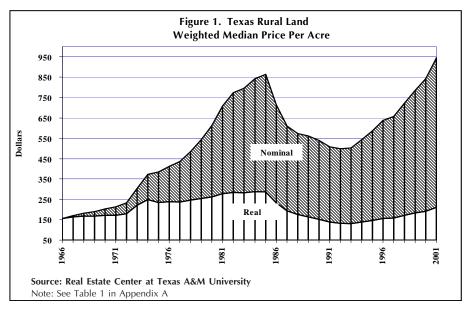
Markets for Texas rural acreage remained robust, recording widespread gains in 2001. Settling at a record high of \$945 per acre, the 2001 weighted median price rose well above the previous high of \$865 registered in 1985 (see Figure 1).

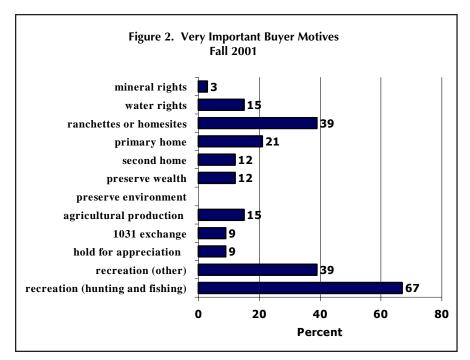
Because of continuing drought, low commodity prices for many agricultural products and the September terrorist attacks, market observers had nervously anticipated weaker prices and slower sales. Confounding this widespread pessimism, the market registered a hefty 12 percent gain in 2001. The last time prices increased by 12 percent or more was in 1981.

The volume of sold properties reported to the Center remained steady at 4,723 sales in 2001 compared with 4,713 sales in 2000. The statewide typical size of sold properties fell from 117 acres in 2000 to 101 acres in 2001 indicating a marked trend toward sales of smaller properties.

After adjusting for inflation, real prices settled at \$211 per acre, well short of the record \$288 per acre posted in 1984. Still

the 2001 real price amounted to a 10 percent increase over the 2000 median price. That growth in real prices produced





a yield of 0.8 percent annual compound capital growth from 1966 price levels.

The upward pressure on prices originated from the continuing presence of buyers with strong appetites for land with recreational potential. Sizable numbers of respondents to the Center's fall 2001 survey of market observers listed hunting and fishing and other types of recreation as very important buyer motives (see Figure 2). Purchase for ranchettes or homesites also ranked as very important.

This widespread preference for land in nonagricultural uses has created a pronounced and widening gap between peracre prices for small and larger properties. In 1966, the typical small tract of Texas land sold for \$206 per acre, approximately 164 percent of the comparable large property price of \$126 per acre. In 2001, the small tract brought \$1,302 per acre, 221 percent of the large tract price of \$589 per acre.

The compound growth in small tracts averaged 6.3 percent from 1966 through 2001 while the comparable large tract growth amounted to 5.3 percent annually. For this analysis, small properties are defined as the smallest 25 percent of sales with the large properties category including the largest 25 percent of sales. The upper limit of small tracts ranged from as few as 19 acres in the Lower Rio Grande Valley (Land Market Area [LMA] 32) to 8,059 in the Trans-Pecos (LMA 8). The lower bounds for large properties ranged from 44 acres in the Lower Rio Grande

Valley (LMA 32) to a high of 28,650 in the Trans-Pecos (LMA 8).

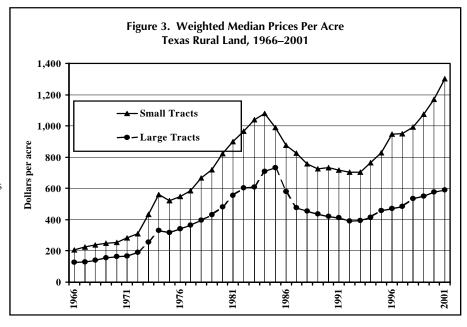
Since the beginning of the current land market recovery in 1993, the disparity between per-acre prices for small properties and large tracts has widened at a rapid pace. Small tracts registered a price of \$704 per acre compared with \$395 for large tracts in 1993, making small tract prices 78 percent higher than large tract prices. By 2001, that disparity had reached 121 percent. This price acceleration led to an eight-year small tract compound annual growth rate of 8 percent compared to 5.1 percent for large properties (see Figure 3).

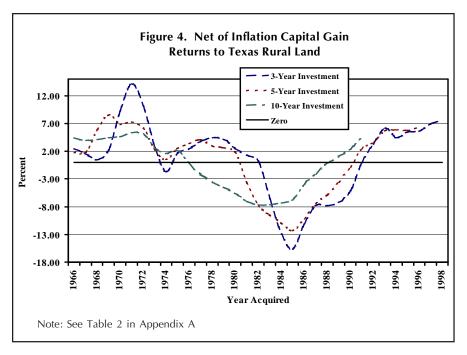
Strong demand for smaller tracts in 2001 suggests potential profit opportunities for splitting larger holdings into more marketable smaller tracts. The large drop in statewide median tract size from 2000 to 2001 reflects the growing demand for recreational and residential properties in the small tract sector. More numerous sales of smaller properties at higher peracre prices accounted for a portion of the strong 12 percent increase in weighted median price in 2001.

#### **Investment Returns**

Land market investors frequently fit in one of three groups based on the preferred duration of their investments: short-term, medium-term and long-term. The return on lands held results from income received during the holding period plus the increase (decrease) in land prices less the growth in inflation in the economy over that same period. Land price appreciation minus the rate of inflation indicates a net capital gain return or return over inflation for holding land. Figure 4 shows the net capital gain yields for short-term (three-year holding period), middle-term (five-year holding period) and long-term (ten-year holding period) investments in Texas rural land as measured by growth in the weighted median price per acre.

The gains reflect annual compound growth after deducting for inflation as measured by the implicit price deflator for gross domestic product. These yields do not include returns on agricultural or recreational activities or any sales costs.





