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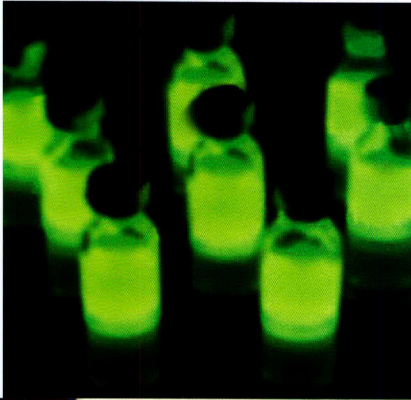
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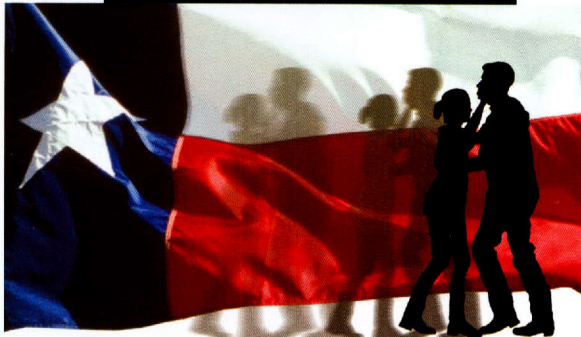
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On the Cover

First light bathes the Lonestar Riverboat on Town Lake in Austin and illuminates the lakeshore skyline. *Money* magazine recently rated Austin one of the ten best places to live in the United States.

Photographer J.P. Beato

1 Exit Wall Street, Right on Real Estate by Mark G. Dotzour

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Everyone hates high property taxes. So why is the Robin Hood plan for school funding still around? Easy. Texans hate the idea of a state income tax even more.

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benchmarks

Does the stock market have an impact on real estate in the United States? Should real estate investors be concerned if stock prices are going up or down?

The short answer is yes. Stock market price trends affect three major groups whose decisions have significant repercussions for commercial real estate: consumers, corporate managers and investors.

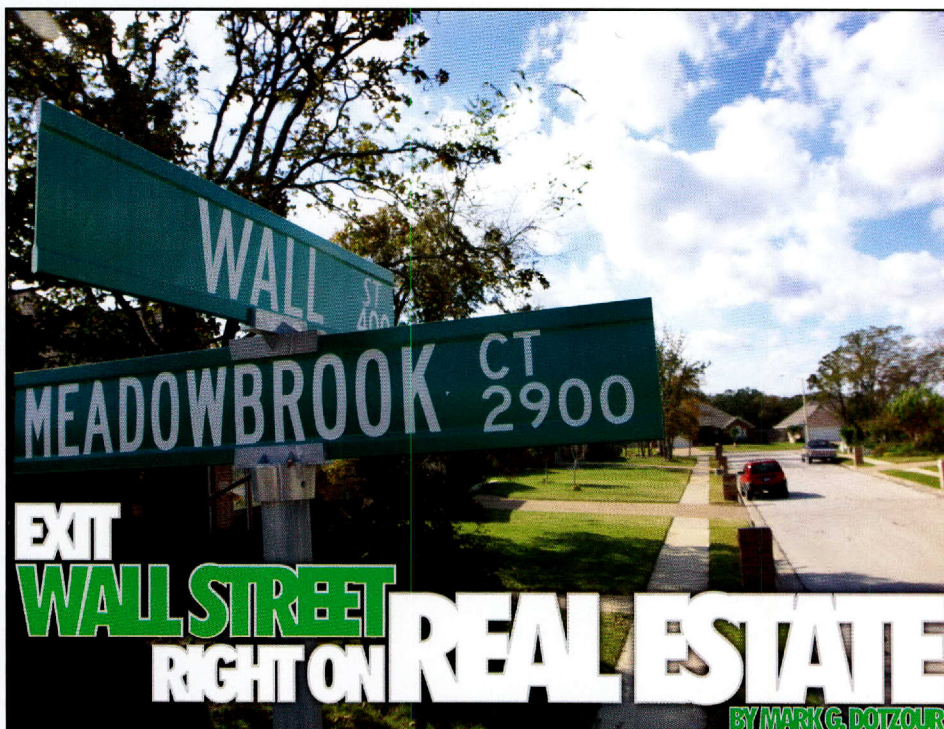
CONSUMERS

American consumers are the engine that drives the U.S. economy. The money Americans spend on goods and services fuels businesses not just in America but all over the world. When Americans are confident their jobs are secure, they tend to spend freely. When they are uncertain about employment prospects, they spend less and save more.

Trends in stock prices impact American consumers in two key ways. First, when stock prices are rising, companies are likely to expand and hire more employees, giving consumers confidence in the future. Federal Reserve studies have shown that when consumers are confident, the U.S. economy thrives and grows.

The second way trends in stock prices affect consumers is through what economists call the "wealth effect." When stock prices rise, Americans feel richer. Their IRAs and 401k plans steadily increase in value. With their investment portfolios plumping up, they feel wealthier and are comfortable spending money more freely. They buy bigger houses, more expensive cars, travel more and buy vacation homes. Some plan to retire early.

The wealth effect also works in reverse. When the stock market declines regularly for a prolonged period of time, a negative wealth effect can occur. As retirement portfolios contract, consumers may decide to postpone retirement, spend less and put more income into their retirement accounts.



When consumers spend, the real estate market prospers, too. Demand for retail and industrial space increases. Likewise, demand for real estate declines when consumers are more conservative in their spending.

CORPORATE MANAGERS

Corporate CEOs are paid large salaries for one reason: to ensure the company's stock price increases sufficiently each year to provide an attractive return to the company owners (the shareholders). When their stock price increases, CEOs get generous bonuses and shareholders are happy. Conversely, when share prices fall for a sustained period, shareholders may consider replacing the CEO. Consequently, stock price trends impact decisions of corporate managers.

Stock prices tend to fall when corporate profits fall. When profits fall, managers look for ways to generate more revenue and cut costs. When stock prices fall for a sustained period, companies begin cutting costs in a big way. They reduce travel to attend trade shows, eliminate jobs, close facilities and postpone expansion plans.

Once the company gets "right sized," profits usually start to rise and share prices generally rise, too. Once the CEO feels confident that the company can generate sustainable and growing profits, hiring begins again, boosting demand for new office and industrial space.

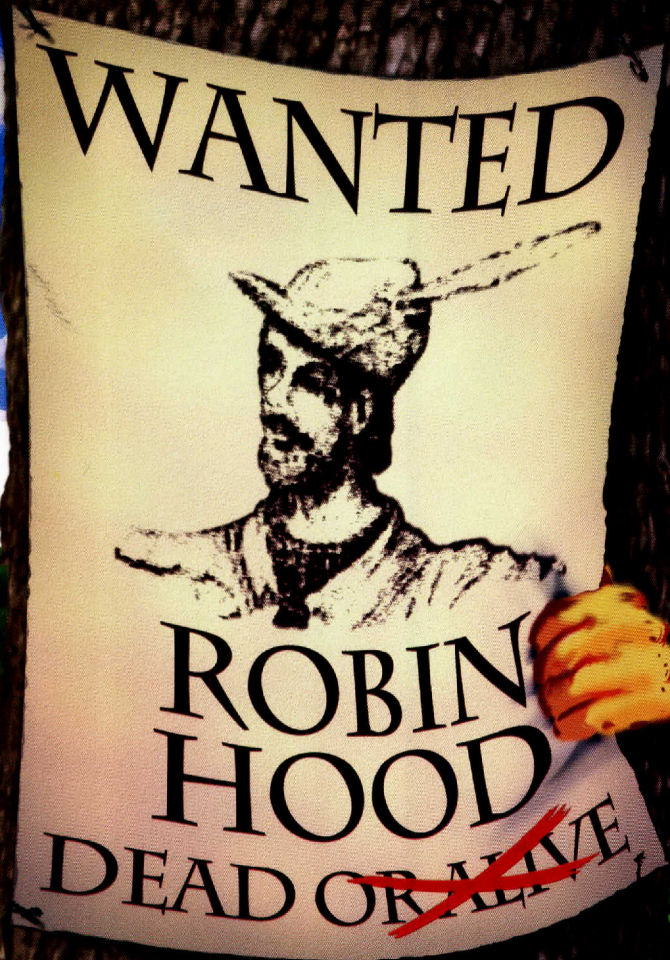
INVESTORS

It is no surprise that stock price trends impact investors in the United States and around the world. When the stock market is robust, generating 20 to 30 percent returns per year, investors pour funds into the market. But when stocks are on a relentless and extended decline, alternative investments such as bonds, real estate and annuities start to look more attractive.

This has been the case in the United States during the past two years as the stock market has swooned. Real estate investment trusts are once again drawing investors who appreciate the tangibility of real estate. Direct investment in real estate is also popular with investors.

Increased investor appetite for real estate was apparent in the Austin office market, which has suffered from a slow

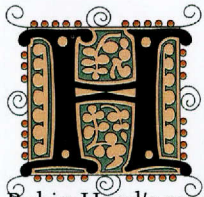
(Benchmarks continued on page 28)



Why Texans Won't Kill Robin Hood

By Charles E. Gilliland

One thing is clear. Robin Hood has a long list of enemies. The unpopular system for financing public schools relies heavily on property taxes and is despised throughout Texas.



Homeowners are dismayed about their annual property tax bills. Political figures, school officials and individual taxpayers denounce Robin Hood's recapture provisions, which take funds from wealthy districts and distribute them to poorer ones.

Frequently, these complaints end in pledges to do away with the system. However, political, economic and social forces in Texas make the death of Robin Hood extremely unlikely, at least in the short-term.

Litigation Drives Funding Policy

Beginning in the 1970s, citizens in poor school districts filed legal challenges to Texas' public education financing system. Plaintiffs argued that relying on property taxes for school funding made education function of local wealth, granting an unfair advantage to children from wealthy areas. They argued that this violated the U.S. Constitution, but federal courts ultimately declined jurisdiction.

Later, poor districts suing in state courts cited Article 7, Section 1 of the Texas Constitution, which states that it is the state legislature's duty "to establish and make suitable provision for the support and maintenance of an efficient system of public free schools." In the suit popularly known as Edgewood I, those districts argued that the state's financing system did not provide enough funding to cover the minimum state-required educational program.

The Texas Supreme Court agreed with the plaintiffs and opined that an efficient system must provide "substantially equal access to similar revenues per pupil at similar levels of tax effort." Basically, this means that a poor district should yield the same revenue per pupil from a one-cent tax increase as any other district would from the same one-cent increase.

This pronouncement focused the school funding debate on the issue of equity among school districts. Equity issues drove educational fiscal policy decisions throughout the 1990s. Four more Edgewood cases were litigated in response to legislative efforts to meet the equity standard.

During this series of suits, the court and legislature also addressed adequacy of funding. Adequate funding was deemed to require that districts have "substantially equal access to

the funds necessary to provide an accredited education" according to the Texas Supreme Court's Edgewood III decision. The dual requirements of equity and adequacy became the standard in the search for an acceptable revenue system for local schools.

After Edgewood I, Texas legislators began looking for additional revenues to fund poor school districts. Lieutenant Governor Bob Bullock concluded that only a personal income tax could generate revenues sufficient to address the equity issue. He submitted a proposal that imposed an income tax for education but provided property tax relief by allowing a tax credit for all or part of homeowners' school tax

Despite widespread dissatisfaction with the Robin Hood system, there has been virtually no support for a state income tax.



liabilities. The plan encountered swift and strong negative reaction from the Texas citizenry and quickly foundered.

Reacting to this rejection, Bullock proposed a constitutional amendment that many Texans mistakenly believe outlaws a state income tax. In fact, the amendment allows the legislature to adopt a state income tax, with all revenues to be used to fund education, and two-thirds of revenue specifically allocated for property tax relief. Adoption is contingent on voter approval. Bullock's amendment passed, but legislators were unwilling to try to enact the income tax. The idea of a personal income tax continues to be anathema in Texas legislative circles.

The Robin Hood plan was implemented in 1993 as a temporary measure to provide funds until a more permanent solution could be devised. Without added sources of revenue at the state level, however, the burden of funding Texas schools has increasingly migrated to the local property tax base. The average school tax rate has risen from 89 cents per \$100 of assessed value in 1989 to \$1.4857 per \$100 of assessed value in 2001, according to the Property Tax Division of the Texas Comptroller's Office. The Robin Hood plan has gained notoriety as school tax rates have risen.

Texas Versus the Nation

How do other states fund their public schools? The figure (previous page) shows the key difference — the absence of individual and corporate income taxes in Texas. Income taxes provide a combined average of 28 percent of state and local revenues, nationwide. Clearly, high per capita sales and gross receipts taxes and property taxes in Texas prevail because the income tax base is off limits.

In 2001, Texas school property taxes totaled more than \$15 billion. In 1999, Texas collected an estimated \$25 billion in sales and gross receipts taxes. Replacing the 2001 school tax revenue with a sales tax increase would require a 67 percent increase in sales taxes collected. That increase would raise per capita sales and gross receipts taxes to \$2,050 in Texas, substantially exceeding the 1998–1999 high of \$1,842 per capita in the state of Washington. With the exception of corporate and personal income taxes, no other Texas tax base could effectively replace the school property tax levy.

