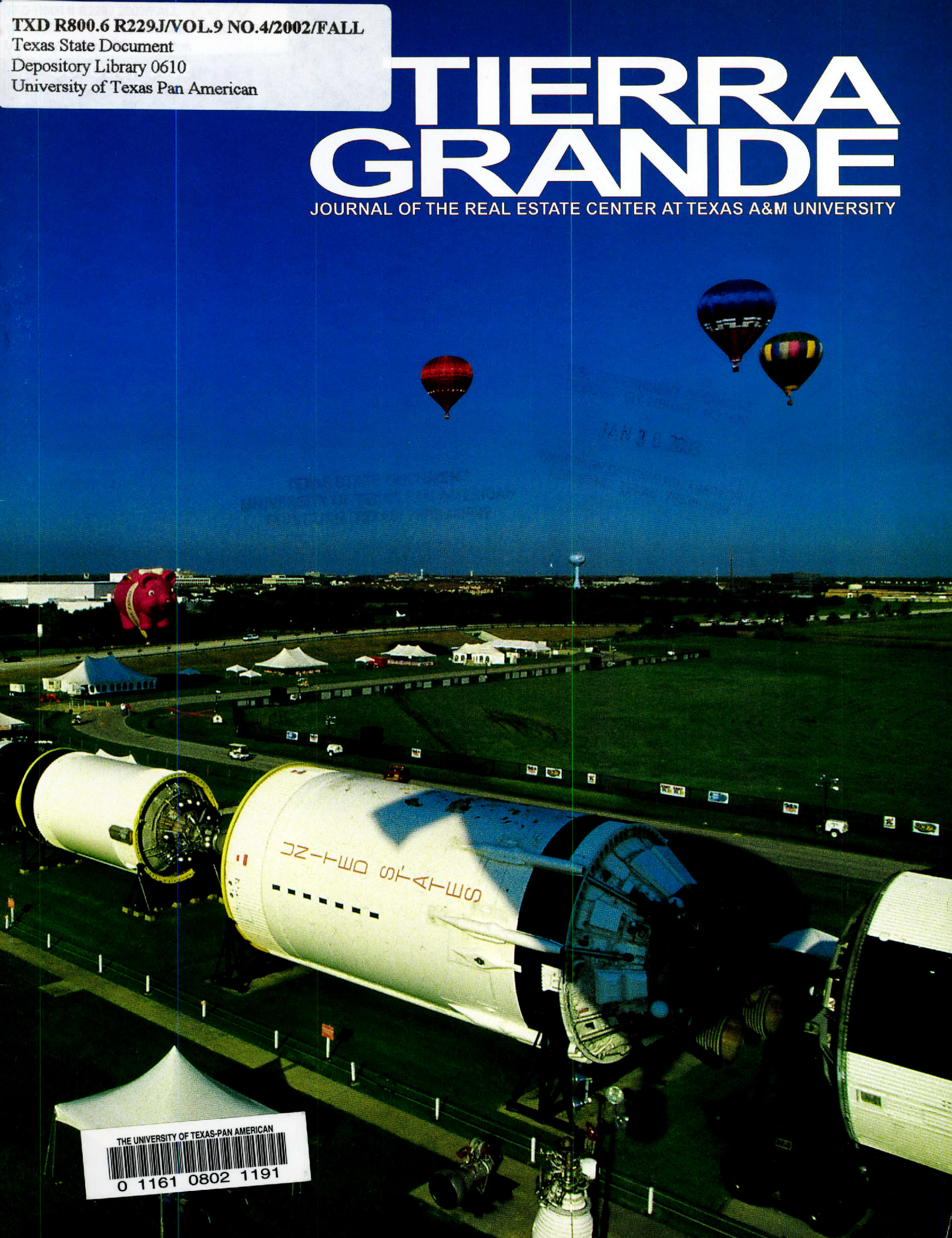
TIERRA GRANDE

JOURNAL OF THE REAL ESTATE CENTER AT TEXAS A&M UNIVERSITY



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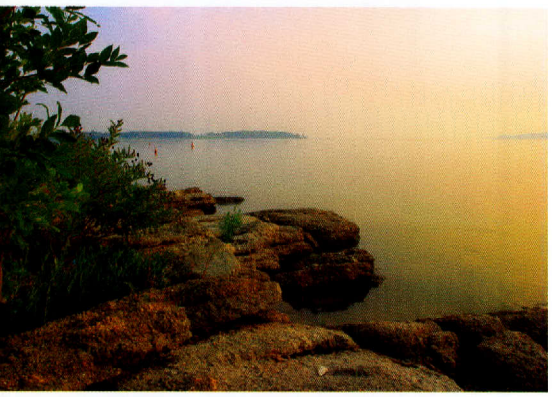
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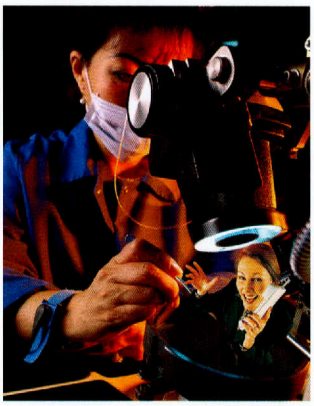
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On the Cover

Hot-air balloons drift over the Johnson Space Center during the Ballunar Liftoff Festival in Houston.
Photographer J.P. Beato

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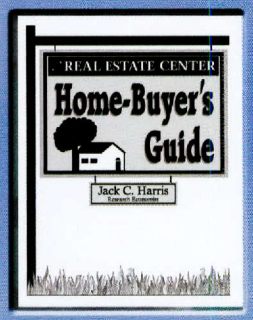
benchmarks

REAL ESTATE CENTER ANNOUNCES BIG GIVEAWAY

Nearly all of the most popular publications from the Real Estate Center at Texas A&M University are now available free on the Internet.

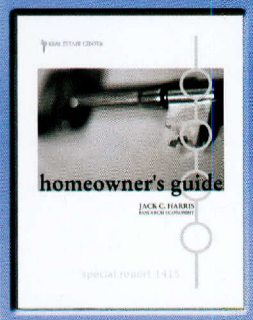
"Over the past 30 years, the Center has produced nearly 1,600 publications designed to help professionals and the public make wise real estate decisions," said Center Director R. Malcolm Richards. "We will continue to do that, only now the research results will be free in most instances."

Here are some of the publications and the addresses where they can be viewed.



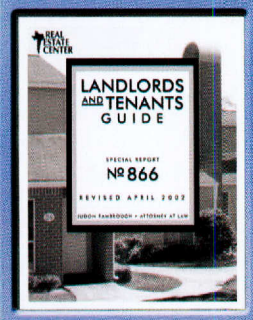
Home-Buyer's Guide

(http://recenter.tamu.edu/pdf/1044.pdf) This 49-page booklet previously sold for $5. It covers the meaning of homeownership, shopping for a home, housing options, obtaining a loan, negotiating a sales contract and more. Topics are presented in the sequence they normally occur in the home-buying process.



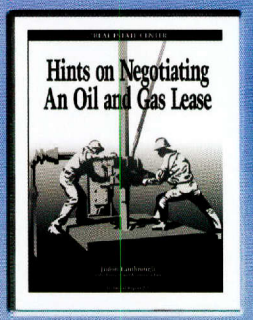
Homeowner's Guide

(http://recenter.tamu.edu/pdf/1415.pdf) A 21-page booklet that was $4 covers owning and selling a home and a glossary of terms homeowners need to know.



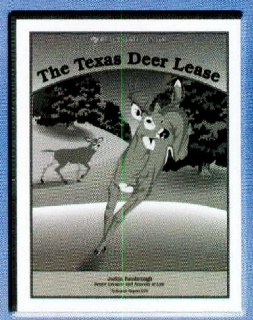
Landlords and Tenants Guide

(http://recenter.tamu.edu/pdf/866.pdf) The best deal of all, this 100-page report was updated this year and previously sold for $10. It explains what the Texas Property Code says about a residential landlord's responsibilities and liabilities for repairs, evictions, security deposits, smoke alarms and utility cutoffs.



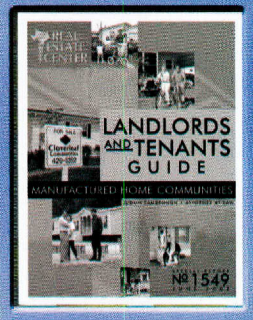
Hints on Negotiating an Oil and Gas Lease

(http://recenter.tamu.edu/pdf/229.pdf). This is the Real Estate Center's all-time best seller, and thousands were sold at $4 each. The 19-page report details step-by-step clauses in an oil and gas lease and outlines important provisions for the mineral owner's consideration.



The Texas Deer Lease

(http://recenter.tamu.edu/pdf/570.pdf). This popular 17-page booklet has taken on added importance for landowners facing declining agriculture and petroleum revenues. The easy-to-read report offers hunters and landowners suggestions for avoiding misunderstandings common in lease agreements. Previously it sold for $4.



Landlords and Tenants Guide for Manufactured Home Communities

(http://recenter.tamu.edu/pdf/1549.pdf). This recently released guide examines the 2002 Texas law regulating the leasing, management and maintenance of manufactured housing communities. It was $5.

continued on page 27

PESO POWER

By M.A. Anari and Mark G. Dotzour

Literally millions of Mexican nationals cross the Rio Grande to shop and do business in Texas every year. They come on foot and in vehicles (see table), bringing disposable income with them. When the peso is strong, so is their buying power. When the peso weakens, they have less to spend.

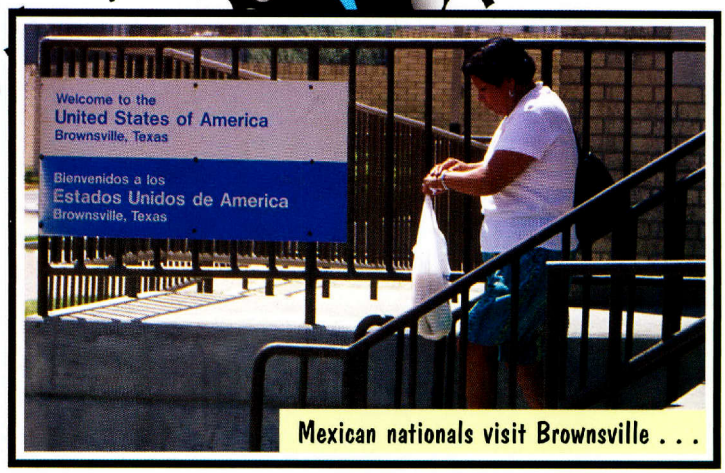
Changes in Mexico's economy no doubt affect the Texas economy. So what is known about the relationship between the peso-dollar exchange rate and retail sales in Texas?

In the past, peso devaluations have often been followed by negative or smaller retail sales growth rates in several Texas metropolitan statistical areas (MSAs). For example, after the December 1994 peso devaluation, 1995 retail sales in the Brownsville-Harlingen-San Benito metro area fell by 7.4 percent, compared with an increase of 6.8 percent the previous year. The McAllen-Edinburg-Mission area's retail sales grew 6.6 percent in 1994 and decreased by 7.4 percent in 1995.

This correlation between Texas retail sales and the peso-dollar exchange rate is an outcome of increased integration of the U.S. and Mexican economies. During the 1980s, Mexico removed or reduced a number of restrictions on foreign trade and investment. The passage of the North American Free Trade Agreement (NAFTA) in January 1994 further reduced trade barriers.

How the liberalization of trade and investment brought about by NAFTA has affected the U.S. economy has been the subject of academic research and intense public debate. Research has focused on regional economic integration, distribution of costs and benefits of economic integration and the impact of trade policies on the location of industries.

In 1996, Gordon Hanson investigated whether the growth of export manufacturing in Mexican border cities affects demand for goods and services produced in neighboring U.S. border cities. Noting that border city pairs are natural laboratories for studying trade policy, Hanson analyzed 1975–1989 data on the six largest U.S.-Mexico border-city pairs (Brownsville-Matamoros, El Paso-Ciudad Juarez, Laredo-Nuevo Laredo, McAllen-Reynosa, Imperial-Mexicali and San Diego-Tijuana). He found the growth of export manufacturing in Mexico accounted for a substantial portion of the economic activity in U.S. border cities during the period.



Mexican nationals visit Brownsville . . .

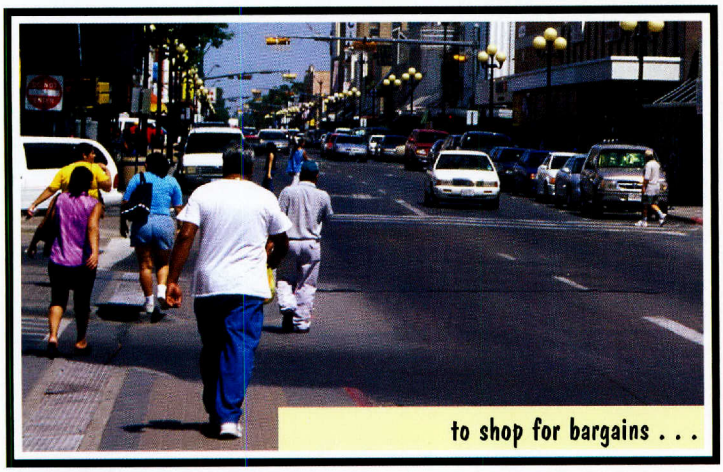
In a study using data from 1988 to 2001, the Real Estate Center examined the impact of the peso-dollar exchange rate on retail sales in all 27 Texas MSAs (see Center report 1468, *Impact of Mexico's Peso-Dollar Exchange Rate on Texas Metropolitan Retail Sales*).

The study revealed that an increase (or decrease) in the peso-dollar exchange rate is associated with an increase (or decrease) in retail sales in five Texas MSAs: McAllen-Edinburg-Mission, Brownsville-Harlingen-San Benito, Laredo, El Paso and San Antonio. The first four MSAs have a common border with Mexico, and San Antonio is a significant partner in trade with Mexico. Retail sales in the 22 remaining Texas MSAs were not influenced to a significant degree by the peso-dollar exchange rate.

2001 MEXICO-TO-TEXAS CROSSINGS

	PEDESTRIAN	VEHICLE
El Paso	7,307,850	8,370,987
Laredo	4,596,023	7,657,231
Brownsville	3,198,168	6,991,739
McAllen-Hidalgo	1,768,897	5,401,575
Progresso	1,228,247	1,137,123
Eagle Pass	820,105	3,315,583
Pharr	—	2,547,896
Roma	204,045	1,191,862
Del Rio	93,207	1,956,960
Presidio	30,329	736,933
Rio Grande	15,686	661,918

Source: Texas Center for Border Economic and Enterprise Development at Texas A&M International University in Laredo. www.tamiu.edu



to shop for bargains . . .

before returning to Matamoros.