Positive returns indicate that appreciation exceeded inflation during the investment period. The year shown at the bottom of the chart represents the year the investor acquired the property. For example, 1966 corresponds to land purchased at the end of 1966 and sold three years later, in 1969, or five years later, in 1971 or ten years later, in 1976.

The period between 1970 and 1983 marked an era of rising real land prices (see Figure 1). As Figure 4 reveals, short-term capital gains for land acquired during that period tended to range higher than for medium- and long-term investments. From 1985 through 1993, growth in real price per acre first faltered and then actually declined. For land purchased during this era, medium- and long-term investment returns tended to exceed those posted by the short-term investment strategy.

As Texas land markets returned to positive real price growth after 1993, the advantage of long- and medium-term investments over short-term strategies narrowed and may vanish as the selling date for the medium- and long-term land holdings moves forward.

In addition to timing, tract size influences land's marketability. Generally, the pool of potential buyers for a small acreage is greater than for a large tract because more buyers can afford to invest the total required to buy the small tract. As a result, there is a greater potential de-

mand for small than for large properties, all other factors being equal. Since 1993, three-year net annual returns for small Texas properties have averaged 5.7 percent. During the same time, three-year annual returns for typically sized properties averaged 4.9 percent while large properties returned 3.4 percent. This difference in returns reflects the fact that smaller properties are generally easier to market than larger ones.

Considering these influences on net returns on holding land, investors should consider both size and potential for growth in land prices as they search for a suitable investment. A buyer should probably consider purchasing several smaller properties rather than one large one. Alternatively, the buyer might consider purchasing a large property that could easily be divided into smaller units and resold, especially if the properties offer a potential recreational use.

#### **Regional Developments**

The active 2001 market produced statistically verified or region-wide price trends in 15 of 33 land market areas. The remaining areas registered changes, but no consistent upward or downward trend for the entire region. For the regions exhibiting consistent across-the-board trends, all but one posted generous gains, mirroring the statewide trend.

**Panhandle – North (LMA 1).** This area, the lone region reflecting weakening

prices, moved from \$400 per acre in 2000 to \$304 per acre in 2001, a 24 percent drop. However, tract size per transaction in that region expanded from a median 421 acres in 2000 to 640 acres in 2001. This sizable 52 percent shift in size suggests that 2001 sales reflected a larger number of sales of nonirrigated cropland and rangeland than the sales in 2000. Because those kinds of properties typically fetch a lower price per acre than irrigated cropland and improved pasture tracts, the apparent price decline probably overstates the weakness in this area. Further, the weakness may be largely confined to nonirrigated cropland with demand for irrigated properties remaining steady and rangeland experiencing increased demand for hunting, as market observers have reported.

The remaining regions with strong trends in prices registered increases ranging from 9 percent to 55 percent. Spurred by strong demand for recreational land or influenced by rising markets in nearby urban areas, the following regions registered solid region-wide gains.

Rolling Plains – North (LMA 6). This area, dominated by ranches (74 percent native rangeland), saw prices rise 9 percent from \$281 per acre in 2000 to \$307 in 2001. The number of reported sales increased by 30 percent, from 139 in 2000 to 181 in 2001. The typical size of transaction grew 45 percent, from 220 acres to 320 acres.

Rolling Plains – Central (LMA 7). Largely split between native rangeland (51 percent) and nonirrigated cropland (41 percent), prices rose 16 percent from a median of \$393 per acre to \$454 per acre. However, the strength of that trend was questionable as the number of reported sales fell 53 per-

cent from 137 to 64.

Rio Grande Plains (LMA 11). Nearly 89 percent of this south Texas brush country lies in native rangeland ranches. Reflecting the strong demand for prime hunting acreage, prices in this region increased 9 percent in 2001. The median price per acre rose from \$650 to \$708. However, this solid price increase was partly the result of a shift to smaller parcels as median tract size dropped 44 percent from 719 acres to 405 acres. Further, the volume of sales dropped 12 percent from 101

sales to 89, a fact reflected in market participants' comments about a scarcity of good quality listings. Land markets in this region will likely face continuing pressure to offer marketed properties as smaller acreages for higher prices per acre.

Crosstimbers (LMA 13). Dominated by native rangeland (75 percent) and nonirrigated cropland (18 percent), this region experienced strong demand from recreational users from urban areas as the median price per acre rose 27 percent, from \$782 to \$996. That increase was accompanied by a 33 percent drop in median tract size, from 150 acres to 100 acres. The volume of reported sales fell 7 percent, from 232 to 215, reflecting the scarcity of properties for sale. Its proximity to the Dallas-Fort Worth metroplex suggests that this area will continue to see solid demand for land in the future.

Hill Country – North (LMA 14). Demand spilled over from neighboring areas to this ranchland region (83 percent), increasing the median price per acre 13 percent, from \$975 to \$1,100 per acre. Median tract size declined 25 percent, from 181 acres to 135 acres with a 12 percent drop in volume from 262 sales to 231 in 2001. These developments reveal a market with steady demand for increasingly scarce properties.

Hill Country - South (LMA 17). In the path of expanding urban populations, this scenic area saw the median price climb a remarkable 55 percent, from \$2,100 per acre to \$3,248 per acre with an accompanying volume of sales increase of 429 percent, from 17 in 2000 to 90 in 2001. Further, tract size shrank from 99 acres to 55, reflecting strong demand for the ranchland dominating this region. Presumably, the dramatic rise in volume of sales and price could reflect increased diligence among market observers that report sales to the Center. However, the upward push is so strong that sales volume in this area undoubtedly rose, as did prices. This Hill Country region was one of the hottest market areas in Texas in 2001. The pronounced upward pressure on prices will likely abate as potential buyers switch to other locations like the Highland Lakes (LMA 16) or Hill Country - West (LMA

15) as they search out lower-cost alternatives.