Per Capita Total State and Local Taxes, 1998–1999		
1	District of Columbia	\$5,238
2	Connecticut	4,410
3	New York	4,365
4	New Jersey	3,794
5	Minnesota	3,549
6	Massachusetts	3,538
7	Wisconsin	3,277
8	Maine	3,232
9	Hawaii	3,227
10	Delaware	3,214
11	Maryland	3,166
12	California	3,158
13	Washington	3,121
14	Rhode Island	3,087
15	Illinois	3,083
16	Michigan	3,029
17	Vermont	2,961
18	Colorado	2,905
19	Pennsylvania	2,872
20	Ohio	2,853
21	Alaska	2,831
22	Virginia	2,814
23	Nevada	2,793
24	Wyoming	2,762
25	Kansas	2,732
26	Nebraska	2,719
27	Georgia	2,703
28	Iowa	2,637
29	Indiana	2,587
30	North Dakota	2,583
31	Florida	2,576
32	North Carolina	2,572
33	New Hampshire	2,562
34	Missouri	2,531
35	Oregon	2,531
36	Utah	2,503
37	New Mexico	2,482
38	Arizona	2,471
39	Kentucky	2,439
40	TEXAS	2,418
41	Idaho	2,405
42	Louisiana	2,367
43	West Virginia	2,359
44	South Carolina	2,297
45	Montana	2,281
46	Oklahoma	2,271
47	South Dakota	2,209
48	Mississippi	2,161
49	Arkansas	2,138
50	Tennessee	2,096
51	Alabama	1,985

Per Capita Property Taxes, 1998–1999		
1	New Jersey	\$1,722
2	New Hampshire	1,659
3	Connecticut	1,533
4	New York	1,316
5	Vermont	1,271
6	Rhode Island	1,241
7	Maine	1,225
8	District of Columbia	1,197
9	Alaska	1,169
10	Massachusetts	1,160
11	Illinois	1,145
12	Wyoming	1,064
13	Wisconsin	1,039
14	Montana	996
15	Washington	993
16	TEXAS	924
17	Nebraska	922
18	Minnesota	921
19	Michigan	892
20	Florida	890
21	Iowa	870
22	Indiana	860
23	Virginia	828
24	South Dakota	825
25	Ohio	824
26	Colorado	818
27	Maryland	792
28	Kansas	792
29	Pennsylvania	788
30	North Dakota	770
31	California	765
32	Oregon	758
33	Arizona	724
34	Georgia	682
35	Nevada	666
36	Idaho	645
37	South Carolina	627
38	Missouri	596
39	North Carolina	552
40	Utah	545
41	Mississippi	493
42	Hawaii	490
43	Tennessee	479
44	Delaware	453
45	West Virginia	448
46	Kentucky	416
47	Arkansas	366
48	Louisiana	364
49	Oklahoma	362
50	New Mexico	326
51	Alabama	270

Notes: Per capita estimates based on taxes divided by average of 1998–1999 population estimates. Fiscal years vary from state to state. However, figures are for one fiscal year in the 1998–99 period. Total state and local taxes include property taxes, sales and gross receipts taxes, individual income taxes, corporate income taxes, motor vehicle license fees and other taxes.

Source: U.S. Bureau of the Census

As Texans continue to complain about rising property taxes, one might anticipate that eventually the state could be forced to turn to personal and corporate income taxes to provide public school revenue. Despite widespread dissatisfaction with the Robin Hood system, however, there has been virtually no support for creation of a state income tax. That leaves the state with few options to generate the revenues needed to meet the constitutional directive for education and relieve rising property tax burdens resulting from Robin Hood.

Per Capita Sales and Gross Receipts Taxes, 1998–1999		
1	Washington	\$1,842
2	Nevada	1,761
3	Hawaii	1,652
4	District of Columbia	1,645
5	Connecticut	1,428
6	Louisiana	1,340
7	Florida	1,335
8	New Mexico	1,319
9	Tennessee	1,272
10	TEXAS	1,229
11	New York	1,130
12	Minnesota	1,118
13	Arizona	1,105
14	Georgia	1,099
15	Mississippi	1,094
16	California	1,091
17	North Dakota	1,074
18	Wyoming	1,071
19	Utah	1,067
20	Kansas	1,058
21	South Dakota	1,051
22	Colorado	1,051
23	Arkansas	1,034
24	Missouri	1,011
25	Illinois	1,004
26	West Virginia	994
27	Alabama	993
28	New Jersey	963
29	Wisconsin	959
30	Michigan	947
31	Maine	920
32	Oklahoma	908
33	North Carolina	894
34	Rhode Island	893
35	Kentucky	892
36	Iowa	880
37	Ohio	877
38	Nebraska	869
39	Pennsylvania	851
40	South Carolina	831
41	Maryland	817
42	Virginia	816
43	Idaho	808
44	Indiana	788
45	Massachusetts	769
46	Vermont	744
47	Alaska	457
48	New Hampshire	426
49	Delaware	360
50	Montana	344
51	Oregon	249

Total State and Local Taxes, 1998–1999 (in thousands)		
1	California	\$104,977,251
2	New York	82,153,897
3	TEXAS	49,231,585
4	Florida	40,244,933
5	Illinois	37,969,839
6	Pennsylvania	35,192,509
7	Ohio	32,301,429
8	New Jersey	31,575,898
9	Michigan	29,904,866
10	Massachusetts	22,269,422
11	Georgia	21,503,096
12	North Carolina	20,266,326
13	Virginia	19,557,644
14	Washington	18,118,092
15	Wisconsin	17,417,597
16	Minnesota	17,187,874
17	Maryland	16,558,537
18	Indiana	15,575,751
19	Connecticut	14,888,650
20	Missouri	14,027,725
21	Arizona	12,237,979
22	Colorado	12,116,877
23	Tennessee	11,748,362
24	Louisiana	10,533,303
25	Kentucky	9,760,823
26	South Carolina	9,067,175
27	Alabama	8,770,411
28	Oregon	8,536,218
29	Oklahoma	7,767,899
30	Iowa	7,673,090
31	Kansas	7,292,434
32	Mississippi	6,086,891
33	Arkansas	5,641,764
34	Utah	5,468,796
35	Nevada	5,290,739
36	Nebraska	4,623,913
37	New Mexico	4,469,003
38	West Virginia	4,278,788
39	Maine	4,082,369
40	Hawaii	3,913,612
41	Rhode Island	3,197,279
42	New Hampshire	3,110,088
43	Idaho	3,039,342
44	District of Columbia	2,973,583
45	Delaware	2,471,752
46	Montana	2,041,456
47	Vermont	1,784,409
48	Alaska	1,761,609
49	North Dakota	1,668,354
50	South Dakota	1,653,134
51	Wyoming	1,357,106

Notes: Per capita estimates based on taxes divided by average of 1998–1999 population estimates. Fiscal years vary from state to state. However, figures are for one fiscal year in the 1998–99 period. Total state and local taxes include property taxes, sales and gross receipts taxes, individual income taxes, corporate income taxes, motor vehicle license fees and other taxes.

Source: U.S. Bureau of the Census

New Legal Challenges

Frustration with the current system of public school finance has prompted new legal challenges from wealthy school districts. One case has renewed the argument that the \$1.50 per \$100 of assessed value limit on the maintenance and operations tax rate has converted Robin Hood into an unconstitutional state income tax. In previous rulings, the Texas Supreme Court stipulated that the state's educational funding system will be unconstitutional when "enough" (a term that has yet to be defined by the court) districts reach the limit.

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Initial rulings in the case mandated that a district has not officially reached the limit until it has rescinded the optional homestead exemption. Because many of the districts cited as having reached the limit have extended an optional homestead exemption, the court ruled that the case had not reached the threshold that would render Robin Hood unconstitutional in its current form.

That decision is currently on appeal. If the decision stands, the pressure the state currently is under to deal with school tax reform may ease. Many observers believe that the Select Committee on Public School Finance will make few concrete proposals in the 2003 legislative session.

Prospects for property tax relief appear dim. Without an infusion of revenue from another source, school tax rates will likely continue to increase. Combined with rising property values, real estate will bear the lion's share of the growing tax burden.

Limiting Robin Hood's Impact

Droperty owners should act to limit their tax liability by carefully considering all influences that could work to reduce the marketability of their property. For example, weak markets that contribute to sagging rental rates (external obsolescence) or any conditions that adversely affect the ability of the property to function efficiently (functional obsolescence) may justify property value reductions.

Owners should consider protesting valuations to their local appraisal districts when property suffers from such negative influences. Because rising tax burdens are raising the amounts at stake,

owners may find it cost effective to engage an attorney or registered property tax consultant to assist in these efforts.

Texans detest the Robin Hood plan. They detest the idea of a state income tax even more. Until someone comes up with a viable third choice, the public school funding issue will keep Texans right where they are now — between a rock and a hard place. ♣

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BIO-TEX



By Harold D. Hunt



LEXICON GENETICS (left) and Sigma Genosys were founded in The Woodlands and continue to operate there. Growing Texas into a biotechnology hub on par with Boston and San Francisco will require cooperation between medical schools, university research centers and community economic development programs.

Money (lots of it). The best facilities. Topflight personnel. Excellence in the front office. And more money. These could be what Texas needs to field a winning NFL team.

But forget football. A tougher competition is under way. Texas is tackling 41 other states that want to become the next great biotechnology hub. At stake are hundreds of new jobs, many of them high-paying. What will it take for Texas to win the Super Bowl of biotechnology job creation?

Biotech Business Boom

Biotechnology has many definitions. One is "the use of cellular and molecular processes to solve problems or make products." Firms that use cells and biological molecules for applications in medicine, agriculture and environmental management fall within this definition.

In less than 30 years, the biotechnology field has grown from a handful of small firms to more than 4,000 companies worldwide. Direct global employment in biotech is nearing 200,000 in publicly traded companies alone, with more than two-thirds of those jobs located in the United States.

The number of biotechnology discoveries has multiplied as well. According to the industry's advocacy group, the Biotechnology Industry Organization (BIO), 70 percent of biotech medicines on the market today were approved within the last six years. More than 350 biotech drug products are in clinical trials.

A recent study by Ernst & Young (E&Y) stated that Texas' publicly traded biotech firms reported almost \$103 million in revenues, spent \$196 million on research and development and employed more than 1,500 in 2001. E&Y determined that each new biotech job leads to the creation of an additional 2.9 indirect jobs.

However, not all biotech statistics are positive. Although the E&Y study shows that earnings in publicly traded U.S.

biotech companies have tripled to more than \$24 billion since 1992, the companies also suffered a net loss of \$4.8 billion in 2001. A little more than \$198 million of that loss was attributed to Texas-based publicly traded biotech firms. Fewer than 70 of the 342 U.S. publicly traded biotech firms are profitable.

Failure rates for new biotech drugs are extremely high. Typically, only five in 5,000 biotech dis-

coveries make it to the clinical trial stage; of those five, only one is granted approval by the Food and Drug Administration for human use.

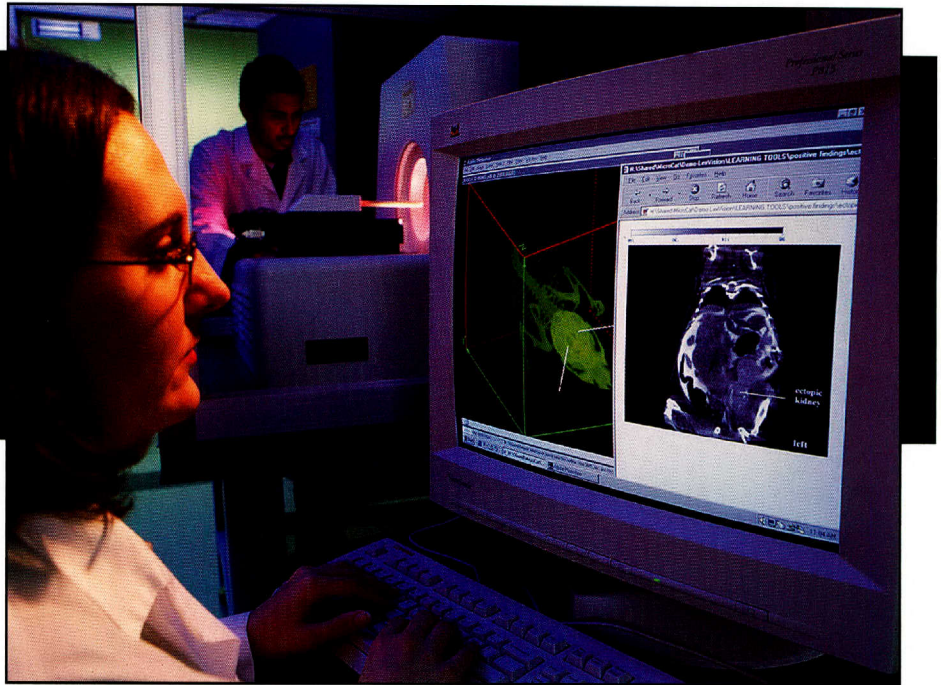
The high drug failure rate translates into a high rate of failure for biotech firms. Companies spending years to get their first drug on the market may not have the resources and additional new discoveries to continue growing. About 80 percent of biotech start-ups fail within three years.

Importance of Star Professors

The path to successful commercial biotechnology development is fairly well documented (see figure). New discoveries begin almost exclusively with what those in the industry refer to as "blue sky" academic research — research conceptualized and carried out by world-class scholars with no restrictions on creativity or finances. These "star" professors usually gravitate toward prestigious university-affiliated medical schools where they are assured of generous funding and access to a large number of graduate assistants.

Where star professors locate is particularly critical because of their value to commercial biotech firms. A report by the Dallas Federal Reserve indicates a correlation between published academic articles and commercial development. For every five articles coauthored by academic stars and a commercial firm's scientists, five more biotech products are in development, 3.5 more products are on the market and 850 more people are employed in the industry.

TURNING A BRILLIANT IDEA into a marketable biotech product takes time, money and experienced management, not to mention high tolerance for risk.



Several factors can attract star professors to a particular location. Money is an obvious incentive. Recent estimates indicate it takes as much as a \$4 million endowment, a \$500,000 lab facility and a staff of 16 post-doctoral medical students in addition to the professor's salary of around \$400,000 per year to generate any meaningful interest.

Working in proximity to other star professors may be just as important. Dr. Jonathan Graff, an assistant professor of molecular biology who is working on a cure for colon cancer at the University of Texas Southwestern Medical Center at Dallas (UTSW), says he was drawn to UTSW by "the opportunity to work around so many Nobel laureates." Four Nobel Prize winners in medicine and chemistry are resident at UTSW; Rice University has two and the University of Texas Health Science Center at Houston has one.

For some star professors, quality of life may be the deciding factor. When money is ample and choices numerous, amenities such as quality schools, low cost of living and a pleasant climate may steer the decision.