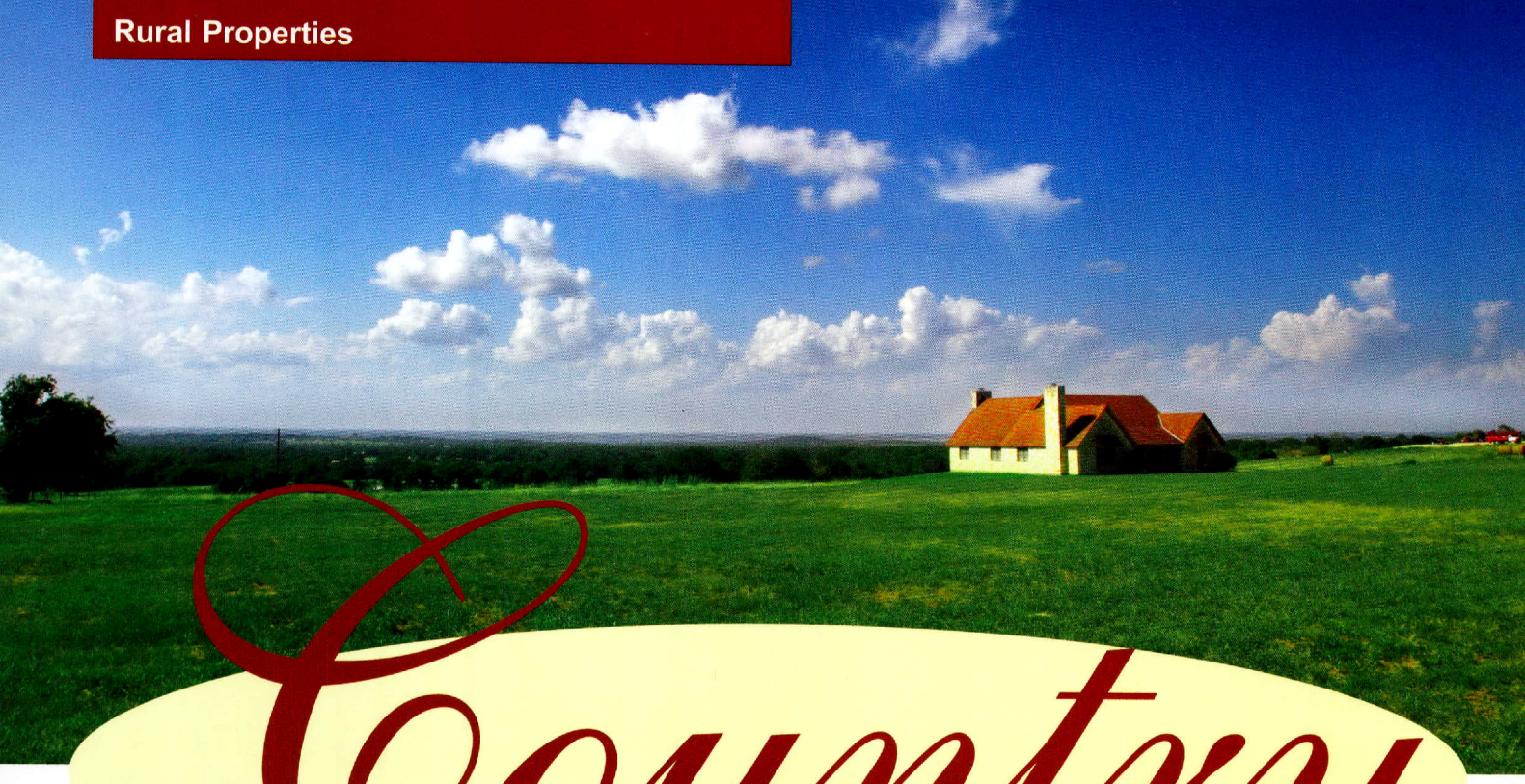
The Laredo MSA's retail sales have been most affected by changes in the exchange rate. An increase of 10 percent in dollars per peso can be expected to increase Laredo's retail sales by 4.4 percent. The McAllen-Edinburg-Mission metropolitan area was second. This region draws Mexican consumers from nearby Reynosa and Monterrey. An increase of 10 percent in dollars per peso can increase retail sales by 2.9 percent. The corresponding retail sales increase in San Antonio is 1.8 percent; in Brownsville-Harlingen-San Benito, 1.6 percent; and in El Paso, 1.2 percent. The Brownsville area draws customers from Matamoros and nearby Monterrey as well. El Paso is a retail destination for over 1.5 million people living across the Rio Grande in Juarez. Some of the highest-producing stores for Dillards, JCPenney and Payless Shoes have been located in Texas border cities.

San Antonio is a favored destination for shoppers from all over Mexico. Anecdotal evidence suggests that Mexican nationals do a lot of shopping in Dallas and Houston as well, but the retail market in those areas is so large and diverse that swings in the peso's value do not have a significant effect.

The proximity of the McAllen-Edinburg-Mission, Brownsville-Harlingen-San Benito, El Paso and Laredo MSAs to Mexican markets and manufacturing centers and the significant influence of the peso-dollar exchange rate on area retail sales support Hanson's findings that increased U.S.-Mexico economic integration may cause more economic activity in the U.S.-Mexico border region. In recent years, American retailers have expanded their presence in Mexico, which will reduce the need for Mexican shoppers to visit Texas. However, there is still a keen interest in buying goods from stores located in America.

Clearly, fluctuations in the value of the Mexican peso can strongly impact retail sales in these five Texas MSAs. Commercial real estate investors must be aware of both the risks and the rewards that can come from retail property investments in these areas. When the value of the peso declines, sales can drop precipitously. But when the peso is strong, the retail sales potential is enormous.

Dr. Anari (m-anari@cgsb.tamu.edu) is a research economist and Dr. Dotzour (dotzour@tamu.edu) is chief economist with the Real Estate Center at Texas A&M University.



Country GETAWAYS

By Charles E. Gilliland, Michael Mays and Jonathan Sanders

Markets for Texas rural acreage remained robust, recording widespread gains in 2001. With a record high of $945 per acre, the 2001 weighted median price was well above the previous high of $865 registered in 1985.

Continuing drought, low commodity prices for many agricultural products and the September 2001 terrorist attacks led market observers to nervously anticipate weaker prices and slower sales. Confounding this widespread pessimism, the market registered a hefty 12 percent gain in 2001. Not since 1981 had such an increase been recorded.

The volume of sold properties reported to the Real Estate Center remained steady at 4,723 sales in 2001, ten more than in 2000. Statewide, the typical size of sold properties fell from 117 acres in 2000 to 101 acres in 2001 indicating a marked preference for 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 was 10 percent more than the 2000 median. That growth in real prices produced a 1966–2000 yield of 0.8 percent annual compound capital growth.

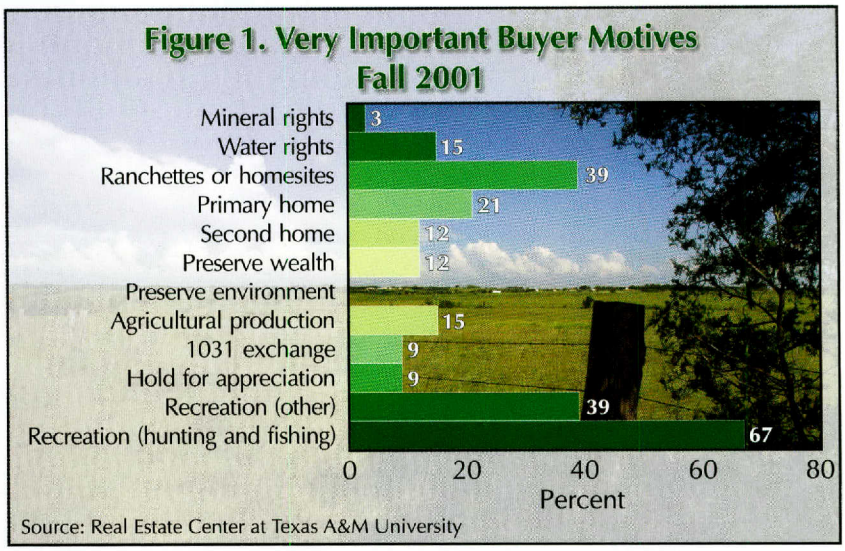
Higher prices were spurred by buyers with strong appetites for recreational land. Many respondents to the Center's fall 2001 survey of market observers listed hunting, fishing and other types of recreation as "very important" buyer motives (see Figure 1). Purchase for ranchettes or homesites also ranked as very important.

This widespread preference for nonagricultural uses has created a pronounced and widening gap between per-acre prices for small and large properties. In 1966, the typical small Texas tract sold for $206 per acre, approximately 64 percent higher than the comparable large property price of $126 per acre. In 2001, the small tract brought $1,302 per acre, 121 percent higher than 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. Interestingly, the size of a "small tract" (the smallest 25 percent of sales) varies dramatically statewide, ranging from 19 acres in the Lower Rio Grande Valley to more than 8,000 acres in the Trans Pecos.

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 rapidly. In 1993, small tracts sold for $704 per acre compared with $395 for large tracts, making small tract per-acre prices 78 percent higher than large tract prices, a modest increase over the 1966 differential of 64 percent. 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.

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

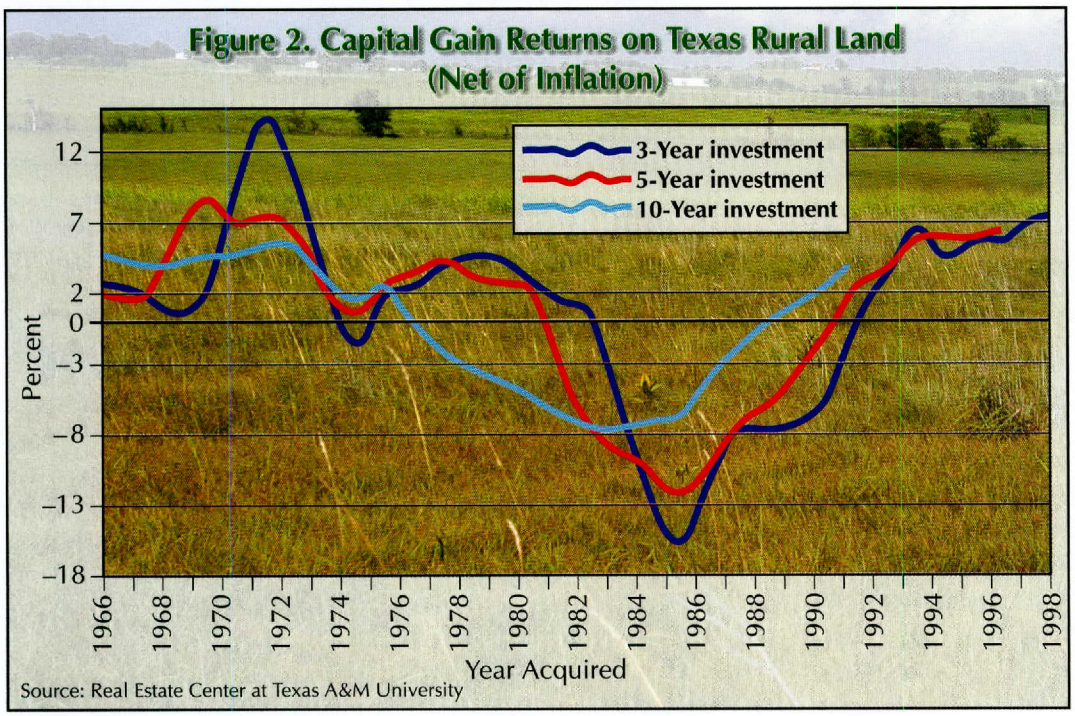


INVESTMENT RETURNS

Land market investors frequently fit in one of three groups based on the preferred duration of their investments: short-term (three-year holding period), medium-term (five-year holding period) and long-term (ten-year holding period). 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 equals the net capital gain return or return over inflation for holding the land. Figure 2 shows the net capital gain yields for various terms and 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.

Between 1970 and 1983, real land prices rose. As Figure 2 reveals, short-term capital gains for land acquired during that period tended to range higher than medium- and long-term investments. From 1985 through 1993, growth in real price per acre first faltered and then declined. For land purchased during this time, medium- and long-term investment returns tended to exceed the short-term investment strategy.



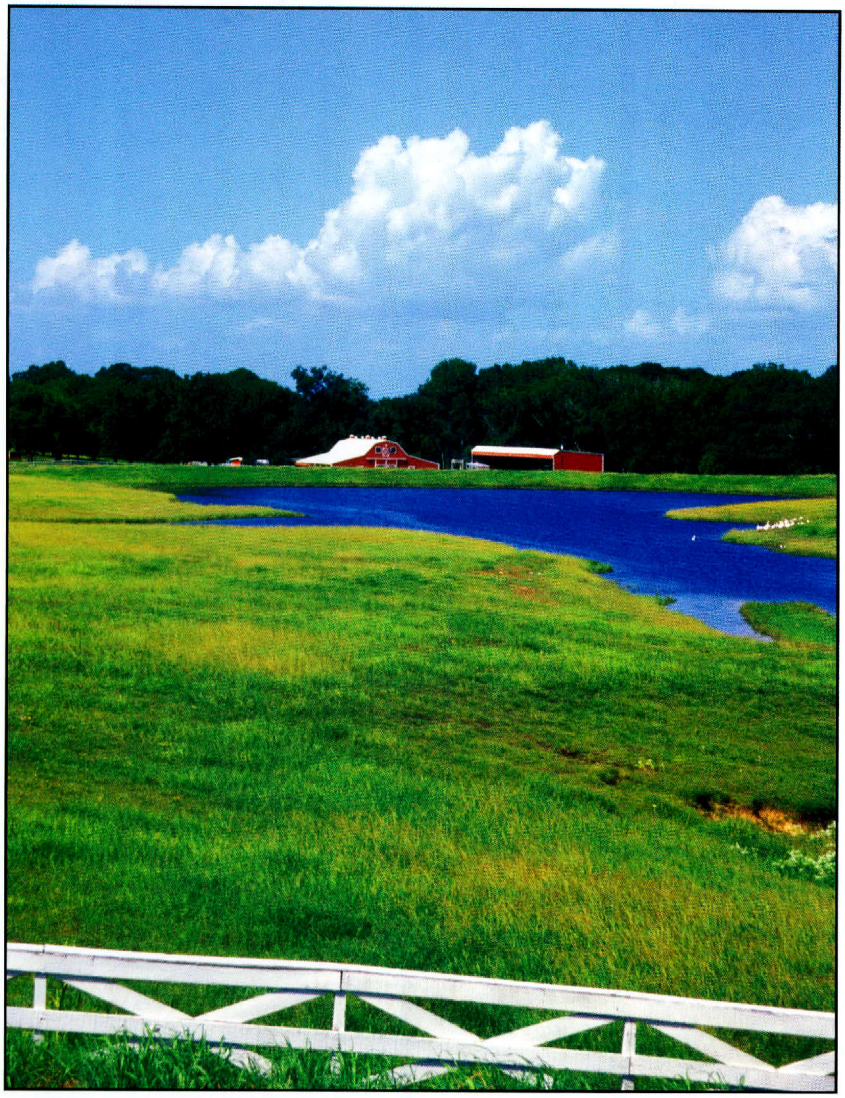
As Texas land markets returned to positive real price growth after 1993, the advantage of long- and medium-term investments narrowed and eventually may vanish as the selling date for the medium- and long-term land holdings moves forward. Short-term land investments are favored in times of rising land prices while medium- to long-term strategies are popular during difficult market eras.

In addition to timing, tract size influences land's marketability. Generally, the pool of potential buyers for a small acreage property 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 demand for small 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 reflects the fact that smaller properties are generally easier to market.

Considering these influences on net returns, 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. The buyer might consider purchasing a large property that could be divided into smaller units and resold, especially if the properties offer a potential recreational use.



***TEXAS RURAL LAND** is more often bought for fun than farming as city folks search for out-of-the-way places to relax and rejuvenate themselves.*

OUTLOOK FOR TEXAS LAND MARKETS

The prosperous decade beginning in 1993 propelled Texas land markets to an all-time high on a wave of demand for recreational properties. Many local land markets have fewer good properties, resulting in rising prices and a trend toward smaller acreage purchases. 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.

The recurring litany of potential market threats center on poor conditions for agricultural producers. Drought and commodity prices continue to hamper farmers and ranchers. However, demand from urban-based consumers and government disaster payments have helped.

During the 1970s and into the 1980s, investors were significant buyers of rural land. However, the land market bust of the late 1980s sent investors scurrying into 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 once again consider adding land to their portfolios. The Sept. 11, 2001, attacks and ongoing struggle with global terrorism have added to a feeling of uncertainty. That uneasiness has caused some investors to seek out land as a secure investment.

With land prices at record highs, many wonder if this recovery has run its course. While land prices have reached a record high level of $945 per acre after adjusting for inflation, real land prices are only 73 percent of their record 1984 high. In fact, real prices have recovered only the losses suffered in the 1986–87 collapse. Prior to 1986, land prices last approached current inflation-adjusted levels in 1973. With current prices comparable to 1973 levels, the demand for rural properties should increase.

With the exception of areas hit hard by the woes of the high-tech industry, it seems logical to look for higher land prices across most of Texas. Farmland prices may stabilize instead of increase, but in the remainder of the state, prosperity should return with the economic rebound anticipated later in 2002.

The overall lack of good properties for sale means that future demand faces a market constrained by a restricted supply. Growing demand and dwindling supplies point to higher prices in the next year to 18 months. 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 post moderate price growth as buyers locate acceptable substitute properties.