San Antonio (LMA 18). This region surrounds San Antonio on the east and south with 25 percent of the land in improved pasture versus 53 percent in native rangeland. Bexar County is not included in this analysis. This grassland region lacks the dramatic appeal of the Hill Country, so it sells for more moderate prices than those regions. Nevertheless, prices surged upward by 38 percent, climbing from \$969 per acre to \$1,333 per acre. Volume of sales held steady at a 6 percent increase, from 173 to 183, while tract size fell 43 percent, from 115 to 65 acres. Clearly, urban buyers' hunger for rural acreage has heavily impacted this LMA.

Coastal Prairie – North (LMA 19). At 62 percent rangeland and 27 percent improved pasture, this lowland region saw an 18 percent uptick in median price, rising from \$1,390 to \$1,645 per acre. Median size fell 26 percent, from 74 to 55 acres, on a sales volume that was up 21 percent, from 156 to 188.

Coastal Prairie - South (LMA 20). This region surrounding Corpus Christi contains a sizable expanse of nonirrigated cropland, 27 percent, but remains dominated by rangeland, which represents 54 percent of total acreage. Here median price increased 18 percent, from \$850 to \$1,001 per acre. Volume of sales remained roughly steady, rising 5 percent, from 164 to 172. While sales indicated a trend toward smaller tracts, with median size falling 24 percent, from 144 to 110 acres, this movement to smaller properties did not prevail across the entire area.

Fort Worth Prairie (LMA 23). This North Texas region is dominated by native rangeland (70 percent) with a noteworthy nonirrigated cropland presence (11 percent). Spurred by the bustling urban economy nearby, median prices in this area grew 28 percent, rising from \$2,350 to \$3,000 per acre on a relatively stable volume of sales, dropping only 5 percent, from 87 to 83. This region also saw a noticeable drop-off in tract size of 32 percent, as median acreage declined from 50 to 34 acres. That shrinkage in size hints that the change in median price may

tend to overstate the rate of growth in this area.

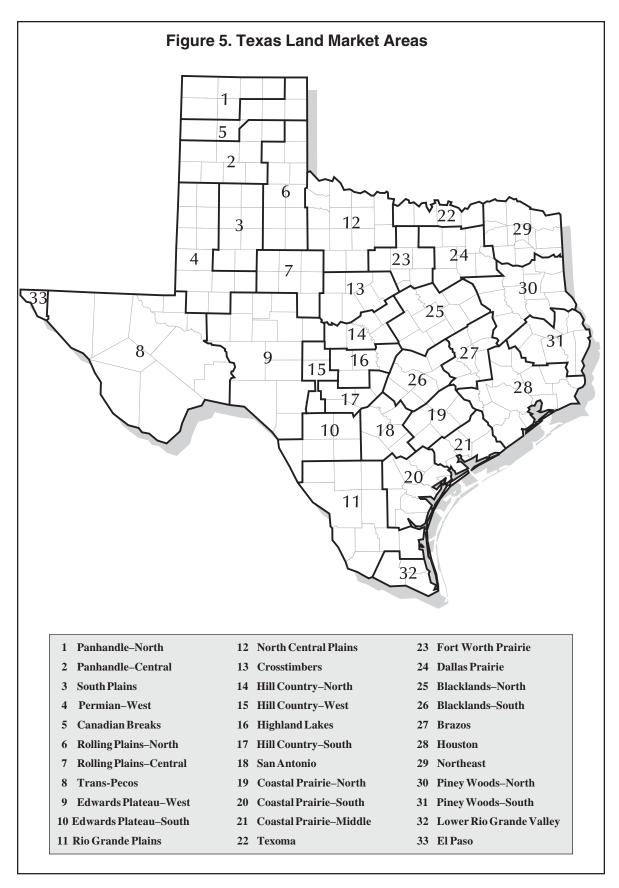
Blacklands - North (LMA 25). Perhaps fueled by the presence of Crawford's most famous resident, President Bush, this region registered sizable increases in median price plus an increase in sales volume and a sizable region-wide drop in tract size. The price pushed upward 30 percent, rising from \$1,000 to \$1,300 per acre on a sales volume that increased 26 percent, expanding from 339 sales to 426. The size contracted 16 percent, from 91 to 76 acres. Land uses split among native rangeland (54 percent), improved pasture (19 percent) and nonirrigated cropland (25 percent).

Blacklands – South (LMA 26). Because of the high-tech industry meltdown, many predicted falling real estate prices in this region. The meltdown prompted sellers to lower asking prices from unrealistic levels envisioned while the boom was on but not below previous market levels. Consequently, this area posted a 53 percent increase in reported volume of sales, from 202 to 309, with a region-wide 24 percent rise in median price, from \$1,866 to \$2,320 per acre. Size remained steady at 56 acres.

North East (LMA 29). Evenly divided among improved pasture (32 percent), native rangeland (31 percent) and timberland (27 percent), this region posted a healthy 21 percent increase in median price, from \$800 to \$970 per acre.

Piney Woods — North (LMA 31). Despite the woes of the timber industry, this region saw median price rise from \$974 to \$1,224, a 26 percent gain. The volume of sales remained virtually unchanged at 113 sales, but tract size contracted from 80 to 53 acres.

These regional market developments reflect a market in which recreational and residential users are setting prices. The fortune of agriculture, the traditional underpinning of the rural land market, currently has little or no influence on land prices. Consequently, the future of Texas rural land markets depends on continued prosperity in urban economies and low interest rates.



Source: Real Estate Center at Texas A&M University

Note: See Appendix B for a listing of counties by land market area

#### Outlook for Texas Land Markets

The prosperous decade beginning in 1993 has propelled Texas land markets to an all-time high on a wave of demand for recreational properties. As a result, many local land markets have dwindling supplies of good properties, and are experiencing rising prices and a trend toward smaller acreage purchases. All of these characteristics point to a market buoyed by prosperity in the nonfarm economy that has endowed many with the means to buy property in the country. Most analysts look for a rebound from the recession of the past year.