Keeping Technology Local

The bridge between academic research and a commercially viable product is known as tech transfer. Research institutions' tech transfer offices process patent applications and negotiate licensing agreements with commercial firms. Tech transfer officials also consult with venture capital specialists and decide whether patents should be kept in-house or licensed out to mature biotech or large pharmaceutical corporations.

Retaining the newly discovered technology locally is key to building a strong biotech base. If the technology is sold, research and production typically move to one of a handful of biotechnology regions or "clusters" on the East or West Coasts.

Some suggest that the best chance for developing viable biotech clusters in Texas will come from homegrown talent. Lexicon Genetics, which garnered national attention with its discovery of the so-called "fat gene" that keeps some mice fatter than others despite being fed equally, is a prime example.

"Lexicon Genetics, Texas' largest biotech firm, and Sigma Genosys, a subsidiary of global chemical giant Sigma Aldrich, were founded in The Woodlands," says Damon Palermo, development director-Research Forest for The Woodlands Operating Company. "They have stayed here because both company presidents are from the Houston area and consider the business

environment conducive to start-ups and mature biotech firms alike."

Although relatively low by national standards, income from Texas' life science intellectual property has been increasing. The Dallas Fed reports that the figure grew from \$4.2 million to \$25.6 million between 1993 and 1999. More recently, Dr. Dennis Stone, vice president for technology development at UTSW, says that the medical center received \$10 million in revenues from patents and licensing activities in one year.

Incubators Help Cash-Poor Firms

If the technology can be retained locally, a small start-up company will usually be formed and moved to an "incubator" facility where testing begins. Incubator lab space is expensive, possibly costing as much as \$350 per square foot to construct, including finish-out. Because obtaining traditional financing for such specialty space is difficult for cash-poor start-ups, universities often serve as the "mother ship" by purchasing and administering the incubator space.

Start-ups typically look for expansion potential and lease flexibility at this early phase in the development process. Incubator facilities usually range from 5,000 to 25,000 square feet.

Start-up businesses with discoveries that show promise need a good business plan to obtain seed money (also called "angel financing") and advance to the next stage of the process: developing a commercially viable product. Incubators in mature biotech clusters have an advantage over those in Texas because they are often located near big pharmaceutical firms that can offer business support services (for example, assistance in writing a business plan) that fall outside the technology creator's expertise.

The fledgling company now moves toward conducting clinical trials. Venture capital and expert business management are critical to success at this juncture. Continued success may lead to an initial public offering, which allows capital to be raised in the public securities markets, but at this point, start-ups depend on money invested by venture capitalists with experience in biotechnology.

At this stage, companies need their own commercial space, with requirements ranging from 10,000 to 70,000 square feet. They now must lease space from private developers.

Mature biotech clusters such as San Francisco or Boston have created sufficient synergy to profitably develop, lease and re-lease high-end laboratory space. In Texas, however, the higher likelihood of not finding a replacement biotech tenant that can afford to lease the space makes investment in such properties much riskier. Some suggest constructing commercial biotech labs away from major medical centers, where development costs are high. Both developers and start-ups could benefit from the lower real estate costs.

After successful clinical trials and approval by the FDA, viable discoveries advance to the pharmaceutical production stage. Major pharmaceutical manufacturers are large employment generators. None have facilities in Texas.

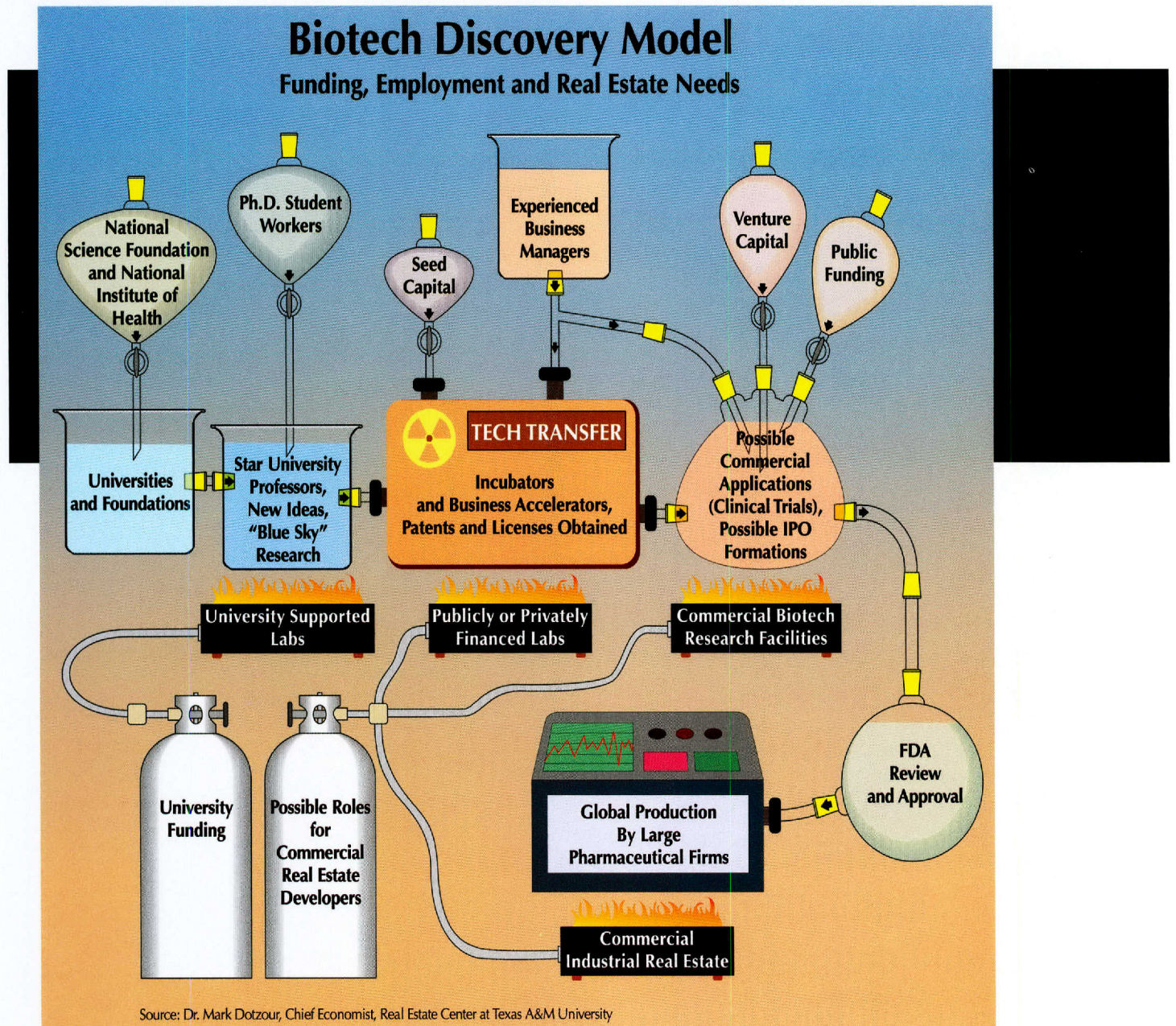
Challenges and Opportunities for Texas

The extremely successful East and West Coast biotechnology regions have built their success on three strengths:

well-funded research institutions, abundant venture capital and topflight business management. They also enjoy favorable business climates, highly educated workforces, solid real estate expertise and a host of business accelerators (organizations that smoothly move biotech discoveries through the research pipeline to the commercial production stage). Groups interested in creating a successful biotechnology cluster in Texas must attempt to evaluate prospective locations in terms of these factors.

Biotechnology experts and several published reports indicate that Texas is especially weak in venture capital funding. The Dallas Fed reports that of the \$752 million in venture capital funding invested in the U.S. biotechnology industry in first quarter 2002, Texas received only \$14 million (1.8 percent).

Texas also has been slow to develop good business accelerators and business management talent. Most major cities in the state now have established local business accelerators, but competent biotech business managers are still scarce.



Source: Dr. Mark Dotzour, Chief Economist, Real Estate Center at Texas A&M University

Governor Rick Perry took steps to improve the business climate for biotechnology during the last legislative session by setting up four special committees and securing \$800 million for improving life science research and commercialization activities in the state. The committees address the critical areas of capital formation, research funding, technology transfer and workforce concerns.

Although Texas is not currently benefiting from the biotechnology boom to the extent that California, New York

and Massachusetts are, some insiders believe the state is only one major discovery away from dramatically improving its standing (see related article). Lexicon Genetics Executive Vice President and CFO Julia Gregory sums it up philosophically. "Sometimes" she says, "you have to stand in the path of luck to get lucky." ♦

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Interview with Warren Huff

Warren Huff is a venture partner with StarTech Medical Ventures and founding CEO of a Texas-based biotechnology company, Reata Discovery. Reata was formed to develop medications for cancer and neurodegenerative disease using technology developed at the University of Texas Southwestern Medical Center at Dallas. Huff recently moved back to Texas from Boston where he founded and took public a biopharmaceutical company that developed drugs to treat diabetes and obesity.

Q: A recent Brookings Institution study concludes that no Texas cities currently have the entrepreneurial and financial capacity needed to consistently generate significant numbers of new biotechnology-related businesses. Would you agree?

HUFF: It takes three components to make biotechnology successful. You need world-class biological research, seasoned executives-entrepreneurs with pharmaceutical or biotech backgrounds and venture capital experienced in making biotech investments. Texas is deep in world-class biological research and ranks with the top four or five biotechnology centers in the United States on most important measures. However, the state lacks seasoned executives from the biotechnology or pharmaceutical industry with critical drug development skills such as clinical and regulatory experience.

As far as venture capital, the leading biotech venture firms are based on the East and West Coasts, and they like to invest in companies located near them so they can be actively involved. That makes it much easier to get deals funded in Boston or San Francisco. Texas has not been successful developing biotech to date because, for the most part, it has produced companies with limited, early-stage technologies that could not attract funding from these investors.

While I agree with the challenges identified in the Brookings report, I disagree with the conclusion that Texas cannot develop its share of biotech companies. I believe that Texas can attract capital for biotechnology if it produces companies that have deeper and stronger technology platforms than the investment opportunities on the East and West Coasts.

Texas certainly has the research base for this and can assemble world-class projects that can attract top-tier venture investment. After Texas produces one or two high-profile successes, it will not be difficult to attract sustained venture capital and management resources.

Q: Governor Perry has established a Council on Science and Biotechnology Development. What do you think of state government involvement in developing a viable biotech industry?

Huff: I think state government can play an important role, and the governor's council has developed some very good recommendations. The technology transfer process in Texas has been hampered in the past by bureaucracy. It is subject to many rules that have prevented state government and university

systems from proactively facilitating establishment of the biotech industry.

The environment has been improving in the last year or so, however, and that effort needs to continue. Also, state government could take steps to help biotech capital formation. For example, a portion of state retirement funds currently get invested in East and West Coast venture funds that do not make any Texas investments. These funds use Texas money to create California companies to sell products produced with technology discovered in Texas. We should remedy that by having some of these funds cultivate Texas investments.

Q: What can be done to improve our state's competitive position in relation to the top biotech regions?

Huff: Fostering more cooperation between the major medical schools in the state could give us a huge boost. The whole state should be viewed as one region for biotechnology development instead of several self-contained clusters. In this way, Texas cities could play off their strengths.

Very specialized, networked clusters could be created across the state. For example, a cancer project could involve research in Dallas and clinical studies in Houston. Other cities could contribute their specialized functions as well. We will need all Texas resources working in cooperation to develop this industry, even though there is no history of such cooperation here.

Q: What biotech-related opportunities are available for cities without a medical school nearby?

Huff: Many services are required to support biotech research. For example, laboratories use an array of chemicals, instruments, equipment and computers that must be manufactured, constructed or distributed from somewhere.

Labs also use special animals that are produced for testing. These animals have to be bred, housed and cared for. There are many opportunities for schools to specialize in the training of laboratory technicians, veterinary technicians and others.

Q: Any final thoughts?

Huff: I believe we're on our way to experiencing in biotech what we have experienced in information technology since the 1970s. I expect to see technological advances and discoveries in the years ahead that could significantly change the way we treat human disease. This is an exciting time to be involved with biotechnology in Texas.

Romancing The LOAN

by Jack C. Harris

Any time mortgage interest rates drop, homeowners flock to refinance their loans. The question is, should they? Refinancing is not always beneficial.

In some instances, there is more to be gained by banking the money required for refinancing charges and fees. And timing can be key. If rates have not hit bottom, borrowers may save more by waiting for even lower rates.

Refinancing lowers the monthly payment, but getting the new loan usually involves some cost. Borrowers hope monthly savings will eventually total more than the cost to refinance.

A borrower refinancing a mortgage loan has three options:

- Get a new loan and pay all the fees and points in cash.
- Get a new loan and finance the costs into the loan.
- Get a "no cost" loan that charges no fees or points.

Table 1. Mortgage Rates for Refinancing with Cash Payment of Closing Costs

Old Rate	Cost = 1%	Cost = 2%	Cost = 3%	Cost = 4%	Cost = 5%
New loan is in effect for at least 3 years after refinancing					
10	9.625	9.25	8.875	8.5	8.125
9	8.625	8.25	7.875	7.5	7.125
8	7.625	7.25	6.875	6.5	6.125
7	6.625	6.25	5.875	5.5	5.125
New loan is in effect for at least 6 years after refinancing					
10	9.75	9.5	9.375	9.125	8.875
9	8.75	8.5	8.375	8.125	8
8	7.75	7.5	7.375	7.125	7
7	6.75	6.5	6.375	6.125	6
New loan is in effect for at least 10 years after refinancing					
10	9.75	9.625	9.5	9.375	9.25
9	8.75	8.625	8.5	8.375	8.25
8	7.75	7.625	7.5	7.375	7.25
7	6.875	6.75	6.5	6.375	6.25

Source: Real Estate Center at Texas A&M University

Table 2. Mortgage Rates for Refinancing with Financed Closing Costs

Old Rate	Cost = 1%	Cost = 2%	Cost = 3%	Cost = 4%	Cost = 5%
New loan is in effect for at least 3 years after refinancing					
10	9.5	9.125	8.75	8.375	8
9	8.5	8.125	7.75	7.375	7
8	7.5	7.125	6.75	6.375	6
7	6.5	6.125	5.75	5.5	5.25
New loan is in effect for at least 6 years after refinancing					
10	9.75	9.5	9.25	9	8.75
9	8.75	8.5	8.25	8	7.875
8	7.75	7.5	7.25	7.125	6.875
7	6.75	6.5	6.25	6.125	5.875
New loan is in effect for at least 10 years after refinancing					
10	9.75	9.625	9.5	9.25	9.125
9	8.75	8.625	8.5	8.25	8.125
8	7.75	7.625	7.5	7.375	7.125
7	6.75	6.625	6.5	6.375	6.25

Source: Real Estate Center at Texas A&M University

Previous rules of thumb used to determine whether refinancing is worthwhile are mostly obsolete. Tables 1, 2 and 3 serve the same purpose but are based on specific loan characteristics and financial calculations.