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 price increases remains difficult. Therefore, potential investors should be prepared to hold land investments well into the future. ♣

Dr. Gilliland (c-gilliland@tamu.edu) is a research economist and Mays and Sanders are graduate research assistants with the Real Estate Center at Texas A&M University.

Mortgage Rate and Inflation: An Intimate Relationship

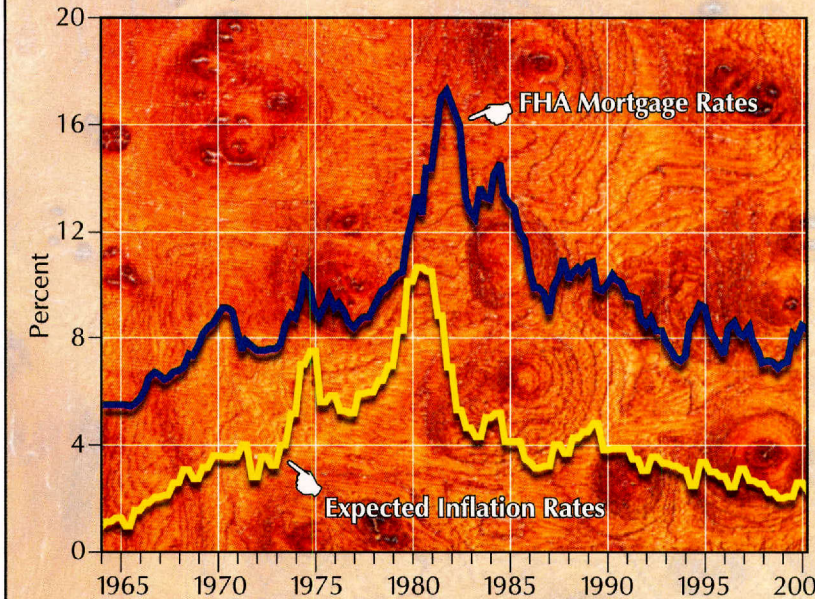
By M.A. Anari and Mark G. Dotzour

When talk around the watercooler focuses on the link between mortgage rates and inflation, listen up. The relationship isn't just a rumor, and real estate professionals need to know all they can about it.

The mortgage rate, which constitutes the major cost of owning real estate, drives demand for real property. The rate is based on three components: the real riskless interest rate, the expected inflation rate and risk premiums. Of these, the expected inflation rate is the key determinant.

Figure 1 shows conventional 30-year FHA mortgage rates and expected inflation rates from January 1964 to June 2000. The figure shows past changes in the mortgage rate have been closely associated with changes in the expected inflation rate. That pattern will continue.

Figure 1. 30-Year FHA Mortgage Rates and Expected Inflation Rates (1964–2000)

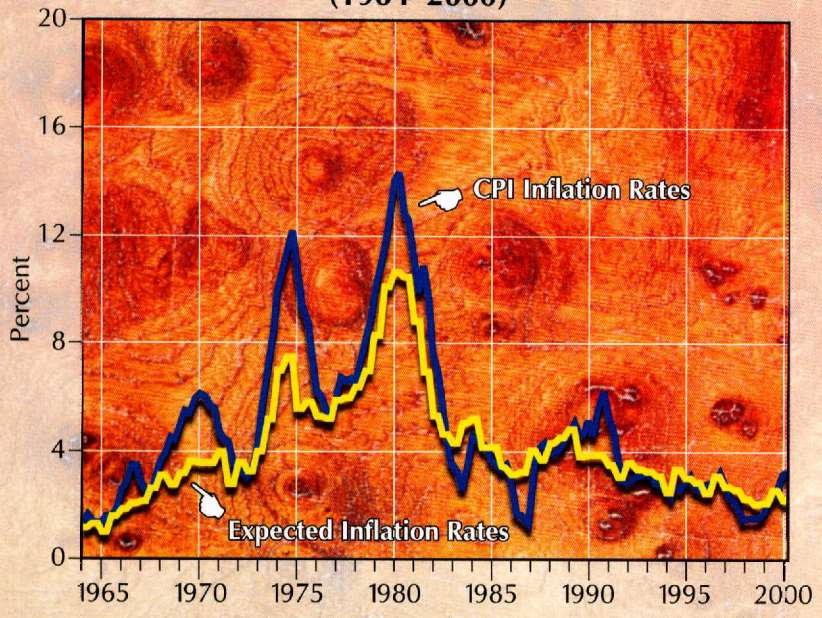


Sources: Federal Home Loan Mortgage Corporation and the Federal Reserve Bank of Philadelphia Livingston Survey

What is Inflation?

Inflation is the continual increase in prices of goods and services produced in an economy. Short-run causes of inflation are grouped into two classes: those resulting from changes in *demand* for goods and services (demand-pull inflation), and those resulting from changes in *supply* (cost-push

Figure 2. Inflation Rates from Consumer Price Index (CPI) and Expected Inflation Rates from Livingston Survey (1964–2000)



Sources: Federal Reserve Bank of Philadelphia and U.S. Bureau of Labor Statistics

inflation). In the long run, inflation is caused by the rate of growth of the money supply exceeding the rate of growth in gross national product.

Demand-pull inflation occurs when demand for goods and services exceeds supply. Increases in demand may be the result of increases in consumer spending, business investment, government expenditures and net exports (exports minus imports). Excess demand causes an increase in the prices of goods and services in the short run. After an adjustment period, the excess demand disappears, and prices fall because the supply of goods and services increases.

Cost-push inflation occurs when either the unit cost of goods or sales taxes are increased and the producers pass along these increases to consumers. Increases in unit costs may be the result of higher wage rates, costs of material or energy or anything else used in producing goods and services. One of the worst forms of cost-push inflation is the wage-price spiral, which occurs when higher wages lead to higher prices

Inflation Retrospective

From January 1960 to January 1964, the average U.S. annual inflation rate was less than 1.3 percent. Excessive spending growth from 1966 to 1969 for the Vietnam War and social programs in an economy constrained by its productive capacity increased the average annual inflation rate to 3.1 percent from 1965 to 1970. Higher expected inflation rates led to higher wage rate contracts, and the wage-price spiral pushed inflation to 5 percent in first quarter 1970 as labor productivity grew far less than wage rates.

The Nixon Administration's price control program from 1971 to 1974 temporarily reduced inflation from 5 percent in first quarter 1970 to 3.6 percent in first quarter 1973. However, the controls failed to reduce inflation permanently, and when they were terminated, inflation climbed to 5.9 percent.

The acceleration in inflation was exacerbated by the first major oil price shock at the end of 1973. The price of West Texas intermediate crude oil increased from $3.56 per barrel in July 1973 to $10.11 per barrel in the aftermath of the Arab oil embargo. In fourth quarter 1974, the U.S. inflation rate climbed to 12.2 percent.

The second oil price increase came in the aftermath of the 1979 Iranian revolution. The price of West Texas intermediate crude climbed to $39.50 per barrel in July 1980. The U.S. inflation rate exceeded 14.4 percent in second quarter 1980 and the real interest rate (interest rate minus inflation rate) became negative. Mortgage rates reached a historic high of 18 percent.

Prior to October 1979, the Federal Reserve Board's monetary policy was to maintain the federal funds rate within a "zone of tolerance." This contributed to the destabilization of the economy by increasing the real money supply when the economy was strong and reducing monetary growth when the economy was weak.

The Fed changed its policy to controlling the money supply by setting target zones for the supply. This policy could have worked if economic growth had remained stable as it did during the 1980s. But instability in money demand resulting from the financial deregulation of the 1980s generated overly volatile monetary growth, coupled with high interest rates.

The average annual inflation rate from first quarter 1980 to first quarter 1982 increased to 9.4 percent. The Fed abandoned its policy of maintaining the money supply within target zones in October 1982. Since then, the Fed has been able to control inflation by skillfully managing the Fed funds rate and money supply growth rates.

After a recession in 1982, the U.S. economy embarked on a long expansion that lasted until June 1990. The expansion was stimulated by a sharp drop in interest rates that fueled expenditures by consumers as well as businesses. Consumer spending was further boosted by the Reagan tax cuts.

On the supply side, the expansion was helped by falling oil prices. In the first half of the 1980s, energy consumption per dollar of gross domestic product decreased sharply thanks to more efficient use of energy. Higher oil prices resulted in increased oil supplies from North Sea oil producers, notably the United Kingdom and Norway, and from Mexico. By April 1986, the price of West Texas intermediate crude oil fell to $12.84 per barrel.

When the economy expands, people need more money to spend. Money supply growth rates during the economic expansion of 1982–1990 were managed to meet the growing demand for money without fueling inflation. The expansion was followed by a short-lived recession from July 1990 to March 1991. The U.S. economy then experienced its longest period of economic expansion, which began in April 1991 and ended in 2001.

and higher expected inflation rates lead to higher wages.

Writing in 1930, economist Irving Fisher asserted that there is a one-to-one relationship between expected inflation and mortgage rates, and that a 1 percent (100 basis points) increase in the expected inflation rate will increase the interest rate by 1 percent. This relationship becomes apparent over long periods.

Forecast errors can occur in estimating expected inflation rates in the short run (Figures 1 and 2). Fisher found it could take several decades for the effects of inflation to be fully reflected in interest rates.

BECAUSE MOST MORTGAGE LOANS *are long-term, the expected inflation rate is the most important determinant of the interest rates consumers must pay.*

Mortgage Lending Risks

When lenders loan funds to the federal government by purchasing U.S. Treasury bills, notes and bonds, they are guaranteed the return of the principal at the end of the contract period. Accordingly, the rate of interest they receive is referred to as the riskless interest rate.

But mortgage lenders incur risks different from those incurred by investors in Treasury securities. Because of this, mortgage rates include premiums for inflation risk, interest rate risk, credit (default) risk, maturity risk, liquidity risk, prepayment risk and reinvestment risk.

Inflation risk reflects the average inflation rate expected over the life of the loan. Because mortgage loans are normally long-term, expected inflation is the most important component of mortgage rates.

Interest rate risk occurs because fluctuations in market interest rate affect the value of mortgage loan investments. When interest rates rise, the value of fixed-rate mortgage loan investments falls. Variable-rate mortgages are adjusted when interest rates rise or fall, but the adjustment is not immediate.

Credit (default) risk refers to the possibility that borrowers will fail to pay the loan principal and interest when due. Since 1983, the default rate on mortgages has generally increased. During the 1991–1992 recession, foreclosure rates climbed to 1 percent of one-to-four family residential nonfarm mortgage loans. However, the risk of default on home mortgages is low overall.

Maturity risk is associated with loan term. The longer the loan period, the more the uncertainty associated with that investment. To compensate, investors expect higher returns on longer maturity debts. Liquidity risk refers to the difficulty of converting a loan investment to cash.

Mortgage lenders are exposed to prepayment risk because the law allows homeowners to prepay the principal balances on their mortgages without penalty. Prepayment shortens the life of the mortgage and exposes lenders to reinvestment risk because lenders must find new investment opportunities for the prepaid mortgage funds. When interest rates fall, homeowners pay off high-rate mortgages by refinancing. The mortgage holder must then reinvest that money, typically at a lower rate.

Expected Inflation

There are three sources of information about expected inflation rates. The Livingston Survey is the oldest continuous survey of expectations about a number of important macroeconomic variables, including the expected consumer price index and the producer price index. It was initiated by the late columnist Joseph Livingston in 1946.

Since 1990, the Federal Reserve Bank of Philadelphia has assumed responsibility for the Livingston survey (www.phil.frb.org/econ/liv/), which is compiled semiannually. The Philadelphia Fed also conducts a survey of professional forecasters who produce forecasts of a number of key economic variables, including inflation rates.

The University of Michigan Survey of expected inflation (http://athena.sca.isr.umich.edu/scripts/mine/mine.asp) is compiled monthly and is available from January 1978.

The association between the expected inflation rate and mortgage rates points to the wisdom of inflation watching. Monitoring inflation should give real estate professionals a hint of where mortgage rates are headed.

Dr. Anari (m-anari@cgsb.tamu.edu) is a research economist and Dr. Dotzour (dotzour @tamu.edu) is chief economist with the Real Estate Center at Texas A&M University.

RETURN OF THE REITS

By Harold D. Hunt

As the heady days of NASDAQ 5,000 and the technology stock boom fade into the past, many are diversifying their investments hoping for better returns. Real estate investment trust (REIT) stocks are an increasingly popular investment alternative.

REIT ownership in Texas is substantial, with about 120 REITs controlling more than 3,000 properties in the state, according to SNL Financial's March 2002 Property Register.

REIT Evolution

A REIT is basically a company established to own, and in most cases operate, income-producing real estate. REITs also can own mortgages or real estate-related securities, develop new properties and purchase older buildings for renovation and modernization.

Congress created REITs in 1960 so that small investors could invest in large-scale, income-producing real estate properties by purchasing shares. Today, a large percentage of REIT shares are owned by institutional investors.

Before the passage of the Tax Reform Act of 1986, managers of REIT funds were not allowed to operate or manage the funds' real property. The act improved the competitiveness of REITS as an alternative investment, transforming management from passive owners to active operators. The savings and loan crisis, however, combined with overbuilding in many U.S. cities, and the popularity of real estate limited partnerships, prevented REITs from gaining widespread acceptance during the 1980s.

The REIT industry has grown rapidly in recent years. Total market capitalization for all publicly traded REIT stocks increased from $16 billion in 1990 to more than $160 billion as of mid-2002. Although this growth rate is impressive, REITs still own less than 10 percent of the U.S. real estate market.

On Jan. 1, 2001, the REIT Modernization Act went into effect, allowing REITs to own up to 100 percent of the stock of a taxable REIT subsidiary (TRS). These subsidiaries provide any type of supplemental service, such as telecommunications access or copy service, to REIT tenants or tenants of other properties. Although some of these ventures have turned out badly, REIT managers may be able to use their real estate expertise to form practical, related TRS services in the future.

REITs are required to pay at least 90 percent of their taxable income to shareholders in the form of annual dividends. Qualifying REITs are permitted to deduct dividends paid to shareholders from their taxable income. As a result, most REITs pay as much of their taxable income as possible to their shareholders and typically owe no corporate tax. Shareholders pay taxes on dividends received plus any capital gains from the sale of REIT shares.

At least 75 percent of a REIT's total assets must be invested in real estate. Furthermore, at least 75 percent of a REIT's gross income must come from rents or mortgage interest. Taxable REIT subsidiaries may not exceed 20 percent of a REIT's assets. REITS may receive no more than 30 percent of their gross income from the sale of real property held for less than four years or securities held for less than one year.

A REIT must have at least 100 shareholders, and five or fewer shareholders cannot own more than 50 percent of the outstanding shares.

Types of REITs

Equity REITs own and operate income-producing real estate, engaging in a wide range of real estate activities such as leasing, development and tenant services. However, REITs must acquire and develop properties primarily to operate them as part of their own portfolio as opposed to reselling them once they have been developed. REITs get around this "build and hold" requirement by using a TRS to develop and sell new construction, but they must pay income taxes on the TRS. Equity REITs make up the bulk of publicly traded REITs, representing about $150 billion of the $160 billion publicly traded REIT market.

Mortgage REITs lend money directly to real estate owners and operators or extend credit indirectly through the acquisition of loans or mortgage-backed securities. Mortgage REITs primarily extend mortgage credit on existing properties.

Hybrid REITs, which are a combination of equity and mortgage REITs, both own properties and make loans to real estate owners and operators.

Today, about 180 different REIT stocks are publicly traded on the major U.S. stock exchanges, of which about 150 are equity REITs. A large number of private REITs not traded on

any exchange exist as well, bringing the total number of U.S. REITs to about 300, with assets totaling more than $300 billion. According to SNL Financial's March 2002 Property Register, 111 equity REITs, 11 mortgage REITs and one hybrid REIT own properties in Texas.

Advantages, Risks of REIT Ownership

According to Jeff Caira, vice president of Pioneer Investment Management, the renewed investor interest in REITs since the tech stock downturn stems from their relatively stable and predictable cash flows, the diversification they provide in an investor's portfolio and the dividend yield they offer. From 1982 to 2002, about two-thirds of the total return from REITs has come from dividend yields; the remainder is a result of stock price appreciation.