The recurring litany of potential threats to the market center on poor conditions for agricultural producers. Drought and poor commodity prices continue to hamper farmers and ranchers in their traditional production activities. However, government disaster payments have kept the wolf from the door.

Despite agriculture's woes, land markets have posted substantial gains during the past ten years, primarily because of urban buyers. Conventional wisdom has held that many farmers will eventually face liquidation, which could send land markets lower. Fortunately, Congress has recently adopted a generous farm program

that promises to ease farmers' financial plight even more.

During the 1970s and into the 1980s, investors were a significant source of demand for rural land. However, the land market bust of the late 1980s sent investors scurrying into the stock and bond markets. Anemic interest rates and stratospheric stock prices coupled with growing concerns about the accuracy of corporate financial statements may be causing some investors to consider adding land to their portfolio. The Sept. 11 attacks and ongoing struggle with global terrorism has added to a feeling of uncertainty about the future. That unease reportedly has caused some investors to seek out land as a secure investment in troubled times.

With the general level of land prices reaching record highs, many wonder if this recovery has run its course. However, real land prices have only recovered the losses sustained after 1985. Prices in the market last approached current inflation-adjusted levels in 1973. If land is to remain at least as valuable today as it was in 1973, this simple comparison of market price levels suggests that demand for land will grow as prosperity returns. It seems logical to look for growing land prices across most of Texas with the

exception of areas hit hard by the woes of the high-tech industry. Farmland areas may see prices firming instead of growing, but the remainder of the state should see a return to prosperity accompanying the economic rebound anticipated later in the year.

The overall lack of good properties for sale means that future demand will face a market plagued with a restricted supply. Growing demand and dwindling supplies point to upward price pressure in the future. Markets in the next year to 18 months will likely see prices climb. However, the rate of price growth may moderate from the high levels posted in 2001 and some regional markets registering sizable gains in 2001 may see moderate price growth as buyers locate acceptable substitute properties in less heated areas.

Long-term prospects also appear to be positive. Projected population growth in the next quarter century suggests increasing competition for land ahead. The growing demand for space chasing an ever restricted supply spells prosperity for landowners. However, timing the arrival of those thriving long-term land prices remains difficult. Therefore, potential investors should be prepared to hold land investments well into the future.

# Appendix A Guide to Appendix Tables

Reported data consists of two sets of tables. One set reports on prices while the other relates the size of properties in the sample of transactions. Statistics for price contain the median sale price for each land market area (LMA). The statewide table contains a weighted average price per acre based on individual LMA median prices aggregated according to the relative amount of acreage in each LMA. Thus, while regional medians reflect probable values of land in each LMA, the weighted average reflects the value of an "average" acre of Texas rural land. This weighting process ensures that trend comparisons reflect the same relative distribution of land over time and limits distortions in indicated trends that can result from variations in the mix of lands sold from year to year.

Tables 1 and 2 report price statistics, Table 3 reports the size of properties in transactions, and Table 4 shows the volume of sales by land market area. Data contained in each table are as follows.

Table 1. Nominal and Real Changes in the Weighted Average Price of Texas Rural Land. This table contains price and tract size statistics from 1966 to date. The table contains the following information.

- Year. Calendar year for the statistics contained in the analysis beginning with 1966.
- Median Size. The median size in acres for tracts sold during the year listed on the left. Variations in tract size can indicate shifts in property types sold. For example, ranches generally require more land than farms. Therefore, a marked increase in tract size could signal a shift from smaller cropland sales to larger ranchland sales.
- Nominal. The statistics listed in the three columns beneath this heading refer to the actual prices paid for the reported transactions. Nominal prices reflect dollars per acre.
  - Weighted Average Price per Acre. This column reports the weighted average of land market area median

prices per acre. The weights represent the proportion of land in each land market area based on a long term average of acreage reported to the Office of Comptroller — Property Tax Division. This weighted average price represents a composite of a "typical" acre of Texas rural land, containing a little Lower Rio Grande Valley land, a little Amarillo area land as well as a little of all the land in between.

- Year-to-Year Percentage Change. The percentage change in current weighted average price from the weighted average price in the previous year.
- Annual Compound Pretax Growth Rate from 1966. The annually compound rate of appreciation for the current weighted average price per acre compared to the 1966 weighted average land price. This column reports a yield for an investment in a typical acre of Texas rural land between 1966 and the current year.
- Real. The statistics listed in the three columns beneath this heading report statistics for the nominal prices after adjusting for changes in purchasing power. Resulting real prices reflect Texas land prices in 1966 dollars.
  - Deflated Weighted Average Price per Acre. The nominal weighted average of land market area median prices per acre adjusted with the consumer's price index to reflect purchasing power changes from 1966.
  - Year-to-Year Percentage Change.
     The percentage change in current deflated weighted average price from the deflated weighted average price in the previous year.
  - Annual Compound Pretax Growth Rate from 1966. The annually compounded rate of appreciation for the current deflated weighted average price per acre compared to the

1966 weighted average land price. This column reports a real inflation-adjusted yield for an investment in a typical acre of Texas rural land between 1966 and the current year.

Table 2. Capital Gain Investment Returns on Texas Rural Land. This table shows the overall compound rate of growth in land prices after adjusting for the rate of inflation during a three-year, five-year and ten-year investment period as shown at the top of the table. The table contains the following information:

- Year Sold. Year ending the investment period. For example, 1969 in this column refers to land purchased in 1966 and sold in 1969 for the three-year investment.
- **Year Acquired.** Refers to the year beginning the investment period.
- **Nominal Return.** Reports the compound growth rate for land acquired at the beginning of the holding period at that year's median price and sold at the ending year's median price.
- Average Inflation. Represents the rate of inflation or compound change in the level of inflation between the two dates in the investment period.
- **Net Return.** Reports the nominal return less the average inflation. This quantity represents the gain or loss above or below the rate of inflation for the investment period.