Loans with cash costs should offer sufficient savings to provide a competitive return on the cost of refinancing. Otherwise, the borrower is better off keeping the existing loan and putting the money it would cost to refinance in an interest-bearing account.

Table 1 can be used to determine the maximum interest rate on the new loan that provides a good return over the time the loan is outstanding. A borrower should refinance only if the new loan rate is no higher than the rate in the table. The lower interest rate on the new loan reduces the monthly payment and allows the loan to amortize faster. The information in this table is based on the following assumptions:

- the amount of the new loan equals the balance of the old loan (no cash out),
- there is no prepayment penalty,
- all costs are paid in cash at closing,
- maturity of both loans is 30 years and
- the borrower can get a return of 2 percentage points below the refinanced interest rate on alternative, safe investments.

To use the table, first determine how long the borrower expects to hold the new loan. The table has sections for three-, six- and ten-year holding periods (pick the one that most closely matches the time horizon). The longer the new loan, the more savings will accumulate.

Second, estimate the cost of refinancing as a percentage of the loan amount. The table shows costs from 1 to 5 percent of the loan. Find the interest rate on the existing loan in the left-hand column. The intersection of the cost column and the row showing the old rate indicates the

maximum interest rate the new loan could carry for refinancing to be worthwhile.

For example, if a borrower expects to live in the home for another six years, the current mortgage is 9 percent and it costs 3 percent to refinance, the new loan must have an interest rate of no more than 8.375 percent.

Table 2 functions identically but is for cases in which costs are fully financed into the new loan. Assumptions are the same as for Table 1, except that the new loan is for an amount equal to the old loan balance plus closing costs.

No-cost loans mean no out-of-pocket expense to the borrower. The lender pays the cost of refinancing. Because these loans require no cash investment, refinancing is worthwhile if it reduces the interest rate on the loan. However, borrowers should consider whether they could get an even lower interest rate by paying closing costs. Which type of loan provides the better deal?

Table 3 answers this question. Find the row that comes closest to the interest rate offered on the no-cost loan. Then go to the column representing the percentage cost of refinancing for loans requiring payment of closing costs. If the interest rate offered on the loan with closing costs is lower than the rate indicated at the intersection, then that loan is a better deal than the no-cost loan.

For example: assume a no-cost loan is available at 7 percent interest and the going rate for loans with 2 percent costs is 6.5 percent. Also assume the borrower expects to live in the house for at least ten years. The intersection of the 7 percent row and the 2 percent column is 6.625 percent. The loan with 2 percent closing costs is a better deal because the interest rate offered, 6.5 percent, is lower than 6.625 percent. ♣

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Table 3. Mortgage Rates for Full-Cost Loan Equivalent to No-Cost Loan

No-cost Rate	Cost = 1%	Cost = 2%	Cost = 3%	Cost = 4%	Cost = 5%
New loan is in effect for at least 3 years after refinancing					
8	7.625	7.25	6.875	6.5	6.125
7.5	7.125	6.75	6.375	6	5.625
7	6.625	6.25	5.875	5.5	5.125
6.5	6.125	5.75	5.375	5	4.625
New loan is in effect for at least 6 years after refinancing					
8	7.75	7.5	7.275	7.125	7
7.5	7.25	7	6.875	6.625	6.5
7	6.75	6.5	6.375	6.125	6
6.5	6.25	6	5.875	5.625	5.5
New loan is in effect for at least 10 years after refinancing					
8	7.75	7.625	7.5	7.375	7.25
7.5	7.25	7.125	7	6.875	6.75
7	6.75	6.625	6.5	6.375	6.25
6.5	6.25	6.125	6	5.875	5.75

Source: Real Estate Center at Texas A&M University



Texas Two-Step

Looking Back, Moving Forward

By Research Staff

“The mild recession is ending, and now the economy should be getting back on track,” announces the ever-optimistic television economist. Comments such as these raise a number of questions.

If there was a recession, why did the housing market hit record sales volume? Will recovery mean even higher levels of sales? If the economy is recovering, why is employment growth still negative (Figure 1)?

Despite the fact that housing markets have been flourishing during the economic slowdown, a strong economy is important to the vigor of the real estate markets. Growth means an expanding population, increased business activity and the resulting need for homes and commercial space. It means higher income and the confidence to make financial commitments. The research staff of the Center offers this review of economic trends, and highlights the developments likely to affect the real estate industry this year.

Looking for Signs of Recovery

Based on employment figures, Texas and the nation fell into recession (meaning that fewer people were employed) in late 2001 and had not yet recovered by September 2002. By fall 2002, the decline in job growth was slowing, suggesting that the worst had passed, and the economy was building a foundation for renewed growth.

For the past several years, the Texas economy consistently outperformed the U.S. economy. When U.S. job growth was positive, job growth in Texas grew faster than the national rate. When national job growth was negative, Texas' job growth rate declined at a slower rate. However, that changed in summer 2002 when, compared with the U.S. rate, the rate of job loss in Texas was higher in July, August and September. This may signal a slow recovery for the state's economy.

Gazing into the economic crystal ball crafted from the lessons of market cycles past reveals a cloudy picture of the year ahead. The most likely scenario for 2003 is a slow recovery that when plotted on a graph looks more like a wide “U” rather than the sharp “V” that most of us would like to see. Some sectors of the economy will continue to shrink and consolidate. Even this modest expectation could be jeopardized by several key developments.

War. Where will President Bush take the war on terrorism? Will there be an invasion of Iraq? The economy may get a boost from military spending, but the cost of security measures and reduced spending from fear of terrorism will have a greater effect.

Expectations are that a war will be short, and any associated oil price spike will be temporary. But there is a risk the war will drag on, causing a sustained increase in the cost of oil. That would result in a slowing of industrial production and

would end the current era of low inflation. Some feel that uncertainty over whether the United States will invade Iraq is stalling the recovery, and the economy will begin moving once the invasion question is answered.

Shortfall in state revenues. Owing to a drop in consumer spending, state tax revenue will not meet expectations, resulting in budget cutbacks and, possibly, tax increases. Scaling back spending means that certain programs may lose federal matching funds.

A legislature hunting for ways to raise revenue is always a threat. Local governments are not exempt from the shortfall and have fewer options for boosting revenue. Texas property taxes are already high relative to many states, and increases will have implications for housing affordability.

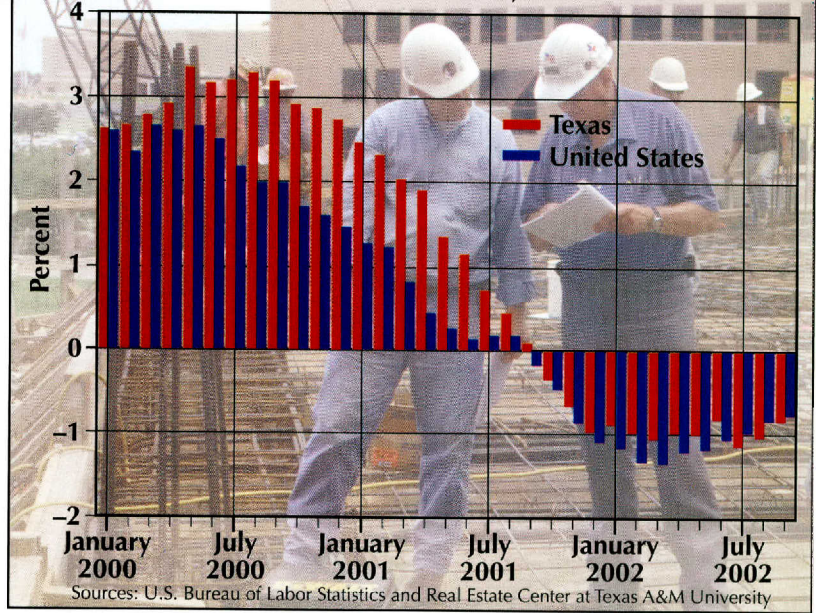
Mexico's economy. Texans can never be oblivious to their southern neighbors. Texas border cities are probably more affected by the Mexican economy than by that of the United States. Hopes for a more prosperous future were kindled when Mexico elected President Vicente Fox, but time has shown that problems are more entrenched than many thought. Further, Mexico has new worries, including the possible loss of manufacturing jobs to China and an impending tax on foreign firms operating in the country.

Interest rates. Low mortgage interest rates have been a major stimulus to the housing market. Refinancing allows homeowners to lower their monthly payments and take equity out of their homes, thus stimulating consumer spending. If rates rise, the refinancing boom will end, and some would-be homebuyers will be priced out of the market.

The Federal Reserve. When the Fed was cutting rates, many expected the economy to rally, but not much happened. The Fed is not likely to cut beyond its half-percentage point cut last November, given its bias against the threat of inflation. If the recovery picks up, it may even begin to raise rates.

Small business growth. The bulk of new employment is produced by small, independent firms. Texas ranks third on a

Figure 1. Nonfarm Employment Growth Rates for Texas and United States, 2000–2002



list of best places to start a business compiled by Microsoft's bCentral website. The ranking considers taxes, business costs, crime rates, labor laws and government restrictions. The state was fourth on a similar ranking conducted by the Small Business Survival Committee. Whether or not Texas can maintain these favorable rankings is a key question.

Slowly Leaking Bubble

Housing booms do not last. This may come as a shock to licensees who entered the real estate business in the last few years. On the other hand, fears of a replay of the 1980s debacle are unfounded, as sales could scale back significantly and still be at historically high levels.

The estimated 190,000 sales through the state's reporting Multiple Listing Services in 2002 represent a 50 percent increase in sales over the mid-1990s. During the worst years of the 1980s, total sales fell by only 15 percent in any one year.

Despite talk of housing "bubbles," there is little speculative premium to be wrung out of housing prices. Mortgage interest rates could rise one or two percentage points and homes would still remain affordable. Even if the economic recovery is not vigorous, it should prevent the type of market collapse induced by the oil industry's downfall in the 1980s.

Sales figures are highly seasonal, but comparing peaks shows a significant slowdown in 2002. The year began at record pace but ran into trouble during the summer. Note, however, that the last few years were boosted by increases in the off-season months rather than higher sales during the summer. The end of that pattern could signal a slow winding down of sales to a more sustainable level somewhat lower than the most recent peak.

Building shows no signs of slowing and may not, even if sales decline. Builders have been hampered by shortages of various supplies (concrete, dry wall) and are responding to perceived backlogs in demand.

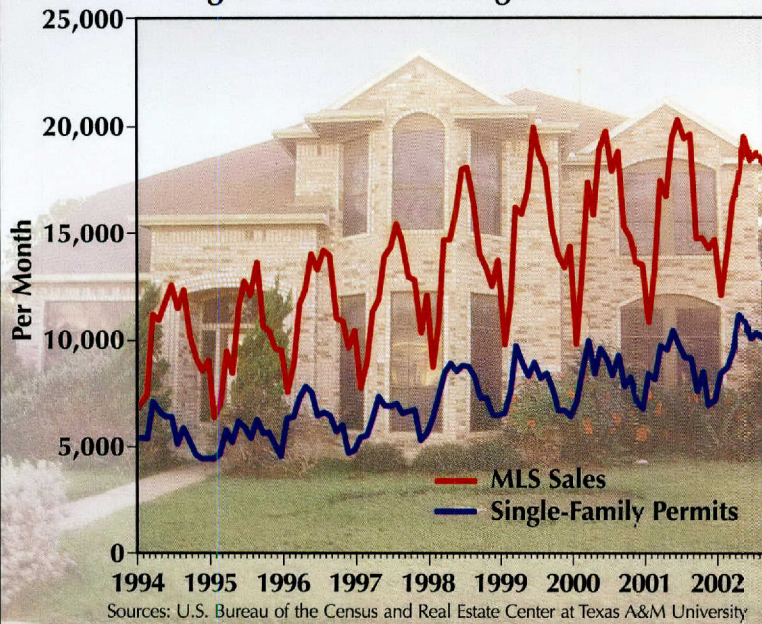
The possibility of a price bubble — or, more accurately, a price "spike" — became apparent in mid-2000 (Figure 3). At one point, the median price of homes rose almost 14 percent

Ten Fastest Growing Economies in Texas, Based on Growth Rate of Nonfarm Employment August 2001–August 2002

Rank	Metro Area	Growth Rate (percent)
1	McAllen-Edinburg-Mission	3.5
2	Laredo	2.6
3	Tyler	1.1
4	Brazoria	0.8
5	Lubbock	0.7
5	San Angelo	0.7
7	Killeen-Temple	0.1
8	Corpus Christi	-0.1
8	Houston	-0.1
10	Brownsville-Harlingen	-0.2
10	Austin-San Marcos	-0.2
10	Odessa-Midland	-0.2

Source: Texas Workforce Commission

Figure 2. Texas Housing Market



Probability of rising mortgage interest rates. Though it is unlikely the Federal Reserve Board will cut the federal funds rate further, that is not why interest rates most likely have bottomed. Rates are low because of how much money flowed from the stock market into bond markets, sending all interest rates downward. If stocks become more attractive, that flow will reverse.