Other advantages of owning REITs include professional management of real estate assets, transparency of REIT firms because of securities laws disclosure requirements and liquidity of REIT shares compared to personally owned real property.

REIT stocks offer diversification through investment in a portfolio of properties rather than a single asset. The property portfolios may be geographically diverse, with properties in a variety of cities or regions. Although most REITs invest in a specific type of property, such as retail or industrial real estate only, a number of REITs own a mixture of property types. REITs also are diverse in management styles, which range from aggressive risk-taking approaches focused on rapid growth to risk-averse, low-key management.

As is true of most investments, there are risks associated with owning REIT stocks. Many are market-driven, including the risk of markets becoming overbuilt, insufficient demand for real estate, risk of tenant default and falling rents. Investors also should be aware that REIT share prices and real estate cycles may not coincide. Real property can perform well as REIT stocks are performing poorly and vice versa.

Annual Total Return for Publicly Traded Equity REITS by Sector (in percent)

Sector	2000	2001
Industrial/Office	33.4	7.1
Retail	18.0	30.4
Residential	34.3	9.0
Diversified	24.1	12.5
Lodging	45.8	(8.6)
Health Care	25.8	51.9
Specialty	(31.6)	7.6
Self-Storage	14.7	43.2
All Equity REITs	**26.4**	**13.9**

Source: National Association of Real Estate Investment Trusts. For a detailed breakdown, see the web version of this *Tierra Grande* at http://recenter.tamu.edu.

Texas REIT Activity

Not surprisingly, REIT ownership is highest in the state's five largest metropolitan areas: Austin, Houston, Dallas, Fort Worth-Arlington and San Antonio.

Of the 73 million square feet of Texas industrial space under REIT ownership, almost 80 percent is in either the Dallas-Fort Worth Metroplex or Houston. Fifteen public REITs own industrial properties in Texas.

The apartment market has the highest concentration of REIT-owned properties in the state's major metro areas. More than 90 percent of all REIT-owned apartment units are in Austin, the Dallas-Fort Worth Metroplex, Houston and San Antonio. Twenty-one publicly traded REITs own more than 172,000 Texas apartment units.

More than 80 percent of all REIT-owned office space is in the Dallas and Houston metropolitan areas. Twenty-one publicly traded REITs and five private REITs own more than 71 million square feet of office space in Texas.

Retail space owned by REITs is concentrated in the major metro areas as well. More than 80 percent of enclosed regional mall space, 70 percent of single-tenant space and 80 percent of shopping center space is in Austin, the Dallas-Fort Worth Metroplex, Houston and San Antonio. Thirty-five publicly traded REITs and six private REITs own Texas retail properties.

Ten publicly traded REITs own elder care properties; seven own other medical-related properties in Texas. Twenty-six public REITs and one private REIT own lodging properties in the state. Five public REITs own self-storage properties.

Since 1994, total returns from REITs have varied widely by property type. Most recently, retail, self-storage and health care related REITs have performed best while lodging REITs have performed worst.

The average annual total return for all equity REITs during the ten years ending March 31, 2002, was 12.5 percent. By comparison, the S&P 500 recorded a 13.3 percent average annual return during this time.

For 2001, equity REITs posted a 13.8 percent annual total return versus an 11.9 percent loss for the S&P 500 and a 14.9 percent loss for the NASDAQ. Historically, REIT stock performance has not correlated strongly with other equity securities. It is not surprising that REITS continue to draw attention from investors interested in diversifying their portfolios.

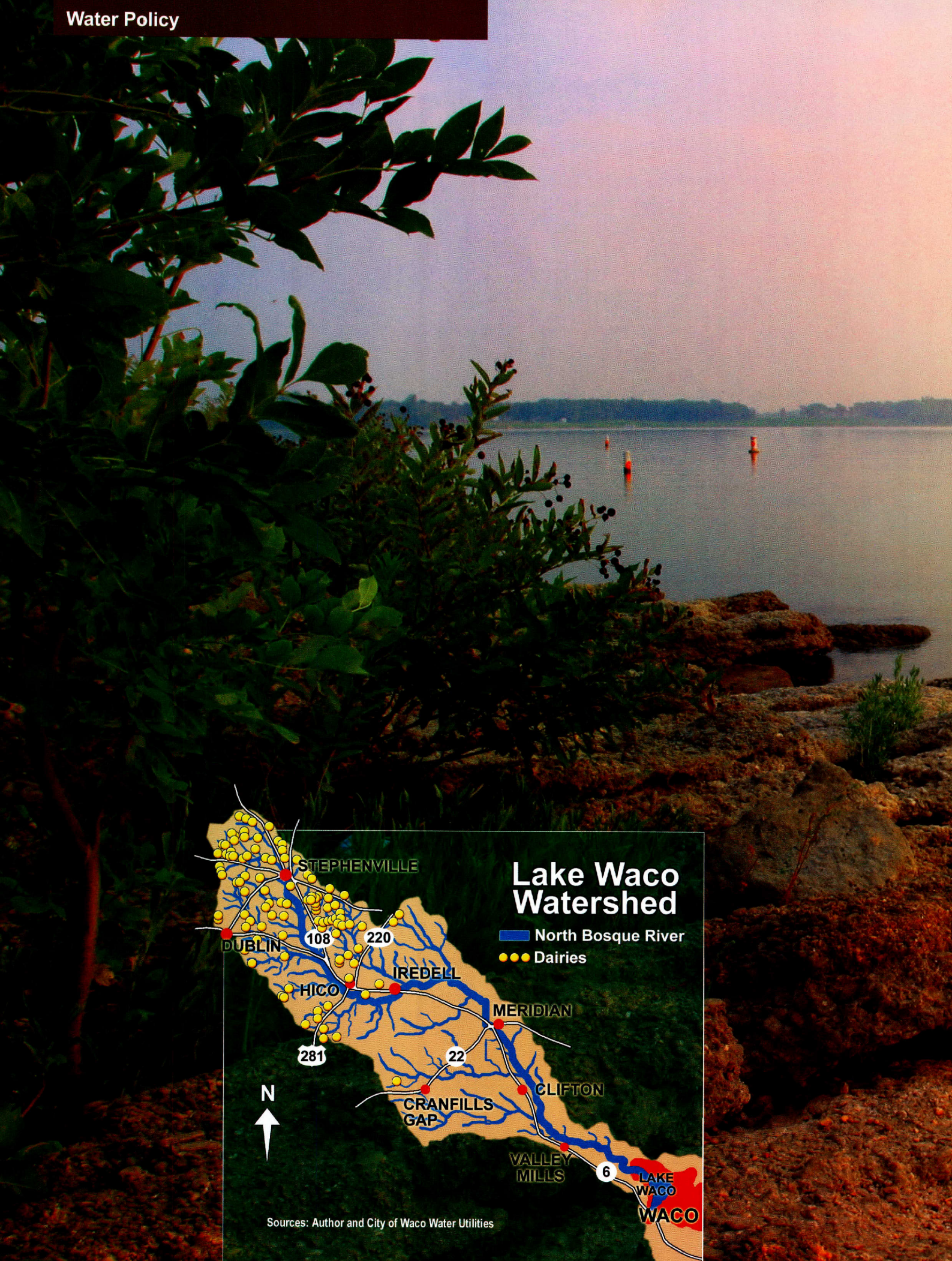
Consultation with a competent investment professional is recommended.

Number of REIT Properties by MSA
Estimates as of March 2002

MSA	Total Properties	MSA	Total Properties
Outside the MSAs	144	Laredo	4
Abilene	6	Longview-Marshall	14
Amarillo	24	Lubbock	14
Austin	280	McAllen-Edinburg-Mission	10
Beaumont-Port Arthur	50	Odessa-Midland	39
Brazoria	2	San Angelo	6
Brownsville-Harlingen	15	San Antonio	244
Bryan-College Station	16	Sherman-Denison	4
Corpus Christi	24	Texarkana	9
Dallas	939	Tyler	15
El Paso	51	Victoria	6
Fort Worth-Arlington	255	Waco	13
Galveston	18	Wichita Falls	5
Houston	870	Location Not Disclosed	42
Killeen-Temple	16	**Total**	**3,135**

Source: National Association of Real Estate Investment Trusts. For a detailed breakdown, see the web version of this *Tierra Grande* at http://recenter.tamu.edu.

Dr. Hunt (hhunt@recenter.tamu.edu) is an assistant research scientist with the Real Estate Center at Texas A&M University.


Lake Waco Watershed
North Bosque River
Dairies
STEPHENVILLE
DUBLIN
108
220
IREDELL
HICO
MERIDIAN
281
22
CLIFTON
CRANFILLS GAP
VALLEY MILLS
6
LAKE WACO
WACO
N
Sources: Author and City of Waco Water Utilities

A RIVER RUNS THROUGH IT

Waste Management at Center of Controversy

By J.W. Siebert

The North Bosque is a small, 100-mile-long seasonal river that flows from north of Stephenville south to Lake Waco, the sole source of drinking water for about 150,000 people. During winter and spring, the river's flow consists mainly of stormwater runoff. In drier times, the river's water volume consists largely of effluent from a few small municipal wastewater treatment plants.

The North Bosque River watershed also is home to about 80 dairy farms, which are proving fertile ground for a growing controversy. Dairy farmers and the City of Waco have squared off on opposite sides of a battle over waste management and water quality.

"We have a real challenge dealing with their waste," says an elected Waco city official. "We want people to clean up their own mess. We are faced with a huge capital cost [for water purification], and this does not seem fair to the people of Waco."

"Nothing is enough," says a North Bosque area dairy farmer. "They seem to want us out. I believe that is true. Soon only a few [dairy farms] will be left."

The turmoil has reached the halls of the state legislature, the offices of the Texas Natural Resources Commission (TNRCC) and the city halls of smaller municipalities upstream from Waco.

Who Has Vested Interest in What

Dairy farmers. Dairy farmers on the North Bosque are not a unified group. Some have been dairying in the region for over half a century. Others are first- or second-generation Dutch immigrants, many of whom arrived during the 1980s and 1990s by way of Arizona and California. Significant differences exist in farmers' herd sizes and expansion goals, making it difficult for them to work together as an industry.

Regulatory agency. The TNRCC is the Environmental Protection Agency (EPA)-authorized body that administers the Clean Water Act in Texas. The commission regulates dairy waste management practices. It requires producers to obtain permits to operate their dairies, submit to annual inspections, pay fines if they breach the terms of their permits, apply for an

SUNRISE OVER LAKE WACO *illuminates the city's only source of drinking water. The North Bosque River, which feeds into the lake (inset), is home to some 80 dairies and to small communities with wastewater plants.*

ACROSS THE NATION, *the number of dairy farms is decreasing while herd sizes are increasing. Some North Bosque River watershed dairy farmers would like to invest in more cattle, but they have been unable to get expansion permits from the TNRCC. Some are abandoning dairy farming altogether.*

amended permit prior to expanding and renew their permits every five years.

Texas Institute for Applied Environmental Research. The Texas Institute for Applied Environmental Research (TIAER) began seeking scientific evidence on water quality problems in 1991. The institute has made the North Bosque one of the most studied watersheds in the country, facilitating scientific research as well as meetings among stakeholders in an effort to enhance North Bosque water quality.

City of Waco. As participants in the stakeholder meetings, City of Waco officials expressed concern over two issues: whether present regulations were being enforced by the TNRCC and whether those regulations were sufficient to guarantee Lake Waco's water quality.

To investigate, Waco officials made a series of helicopter flights over the dairy farms. Several flights were made during the extraordinarily heavy 2001 winter rains, which resulted in overflowing waste lagoons at about 30 dairies. Many of these discharges were legal, but officials were nonetheless concerned.

A public health consultant concluded that the city had more to worry about than the phosphorus in the waste overflow. Fecal coliform and cryptosporidium also posed potential public health threats. The city's policy began to change from trying to get TNRCC to enforce existing laws to lobbying Texas legislators to write new laws governing dairy waste. As compromises facilitated by TIAER ground to a halt, the conflict developed political overtones and moved to the state legislature.

Texas Legislators Act

In spring 2001, the City of Waco worked with local state legislators to request environmental compliance histories from the TNRCC on all dairy farms.

Dairy interests suggested that Waco look in its own backyard for pollution problems from septic systems, water contact sports, lawn fertilizer, family pets and upstream municipal waste treatment facilities. But the public's perception of the problem was most influenced by the dairy cow manure, and opinion in the legislature swung against the dairy farmers.

A rider was attached to H.B. 2912 governing the waste management of concentrated animal feeding operations. The rider requires new or expanding dairy farms in the area to remove 100 percent of the collectable manure from any new cows. Permitting for herd expansion was made more strict, and the phosphorus count on dairy farmland was limited to a maximum of 200 parts per million.

Dairy farmers received financial assistance in the form of a two-year-long composting program. The program covers most costs for hauling manure from dairies to compost sites.

H.B. 2912 has not satisfied Waco city officials, who are expected to protest new dairy permits as well as expansion requests. Dairy farmers are less than pleased as well, for the bill does nothing to speed up the permit process.

Farmers are worried about the future value of their farm assets, which, except for the cows and limited equipment, cannot be moved. When a modern dairy relocates, unrecoverable costs can be as high as $2,000 per cow ($1 million for a 500-head herd).

According to the Texas Association of Dairymen (TAD), waste management capital costs in the North Bosque area average $274 per cow while annual waste management operating costs average $64 per cow. Considering the size of their businesses, dairy farmers' costs are high compared to other waste producers on the North Bosque, such as municipal sewer plants.

No Effective Industry Response

"They [the dairy farmers] are never going to be effective with the TNRCC until [they are] effective in Austin, and they will not be effective in Austin until [they are] unified," says a local elected official serving in Stephenville, in the heart of Texas' dairy country. This individual has seen the problem of dairy waste increasing over the years, and sees lack of accountability as the single biggest problem faced by dairy farmers.

"They need to police themselves, with accountability to one another as an industry," he says. He also asserts that the dairy industry needs to launch a more united initiative to obtain assistance from government agencies, such as the Texas Cooperative Extension.

City, Rural Residents Remain on Offensive

The North Bosque River watershed includes parts of six counties. On Jan. 1, 2001, these counties contained an estimated 469,000 head of cattle and calves. The USDA estimated 31 percent were milk cows.

Waco's mayor sees animal waste issues as public health issues. "We need more knowledge here. Serious risks exist. . . . I do not want to lose any of the assets of our lake."

Waco's assistant city manager says, "Every dairy has a well. The cities [that neighbor Waco] rely on the Second Trinity Aquifer. The dairies are pulling down that aquifer. Water is then polluted by the dairy process, and then it comes down to our lake, the only other source for our water."

According to Waco's utilities director, Waco spends millions on comprehensive water quality studies, tests for nutrient

overloads on land near the lake, construction of free disposal sites for boat sewage and assistance for septic system users who want to connect to the municipal sewer system.

"I have to deliver water that is safe and with high aesthetic quality," he says. "This is important to citizens, the mayor, and the city council. . . . To the layperson, smell and quality are the same."

A rural resident recently filed suit against a neighboring dairy farm. This resident's small ranch sits on a creek downstream from the dairy.

"I am not against the dairy industry," says the resident. "I am not against dairies. I am against bad [polluting] dairies. . . . When they [dairymen] see a guy is bad, they rally around the guy and defend him. They act like it's our fault that he polluted our property. If TAD would just step up and say 'so and so is a bad dairyman' and support efforts to get him out, that would boost their credibility."

Herd Expansion is Sticking Point

Nationally, the number of dairy farms has dropped 37 percent since 1992, and the average herd size has increased by 50 percent. The predominant dairy industry perception is that dairy farmers seeking to stay in business are actively expanding herd size. Conversely, farmers not seeking to expand their herd size are viewed as likely to quit dairying.

But TNRCC expansion permits are hard to come by. One North Bosque dairy farmer who just relocated his herd to New Mexico says, "the problem with expansion here was that we couldn't."

A local dairy farmer whose family has dairied along the North Bosque River area since the 1930s states, "My own philosophy is to stay flexible and roll with the punches to survive. We are now milking 450 cows. We would like to go to 1,000 cows."

In February 1999, another dairy in the watershed applied for a permit to add 500 cows. As of June 2002, TNRCC approval was still pending.