Table 3. Regional Trends in Texas Rural Land Markets 2000–2001: Price Per Acre. This table reports land market area median prices for the past two years, indicating the changes in those medians. The table also identifies which of those calculated trends were statistically significant according to a Mann-Whitney Test.

- Land Market Area. This column shows the number of the land market areas producing the statistics listed to the right in the table.
- Median Price. The two columns under this heading report the median price per acre for each of the years listed at the head of those columns.

Statewide prices reflect the weighted average price.

- Trend Analysis. This section of the table contains an indication of the change in prices in both dollars per acre and percentages from the first year to the second. The final column indicates the results of a Mann-Whitney test of the distributions of prices from each year. When the test indicates statistical significance, prices have changed across the board for the area listed. Price trends in those LMAs with a single asterisk were significant at the 5 percent level while two asterisks indicates significance at the 1 percent level.
- *Distribution of Sales Analysis.* The four columns in this section report the lower quartile, upper quartile, minimum and maximum price per acre.
  - Lower Quartile. The lower quartile is the 25<sup>th</sup> percentile of the distribution of sales. When ranked from lowest to highest, one-fourth of the sale prices are less than the 25<sup>th</sup> percentile while 75 percent exceed that amount. The lower quartile probably indicates price levels for larger, more production-oriented properties.
  - Upper Quartile. The upper quartile is the 75th percentile of the distribution of sales. When ranked from lowest to highest, one-fourth of the sale prices exceed the upper quartile while 75 percent rank lower than that amount. The upper quartile probably indicates price levels for smaller, more consumer or development-oriented properties.
  - Minimum. The smallest reported sale price.

- *Maximum*. The largest reported sale price.
- *State*. Statewide price statistics reflect the weighted average prices for the listed years.

Table 4. Trends in Texas Rural Land Markets 2000–2001: Tract Size. This table reports the median tract size for sales in each land market area for the past two years and changes in those medians. The table also identifies which of those trends are statistically significant according to the Mann-Whitney Test.

- Land Market Area. This column indicates the number and name of the land market area producing the statistics listed to the right in the table.
- Median Size. The two columns under this heading report the median size per acre for each of the years listed at the head of those columns.
- Trend Analysis. This section of the table contains an indication of the change in sizes in both acres and percentages from the first year to the second. The final column indicates the results of a *Mann-Whitney* test of the distributions of size from each year. When the test indicates statistical significance, tract size has changed across the board for the area listed. Size trends in those LMAs with a single asterisk were significant at the 5 percent level while two asterisks indicates significance at the 1 percent level.
- Distribution of Tract Size Analysis.

  The four columns in this section report the lower quartile, upper quartile, minimum and maximum tract size.
  - Lower Quartile. The lower quartile is the 25<sup>th</sup> percentile of the distribu-

- tion of sales. When ranked from lowest to highest, one-fourth of the tract sizes are less than the 25<sup>th</sup> percentile while 75 percent exceed that amount. The lower quartile probably indicates typical sizes for smaller, more consumer-oriented properties.
- *Upper Quartile*. The upper quartile is the 75<sup>th</sup> percentile of the distribution of sales. When ranked from lowest to highest, one-fourth of the tract sizes exceed the upper quartile while 75 percent rank lower than that amount. The upper quartile probably indicates typical tract sizes for larger production-oriented properties.
- *Minimum*. The smallest reported tract size.
- Maximum. The largest reported tract size.
- **State.** Statewide tract size statistics reflect the median tract size for the listed years.

Table 5. Trends in Texas Rural Land Markets 2000–2001: Volume of Sales. This table reports the number of transactions reported in each geographic area of Texas.

- Land Market Area. This column indicates the number and name of the land market area producing the statistics listed to the right in the table.
- **Number of Sales.** This column gives the number of sales in each LMA for the indicated year.
- *Trend Analysis*. This section reports the change in typical (median) tract size from the first to the second indicated years.

Table 1. Nominal and Real Changes in the Weighted Average Price of Texas Rural Land, 1966–2001

			Nominal			Real	
	Median			Annual	Deflated		Annual
	Median	Weighted		Compound	Weighted		Compound
	Tract	Average	Year-to-Year	Pretax	Average	Year-to-Year	Pretax
Year	Size (acres)	Price per Acre	Percentage Change	Growth Rate from 1966	Price per Acre*	Percentage Change	Growth Rate from 1966
1966	120	\$157	###	###	\$157	###	###
1967	110	169	8	8	164	4	4.5
1968	101	181	7	7	168	2	3.4
1969	100	190	5	7	168	0	2.3
				7			
1970	107	204	7		172	2	2.3
1971	110	213	4	6	171	-1 -	1.7
1972	120	233	9	7	179	5	2.2
1973	153	304	30	10	221	23	5.0
1974	150	372	22	11	248	12	5.9
1975	126	384	3	10	235	-5	4.6
1976	128	412	7	10	238	1	4.2
1977	121	436	6	10	237	0	3.8
1978	126	485	11	10	246	4	3.8
1979	132	544	12	10	255	4	3.8
1980	138	613	13	10	263	3	3.8
1981	124	708	15	11	278	6	3.9
1982	105	773	9	10	285	3	3.8
1983	113	796	3	10	283	-1	3.5
1984	125	842	6	10	288	2	3.4
1985	118	865	3	9	287	0	3.2
1986	113	714	-17	8	232	-19	2.0
1987	130	611	-14	7	193	-17	1.0
1988	139	574	-6	6	175	<b>-9</b>	0.5
1989	141	562	-2	6	165	-6	0.2
1990	135	539	-4	5	152	-8	-0.1
1991	138	508	-6	5	139	<b>-9</b>	-0.5
1992	145	499	-2	5	133	-4	-0.6
1993	140	503	1	4	131	-2	-0.7
1994	136	544	8	5	139	6	-0.4
1995	122	586	8	5	146	5	-0.3
1996	111	638	9	5	156	7	0.0
1997	139	657	3	5	158	1	0.0
1998	139	723	10	5	171	8	0.3
1999	120	786	9	5	184	8	0.5
2000	117	842	7	5	193	5	0.6
2001	101	945	12	5	211	10	0.8