Slow economic recovery, especially in employment. Job creation is critical to attracting new residents and giving renters the confidence to become homeowners. And these two groups are essential to maintaining repeat sales. If interest rates rise, homeowners will no longer be able to effectively derive income from refinancing their homes.

Some retrenchment among providers of low down payment mortgage loans. Making it easy for first-time buyers to make the transition to homeownership is key

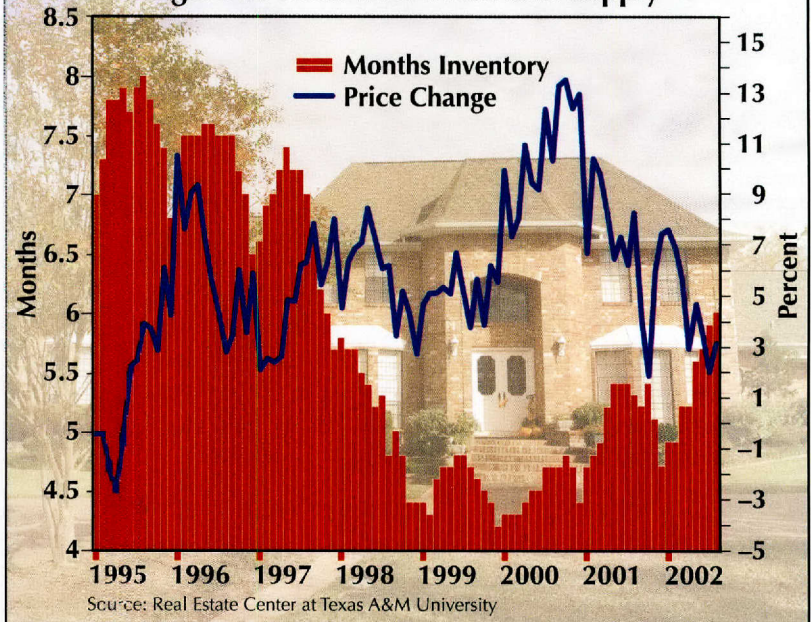
above the same-month-last-year amount. Since then, however, price increases have fallen to the 3 percent range or slightly more than the rate of inflation.

Bubbles usually do not fizzle out; they burst in a rapid decline in prices. The brief price run-up looks more like a classic sellers' market — steady demand combined with lower supply. The markets have corrected for this imbalance. Since mid-2001, inventories have increased. MLSs now have a six-month supply of active listings.

Much of the media's concern about price bubbles centers on affordability. News coverage may imply that housing prices should advance in line with household incomes, and lately they have been rising much faster. In some areas, prices have increased two to three times faster than income. The implication is that prices eventually will fall into alignment with income. Falling interest rates have deflected the impact of price increases on buyers. As long as rates stay low, prices do not seem so out of line.

Many factors point to slower market activity. Consider these developments.

Figure 3. Texas MLS Price and Supply



to expanding the market. However, the rising risk level represented by these loans is showing up in higher delinquency and foreclosure rates.

Some have raised alarms over what they view as the highest delinquency rates in a decade, though the Mortgage Bankers Association of America considers the rates consistent with current unemployment levels. Loan performance should improve with the economy, but if this does not occur, mortgage credit may become tighter.

The mortgage industry can draw lessons from recent experiences of manufactured housing lenders. Defaults and foreclosures have caused major disruption in the new manufactured home market, forcing lenders and home suppliers out of the market.

Eroding affordability. Home prices have risen, and the overall cost of owning a home also has escalated to an unusual degree. As prices rise, so do property taxes, a problem that is compounded by the relatively high Texas property tax rates.

Increase in Median Home Prices and Median Household Incomes 1998 to 2002 (Second Quarter)

Metro Area	Price Change (percent)	Income Growth (percent)
Houston	36.2	18.1
Austin	33.8	16.0
Bryan-College Station	31.8	9.5
Dallas	23.1	10.7
San Antonio	21.3	3.4
Lubbock	18.7	8.4
Tyler	18.3	10.6
El Paso	16.4	8.6
Amarillo	14.2	10.2
Wichita Falls	12.8	7.1

Source: Real Estate Center at Texas A&M University



SOUNDS OF NAIL GUNS
and power saws filled the air as builders did their best to supply eager throngs of Texans with new homes. Sales slowed as the year progressed, but low-interest mortgage loans kept overall sales at record highs.

The cost of homeowners insurance is a growing concern. Large casualty losses combined with negative investment returns are pressuring insurance companies to raise rates dramatically. Lenders consider taxes and insurance when qualifying borrowers for mortgage loans. Therefore, fewer buyers will be able to buy homes, even if they are willing to pay the higher costs.

Insurance availability. In some cases, insurance may not be available even at a much higher cost. The state's major insurers have either stopped or restricted the writing of new homeowners policies. Some have refused to renew existing policies if the policyholder has a history of claims.

A poll by the Texas Association of Realtors shows almost all responding agents think that getting insurance is harder now than in the past. Because mortgage lenders require insurance coverage as a condition for making loans, a shortage of insurance could severely cripple the housing market.

It is highly unlikely that home sales could continue at the level of the last few years. However, with only a mild rise in interest rates, no major increase in foreclosures and a resolution of the insurance situation, the market can settle into a sales level that can be sustained for years.

The outlook for new construction is more restrictive. If the State Data Center's forecast for slower population growth is right, look for single-family production to decline from the record output of recent years.

Investment Property: Waiting for Turnaround

Given the state of the economy, it is no surprise that commercial markets are at a low ebb. According to the market cycle analysis reported by Legg Mason Wood Walker, Inc., most property markets across the country are either in the late stages of recession or early recovery. That translates to occupancies and rents well below equilibrium. Look for renewed vigor only after the economy has begun to expand, and the need for more space becomes apparent.

Office markets. These markets reflect the economy fairly closely. Nationwide, the vacancy rate is 16 percent. High-tech dominated localities have been especially hard hit. Austin and Dallas recorded sharp increases in vacancies and now exceed 20 percent. Any uptick in demand will only serve to reduce the pressure from a stream of new stock poised to come online in the next several years.

It will take a return to positive employment growth to help these markets. Small business creates about 70 percent of all new jobs, so those properties that can serve the needs of small companies and start-ups should be in the best position for recovery.

A few years ago, much was made of the trend toward telecommuting and its impact on demand for office space. However, telecommuting does not appear to be a factor in today's

weakened demand. Companies simply do not need as much space to handle their reduced business. When growth returns and companies begin to invest, employ and expand, demand for office space will rise.

The availability and cost of commercial property insurance is one problem that could delay market recovery. With insurance companies hypersensitive to risk and looking to raise revenues, expansion may come with a higher price tag.

Apartment markets. Rental housing is not as dependent on a good

Major Texas Office Markets

Area	Rent per Square Foot	Trend	Occupancy (percent)	Prognosis	Cycle Phase*
Austin	\$25	Down	83	Down	Late recession
Dallas	\$20	Down	86	Flat	Late recession
Fort Worth	\$17	Down	84	Flat	Late recession
Houston	\$20	Slightly down	85	Flat	Late recession
San Antonio	\$17	Flat	83	Up	Late recession

*Legg Mason Wood Walker defines markets according to phases in an idealized property market cycle. "Recovery" starts when occupancies begin to rise after a period of decline. "Expansion" occurs when construction activity begins while occupancies continue to rise. "Oversupply" represents the peak in the market when new supply causes occupancy levels to decline. "Recession" sets in when oversupply causes rental rates to decline.

Sources: Reis; Legg Mason Wood Walker, Inc.

Major Texas Apartment Markets

Area	Rent per Month	Trend	Occupancy (percent)	Prognosis	Cycle Phase*
Austin	\$800	Flat	91	Flat	Late recession
Dallas	\$740	Flat	92	Flat	Mid recession
Fort Worth	\$650	Flat	94	Flat	Mid recession
Houston	\$650	Flat	94	Flat	Mid oversupply
San Antonio	\$600	Up	94	Up	Late oversupply

Major Texas Retail Markets

Area	Rent per Square Foot	Trend	Occupancy (percent)	Prognosis	Cycle Phase*
Austin	\$16	Flat	94	Down	Early recovery
Dallas	\$14	Up	92	Down	Late oversupply
Fort Worth	\$13	Flat	90	Flat	Late oversupply
Houston	\$14	Flat	88	Flat	Mid recovery
San Antonio	\$13	Up	89	Down	Late oversupply

Major Texas Industrial Markets

Area	Rent per Square Foot	Trend	Occupancy (percent)	Prognosis	Cycle Phase*
Austin	\$5.60	Down	84	Down	Late recession
Dallas	\$3.80	Down	88	Flat	Late recession
Fort Worth	\$3.90	Down	88	Down	Late recession
Houston	\$3.70	Flat	89	Down	Early recovery
San Antonio	\$4.30	Up	82	Down	Early recovery

*Legg Mason Wood Walker defines markets according to phases in an idealized property market cycle. "Recovery" starts when occupancies begin to rise after a period of decline. "Expansion" occurs when construction activity begins while occupancies continue to rise. "Oversupply" represents the peak in the market when new supply causes occupancy levels to decline. "Recession" sets in when oversupply causes rental rates to decline.

Sources: Reis; Legg Mason Wood Walker, Inc.

economy as other property types. Texas apartment markets have not performed that badly during the recession. Many of the factors that have aided home sales, however, have worked against apartments.

Low mortgage interest rates and easy loan qualifying have allowed many renters to become homeowners. The popularity of manufactured homes also has eroded demand for apartments. These factors will reverse if interest rates rise significantly.

Unlike single-family permits, apartment building permits have dwindled over the last several years. Permits issued in late 2002 were at about 65 percent of 1998's peak rate. This allowed landlords to raise rents or maintain rent levels despite a reduction in demand.

Lower construction levels also reflect lack of demand for multifamily properties. Individual investors appear more comfortable with single-family homes, and real estate investment trusts (REITs) have reduced acquisitions over the last several years. Though REITs are once again attracting funds, they have not started buying properties in great numbers.

The housing needs projection indicates multifamily production will remain steady for the next several years. Although not expected to return to peak levels, the predicted pace of production is substantially higher than the 1990s average.

Retail markets. Consumers have long been the hope for turning the economy around and largely delivered until the

mid-2002 slump. Retail properties have performed well, and are relative latecomers to the experience of falling rents and occupancy. This could be a problem for the sector, with many markets oversupplied with space.

Retail thrives on both population and income growth, so demand will be soft for a while. Look for some retrenchment before the market begins to grow again.

Industrial markets. Uncertainty over whether the economy will begin a new growth phase has placed company expansion plans on hold. On average, the economy has more production capacity than it can use, so additions will occur only if existing facilities are not the right type or in the right location to serve the needs of existing firms.

Research and development space used heavily in the technology sectors of industry has been especially hard hit. Tech was notorious for its overexpansion during the last economic boom. Accordingly, industrial markets

will probably be the last to recover.

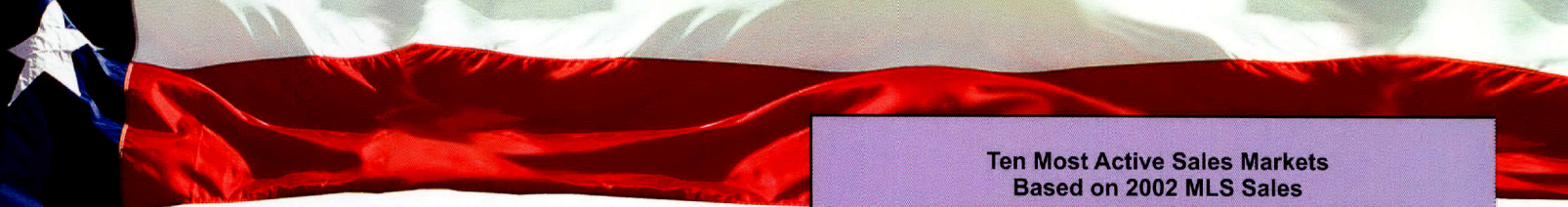
Other Issues to Ponder

Homeowners insurance. The risk of being a homeowner must have risen enormously over the past year, judging from the increase in premiums for homeowners hazard and liability insurance.

The need to decrease the disparity between premium revenue and claim costs, a problem exacerbated by low earnings on stockpiled funds, has made insurance companies sensitive to their exposure to new claims. Consequently, they are reluctant to write new policies or continue coverage for long-time customers with any potential for claims.

Unofficial reports indicate that insurance availability problems are delaying closings and may be discouraging sales. However, the problems have not shown up in the data as yet. What is apparent is the impact on affordability. One estimate is that the average homeowner's premium has increased 38 percent in 2002. Values for the Texas Housing Affordability Index, which compares the cost of buying a home to resident incomes, have fallen to levels last seen in 1990, despite much lower mortgage interest rates.

Manufactured housing. Factory-built units are a major source of affordable housing in Texas. Financing problems put that role in jeopardy. By mid-2002, shipments of new units were down 50 percent from year 2000 levels. This was at a time when production of new site-built homes was rising. The



**Ten Most Active Home Building Markets
Based on 2002 Single-Family Permits Issued**

Rank	MSA	Permits per 1,000 Persons
1	Brazoria County	16.6
2	Galveston	15.6
3	McAllen	15.5
4	Fort Worth	11.7
5	Laredo	11.5
6	Brownsville	11.1
7	Dallas	10.6
8	Houston	10.1
9	Bryan-College Station	9.5
10	San Antonio	8.5

Source: Real Estate Center at Texas A&M University

**Ten Most Active Sales Markets
Based on 2002 MLS Sales**

Rank	MSA	Sales per 1,000 Persons
1	Austin	14.6
2	Houston	13.2
3	Dallas	12.9
4	Wichita Falls	12.4
5	Tyler	12.0
6	Lubbock	11.9
7	Bryan-College Station	11.6
8	Abilene	11.3
9	Odessa-Midland	11.2
10	San Angelo	10.9

Source: Real Estate Center at Texas A&M University

**Ten Highest Price Increases
Based on 2002 MLS Sales Price Annual Increase**

Rank	MSA	Median Price	Percent Increase
1	San Antonio	\$105,900	7
2	Fort Worth	95,200	6
3	Houston	128,900	6
4	Lubbock	87,500	5
5	Victoria	87,600	4
6	Austin	156,200	3
7	Killeen	79,100	3
8	Wichita Falls	76,500	3
9	Dallas	144,900	2
10	Sherman-Denison	85,200	2

Source: Real Estate Center at Texas A&M University

industry is struggling with a large number of repossessed units on the market that attract buyers away from new manufactured homes.