In February 2001, the TNRCC placed the North Bosque under TMDL (total maximum daily load) restrictions for soluble reactive phosphorus with the objective of reducing the volume of phosphorus going into the river by 50 percent and thus controlling the growth of excess algae.

TNRCC will create a TMDL Plan that will regulate the amount of pollutants going into the river. The plan will likely require dairy farms to make major changes in their operations, such as requiring a 50 percent reduction in dairy waste or requiring trucking of waste to other locations.

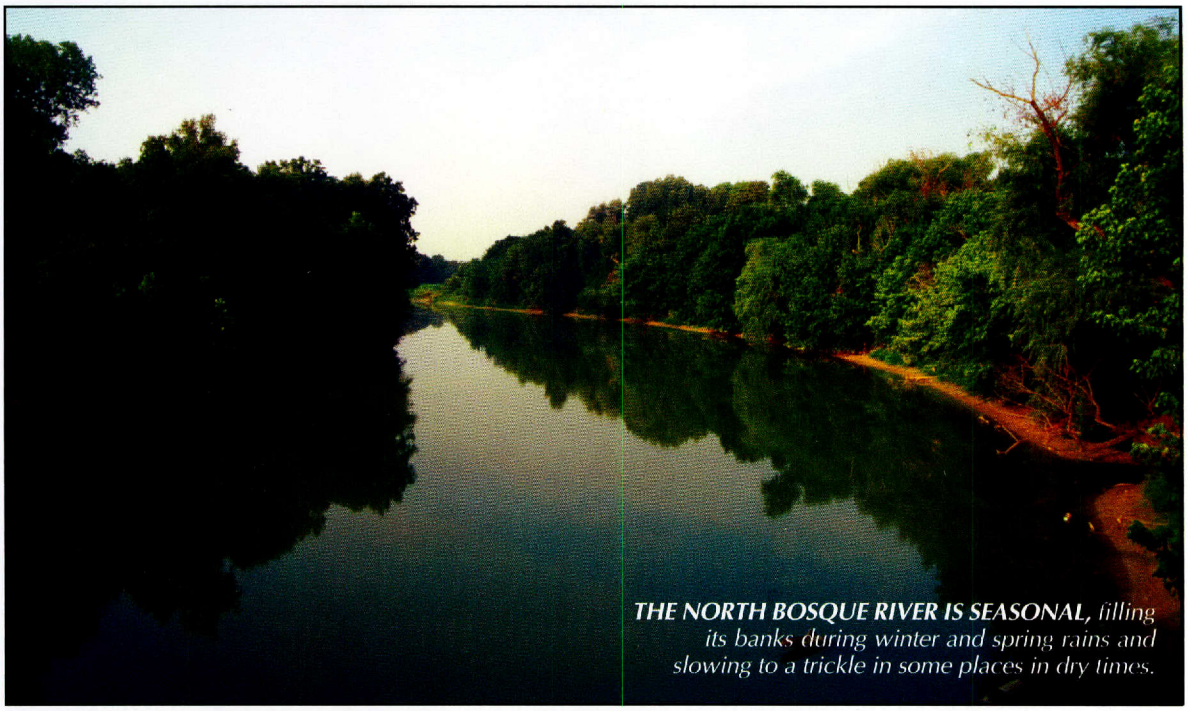
The TMDL Plan will be formulated specifically for the North Bosque River, not for Lake Waco, which is not officially listed as an impaired body of water by the EPA. In fact, a recent TNRCC report ranks the lake 39th best out of 111 Texas water reservoirs in phosphorus content.

Issues Become Clearer

Events continue to unfold. Today 86 dairy farms have manure hauled from their corrals to eight composting sites, where it is turned into a resource that can aid plant germination, growth and drought tolerance. The long-term success of the composting program will depend on generating uses and interest sufficient to pay transportation costs for the product.

City of Waco officials are likely to continue a number of efforts such as lobbying the state legislature, protesting individual dairy permits and suing individual dairy farmers. The city also wants the total number of cows reduced. Pressure on the TNRCC to increase regulatory enforcement seems likely.

Controlled lagoon releases, although legal, prompt the strongest objections from Waco officials. Why? The city may have to build a $70 million water treatment plant if lake water quality does not improve.



THE NORTH BOSQUE RIVER IS SEASONAL, *filling its banks during winter and spring rains and slowing to a trickle in some places in dry times.*

Dairy farmers view the freedom to expand herd size as critical to future financial success. Farmers are willing to make management concessions if they are free to grow.

Because of political pressure, individual dairy sites continue to be abandoned. Even if the remaining farmers expand their herds, the total number of cows may decrease.

Dairy farmers and City of Waco officials have recently met face-to-face, and there is reason for optimism now that the parties have begun talking. However, many more meetings will be necessary before this hotly charged issue nears resolution.

Dr. Siebert (j-siebert@tamu.edu) is an associate professor in the Department of Agricultural Economics at Texas A&M University.

Brokerage Under the Research Microscope

By Jack C. Harris

- Extraverted, conscientious people are more successful at selling real estate.
- Realtors with professional designations earn more.
- Despite increased liability, more agents are representing buyers.
- Homebuyers are increasingly diverse, and minorities are more likely to use an agent.
- Globalization could reduce real estate commissions in this country.

That's just a sampling of what can be learned from real estate research. At universities around the country, researchers are examining major real estate issues, and convening annually to compare notes. The latest session of the American Real Estate Society met in Naples, Fla. Here are some highlights of what they reported.

Hire an Extravert

Researchers from Upward Motion, Inc., in Toronto, Canada, tested several approaches for predicting the performance of real estate salespeople. They tested three methods for screening job applicants for real estate sales aptitude.

- A *proprietary simulation* requires applicants to respond to typical situations that arise during a real estate transaction. Applicants are rated on how closely their responses match the most effective way to handle each situation.
- A *cognitive ability test* rates applicants on the basis of their ability to learn quickly. Essentially this tests intelligence.
- A *personality profile* rates applicants for characteristics such as extraversion, agreeableness, conscientiousness, emotional stability and openness to experience. The idea is that certain personality traits are more suited to the job of selling, and people possessing those traits will be more successful.

Tests were given to more than 200 experienced agents whose track records were known. Scores were compared to the agents' past performance.

Agents with high simulation scores were top performers about 47 percent of the time, a statistically significant result. While the research found no relationship between cognitive ability and sales performance, combining some of the personality tests with the simulations improved predictability. In particular, higher scores on conscientiousness and extraversion helped predict better sales performance.

Commercial computer software called "Success Profiler" simulates the transaction process from the point of building rapport with the client to closing the sale. The results include an assessment of the applicant's strengths and areas needing improvement. It can be used as a training resource as well as a recruiting tool. For more information, go to http://www.upwardmotion.com.

Professional Designations Pay

Some continuing education is required to maintain a real estate license, but many professionals go a step further by earning professional designations.

Most people assume that this advanced training pays off in more successful careers. Professors at the University of Evansville and Florida Gulf Coast University tested this assumption by surveying full-time Realtors in California, Tennessee and Florida. Researchers defined "career success" based on income,

tenure in the business and job status (associate, broker-associate or broker). Statistical methods controlled for other characteristics such as formal education level and age that might have an effect on professional attainment.

The analysis showed that Realtors with professional designations earn an average of $17,000 more per year and have been in the business an average of 3.8 more years than those without. They also tend to have greater job status, but this association is too weak to be statistically significant.

Researchers also found that designations are associated with respondents' "moral reasoning skills," meaning they tend to make better choices when presented with hypothetical business situations.

Despite Liability, Buyers Reps Flourish

Mandatory disclosure of agency relationships induced wide demand for buyer representation. Most buyers see no down side to having the agent represent them, especially because the seller still pays the commission. Initially, agents saw few reasons to avoid buyer representation agreements. Essentially, agents were freed up to fully serve the buyer and not be governed by the best interests of the seller.

The buyer is more vulnerable to misfortune in any transaction because the seller is more familiar with the property. If anyone ends up dissatisfied with the results, it is likely to be the buyer. And buyers tend to blame the agents who are supposed to be looking out for them. The courts, too, have held buyer agents to a higher level of accountability. As a result, brokers have discovered that representing buyers increases liability.

Researchers from the University of North Alabama and Florida Atlantic University surveyed brokers in Alabama in 1998, 2000 and 2002. In the first two surveys, researchers noted the percentage of agents who represent buyers in at least half their transactions rose significantly after mandatory disclosure went into effect (from 15.4 to 21.7 percent), but then declined (to 16 percent in 2000). The rate rose again in the 2002 survey, as 23 percent of respondents worked mostly as buyer agents.

Researchers point out that the increase in buyer agency is the result of increased consumer demand rather than agent preference. In particular, they found that as agents become more experienced, they are less comfortable working as buyer agents, presumably because they are more aware of the increased liability.

When asked whether they would prefer to act as a buyer agent or a neutral transaction broker, only 42 percent of very experienced agents picked buyer agent compared with 64 percent of inexperienced agents. Two-thirds of the experienced agents disagreed with the statement that buyer agency does not increase liability, while less than half of inexperienced agents disagreed. In spite of this, more than half of very experienced agents said they find themselves increasingly representing buyers. Only 39 percent of inexperienced agents are representing more buyers now than in the past.

Brokers Target Minorities

Housing markets are booming largely because they have become accessible to a wider range of buyers, meaning that real estate agents deal with a more diverse clientele than in the past. Researchers at Cleveland State University and Hawaii Pacific University surveyed brokerage firms in Ohio to document this change in customer base. They also surveyed minority homebuyers in Cleveland to see how they perceive the process.

Ninety percent of the brokerage firms reported that their customer base had become more diverse over the years, while 43 percent said they had undertaken strategies to reach minority groups. The most popular methods were targeted advertising, developing contacts in minority communities and hiring a more diverse group of agents.

Statistical analysis of the data revealed a significant link between efforts to target minorities and diversification of the client base. In other words, the strategies appear to be working.

Analysis of homebuyer data indicates that minorities perceive more difficulties with the homebuying process. Specifically, minority buyers more often mention problems with arranging a down payment (42 percent compared with 22 percent of Caucasians), qualifying for a mortgage (35 percent, 17 percent for Caucasians), difficulties with English (15 percent compared with 3 percent) and cultural differences (7 percent compared with 1 percent). On the other hand, minorities are more likely to use an agent to help find a home (94 percent compared with 79 percent). Apparently, they view agents as experts in overcoming these homebuying obstacles.

Professional Diversity Slow

Women have always been a big part of the brokerage industry and in 1999 made up 58 percent of Realtors. The percentage of women holding broker licenses rose from 21 percent in 1978 to 45 percent in 1999. Ethnic representation in Realtor ranks lags demographic trends, however. In 1999, only 5 percent were Hispanic, and 2 percent were African-American.

***BROKERAGE FIRMS** work with a more diverse clientele these days, but minorities still perceive more homebuying obstacles than others do.*

Researchers representing American University, University of North Carolina-Greensboro and the National Association of Realtors (NAR) analyzed data from NAR's 1999 membership survey to see how gender and ethnic differences affect earnings. The analysis controlled for differences in experience, education and organizational role of the respondent, and for the size and location of the firm.

The difference in earnings between male and female agents is small (about 4 percent) and statistically weak. It is weakened

further when a variable reflecting whether the respondent came to real estate from another profession is introduced.

African-American Realtors earn 28 percent less than whites. Furthermore, African-American males earn 35 percent less than comparable white males, while African-American females lag white females by 15 percent. These results should be considered in light of the fact that less than 2 percent of respondents were African-American.

Globalization May Lead to Lower Commissions

Real estate brokerage has been affected by many forces influencing the business world, especially technology and diversity. So far, however, globalization has not had much impact on the industry.

Real estate markets, especially residential, are essentially local markets; real estate firms do not face foreign competition. However, U.S. commission rates are high relative to other countries, perhaps suggesting "excess profits" that could dissipate as technology makes price competition more feasible.

Researchers at South Alabama University and the University of Cincinnati compared commission rates for residential sales agents in 30 countries. Commission rates run from a low of 1 percent in the most active market areas of the United Kingdom to a high of 15 percent in the former Soviet republic of Belarus, a market with little available public information. Almost all of the countries surveyed require a license to provide brokerage services.

Realtors with professional designations earn an average of $17,000 more per year.

Researchers used a statistical model to compare the differences in commission rates. Among the factors included were income (in gross domestic product per capita), a corruption index (to measure the risk of doing business), agent representation (typical number of agents involved in a transaction) and sales per agent.

Results revealed that to be in line with those in the rest of the world, the U.S. commission rate should be slightly more than 4 percent. The researchers also point out that American brokers do not compete on price because firms must cooperate to complete transactions. They suggest that large firms, which may have financial and staffing resources that would allow them to be less dependent on the MLS, may decide to undercut the competition on price and set off a competitive decrease in commission rates. This could change the whole structure of compensation in the industry, leading to lower rates for higher-priced homes and packages of selected services at various prices.

Dr. Harris (jharris@cgsb.tamu.edu) is a research economist with the Real Estate Center at Texas A&M University.

Endangered Species Act

What Landowners Should Know

By Charles E. Gilliland

After two previous Congressional acts failed to slow the extinction rates of endangered species, the Endangered Species Act (ESA) of 1973 enshrined species protection as the ultimate societal objective. Species preservation trumped all other considerations, even existing social and economic programs.

This uncompromising approach encountered vigorous opposition as the act took effect and unanticipated restrictions inhibited planned projects. After a tiny fish — a snail darter — initially killed the Tellico Dam project in Tennessee, the ESA came under the glare of the media spotlight. Public policy began to soften the act by creating some exceptions. The incidental take permit, which resulted from 1983 revisions to the ESA, opened the door to development even in the presence of endangered species.

In the 1990s, as newly designated species gained ESA protection, landowners facing enforcement of the ESA raised a series of highly publicized challenges. Political fallout from those confrontations has prevented renewal of the act since 1993. However, Congress continues to appropriate funds for ESA enforcement, and it remains in effect. Some current and potential landowners, fearing applications of what they refer to as the "Darth Vader" of environmental law, continue to regard ESA enforcement as a potentially debilitating regulatory straightjacket. They see ESA restrictions as a threat to the profitable use of their land.

MANY TEXAS LANDOWNERS *became personally acquainted with the Endangered Species Act when the Golden-Cheeked Warbler was added to the federal endangered species list. This warbler winters in Mexico and Central America but nests and breeds only in the juniper-oak woodlands of the Texas Hill Country.*

In view of continued opposition, policy makers continue to search for regulations that can preserve endangered species while accommodating reasonable land uses. Consequently, the ESA regulatory framework now includes an array of measures designed to facilitate landowners' plans and protect endangered species.

ESA Basic Provisions

The U.S. Fish and Wildlife Service (FWS) of the Department of the Interior and the National Marine Fisheries Service (NMFS) administer ESA for both land- and marine-based species. According to the FWS, Texas could provide habitat for 82 endangered and 16 threatened species. Texas species range from the blue whale, two of which were reported to have beached on the coast at different times, to the coffin cave mold beetle.

Endangered or threatened status provides species a broad range of protections that can severely restrict how landowners can use their property. Many Texas landowners' objections to the ESA resulted from the uncertainty they faced concerning use of their property after the FWS listed the Golden-Cheeked Warbler as endangered. To comply with the ESA and maximize property potential, landowners must understand what the act does and does not allow.

Taking an endangered species violates the law, according to section 9(a)(1)(B) of ESA. Most people interpret *take* to mean capturing or killing an endangered plant or animal. However, the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any such conduct." Through regulation, the FWS further defined *harm* to include any activity that "actually kills or injures wildlife" and incorporates actions "significantly impairing essential wildlife behavioral patterns, including breeding, feeding, or sheltering." In the *Sweet Home* decision, the U.S. Supreme Court upheld this broader interpretation of take (115 S. Ct. 2407 [1995]).

Most litigation addressing landowner activities under the ESA has focused on differing Congressional and FWS and NMFS interpretations of harm. The First Circuit Court has ruled that harm means actually killing or injuring wildlife and requires proof of past or present injury. The Ninth Circuit, however, has ruled that harm includes actions that are "reasonably certain" to cause injury in the future. The U.S. Supreme Court has not explicitly chosen between these conflicting standards.