\*In 1966 dollars

Table 2. Capital Gain Investment Returns on Texas Rural Land

		3-Year In	vestment			5-Year In	vestment			10-Year In	vestment	
		Nominal	Average	Net		Nominal	Average	Net		Nominal	Average	Net
Year	Year	Return	Inflation	Return	Year	Return	Inflation	Return	Year	Return	Inflation	Return
Sold	Acquired	(Percent)	(Percent)	(Percent)	Acquired	(Percent)	(Percent)	(Percent)	Acquired	(Percent)	(Percent)	(Percent)
1969	1966	6.57	4.10	2.47								
1970	1967	6.48	4.85	1.62								
1971	1968	5.58	5.09	0.49	1966	6.29	4.53	1.76				
1972	1969	7.04	4.87	2.17	1967	6.63	4.77	1.87				
1973	1970	14.22	4.96	9.26	1968	10.93	5.02	5.91				
1974	1971	20.43	6.26	14.16	1969	14.38	5.83	8.56				
1975	1972	18.12	7.95	10.17	1970	13.49	6.61	6.87				
1976	1973	10.66	7.98	2.69	1971	14.10	6.75	7.36	1966	10.13	5.63	4.50
1977	1974	5.43	7.13	-1.69	1972	13.35	7.19	6.16	1967	9.94	5.97	3.97
1978	1975	8.09	6.41	1.69	1973	9.79	7.50	2.30	1968	10.36	6.25	4.11
1979	1976	9.71	7.30	2.41	1974	7.90	7.37	0.53	1969	11.09	6.59	4.50
1980	1977	12.03	8.21	3.82	1975	9.81	7.34	2.47	1970	11.63	6.98	4.65
1981	1978	13.44	8.95	4.49	1976	11.44	8.08	3.36	1971	12.76	7.41	5.35
1982	1979	12.42	8.23	4.19	1977	12.13	8.03	4.10	1972	12.74	7.61	5.13
1983	1980	9.10	6.49	2.61	1978	10.42	7.39	3.03	1973	10.10		2.66
1984	1981	5.95	4.63	1.32	1979	9.13	6.46	2.67	1974	8.51	6.91	1.60
1985	1982	3.82	3.61	0.21	1980	7.13	5.26	1.87	1975	8.46	6.29	2.17
1986	1983	-3.56	3.02	-6.58	1981	0.17	3.84	-3.67	1976	5.65	5.94	-0.29
1987	1984	-10.14	2.79	-12.92	1982	-4.59	3.21	-7.80	1977	3.43	5.59	-2.16
1988	1985	-12.78	2.87	-15.64	1983	-6.33	3.09	-9.42	1978	1.70	5.22	-3.52
1989	1986	-7.67	3.41	-11.08	1984	-7.77	3.11	-10.88	1979	0.33	4.77	-4.44
1990	1987	-4.09	3.70	-7.79	1985	-9.03	3.26	-12.29	1980	-1.28	4.25	-5.53
1991	1988	-3.99	3.78	-7.77	1986	-6.58	3.55	-10.13	1981	-3.27	3.70	-6.96
1992	1989	-3.89	3.32	-7.20	1987	-3.97	3.43	-7.40	1982	-4.28	3.32	-7.60
1993	1990	-2.28	2.82	-5.10	1988	-2.61	3.23	-5.84	1983	-4.49	3.16	-7.65
1994	1991	2.31	2.31	0.00	1989	-0.65	2.89	-3.54	1984	-4.27	3.00	-7.27
1995	1992	5.50	2.22	3.28	1990	1.69	2.55	-0.86	1985	-3.82	2.90	-6.72
1996	1993	8.27	2.07	6.20	1991	4.67	2.21	2.47	1986	-1.11	2.88	-3.99
1997	1994	6.49		4.47	1992	5.65	2.11	3.54	1987	0.73		-2.04
1998	1995	7.26		5.55	1993	7.53	1.88	5.65	1988	2.34		-0.22
1999	1996	7.20	1.57	5.63	1994	7.65	1.76	5.88	1989	3.42	2.32	1.09
2000	1997	8.62	1.60	7.02	1995	7.52	1.74	5.78	1990	4.56		2.42
2001	1998	9.33	1.80	7.53	1996	8.16	1.72	6.44	1991	6.40	1.96	4.44