Aggressive buyer qualifying put many in homes they could not afford. This is a nationwide problem, but passage of HB 1869 in the 2001 legislature gave Texas suppliers a new set of issues.

The law mandates mortgage financing for homes placed on land owned by the homeowner. The conditions attached to the restriction apparently have sown confusion among providers of nonmortgage manufactured housing loans and have made it difficult to arrange financing, even in cases where the restrictions do not apply. The Texas Manufactured Housing Association will work for reform of the law during the 2003 legislative session, with the aim of restoring consumer choice while retaining consumer protection measures.

Water supplies. This perennial problem is coming to a head around the fast-growing Hill Country-San Antonio area. Regulating authorities in the Edwards Aquifer control area are

OFFICE AND INDUSTRIAL markets were hit hard during the recession and are waiting for employment growth to feed business expansion.



slowing the issuance of well permits. In a related move with implications for growth, authorities reportedly will seek more regulation of subdivisions by county governments in the 2003 legislature.

Clean Water Act. The Texas Commission on Environmental Quality will submit a plan for regulating total maximum daily load for water pollution emissions to the Environmental Protection Agency. Such acts often spur lawsuits from environmental groups interested in slowing development.

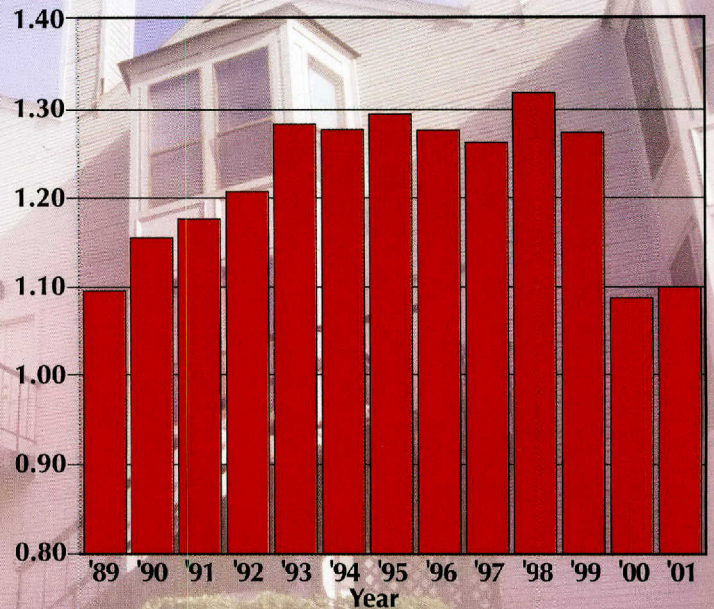
Clean Air Act. The federal government can cut off funding for new highway projects if cities fail to attain specified levels of air quality. Dallas-Fort Worth and Houston are already under mandate to develop plans for attaining these standards.

There is a good chance that Beaumont-Port Arthur, Austin, San Antonio, Tyler and Longview will have to develop attainment plans as a result of the 2004 assessment. El Paso is struggling to maintain a new standard for ozone. The choice is tighter restrictions on industry and automobile emissions or loss of support for new highways. Either has growth implications.

Rural decay. Rural areas and small Texas towns are not only losing population, they are losing the key middle-class segment necessary to maintain a viable local economy.

Affluent retirees are in evidence on ranches and country estates. Although low-income jobs can be found in rural areas, there are dwindling opportunities for professional employment in the countryside. As a result, though Texas is a large state, most of the population lives in and around metropolitan areas.

Figure 4. Texas Housing Affordability Index*



*The THAI is the ratio of median household income to the income required to buy the median-priced home using currently available mortgage financing. Standard financing is a 30-year loan covering 80 percent of the cost of the home. A THAI of 1.00 indicates that the median household income is just enough to qualify for a loan sufficiently large to purchase the median-priced home.

Source: Real Estate Center at Texas A&M University

Education. State officials have concentrated on equalizing access to education, but improving the quality of public education, especially in light of Texas' large and growing immigrant population, is critical. Failing to do so will hamper the economic progress of the state's population and limit the number of Texans who can afford homeownership. ➤

For more information, contact info@recenter.tamu.edu

Housing Needs Forecast

The State Data Center projects an additional 1.5 million people will be living in Texas by 2005. Using that projection and additional data from the 2000 Census, the Real Estate Center projects new housing units needed in Texas.

Projected 2005

Population: 22.5 million

Homeownership rate: 64 percent

Persons per unit:

Vacancy rate:

single-family owned: 2.89
single-family rented: 3.1
apartments: 2.2

single-family: 7 percent
multifamily: 10 percent
manufactured homes: 20 percent

	Housing Stock	
	2000	Projected 2005
Single-family	5,420,910	5,759,400
Multifamily	1,970,701	2,137,700
Manufactured homes	765,965	831,900

	New Construction		
	Annual average 1990-2000	2001	Projected annual 2002-2004
Single-family	75,528	111,915	63,700
Multifamily	29,546	38,427	35,300
Manufactured homes	26,287	21,254	15,100

Source: Real Estate Center at Texas A&M University

Living with Mold

By Gailen D. Marshall, Jr., M.D.



What do these things have in common: wine, penicillin, cheese, beer and mushrooms? Stumped? Here's a big hint: it's also the latest health scare, costing Texas consumers millions of dollars in higher insurance premiums and needless home "health" testing, and it's being used as a get-rich-quick scheme by some personal injury lawyers. Right. It's mold.

So how did this common type of fungus, present in all sorts of good things used daily and ever-present in the environment, grow into the major consumer crisis it has become today?

As a board certified allergist-immunologist, I have taught, done research and seen patients with a variety of immune-based medical conditions for 14 years. In the past several years, I have seen an increasing number of frightened, sometimes angry, patients who believe, or have been told, that they have "toxic mold disease." But do they?

There are many different kinds of mold — at least 10,000 common types. Mold is everywhere because it requires only a source of water, sugar, oxygen and a friendly surface on which to thrive. In high-humidity environments like Texas, mold is especially abundant. It is not possible to completely rid the environment of mold, nor would there be any reason to do so.

Is mold harmful to people? Can it cause memory loss, fatigue or brain damage? For most people, the answer is a resounding and hopefully reassuring, "No." The world is filled with mold spores. They are breathed in the air, eaten in foods and drunk in our water every day with no ill effects. Some people develop allergies and experience symptoms of asthma or hay fever when exposed to certain mold spores. There are a few mold-related diseases that can be serious, mostly in people with severely depressed immune systems (such as advanced cancer or AIDS). Fortunately, these are extremely rare cases.

What about the "experts" who diagnose mold-related memory loss or learning disabilities? There is absolutely no proof to support these claims. And what about the dreaded "toxic" mold? The term itself seems to have been manufactured to arouse panic and fear among otherwise calm people.

Even though health risks may be vastly exaggerated, most people would rather not have excess, visible mold in their homes. Mold looks bad and has an unpleasant odor. However, mold removal is relatively simple.

Mold means moisture. Sources of excess moisture — a roof or shower leak or condensation, for example — need to be eliminated. Stop the source of water, and stop the mold. It's that simple. If expert advice is needed, find a reputable person or company trained in moisture management to find and fix the source of excess water. Often, the mold will not return once the moisture is removed.

Is it necessary to pay to have a home tested for mold? No. The Centers for Disease Control and Prevention and the reigning mold expert from Harvard's School of Public Health do not support most home mold testing. Remember, in high-humidity places like the Texas Gulf Coast, at least some mold can be found in virtually all homes more than a couple of years old.

If mold is found, is someone to blame? Probably not. The mere presence of mold in a home or office does not automatically mean that someone has done something wrong.

Should homeowners panic? No. React to mold based on facts, not on hysteria and hype. The mold scare is already having a demonstrable and troubling effect on the Texas economy and on individual lives.

Texas insurance rates are more than double the national average and are continuing to rise based in large part on mold-related claims. Many people can no longer afford homeowners insurance, assuming they are able to get coverage in the first place. Home sales are not going through because of mold concerns; home sellers, lenders, real estate professionals, title companies and a host of other industries are being negatively affected. Eventually this will cost some Texans their jobs.

People are having their lives disrupted by testers and remediators, often for no legitimate reason. If health is the major concern, consider this. The apartment or hotel into which people relocate for weeks or months may have higher mold content than the home being re-mediated. And after the expensive home cleanup is completed, the same molds may still be in the air outside.

The bottom line is this: people who are ill should see a physician. If the doctor thinks the patient has mold allergies, testing by a reputable medical specialist who has the credentials to provide reliable information may be warranted. The doctor's direction for treatment should be

followed. Check the physician's credentials to determine his or her expertise in the diagnosis and management of mold-related allergic diseases. Do not be afraid to ask why he or she thinks mold is causing a problem.

Most importantly, before suing over mold exposure, consider the aggravation, expense and frustration associated with trying to get compensated for one of the everyday risks of living on this planet. Is the stress, anxiety and guilty conscience worth it? ♣

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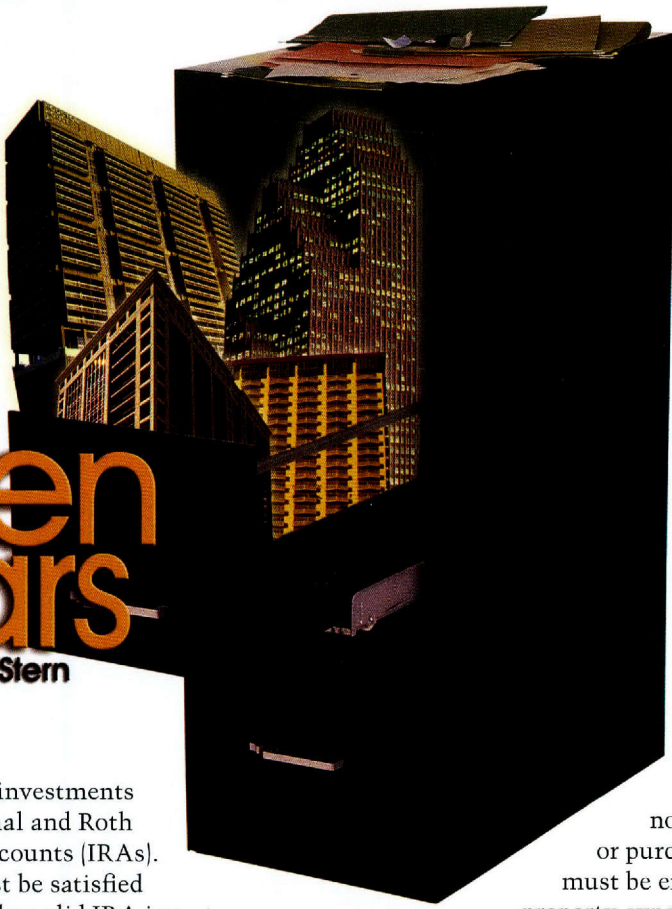
State of Black Mold

Newspaper headlines focusing on "black mold" prompted the Texas Medical Association (TMA) to study the issue. The association's Council on Scientific Affairs (CSA) searched medical and scientific literature and contacted Texas and national experts and specialists.

"Adverse health effects from inhalation of *Stachybotrys chartarum* spores in water-damaged buildings is not supported by available peer-reviewed reports in medical literature," concludes the CSA report, which was issued in September 2002.

"The hypothesis that exposure to molds and their toxic products may lead to adverse health effects can be made," says the report. "However, the proposition that molds in indoor environments may lead to adverse health effects through mechanisms other than infection and allergic/immunologic reactions is an untested impression."

To read the TMA report, go to <http://www.texmed.org/has/CSA%20Black%20Mold.doc>.



buildings
for your
**golden
years**
by Jerrold J. Stern

Tax law allows real estate investments to be included in traditional and Roth Individual Retirement Accounts (IRAs). However, various criteria must be satisfied for real estate investments to be valid IRA investments. Costly penalties apply if these criteria are not met.

IRA investor interest in real estate has increased recently as dramatic stock market declines have prompted investors to look for ways to diversify IRA investment risk. Any type of investment real estate can qualify for IRA investment including apartment buildings, office buildings and motels.

Establishing a Self-Directed IRA

IRA real estate investments must be acquired by establishing a self-directed traditional or Roth IRA through one of three types of IRA trustees — an IRA custodian, an independent IRA administrator or an IRA advisor. According to *The Wall Street Journal*, initial account setup fees can range from \$50 to more than \$1,500. Annual fees range from \$200 to more than \$500 depending on the type of IRA trustee. The more “hand-holding” (advice, management, help with paperwork) offered by the IRA trustee, the higher the fees.

IRA custodians offer no hand-holding and charge the smallest fees. IRA advisors provide a full range of services and charge the highest fees. To find IRA trustees, *BusinessWeek Online* advises investors to search the Internet using “self-directed IRA” as the search term.

Only cash can be placed into an IRA. IRA cash can then be used to purchase real estate, stocks, bonds, mutual funds or other investment assets. IRA cash can be rolled into a self-directed IRA from the taxpayer’s existing IRAs or from certain corporate pension funds on retirement.

When IRA real estate is sold, the proceeds can be reinvested in real estate or invested in other assets. Taxes are avoided as long as funds are kept in the IRA. If the IRA is a traditional deductible IRA, taxes are postponed but eventually paid. Taxes are permanently avoided for Roth IRAs as long as withdrawals comply with IRS rules. Typically, only taxpayers older

than 59½ can make qualified IRA withdrawals.