Little or no litigation has addressed the other elements of the take definition. For example, no rulings have established the meaning of *harass* under the ESA. However, activity that adversely impacts existing habitat qualifies as a take and, in the areas subject to Ninth Circuit jurisdiction, activity that may destroy habitat in the future may also be a take. Texas is in the Fifth Circuit, which has not yet seen litigation testing these specific issues dealing with the meaning of *harm*. Therefore, Texas landowners do not know which standard may apply.

Landowners running afoul of the take provision face both civil and criminal penalties from $25,000 to $50,000 per

violation. Criminal penalties could include up to one year in prison.

Because the ESA allows both the U.S. Attorney General and private citizens to seek an injunction to prevent the taking of an endangered species, landowners face the prospect of both government and private individual intervention. Under the act's language, each action that takes an endangered species could result in imposition of a penalty. An incident that results in the deaths of several members of an endangered species thus could be considered separate violations, each requiring a separate penalty.

The broad scope of the ESA and the substantial penalties for breaching it make it a critical consideration for both current and prospective landowners. Land market participants would undoubtedly prefer to be able to apply a standardized checklist to determine if a given property contains critical habitat. This would allow them to evaluate the potential for restrictions on a property's use.

Each endangered species has unique habitat requirements, however, making it necessary to judge the potential for land use restrictions on a case-by-case basis. To assess the likelihood of future complications, landowners and land buyers should investigate the ecosystem surrounding a property to identify the possible presence of endangered or threatened species. It may be prudent to involve a specialist in endangered species at this step.

Planned activities that will result in a take, such as land development, generally require a permit from either the FWS or the NMFS. Landowners and prospective buyers must identify which activities are prohibited by the ESA. The FWS and NMFS can assist in determining which, if any, proposed actions are likely to result in a take.

If the land is in an area with no listed species, ESA restrictions do not apply. If listed species inhabit the region, however, landowners may well discover protected habitat on their land. Land with extensive habitat may be effectively placed off-limits to any use other than habitat for endangered species. But the ESA has evolved to allow some exceptions to the Section 9 take prohibition. These options vary depending on the species' status within the listing process.

Candidate Conservation Agreements

Candidate species are those that may eventually be proposed for listing as endangered. Landowners in areas inhabited by candidate species can enter into a Candidate Conservation Agreement (CCA) with the FWS or NMFS. Under ESA provisions, landowners can obtain regulatory guarantees from the services by protecting habitat prior to listing. These owners can voluntarily enter into a CCA that allows an incidental take if and when the species is listed.

The ESA defines an incidental take as one that is "incidental to . . . the carrying out of an otherwise lawful activity." An owner with an incidental take permit legally could engage in activities that destroy habitat in the course of using that property for an otherwise legal pursuit.

In negotiating the agreements, the FWS or NMFS strives for land management practices that would make species listing unnecessary if used by all landowners in the area. In return for employing these practices, owners receive a guarantee that they will not face more onerous measures should the endangered listing eventually occur. If an incidental take occurs after

WEBSITES

Endangered species in Texas
http://ifw2es.fws.gov/EndangeredSpecies/lists/

Endangered species, all states
http://ecos.fws.gov/webpage/webpage_usa_lists.html?state=all

Texas Parks and Wildlife Department
http://www.tpwd.state.tx.us/nature/endang/endang.htm

THE TEXAS BLIND SALAMANDER *and the Houston Toad are among Texas species protected by the ESA.*

a listing, but the landowner remains in compliance with the terms of the CCA, the owner can continue to use those specified practices. The CCA limits much of the uncertainty the landowner faces regarding the identified species and possibly contributes to species recovery without listing.

Safe Harbor Agreements

The potential restrictions on land use associated with the ESA make many landowners reluctant to expand or enhance habitat on their properties. Owners fear that if they attract larger numbers of threatened or endangered species, they may be required to maintain the habitat at that higher level to avoid possible ESA penalties.

The FWS, in an effort to encourage rather than discourage voluntary land management practices that could aid in species recovery, offers the Safe Harbor program. Landowners signing Safe Harbor Agreements can improve habitat without fear of facing punitive action if they later choose to discontinue their extra efforts. The NMFS offers a similar form of protection.

BREACHING THE ESA *still carries substantial penalties, but landowners now have options that may help them comply with the act and maintain profitable use of their land.*

Habitat Conservation Plans

While Safe Harbor Agreements do not normally allow an incidental take of the endangered species, a landowner may apply for a Habitat Conservation Plan (HCP) with the FWS or NMFS to obtain an Incidental Take Permit (ITP). The HCP process, created under Section 10 of the ESA, seeks to balance endangered species protection with economic development activities on a specified property.

The plan mandates practices the landowner must follow to secure the ITP. Once the HCP is in place, the landowner is able to undertake activities consistent with the plan even if an incidental take of protected species results. The landowner also may negotiate to avoid further management and mitigation requirements under the so-called "No Surprises" rule, which establishes the maximum requirements an owner will face, even if the FWS and the NMFS begin to impose stricter requirements on other landowners.

The FWS and NMFS have pledged to conduct the HCP application review process as expeditiously as possible. However, the process can be lengthy, depending on the potential effect on the species in question. An application may require specialized scientific studies and opinions such as environmental assessments or environmental impact statements.

After the landowner submits the application, the FWS or NMFS publishes an announcement in the *Federal Register*. Next, the public reviews and comments on the HCP application and the FWS and NMFS evaluate the comments. Other documentation including an Implementation Agreement and Environmental Action Memorandum plus a legal review of the application may be required.

The FWS or NMFS must verify that the plan will "to the maximum extent practicable, minimize and mitigate the impacts . . .", that there will be adequate funding to complete the plan, and that the HCP will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. The agency also provides guarantees that the plan will be implemented. Even after the HCP is approved, third parties can sue if they consider it inadequate, adding to both the delay and expense of the process. The entire application process may take several years in complicated situations.

Entities such as cities, counties and citizen groups can negotiate an HCP to cover a geographic region. The City of Austin and Travis County secured an ITP to cover habitat for the Golden-Cheeked Warbler, Black-Capped Vireo and more than 30 invertebrates in Travis County. The ITP was issued in connection with the HCP creating the Balcones Canyonlands Conservation Preserve (BCCP) in Travis County.

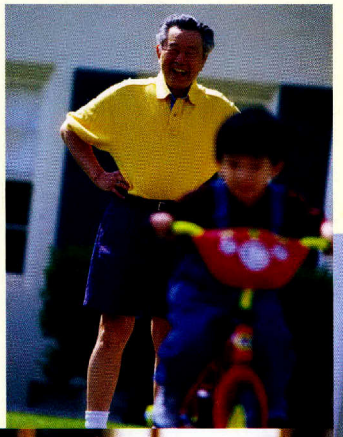
Landowners within western Travis County have the option of cooperating with the BCCP to obtain access to its ITP rather than submitting their own applications. Landowners can proceed with development after the BCCP approves their application. Fees range from $55 to $5,500 per acre. Before applying for an individual HCP, landowners can contact the Transportation and Natural Resources Department of Travis County to determine whether this option would be less expensive and time consuming.

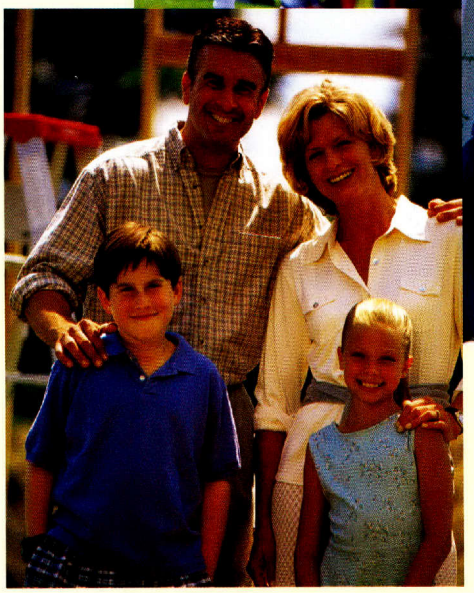
Landowners and landbuyers must be aware of the consequences of violating the take provisions of ESA. The FWS and the NMFS have created mechanisms to allow private landowners to comply with the ESA while making profitable use of their property. The prudent landowner should consider engaging experts with experience in filing applications for the various permits available to them. Despite efforts to simplify the process, landowners wishing to develop areas with habitat for threatened or endangered species must anticipate potentially costly and lengthy time delays.

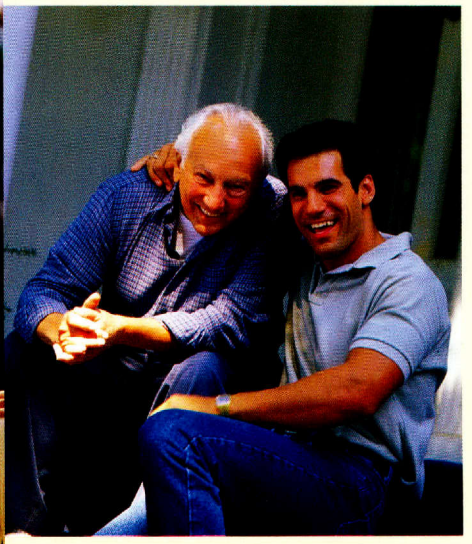
Dr. Gilliland (c-gilliland@tamu.edu) is a research economist with the Real Estate Center at Texas A&M University.

analyze this . . .
homeowners are happier

By Jack C. Harris







Residential real estate agents are in the business of selling homeownership. First-time buyers need to be persuaded of the advantages of becoming homeowners, and current owners have to be convinced that owning a home remains a sound financial strategy.

Owning a home is a pillar of the American way of life. That makes the job easier.

Happily, research documents many of the social and economic benefits attributed to owning a home.

Homeowners are happier. A 1994 study surveyed a group of Baltimore homeowners 18 months after they bought their homes. Homeowners rated their life satisfaction significantly higher than did renters responding to the same poll. Moreover, homeowners' satisfaction remained higher in a follow-up survey three years after their home purchase.

Part of this satisfaction stems from the fact that homeowners exercise more control over their environment. They can repair and remodel their property as they wish; renters must get the landlord's approval.

A 1995 study surveyed a large nationwide sample and found homeowners were significantly more satisfied with their homes than renters. This study statistically controlled for differences in demographics, features of the housing units and neighborhood characteristics.

Studies show that satisfaction also derives from the elevated status homeowners enjoy. In 1996, researchers interviewed people who received homeownership assistance through a lease-purchase program in Cleveland, Ohio. The interviews indicated that the ability to own a home provided a significant improvement in self-image.

Another national study in 1996 found that homeowners were more likely to agree with the statement, "I do things as well as anyone," which is considered an indicator of self-esteem. In the Baltimore study mentioned earlier, 85 percent of homebuyers said that being a homeowner made them feel better about themselves.

Homeowners make good neighbors. Homeowners tend to move much less often than renters. A 1999 study indicated a typical homeowner remains in one residence for 13 years compared with two and a half years for a renter. Homeowners consequently are more committed to a location and the surrounding neighborhood.

This commitment finds expression in citizens' community involvement. A number of studies, including one in 1999, have concluded that homeowners are more likely to participate in voluntary civic organizations and be politically active, even when differences in income, education and other socioeconomic characteristics are taken into account.

Homeowners have a financial stake in their neighborhood and do what is needed to maintain property values. In 1996, researchers used Census data from 1980 and 1990 and found a significant correlation between neighborhood homeownership rates and property value appreciation. On average, each percentage point increase in homeownership was associated with a $1,600 increase in average home value over the decade.

Homeownership represents solid investment. Homeowners realize how important their homes are to their financial future. In 1995, equity in a home represented 44.4 percent of the average homeowner's net worth. Moreover, the value of home equity is remarkably stable.

A 1998 study found that returns on housing investments over time are one-fourth as variable as stock returns and entail relatively low risk. Homeownership also offers the subjective benefits of autonomy, pride of ownership, freedom to customize the home and a means of self-expression.

For a list of studies referenced in this article, send an e-mail request to the author.

Dr. Harris (j-harris@tamu.edu) is a research economist with the Real Estate Center at Texas A&M University.

RETIREMENT PLANS for Self-Employed IMPROVE

By Jerrold J. Stern

The 2001 Tax Act made retirement plans for self-employed workers significantly more attractive. Additional enhancements went into effect in 2002. This is good news for real estate brokers and sales associates operating as independent contractors because they are considered self-employed for tax purposes.

Self-employed individuals can choose from several retirement plans. They differ in complexity and in the amount of contribution allowed.

Traditional IRAs. The least complicated plans are traditional IRAs and Roth IRAs. Contributions to traditional IRAs provide a tax deduction in the year they are made, and all qualified withdrawals are taxable as ordinary income.

Contributions can be made to traditional IRAs until age 70½; withdrawals must begin after age 70½. Limits on contribution amounts are listed in the table. Qualified withdrawals may begin at age 59½ as well as under various other conditions. A 10 percent penalty plus regular income tax applies to unqualified withdrawals.

Roth IRAs. Contributions to Roth IRAs are nondeductible, but all qualified withdrawals are tax free. There is no age limit for contributions (contributions beyond age 70½ are allowed) and no mandatory withdrawals.

Traditional IRA and Roth IRA contribution limits. Contribution limits on traditional and Roth IRAs will rise over time, as shown in the table. IRAs can be established for both the worker and a nonincome-earning spouse. Workers over age 50 are allowed to make additional contributions, called "catch-up contributions."

For Roth IRAs (but not traditional IRAs), the maximum annual contribution is phased out for single individuals with adjusted gross income between $95,000 and $110,000 and for joint filers with adjusted gross income between $150,000 and $160,000. Various phase-out limits exist for traditional IRAs if brokers or their spouses participate in an employer-sponsored pension plan.

Traditional IRA and Roth IRA Contribution Limits

Tax Year	Normal Contribution Limit	"Catch-up" Contribution Limit
2001	$2,000	$ 0
2002–2004	3,000	500
2005	4,000	500
2006–2007	4,000	1,000
2009+	Inflation-indexed	1,000

For example, assume a self-employed broker has $100,000 net income from commissions in 2002 ($110,000 total commissions less $10,000 expenses), and the broker's spouse does not earn income. Both are over age 50. The broker and the spouse each may deposit $3,500 ($3,000 plus a catch-up contribution of $500) into either their traditional or Roth IRAs in 2002, for a total annual contribution of $7,000.

SEP-IRA. Self-employed workers can establish a Simplified Employee Pension (SEP) IRA for themselves. The contributions are deductible and are made to the taxpayer's traditional IRA account. The annual contribution limit is 13.0435 percent of net self-employed earnings. Contributions cannot exceed $30,000 for 2002 (up from $25,500 in 2001). Roth IRA contribution limits are not affected by SEP-IRA contributions. Thus, the self-employed broker from the previous example can deposit a deductible $13,044 in a SEP-IRA (13.0435 percent of $100,000) plus a total of $7,000 in Roth IRAs.

SIMPLE-IRA. Starting in 2002, a self-employed person can make a deductible deposit of $7,000 plus a matching deductible contribution of up to 3 percent of self-employment net income. For example, the self-employed broker discussed previously could contribute $10,000 to a SIMPLE-IRA ($7,000 plus 3 percent of $100,000 net self-employment income, which equals $3,000). Roth IRA contributions would still be available with the limits shown in the table ($3,500 each for the broker and the spouse).

The $7,000 SIMPLE-IRA contribution limit will rise by $1,000 per year until it reaches $10,000 in 2005. After 2005, the limit will rise with inflation.

Keogh. The deductible contribution limit for Keogh accounts in 2002 is the smaller of $40,000 or 20 percent of taxable compensation. The $40,000 limit will rise with inflation starting in 2003. While the contribution level is higher than the other plans described, Keogh plans are more complicated to establish and maintain over time.