Table 3. Regional Trends in Texas Rural Land Markets 2000–2001: Price Per Acre

	Media	n Price	Tre	nd Analy:	sis	Distribution of Sales Analysis (\$/acre)			
Land Market Area	(\$/acre)		Change 2000–2001		2001 Price	Quartiles	2001 Price	Extremes	
	2000	2001	(\$/acre)	(percent)	Test	Lower	Upper	Minimum	Maximum
1 Panhandle–North	400	304	(96)	(24)	*	229	655	124	1,566
2 Panhandle–Central	344	350	6	2		300	615	113	2,683
3 South Plains	497	475	(22)	(4)		345	650	113	3,026
4 Permian–West	500	422	(78)	(16)		275	644	140	12,561
5 Canadian Breaks	244	325	81	33		237	548	165	2,126
6 Rolling Plains-North	281	307	26	9	**	250	365	80	2,500
7 Rolling Plains–Central	393	454	61	16	*	351	623	206	1,500
8 Trans-Pecos	120	120	0	0		55	326	43	2,550
9 Edwards Plateau–West	492	493	1	0		423	615	150	8,500
10 Edwards Plateau–South	1,111	1,140	29	3		775	2,084	355	17,233
11 Rio Grande Plains	650	708	58	9	**	650	986	60	22,568
12 North Central Plains	625	596	(29)	(5)		390	890	150	2,852
13 Crosstimbers	782	996	214	27	**	750	1,340	225	5,391
14 Hill Country–North	975	1,100	125	13	*	775	1,500	228	17,610
15 Hill Country–West	830	800	(30)	(4)		585	1,030	333	8,138
16 Highland Lakes	3,026	2,836	(190)	(6)		2,416	4,400	1,080	15,280
17 Hill Country–South	2,100	3,248	1148	55	**	2,300	5,284	815	15,000
18 San Antonio	969	1,333	364	38	**	876	2,500	105	8,069
19 Coastal Prairie–North	1,390	1,645	255	18	**	1,123	2,597	547	8,332
20 Coastal Prairie–South	850	1,001	151	18	**	800	1,355	389	8,400
21 Coastal Prairie–Middle	1,000	1,034	34	3		800	1,750	425	5,000
22 Texoma	1,506	1,772	266	18		1,003	2,307	409	11,494
23 Fort Worth Prairie	2,350	3,000	650	28	*	2,000	4,000	288	16,873
24 Dallas Prairie	1,900	2,000	100	5		1,100	3,000	425	23,161
25 Blacklands-North	1,000	1,300	300	30	**	850	2,100	300	14,271
26 Blacklands-South	1,866	2,320	454	24	**	1,400	4,712	362	22,000
27 Brazos	1,639	1,800	161	10		1,130	3,005	459	15,094
28 Houston	2,498	3,000	502	20		1,450	4,750	266	11,333
29 Northeast	800	970	170	21	**	650	1,350	333	5,900
30 Piney Woods-North	974	1,224	250	26	**	895	2,240	343	7,991
31 Piney Woods–South	1,487	1,300	(187)	(13)		800	1,574	354	4,250
32 Lower Rio Grande Valley	1,456	2,000	544	37		1,350	3,200	389	13,497
33 El Paso	NA	NA	NA	NA		NA	NA	NA	NA
State	842	945	103	12	**	600	2,000	43	23,161

Note: Test shows the result of a Mann-Whitney test of the indicated changes:

Lower quartile is 25th percentile; Upper quartile is 75th percentile.

State price is weighted average of regional median prices.

<sup>(\*\*)</sup> indicates significance at the 99 percent level;

<sup>(\*)</sup> indicates significance at the 95 percent level;

all others showed no statistically verifiable trend.

Table 4. Trends in Texas Rural Land Markets 2000–2001: Tract Size

Land Market Area	(Acres		a.	CI.		2001 0:			sis (acre)
1	,	s/Sale		c Change	TD .	2001 Size	`	2001 Size	
1 D 1 11 N 1	2000	2001	(Acre/Sale)		Test **	Lower	Upper	Minimum	Maximum
1 Panhandle–North	421	640	219	52		320	1,280	160	16,910
2 Panhandle–Central	320	320	0	0	*	160	640	21	2,938
3 South Plains	164	209	45	27		160	327	29	1,473
4 Permian–West	180	177	(3)	(2)		160	359	16	4,011
5 Canadian Breaks	629	320	(309)	(49)	*	160	606	64	20,226
6 Rolling Plains–North	220	320	100	45	*	160	640	20	11,018
7 Rolling Plains–Central	160	151	(9)	(6)		100	252	28	1,668
8 Trans-Pecos	6,080	4,181	(1,899)	(31)		744	11,564	40	20,699
9 Edwards Plateau–West	155	183	28	18		100	550	14	11,363
10 Edwards Plateau–South	140	109	(31)	(22)		48	500	10	5,252
11 Rio Grande Plains	719	405	(314)	(44)	**	127	1,238	20	9,569
12 North Central Plains	160	150	(10)	(6)	*	74	269	15	2,807
13 Crosstimbers	150	100	(50)	(33)	**	54	171	10	1,598
14 Hill Country–North	181	135	(46)	(25)	**	70	238	10	11,005
15 Hill Country–West	217	296	79	36		63	514	16	1,536
16 Highland Lakes	82	56	(26)	(32)		40	185	10	2,482
17 Hill Country–South	99	55	(44)	(44)		28	108	14	2,769
18 San Antonio	115	65	(50)	(43)	**	30	150	10	1,353
19 Coastal Prairie–North	74	55	(19)	(26)	*	30	113	10	1,054
20 Coastal Prairie–South	144	110	(34)	(24)		64	200	19	3,368
21 Coastal Prairie–Middle	77	95	18	23		34	207	10	3,231
22 Texoma	78	96	18	23		45	155	11	1,515
23 Fort Worth Prairie	50	34	(16)	(32)	*	24	80	11	2,341
24 Dallas Prairie	53	49	(4)	(8)		30	102	10	799
25 Blacklands-North	91	76	(15)	(16)	**	34	166	10	2,743
26 Blacklands-South	55	56	1	2		26	114	10	1,449
27 Brazos	43	49	6	14		24	98	10	3,619
28 Houston	42	39	(3)	(7)		20	92	10	1,454
29 Northeast	80	70	(10)	(13)		36	157	10	1,658
30 Piney Woods–North	80	53	(27)	(34)	**	27	98	10	3,894
31 Piney Woods–South	52	40	(12)	(23)		34	67	12	517
32 Lower Rio Grande Valley	31	28	(3)	(10)		19	72	13	3,074
33 El Paso	NA	NA	NA	NA		NA	NA	NA	NA
State	117	101	(16)	(14)	**	43	228	10	20,699

Note: Test shows the result of a Mann-Whitney test of the indicated changes:

Lower quartile is 25th percentile; Upper quartile is 75th percentile.

<sup>(\*\*)</sup> indicates significance at the 99 percent level;

<sup>(\*)</sup> indicates significance at the 95 percent level;

all others showed no statistically verifiable trend.