Because ordinary (not capital gains) tax rates apply to qualified withdrawals from traditional deductible IRAs, Roth IRAs are the best type of IRA for real estate investment. However, rollovers from traditional deductible IRAs into Roth IRAs are precluded if taxpayers have more than \$100,000 of adjusted gross income.

Potential Pitfalls

Interested investors should do their homework before setting up a self-directed IRA to invest in real estate. If IRS criteria for self-directed IRAs and qualified withdrawals are not followed, combined penalties and income taxes can range from 15 percent to more than 100 percent of the real estate’s value.

Properties included in IRAs cannot be the investor’s personal residence or purchased from immediate family. There must be enough cash in the IRA to pay annual property expenses (mortgage, repairs, maintenance) if the property does not generate sufficient cash flow.

Additional funds can be rolled into the self-directed real estate IRA from other IRAs or certain corporate pension funds if necessary and tax criteria are met. However, only \$3,000 of new IRA funds (\$3,500 for taxpayers age 50 or older) can be added annually.

Mandatory minimum IRA withdrawals begin at age 70½, so investors must plan IRA cash balances carefully to avoid being forced to choose between selling the real estate or paying a penalty. Minimum IRA distributions are based on the taxpayer’s age and the total value of all the taxpayer’s IRAs.

for more information

- “Hatching Property from Your Nest Egg,” Ellen Hoffman, *BusinessWeek Online*, 9/19/02
- “IRA Holders Add Real Estate To Their Mix,” Brian J. O’Connor, *The Wall Street Journal*, 8/14/02, page D-2
- “Retirement Plan Strategies — Using IRAs for Private Investments,” Bruce D. Steiner, *Journal of Retirement Planning*, October 2000

Real estate IRAs have numerous potential benefits and drawbacks. Because of the complexities of the rules governing these transactions, consultation with an experienced real estate professional is recommended. ➔

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TARGETED MARKETING TOOL

NAR RELOCATION REPORTS

BY HAROLD D. HUNT

Real estate professionals looking for a better way to target their marketing may want to investigate a new marketing tool — the National Association of Realtors' *NAR Relocation Report*. Derived from the Internal Revenue Service's county-to-county migration data, the report provides annual statistics on the number of households moving into and out of any U.S. county. Income indices and income ratings also are included.

Users can purchase individual county reports or data for all 3,000 counties. NAR members can order individual county reports for \$25, or reports for all counties for \$299. Nonmembers pay \$35 and \$299, respectively. All reports are delivered electronically.

Licenses use the relocation data primarily in two ways. First, the data are used to target advertising to the counties most households are moving from. Second, they establish referral networks by advertising their services to real estate professionals in counties most households are relocating to.

Each report lists summary statistics about a specific county, including the number of households relocating into and out of the county annually as well as a comparison of the average income of households moving to and from the county.

The top ten counties from which households are relocating are listed along with the number of households relocating from each. A *relocation income index* is reported as well. This index divides the average income of households relocating into or out of the county by the average income of households currently residing in the county. An index value greater than 1.0 means that the average income of relocating households is greater than the average income of current residents.

A *relocation income rating* of one to five stars is assigned to the top ten counties households are moving from.

This rating is based on a national relocation income index ranking. Households relocating from counties with a rating of five average in the top 20 percent of relocating households' incomes. Ratings are in 20 percent increments, with one star representing arriving households that rank in the bottom 20 percent of relocating households' incomes.

All of these statistics are provided for the ten wealthiest counties from which households are relocating (based on average household income) and the

ten counties households are most often relocating to (based on number of households).

A sample relocation report can be viewed on NAR's website at www.realtor.org/reinsite.nsf/subscribeinfo?OpenForm.

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NAR RELOCATION REPORT

Bexar County, TX

- In 2001, total of 32,279 households relocated into Bexar County, TX.
 - Total of 32,437 households left Bexar County, TX.
 - The income of households relocating to Bexar County, TX was 8% lower than those leaving Bexar County, TX.
 - Harris County, TX was where the largest group relocated from.
 - The most popular destination was Travis County, also in TX.

Rank	State	County	# of Relocating Households	Relocation Income Index	Relocation Income Rating
1	from TX	Harris County	1,435	1.03	****
2	from TX	Travis County	1,390	1.05	****
3	from FR	Foreign - APO/FPO ZIPs	1,235	1.09	****
4	from FR	Foreign - APO/FPO ZIPs	1,223	0.88	***
5	from TX	Nueces County	914	0.81	****
6	from TX	Guadalupe County	857	1.02	****
7	from TX	Comal County	773	1.22	****
8	from TX	Dallas County	734	0.72	***
9	from TX	Atascosa County	642	0.78	***
10	from TX	El Paso County	609		

Rank	State	County	# of Relocating Households	Relocation Income Index	Relocation Income Rating
1	from CO	Douglas County	22	3.37	*****
2	from MD	Howard County	29	3.28	*****
3	from VA	Henrico County	16	3.17	*****
4	from CT	Hartford County	30	2.73	*****
5	from VA	Fairfax County	164	2.55	*****
6	from GA	Columbia County	17	2.55	*****
7	from NC	Moore County	11	2.43	*****
8	from AR	Lonoke County	13	2.41	*****
9	from MD	Charles County	17	2.38	*****
10	from VA	Arlington County	32		

Rank	State	County	# of Relocating Households	Relocation Income Index	Relocation Income Rating
1	to TX	Travis County	1,843	0.97	****
2	to TX	Harris County	1,480	0.96	****
3	to TX	Guadalupe County	1,133	1.08	****
4	to TX	Comal County	1,076	1.44	****
5	to TX	Dallas County	1,074	1.11	***
6	to TX	Atascosa County	834	0.84	****
7	to TX	Tarrant County	690	1.07	****
8	to TX	Wilson County	636	1.16	****

1) Relocation Income Index = Average income of the households relocating to/from the county / Average income of the households residing in the county
 2) Relocation Income Rating = Based on national relocation income index ranking
 ***** The top 20% group in ranking
 **** The second highest 20% group
 *** The middle 20% group
 ** The second lowest 20% group
 * The bottom 20% group

Page 2 of 7



ZWAHR WARS

EPISODE II

PIPELINE CORRIDORS REVISITED

BY JUDON FAMBROUGH

The July 2001 edition of *Tierra Grande* contained an article entitled "Pipeline Corridors, Economic Units and Condemnation." The article reviewed a November 2000 decision of the Houston Appellate Court (*Exxon Pipeline Co. v. Zwahr*, 35 SW 3d 705). The importance of the case rested in the novel approach the appellate court approved for evaluating property for condemnation purposes.

The Zwahrs purchased 49 acres in 1989. Koch Gateway Pipeline Company owned a 50-foot easement across the property in which a 30-inch natural gas pipeline was placed. The Zwahrs were permitted to grow cotton on the right of way.

In 1995, Exxon began condemning another 50-foot easement alongside and within Koch's easement. The easement included 1.01 acres of the Zwahrs' property, 82 percent of which lay within the existing easement.

A special commissioner awarded the Zwahrs \$2,265 for the taking. Exxon deposited the funds with the court, took possession and laid the pipeline parallel to and within 25 feet of Koch's pipeline. The Zwahrs appealed the special commissioner's award to County Court at Law No. One in Fort Bend County.

At trial, the Zwahrs' expert witness testified the portion of the 1.01 acres

that fell within Koch's existing easement was a self-contained, separate economic unit (the established pipeline corridor) and that its value should be ascertained alone and independent of farmland owned by the Zwahrs.

This method of valuation is proper, as long as the use is physically possible, legally permissible, financially feasible and maximally productive (*State v. Tigner*, 827 S.W.2d 611).

Furthermore, Texas case law dictates that a presumption exists in favor of valuing the land based on its current use (*McAshan v. Delhi Pipeline Corp.*, 739 S.W.2d 130). In this instance, 82 percent of the 1.01 acres was currently used for locating pipelines. Comparable sales for existing pipeline easements were \$26,398. The right to assign an area within an easement sold for \$9,679.

The jury awarded the Zwahrs \$30,000 for the easement plus \$10,000 for the right to assign the easement. Exxon appealed to the First District Court of Appeals.

Exxon contended the expert's opinion was based on sheer speculation and flawed methodology and thus inadmissible under Texas case law. Exxon further claimed the trial court abused its discretion by admitting the testimony

because it lacked relevance and reliability regarding the pipeline corridor as a separate economic unit.

Exxon lost on all points and appealed to the Texas Supreme Court. On May 23, 2002, the high court agreed with Exxon and reversed both the trial court and the appellate court decisions. The ruling indicated that the trial court had abused its discretion by allowing expert testimony involving economic units and highest and best use of the property.

The court reviewed the general rules for valuing property for purposes of condemnation. Compensation is based on the fair market value of land at the time of the taking. The general rule for determining fair market value is the before-and-after approach that requires measuring the difference in the value of the land immediately before and immediately after the taking.

When, as in this case, only part of the land is taken for an easement, the before-and-after rule still applies, but compensation is based on the market value of the part taken plus any damages to the remainder of the land. Because the Zwahrs do not allege any damage to the remainder of their 49-acre tract, only the market value of the 1.01-acre taken for the easement is at issue.

On the other hand, the fact finder (the jury or judge) may consider the highest and best use to which the land can be adapted, not necessarily its current use. The existing use of the land — in this case, cotton farming — is presumed the highest and best use. The landowner can rebut this presumption by showing a reasonable probability that, when the taking occurred, the property was adapted and needed or would likely be needed in the near future for another use.

The court went on to say that the before-and-after rule does not apply when the landowner can show that the condemned land is a self-sufficient, separate economic unit. The evidence must show that the unit is independent from the parent tract, possesses a different highest and best use and a different value from the remaining land. In this situation, the market value of the severed land must be determined without referencing the remaining acreage.

The key to the decision, though, rested with the court's analysis of the project-enhancement rule. In determining market value, the fact finder may **not** consider any enhancement to property value that results from the taking. The object of compensation in condemnation cases is to make the landowner economically whole. To permit compensation for value attributable to the condemnation project, and occurring subsequent to the taking, would place the landowner in a better position than he or she enjoyed before the condemnation occurred.

The Zwahrs' expert witness did not use the before-and-after approach but concluded the pipeline easement was the highest and best use for the 1.01 acres. This conclusion was based, in part, on the existence of the Koch pipeline. Using the market prices for comparable pipelines, he estimated the value of the 1.01 acres at \$35,077.

The court concluded, "As a whole, he (the Zwahrs' expert witness) premised the valuation on the fact of Exxon's condemnation, thus improperly including project enhancement in that valuation. He repeatedly stated that Exxon's condemnation 'created the economic unit,'

and that the 1.01 acre (economic unit) did not exist until after the condemnation." Prior case law holds that the testimony establishing a separate economic unit is admissible when the separate unit existed **before** the condemnation project and had defined **parameters** different from, and not because of, the condemnation project itself (*Bauer v. Lavaca-Navidad River Authority*, 704 SW2d 109.)

The Zwahrs' expert testified that before Exxon's project began, the Zwahrs' interest in the .82 acres within the easement owned by Koch was of "negligible" or "nominal" value. However, once Exxon received Koch's consent to lay another pipeline, the value soared to \$35,720, making the 1.01-acre easement worth \$36,077.

Texas case law holds that once the condemner manifests a definite purpose to take a particular

laying the line in the .82-acre segment of the easement.

Texas case law clearly states that a person cannot convey a greater interest in property than he or she owns. In this case, the Zwahrs could not lay a pipeline in Koch's exclusive easement. Consequently, they could not give Exxon permission to do the same.

Does this case contain any wisdom or direction for landowners confronted with pipeline condemnation? The answer is *yes*, for both those who negotiate future pipeline easements and those who already have them on their land.

Landowners who negotiate future pipeline easements may require their consent to lay additional pipeline(s) within the easement and share in any compensation received for the assignment. Of course, this provision will not come easy and can be negotiated

only if the condemnation process does not proceed to the special commissioner's court. (See Center publication 394, "Understanding the Condemnation Process in Texas" for details.)

For surface owners whose land is burdened by existing pipelines, the case outlines a possible future course of action.

The Texas Supreme Court describes two

requirements for establishing separate economic pipeline units. At one point, the court announced the unit must exist **before** the condemnation begins and have defined **parameters** different from, and not because of, the condemnation project itself. Later, it reiterated the need for boundaries when it proclaimed the evidence was inadmissible because the expert witness could not define the parameters of the economic unit until Exxon revealed the acreage needed for the easement.

Landowners may fulfill these requirements **before** any future condemnation commences by placing 30- to 50-foot restrictive covenants (sometimes referred to as deed restrictions) on either side of



COMPENSATION in condemnation cases is intended to make landowners "economically whole," not put them in a better financial position than before condemnation.

land, market value may not include any enhancement resulting from the project itself (*City of Fort Worth v. Corbin*, 504 SW2d 73).

The case emphasizes a point made in the Center's earlier review of this case. The condemnation award for laying Exxon's pipeline within Koch's easement should have gone to Koch, not the Zwahrs. If Koch had not consented to laying the line, then the condemnation should have proceeded against Koch's interest in the easement, not against the Zwahrs' interest in the land. The only property the Zwahrs owned that should have been in contention was the land needed by Exxon lying outside Koch's easement. Based on this decision, Koch could have charged Exxon \$35,720 for

existing pipeline easements. The covenants would limit the use of the land to pipelines, or possibly electrical lines or fiber optic cables. This would establish the economic units with defined boundaries or parameters before subsequent condemnation commences.

Why would the restrictions be placed along either side of the existing easements? As pointed out by the Zwahr's expert witness, the highest and best use of land alongside an existing pipeline easement is for another pipeline easement. The problem was that the witness could not establish the parameters.

This plan contains several benefits. First, in most instances, it will not change the current use of the land. It only affects future use. Second, it may cause less land to be taken for pipeline purposes.