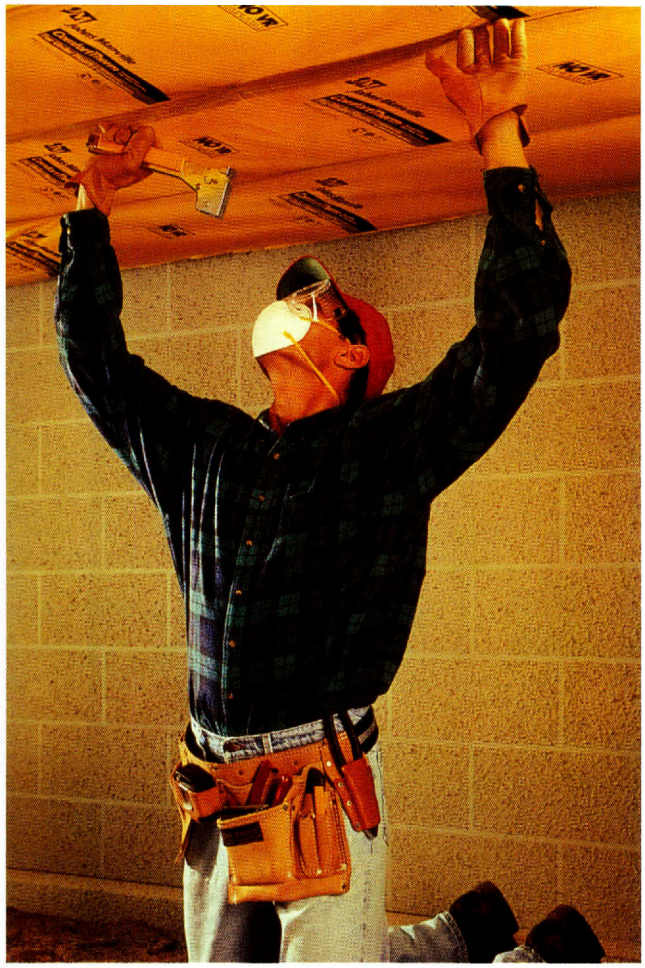
A future column will address how individuals can self-direct IRA investments in real estate and other assets.

The optimal retirement strategy for one person may not be appropriate for another. Because of the complexity of retirement planning, consultation with an accountant or attorney is recommended.

Dr. Stern (stern@indiana.edu) is a research fellow with the Real Estate Center at Texas A&M University and a professor of accounting in the Kelley School of Business at Indiana University.

TAX BREAK for LEASEHOLD IMPROVEMENTS

By Jerrold J. Stern



The 2002 Tax Act provides "bonus" depreciation deductions for leasehold improvements and certain other property. These tax benefits are part of the $123 billion tax reduction package signed into law by President Bush. The new law is intended to stimulate the economy, which has languished since the Sept. 11, 2001, terrorist attacks.

The new rules allow 30 percent of the cost of leasehold improvements made to commercial real estate to be deducted in the first year. In addition to this bonus depreciation, taxpayers can deduct regular depreciation on the improvements. Either the lessor or the lessee may make the improvements and take advantage of the tax benefits.

Example. A rapidly expanding fast-food chain leases commercial space in various new locations in January 2002. The chain spends $1 million on leasehold improvements. Renovations include customized counter space, new lighting fixtures, additional air conditioning equipment and alterations to the ceiling.

The chain would be able to deduct bonus depreciation of $300,000 (30 percent of $1 million). Regular depreciation can be deducted as well. The first-year depreciation percentage for commercial real estate placed in service in January is 2.461 percent. Regular depreciation would be $17,227 ([$1 million – $300,000] × 2.461 percent). The tax law allows the $682,773 balance ($1 million – $300,000 – $17,227) to be written off during the next 38 years.

To take advantage of these benefits, the building must be more than three years old when the improvement is placed in service. If possible, taxpayers should consider delaying improvements in relatively new buildings to avoid that three-year period.

A binding commitment to enter into a lease is treated as a lease for these purposes. If a lease is between related parties, improvements are not eligible for bonus depreciation.

Nonqualified improvements. The law specifies that certain commercial realty improvements are not eligible for bonus depreciation and can only be depreciated over 39 years. These improvements include enlargement of a building, elevators, escalators, any structural components benefiting a common area and changes to a building's internal structural framework.

Structural components for these purposes are defined as load-bearing internal walls and any other internal structural supports, including the columns, girders, beams, trusses, spandrels and all other materials that are essential to the stability of the building.

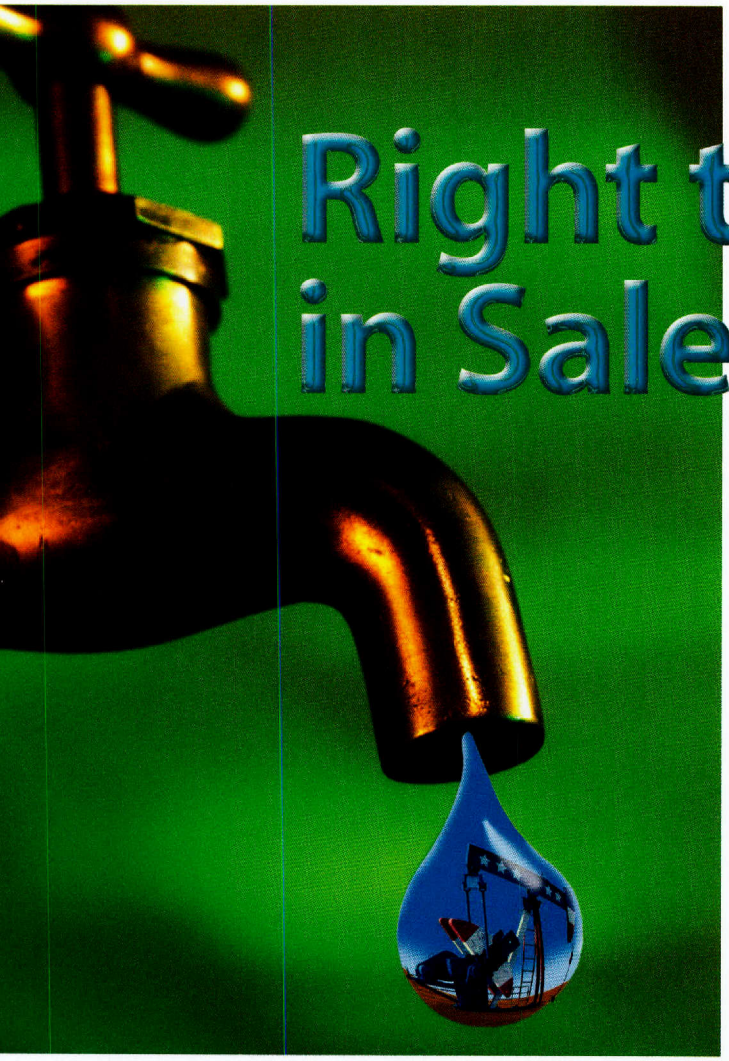
Personal property. Bonus depreciation also applies to personal property used in a business. Various assets used in commercial buildings fall into this category. Examples include computers, furniture, removable lighting fixtures, office equipment, movable partitions, carpeting and plumbing and electrical equipment used in connection with specialized equipment that does not benefit the entire building. All costs involved for specialized equipment are eligible, including the costs of parcels, transformers and wiring.

Personal property used in a business is typically subject to depreciation over five or seven years. To qualify for bonus depreciation, the taxpayer must be the original user of the property.

The benefit of bonus depreciation is that deductions are accelerated into the current tax year. However, there may be **reasons not to use bonus depreciation** even if it is available. First, the taxpayer may have net operating losses from prior tax years that are nearing their expiration dates. Second, the taxpayer may expect to be in a higher tax bracket in future years. In both cases, the taxpayer could be better off by using the slowest methods of depreciation to maximize the size of deductions when marginal tax rates are highest.

The tax rules and computations for bonus depreciation and depreciation in general can be complex. Consultation with an accountant or attorney is recommended. ♦

Dr. Stern (stern@indiana.edu) is a research fellow with the Real Estate Center at Texas A&M University and a professor of accounting in the Kelley School of Business at Indiana University.



Right to Sue in Sales Contracts

By Judon Fambrough

A couple of new landowners received quite a surprise when the Eastland Court of Civil Appeals ruled that they could not sue oil and gas producers for contaminating an underground aquifer (*Senn v. Texaco, 55 SW3d 222, 8/16/01*). The decision may surprise Texas real estate brokers and real estate attorneys. Land sale contracts and deeds may need altering in the future to avoid similar problems.

The plaintiffs purchased a 23,000-acre ranch in 1997. Three thousand acres were in oil and gas production. Texaco and Exxon had leased the property since 1948. Most leases had been assigned to other oil companies, and most production had ceased before the 1997 purchase.

To protect themselves from possible lawsuits regarding the condition of the property, the sellers sold it "as-is." Both the contract and deed stated in all caps that the sale was "As is, where is, and with all faults, and without any representations or warranties whatsoever, express or implied, written or oral . . . . Grantee expressly revokes, releases, negates and excludes all representations and warranties, including, but not limited to . . . any environmental, geological, meteorological, structural, or other conditions or hazards . . . including, without limitations, concerning water in, on, under, or about the property."

After the purchase, the buyers discovered the contaminated groundwater and filed suit for damages. The trial court ruled they did not have the right to bring the lawsuit because the injury occurred before they owned the property. This ruling was upheld on appeal.

However, the Senns were not easily discouraged. They made a number of arguments on appeal. For instance, they argued the right to sue was conveyed to them in the mineral reservation that stated, "Nothing contained herein is intended to limit the right of the Grantee (the Senns), their heirs, successors or assigns to seek to recover whatever surface damages to which Grantee, or their heirs, successors or assigns may be entitled under Texas law in the event of the production or mining of any of the foregoing minerals and other substances."

The appellate court disagreed, saying the purported conveyance does not contain words of conveyance or assignment. The wording is in the reservation clause, not the granting clause. Second, the provision clearly applies to injuries occurring **after** the Senns purchased the land, not before.

The Senns also argued that the court should draw a distinction between permanent and temporary injuries to the land. However, the court ruled that the distinction is meaningless in this instance. All the alleged damages — temporary, permanent or both — occurred before the Senns' purchase.

However, the distinction cannot be overlooked. Had temporary injuries to the land been sustained during the time the Senns owned the property, a lawsuit could have been permitted.

The difference between permanent and temporary injuries to land depends on the frequency of the occurrence. Permanent injuries are constant and continuous, not occasional, intermittent or recurrent. They are presumed to continue indefinitely. Temporary injuries, on the other hand, are not continuous, but sporadic and contingent on some irregular force, such as rain.

Another distinction is the ability of the court to stop (enjoin) the activity causing the injury. If an injury can be enjoined, it is temporary. If it cannot be stopped, it is permanent.

The number of lawsuits that may be filed is another difference. When injuries are deemed permanent, only one lawsuit is permitted. All the estimated past and future damages are recoverable in one lump sum. The lawsuit must be filed within two years after discovery of the first actionable injury, not from the date when the extent of the damages are fully ascertainable.

For temporary injuries, successive lawsuits are permitted because only past damages are recoverable, not future. A lawsuit for temporary damages must be filed within two years after temporary damages are sustained, or they are barred by the statute of limitations.

The amount of recovery varies with the classification. Compensation for permanent injuries is measured by the difference in the value of the land before and after sustaining the damages. This is sometimes referred to as the diminution-in-value test. Recoveries for temporary injuries are measured by the amount of money needed to restore the land for the period covered by the lawsuit. As mentioned earlier, this period lasts for no more than two years, according to the Texas Civil Remedies and Practices Code (Section 16.003).

There is one exception to these rules. Courts will not permit the amount of restoration costs for temporary damages to drastically exceed the reduction in fair market value of the land. In a 1975 case, the jury found the restoration costs to be $45,000 and the decrease in market value to be $10,500. Here, the court held the proper measure of damages for temporary injuries was the $10,500 for diminution in fair market value of the land because of the variance (*Atlas Chemical Industries v. Anderson, 524 SW2d 681[Tex 1975]*).

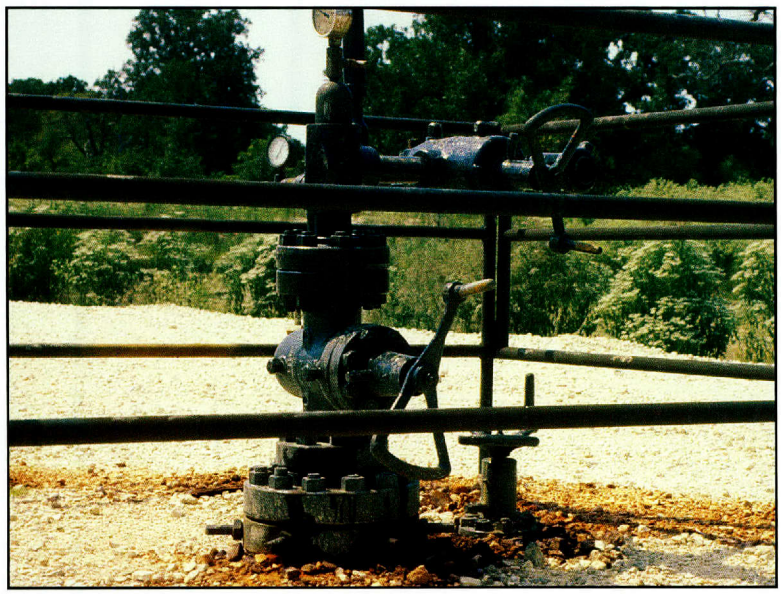
The Senns argued that, although more than two years had passed from the time of the injuries, the discovery rule presents an exception that extends the two-year period. The Senns discovered the water contamination **after** purchasing the land. Consequently, they felt their lawsuit should not be barred because they sued within two years after discovery.

When an injury is inherently undiscoverable, the statute of limitations begins to run not from the time of the injury but from the time the plaintiff knows or, by exercising reasonable diligence, should know of the injury (discovery rule). However, for the court to take note of the discovery rule, the plaintiff must raise the issue in the pleadings or use it as a defense when the defendant claims an expiration of the statute of limitations.

An exception to the rule foiled the plaintiffs' argument. Only the aggrieved party may raise the issue when filing the lawsuit. Here, the aggrieved party was the prior owners, not the plaintiffs. The discovery rule cannot transfer the right to sue from one to another simply because the second owner discovered the injury. An assignment of the right in the deed is required.

Finally, the Senns argued that the right to sue for injury to land is a right that runs with the land. It is not a personal right but rather belongs to and follows whoever owns the land.

A similar case involved a plaintiff who purchased ten acres in Rusk County in 1992 (*Exxon Corp. v. Pluff, 2001 WS 1163758, Tyler, 5/31/2002*). The property had been used for four or five drill sites between 1930 and 1984. It was littered with oilfield equipment, making it unfit for livestock or the use of farm machinery.



LANDOWNERS SHOULD *be aware that lawsuits for permanent damages to land must be filed within two years of discovery of the first damage.*

The new owner sued Exxon and others for surface damages. The plaintiff, Pluff, received the same response from the court as the Senns. The statute of limitations for the injuries expired somewhere around 1986, and he had no right to file the lawsuit because the right belonged to a prior owner.

On appeal, Pluff argued that the right to sue went with the land and belonged to him as the current owner. He distinguished his case from the Senns because the Senns purchased the land "as-is." In this case, the plaintiff's deed conveyed "all and singular the rights and appurtenances thereto in anywise belonging to the (sellers)." This language, he concluded, transferred any cause of action owned by the sellers to the buyer.

Here is how the court responded after pointing out the plaintiff cited no authority for the interpretation.

"However, even if we assume that Pluff's interpretation is correct, no evidence was introduced at trial to establish that the injury occurred during the time Pluff's grantors owned the property. Consequently, we cannot determine from the record whether Pluff's grantors ever owned the tort cause of action Pluff asserted."

In other words, even if the language assigned the right to sue, the plaintiff failed to prove that the injury occurred during the previous owners' tenure. The court then demanded that any assignment be clearly stated.

"To recover on an assigned cause of action, the party claiming the assigned rights must prove that the cause of action was in fact assigned" (*Texas Farmers Ins. v. Gerdes, 880 SW2d 215*).

These cases illustrate both the problem and the cure for purchasers. The problem is the new owners may not have owned the land when permanent or temporary injuries were sustained. The solution is for sellers to convey or assign all their rights to sue for any injuries to the property to the buyers. This should be stated in both the sales contract and repeated in the deed.

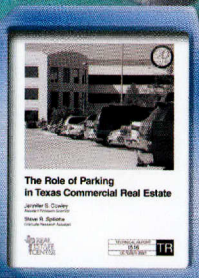
Neither the Texas Real Estate Forms Manual published by the State Bar of Texas nor the contract forms promulgated by the Texas Real Estate Commission contain such an assignment.