Table 5. Trends in Texas Rural Land Markets 2000–2001: Volume of Sales

			Trend A	Analysis
Land Market Area	Number	r of Sales	Change 2	2000–2001
	2000	2001	(Number)	(Percent)
1 Panhandle–North	67	62	(5)	(7)
2 Panhandle–Central	177	197	20	11
3 South Plains	184	160	(24)	(13)
4 Permian–West	108	184	76	70
5 Canadian Breaks	34	20	(14)	(41)
6 Rolling Plains-North	139	181	42	30
7 Rolling Plains-Central	137	64	(73)	(53)
8 Trans-Pecos	15	16	1	7
9 Edwards Plateau–West	152	169	17	11
10 Edwards Plateau–South	140	185	45	32
11 Rio Grande Plains	101	89	(12)	(12)
12 North Central Plains	288	255	(33)	(11)
13 Crosstimbers	232	215	(17)	(7)
14 Hill Country–North	262	231	(31)	(12)
15 Hill Country–West	27	30	3	11
16 Highland Lakes	64	50	(14)	(22)
17 Hill Country–South	17	90	73	429
18 San Antonio	173	183	10	6
19 Coastal Prairie–North	156	188	32	21
20 Coastal Prairie-South	164	172	8	5
21 Coastal Prairie–Middle	159	126	(33)	(21)
22 Texoma	191	106	(85)	(45)
23 Fort Worth Prairie	87	83	(4)	(5)
24 Dallas Prairie	188	191	3	2
25 Blacklands-North	339	426	87	26
26 Blacklands–South	202	309	107	53
27 Brazos	307	289	(18)	(6)
28 Houston	185	95	(90)	(49)
29 Northeast	205	153	(52)	(25)
30 Piney Woods-North	111	113	2	2
31 Piney Woods–South	67	33	(34)	(51)
32 Lower Rio Grande Valley	35	58	23	66
33 El Paso	NA	NA	NA	NA
State	4,713	4,723	10	0

### **Appendix B**

## **Texas Counties by Land Market Areas**

#### **Land Market Area 1**

Dallam Hansford Hartley Moore Ochiltree

Sherman

#### **Land Market Area 2**

Armstrong Briscoe Carson Castro Deaf Smith Gray Parmer Randall Swisher

#### **Land Market Area 3**

Borden Crosby Dawson Floyd Garza Hale Lubbock Lynn

#### **Land Market Area 4**

Andrews
Bailey
Cochran
Ector
Gaines
Hockley
Howard
Lamb
Martin
Midland
Terry
Yoakum

#### **Land Market Area 5**

Hemphill Hutchinson Lipscomb Oldham Potter Roberts

#### **Land Market Area 6**

Childress
Collingsworth
Cottle
Dickens
Donley
Hall
Kent
King
Motley
Stonewall
Wheeler

#### Land Market Area 7

Fisher Jones Mitchell Nolan Runnels Scurry Taylor

#### **Land Market Area 8**

Brewster Crane Culberson Hudspeth Jeff Davis Loving Pecos Presidio Reeves Terrell Ward Winkler

#### **Land Market Area 9**

Coke
Concho
Crockett
Edwards
Glasscock
Irion
Kinney
Reagan
Schleicher
Sterling
Sutton
Tom Green
Upton
Val Verde

#### **Land Market Area 10**

Frio Maverick Medina Uvalde Zavala

#### **Land Market Area 11**

Brooks
Dimmit
Duval
Jim Hogg
Kenedy
La Salle
McMullen
Starr
Webb
Zapata

#### **Land Market Area 12**

Archer
Baylor
Clay
Foard
Hardeman
Haskell
Jack
Knox
Shackelford
Stephens
Throckmorton
Wichita
Wilbarger
Young

#### **Land Market Area 13**

Brown Callahan Coleman Comanche Eastland Erath

#### **Land Market Area 14**

Hamilton McCulloch Mills Lampasas San Saba

#### **Land Market Area 15**

Kimble Menard Real

#### **Land Market Area 16**

Burnet Gillespie Llano Mason

#### **Land Market Area 17**

Bandera Blanco Kendall Kerr

#### **Land Market Area 18**

Atascosa Bexar Comal Guadalupe Karnes Wilson

#### **Land Market Area 19**

Colorado DeWitt Fayette Gonzales Lavaca

#### **Land Market Area 20**

Aransas
Bee
Goliad
Jim Wells
Kleberg
Live Oak
Nueces
Refugio
San Patricio

#### **Land Market Area 21**

Calhoun Jackson Matagorda Victoria Wharton

#### **Land Market Area 22**

Cooke Fannin Grayson Montague

#### **Land Market Area 23**

Hood Johnson Palo Pinto Parker Somervell Tarrant Wise

#### **Land Market Area 24**

Collin
Dallas
Denton
Ellis
Hunt
Kaufman
Rains
Rockwall
Van Zandt

#### **Land Market Area 25**

Bell Bosque Coryell Falls Freestone Hill Limestone McLennan Navarro

#### **Land Market Area 26**

Bastrop Caldwell Hays Lee Milam Travis Williamson

#### **Land Market Area 27**

Brazos Burleson Grimes Leon Madison Robertson Washington

#### **Land Market Area 28**

Austin Brazoria Chambers Fort Bend Galveston Hardin Harris Jefferson Liberty Montgomery Orange San Jacinto Walker

#### **Land Market Area 29**

Bowie Camp Cass Delta Franklin Hopkins Lamar Marion Morris Red River Titus Upshur Wood

#### **Land Market Area 30**

Anderson
Cherokee
Gregg
Harrison
Henderson
Houston
Nacogdoches
Panola
Rusk
Shelby
Smith

#### **Land Market Area 31**

Angelina
Jasper
Newton
Polk
Sabine
San Augustine
Trinity
Tyler

#### **Land Market Area 32**

Cameron Hidalgo Willacy

#### **Land Market Area 33**

El Paso



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