This case illustrates that the expense of condemning within an existing easement greatly exceeds the expense of condemning outside of one. Thus, successive parallel pipeline easements occur. Placing deed restrictions on either side of existing easements may make it more financially viable for pipeline companies to secure assignment rights in existing easements rather than condemn new ones. And finally, if a company attempts to condemn the land within the area designated for pipeline purposes, the landowner can hope the court will accept its valuation as a separate economic unit based on the standards established by the Texas Supreme Court in this case.

This procedure could backfire, however. The company seeking the easement could simply move over and condemn the next 30 to 50 feet on the other side of the restricted area, causing pipelines to be disbursed further across the property.

Some landowners may oppose the method because restricting use of subsurface usually lowers property value. However, restrictive covenants can be removed as easily as they were placed on the land as long as ownership has not changed.

Exxon Pipeline Co. v. Zwahr, 2002 WL 1027003, Tex 5/23/02, has not been released for publication in permanent law reports. Until released, it is subject to revision or withdrawal. ♣

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PROTECTING RENTAL PROPERTY

By Judon Fambrough

Compared with homeowners, landlords and property managers are at a disadvantage when it comes to fighting mold. They do not visit rental properties daily and, therefore, cannot always react promptly to potential problems. Unfortunately, mold flourishes in wet places and may spread within 24 hours under optimum conditions.

Property managers rely on tenants to tell them about water leaks. Some tenants may not readily report leaks, fearing they may be financially responsible for the resulting damage. Others simply may not care that mold damage can adversely affect the property owner's insurance coverage and premiums. If leaks go unreported, mold may grow and spread through adjoining units.

What legal liability do property managers, which here refers to both owners and landlords of rental property, have to disclose, remove and remediate the presence of mold in rental units? The Texas Deceptive Trade Practices Act (DTPA), the Texas Property Code and common law hold answers.

Obligations Under DTPA

The DTPA, delineated in Chapter 17 of the Texas Business and Commerce Code, requires property managers to disclose known facts about the property that may influence a prospective tenant's decision to rent or not. This includes disclosing present water leaks and mold infestations.

Debate continues over whether the DTPA requires disclosing prior water

leaks that were quickly repaired or mold infestations that were properly and promptly remediated. A truthful response is required when a prospective tenant makes a direct inquiry regarding these matters. According to information from the State Bar of Texas and a state report from the Council on Scientific Affairs, as much as 10 percent of the population may have an allergic reaction to mold. These people might not rent a unit if they knew of prior water leaks or remediated mold, it is best to disclose this information. Disclosing all facts, whether required by the DTPA or not, may avoid future conflicts and lawsuits.

Can property managers avoid the disclosures by simply renting the property "as-is"? Texas courts have not addressed this specific issue. However, Texas appellate courts, not the Texas Supreme Court, have held that residential dwellings may be sold "as-is," assuming the correct procedure is followed. Even if rentals could be "as-is," property managers would not be relieved of the obligation to disclose known relevant facts and allow complete preleasing inspections. For more information on disclosure, see Center publication 1114, "DTPA Protects Consumers and Defendants" (<http://recenter.tamu.edu/pdf/1114.pdf>).

Obligations Under Texas Property Code

The Texas Property Code requires property managers to remedy and repair

certain conditions after being informed by the tenant. The rules, described in Chapter 92 of the code, supersede the former common law doctrine of implied warranty of habitability. As detailed in Center publication 866, *Landlords and Tenants Guide*, property managers must make a diligent effort to repair or remedy certain conditions when all the following requirements are met (TPC Section 92.052).

- The tenant gives notice of the condition to the person to whom or to the place where the rent is normally paid.
- The tenant is not delinquent in rent payments at the time.
- The condition materially affects the physical health or safety of an ordinary tenant.
- The tenant, a member of the tenant's family, a guest or invitee of the tenant or a lawful occupant of the dwelling did not cause the condition.

Legally speaking, property managers are not responsible for remediating mold damage if the tenant, a member of the tenant's family, a guest or an invitee of the tenant or a lawful occupant caused the water leak that resulted in mold or if the resulting mold growth did not or does not materially affect the health of an ordinary tenant. However, protecting the property by preventing or stopping moisture penetration should take precedence over affixing blame.

To avoid the repair-and-remedy issue entirely, can property managers get waivers releasing them from the obligation? Absolutely not. The statutory duty to make repairs and remedy certain conditions cannot be waived.

However, the property code gives three alternatives for transferring the duty to repair and remedy to the tenant. The code permits the *obligation* to repair, but not the *expense*, to be shifted to the tenant (TPC Section 92.0561[9]). The statute allows a landlord and tenant to "mutually agree for the tenant to repair or remedy, **at the landlord's expense**, any condition of the dwelling regardless

of whether it materially affects the health or safety of an ordinary tenant."

Both the obligation and expense to repair or remedy conditions affecting the health and safety of an ordinary tenant may be transferred to the tenant in two limited situations. The tenant must repair or remedy **any condition** if the following seven conditions are met (TPC Section 92.006 [e]).

- The landlord owns only one rental dwelling at the beginning of the lease term.
- The dwelling is free from any condition that would materially affect the physical health or safety of an ordinary tenant when the lease commences.
- The landlord has no reason to believe that any condition that would materially affect the physical health

landlord's negligence during the lease term or during a renewal or extension of the lease, the tenant has the duty and expense to repair damages:

- from wastewater stoppage caused by foreign or improper objects in lines that exclusively serve the tenant's dwelling,
- to doors, windows or screens and
- from windows or doors left open (TPC Section 92.006[f]).

Obligations Under Common Law

Even if the blame or obligation to remedy can be shifted, property managers are still at risk for personal injuries and property damage under the common law. Chapter 92 does not supersede recoveries under the common law for negligence.

If property managers "knew or should have known" of a water leak in an apartment, they could be liable for personal injuries (health claims) and the tenant's property damages from the resulting mold infestation. This is true even if the property managers are not liable for repairing the water leak or remediating the mold infestation under Chapter 92. For this reason, property managers should make periodic inspections of rental units even if the obligation to disclose water leaks has been placed on the tenant.



COMMERCIAL REMEDIATION teams follow protocols to remove extensive mold infestations. Most outbreaks can be cleaned using bleach and water.

or safety of an ordinary tenant is likely to occur or recur during the tenant's lease term or during a renewal or extension.

- The landlord and tenant have a written lease.
- The agreement for the tenant to make the repairs is underlined or placed in boldface print in the lease or on a separate written addendum.
- The agreement for the tenant to make the repairs is specific and clear.
- The agreement for the tenant to make the repairs is entered knowingly, voluntarily and for consideration.

The other statute provides that the landlord and tenant may agree that, except for conditions caused by the

TAA Recommendations

Although the Texas statutes offer several ways to lessen or avoid liability for mold caused by moisture leaks, the law does little to protect the property. Consequently, property managers must distinguish between what is legal (to avoid liability) and what is prudent (to protect the property). In many cases, both objectives can be accomplished simultaneously. The key is getting the tenant to report or repair water leaks as soon as possible. Larry Niemann, general counsel for the Texas Apartment Association (TAA), has these tips for property managers.

- In the lease, require the tenant to promptly report any water leaks,

Managing Mold

- "Guidelines on Assessment and Remediation of Fungi in Indoor Environments" published by the New York City Department of Health at www.nyc.gov/html/doh/html/epi/moldrptl.html
- "How to Clean up the Mold: Light Growth, Heavy Growth, Flooding," published by the General Clinical Research Center for the University Hospitals of Cleveland at <http://gcr.cwru.edu/stachy/cleanup.htm>
- "Managing Water Infiltration into Buildings," published by the University of Minnesota at www.dehs.umn.edu/iaq/flood.html
- "Mold Remediation in Schools and Commercial Buildings," published by the U.S. Environmental Protection Agency at www.epa.gov/iaq/molds/toc.html

mold and other conditions that pose a hazard to the property or a risk to the tenant's health or safety. Indicate that failure to do so subjects the tenant to possible lease termination, eviction and liability for the ensuing property damage regardless of the cause.

- Give the tenant an alternate person and phone number to contact in the event the property manager is unavailable when a moisture leak occurs. Ideally, this would be a 24-hour repair service.
- In the lease or in some other document, give detailed instructions on how to turn off the water or other utilities. Permit the tenant to turn off equipment and interrupt utilities to avoid property damage or to perform repairs.
- Make sure someone checks all rental units periodically, especially if the tenants are away for prolonged periods. College students may be gone as long as a month during holiday breaks. Pipes may freeze and burst, windows may break or storms may damage the roof. Make sure the lease grants the property manager the right to enter on a regular basis to perform water-leak inspections and conduct preventive maintenance tasks.
- Tie the eviction policy to the basic care and maintenance of the dwelling. Be prepared to take swift action against tenants whose living habits generate unhealthy conditions or who appear unwilling to report water leaks.

this objective, the National Apartment Association prepared a "Mold Action Kit" that is available to all TAA members. TAA also drafted a mold addendum for use with its lease form. The Mold Information and Prevention Addendum requires tenants to keep their dwellings clean and to promptly report any leaks or water accumulation. It instructs residents on how to clean and apply biocides (products that can kill mold) to nonporous surfaces covered with mold.

Neimann further recommends that property managers maintain a positive attitude and respond promptly when tenants report moisture leaks. "How you handle mold complaints has a significant bearing on whether lawsuits are filed," he says. Consequently, property managers should do the following.

- Take all mold complaints seriously. Do not act indifferently or callously. Empathize with the resident.
- Express a willingness to do whatever is necessary under the circumstances. It is seldom necessary to test for mold. It is more important to detect and remedy the source of the moisture to eliminate mold growth.
- Treat each moisture complaint as a potentially serious matter and respond promptly.
- If unsure about the best course of action, consult knowledgeable persons. ♦

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(continued from page 1)

local economy and high vacancy levels. Despite the soft market, Class A office buildings have sold for sizzling prices in excess of \$200 per square foot.

What drove the sales? Investment opportunity. Quality properties leased to AAA-credit-rated tenants are in great demand in any type of market, attracting investors from all over the world.

Weak stock market performance has increased interest in direct ownership of other property types as well. For example, despite poor crop prices and the weak economy, Texas rural land prices have appreciated in value consistently since 1993. While agricultural use is declining, recreational use is burgeoning. Investment funds clearly are being funneled in this direction.

Direct ownership of real estate has increased in popularity among small investors too, many of whom are realizing that, in these tumultuous economic times, their homes may be the best performing assets in their portfolios. Some small investors, noting this, are buying rental properties or second homes for investment purposes.

The housing market has been exceptionally robust in the past two years, despite negative job growth in many cities. Low mortgage interest rates are one reason for this. However, record housing sales are also partially driven by the investment potential in buying a home.

Academics note that homebuyers get two sources of return on their investment when they buy a home. First, they no longer have to pay rent. Second, some homebuyers get an additional return when houses appreciate in value. The housing market in many U.S. cities has seen significant price appreciation in the past five years.

Unquestionably, stock market trends influence the real estate industry. During the 1990s, investors were infatuated with stocks and the alluring promise of 20 to 30 percent returns per year. Now it is becoming clear that those uncharacteristically prosperous years were an anomaly and not likely to be repeated soon. Real estate is turning investors' heads again, reestablishing itself as a solid investment and an important tool for building wealth. ♦

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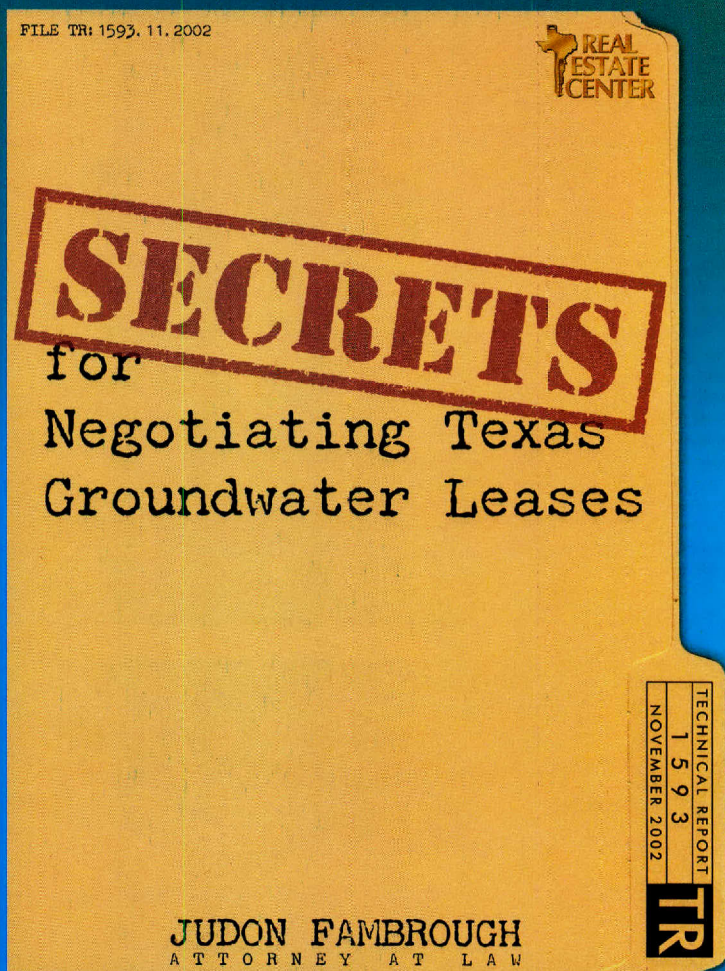
GROUNDWATER LOOK BEFORE YOU LEASE

Millions of gallons of water lie beneath the surface of Texas. Landowners must understand how to protect their rights to this precious resource. Few guidelines exist because water leasing is relatively new. Judon Fambrough, an attorney with the Real Estate Center, uses his expertise in oil and gas leasing to reveal the

Secrets for Negotiating Texas Groundwater Leases

Copies of this 12-page guide are free when downloaded from the Center's website at

<http://recenter.tamu.edu/pdf/1593.pdf>



SECRETS covers groundwater ownership, paragraph-by-paragraph negotiating hints, various clauses, royalty payments, division orders, pooling and more.

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