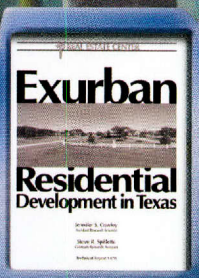
The appellate court summarized the options any potential buyer faces when purchasing property. The Senns could have avoided the problem by "bargaining for an assignment of the prior owner's possible causes of action for injuries to the land that occurred before the purchase." Alternatively, " the Senns could have insisted that Fuller (the seller) give them warranties about the condition of the land and water in the deed." Or, "the Senns could have performed a better inspection of the land and water before they purchased the land."

Fambrough (judon@recenter.tamu.edu) is a member of the State Bar of Texas and a lawyer with the Real Estate Center at Texas A&M University.

(Benchmarks continued from page 1)

Role of Parking in Texas Commercial Real Estate
(http://recenter.tamu.edu/pdf/1516.pdf)

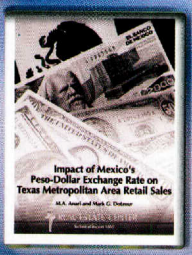




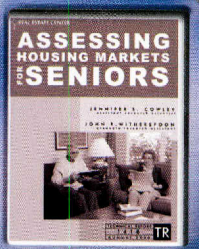
Exurban Residential Development in Texas
(http://recenter. tamu.edu/pdf/1470.pdf)

Long Run Impact of the Fed Funds Rate on Texas Mortgage Interest Rates
(http://recenter.tamu.edu/pdf/1537.pdf)

Impact of Mexico's Peso-Dollar Exchange Rate on Texas Metropolitan Area Retail Sales
(http://recenter.tamu.edu/pdf/1468.pdf)



Consumer's Guide to Mortgage Finance
(http://recenter.tamu.edu/pdf/1420.pdf)



Assessing Housing Markets for Seniors
(http://recenter.tamu. edu/pdf/1418.pdf)

Green Costs VERSUS CONVENTIONAL COSTS

Green building was the topic of an article in the July 2002 issue of *Tierra Grande*. The following is in response to a request to provide some comparative costs on the various techniques discussed.

Bamboo flooring versus hardwood flooring

While there is no significant difference in material cost, bamboo installation is easier because it is engineered to specific lengths, whereas hardwood floors typically include some random lengths. As a result, bamboo floor layouts require less planning and produce less waste.

Steel framing versus wood framing

There is almost no difference in material or labor cost. However, steel-framed walls are prefabricated and produce less waste. Metal scraps can be sold to recyclers. Metal framing resists wood-destroying insects.

Metal roofs versus composite shingle roofs

The cost of metal roofs can range from 10 to 20 percent more than a conventional composite shingle roof. However, a metal roof has two to three times the life expectancy.

Compressed straw panels versus wood studs and sheetrock

Compressed straw is about 15 to 20 percent cheaper overall than wood studs and sheetrock because of reduced labor to install it. Straw panels come in prefabricated 4 × 8-foot or 4 × 16-foot lengths with precut channels for electrical and water lines. Thus, one straw panel can be installed as a single interior wall unit much cheaper than the cost to construct wood studs and hang sheetrock on two sides.

Structural Insulated Panels (SIPs) versus wood studs

SIPs cost as much as 10 percent more than traditional 2 × 4 wood frame construction. The cost is about the same as 2 × 6 wood frame construction.

Cellulose versus fiberglass insulation

Cellulose insulation can cost as much as 20 percent more than conventional fiberglass insulation to install. However, cellulose insulation is sprayed on, creating a monolithic insulation barrier that reduces voids commonly found in walls insulated with fiberglass batting. Thus, increases in cost can be recaptured in lower utility bills over time.

Engineered wood products versus standard lumber

Some engineered wood products are less expensive than standard lumber because engineered products are constructed from wood pieces instead of one continuous piece of lumber. However, other engineered wood products are more expensive because they are chosen for their structural superiority and strength instead of their lower cost.

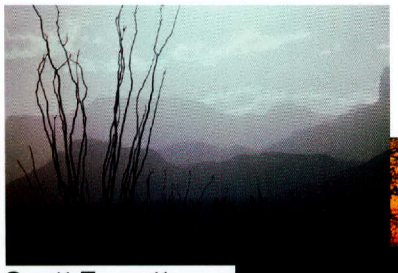
Insulated concrete forms (ICFs)

RASTRA and Faswall are comparable in cost to 2 × 4 wood frame construction and cheaper than 2 × 6 wood frame construction. However, Autoclaved Aerated Concrete is typically 10 to 20 percent more expensive than traditional 2 × 4 construction.

Green builders encourage consumers to consider more than construction costs when choosing a building design. Green construction techniques, they say, result in a superior quality product, energy savings and conservation of the environment.

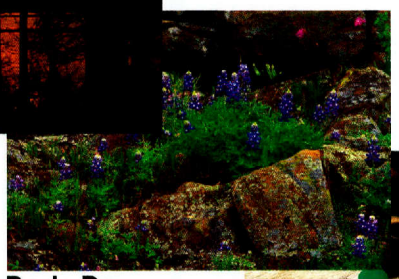
Winners

Texas Shootin' Match

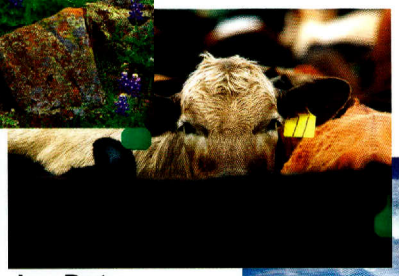


Scott Everett
Desert Haze

Doris Day
Cypress Sunset



Doris Day
Bluebonnets Near Enchanted Rock



Joe Duty
Don't Fence Me In

Scott Blair
Cornfield in Brazos County

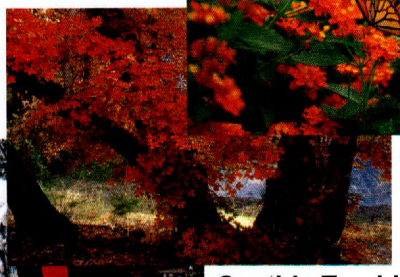
Gerry Batte
Magnolia Blossom

Don Harris
Lost Mine Trail Peak

Cynthia Treybig
Sunset on Llano River

Cynthia Treybig
Whitetail Buck in Choke Canyon

Carol Arnold
Monarch Migration



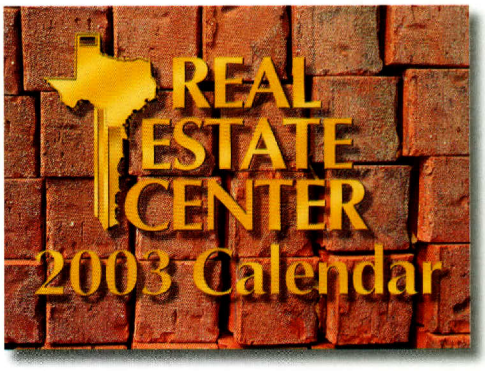
Cynthia Treybig
Fall Foliage at Los Maples State Natural Area

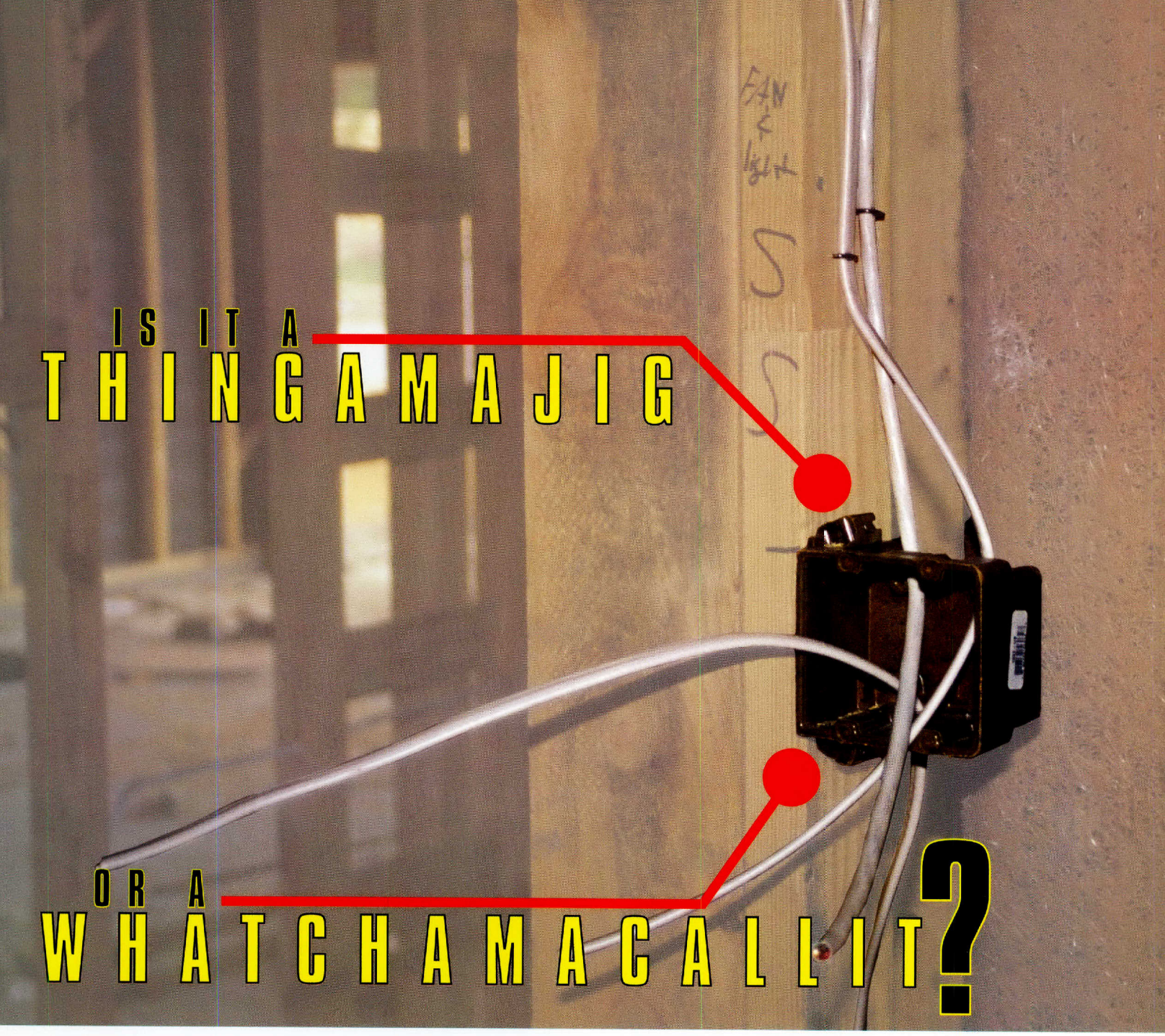
Joe Duty
Neither Rain, Nor Sleet, Nor Snow. . .

When it came time to judge the many fine photos entered in the Texas Shootin' Match 2002, *Tierra Grande's* editorial staff found that we had our work cut out for us. Settling on 12 winning entries was tough.

After considerable discussion, the seven judges reached consensus. We were reminded along the way that beauty is indeed in the eye of the beholder, and that most beholders are not afraid to argue that the photos they like are the most impressive.

Congratulations to the winners. Each will receive ten copies of the Real Estate Center's *2001–2002 Annual Report and 2003 Calendar* and a $50 gift certificate from a national retail chain. If you are interested in receiving a copy of the report-calendar, watch our website for availability.

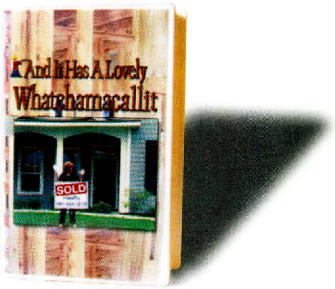




ANSWER: OUTLET BOX*

Let's face it. Construction talk is technical. And real estate professionals need to be fluent in the language. You've got to know rebar from trusses and pilasters from PVC pipe. To help you talk the talk, the Real Estate Center produced "And it Has a Lovely Whatchamacallit."

This basic video takes you step-by-step through the home construction process beginning with site preparation and ending with the sale. Along the way, construction terminology and materials are labeled and explained.



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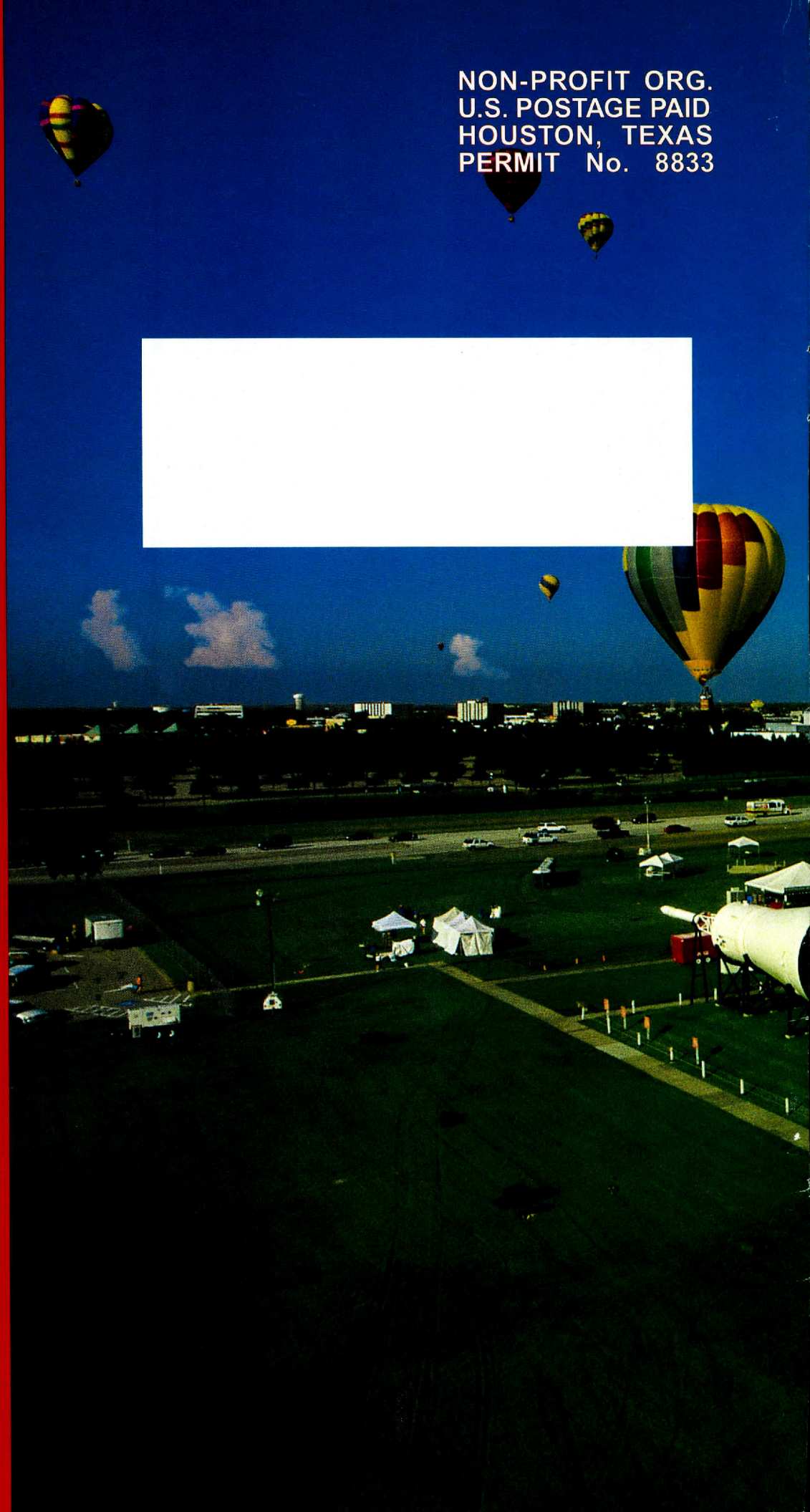

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SOLUTIONS THROUGH RESEARCH