During the past three years, there has been a global boom in housing prices, sales volume and construction. According to reports in the *Wall Street Journal* and other media, home prices in Shanghai surged 26 percent last year and 90 percent since 2000. In the past year, prices climbed 19 percent in Hong Kong, 48 percent in Bulgaria and France, 63 percent in Spain and nearly 100 percent in South Africa.

**The Boom at Home**

In the United States, the median home price rose nearly 33 percent during the past three years and 13 percent in 2005, according to the Office of Federal Housing Enterprise Oversight (OFHEO). The National Association of Realtors (NAR) reports the number of homes sold increased from 5.6 million in 2002 to an annualized level of nearly 7.1 million in 2005. The number of new single-family dwellings built increased 6.7 percent over the past year, from 1.531 million in 2004 to 1.635 in 2005.

Texas’ housing boom reflects an active and growing housing market, but one experiencing a much slower rate of increase than the rest of the country. From 2002 to 2005, the Texas median-priced home increased from $124,500 to an estimated $136,500, a modest 9.6 percent. The average house price grew from $155,600 in 2002 to $174,100 in 2005, an 11.9 percent increase. MLS sales during that period increased from 201,422 to 265,886, a 32 percent increase.

National media have portrayed the rapid appreciation of housing as a price “bubble” that could suddenly and dramatically burst, leaving homeowners and the market reeling. But here in Texas, is a housing bubble fact or fiction? Could the housing market explode like an overinflated balloon?

Probably not.
No Evidence of Bubble Trouble

Several factors indicate that while Texas' housing market is doing well by historical standards, it is not experiencing a price bubble. Important indicators include:

- Texas’ home prices have appreciated at rates significantly less than the national rate.
- Texas’ current rate of home price increase is about equal to the “normal” rate of the past 15 years.
- Across the country and around the globe, lower mortgage interest rates and easy mortgage credit are primary reasons for home price increases.
- The median-price-to-median-family-income ratio in Texas is not disproportionate to the historical norm.
- Residential construction in the state has maintained a reasonable balance between supply and demand, avoiding a shortage or excess supply situation.
- The inventory of houses for sale is only slightly less than “normal,” reflecting relative balance between supply and demand in the marketplace.
- The national housing bubble, to the extent it exists, appears to be localized to several states and specific metropolitan areas with extraordinarily high rates of home appreciation.

Widening Home Appreciation Gap

One of the best indicators that Texas is not experiencing a home price bubble is reflected in the comparison of the rate of increase in home prices nationally with the state increase (Figure 1).

Since the first quarter of 2000, when Texas’ and the United States’ rates of increase in home prices were essentially equal at 6.2 percent and 6.3 percent, respectively, the national rate has been considerably greater than the state’s. The spread between the two rates widened significantly when the national rate exploded in the second half of 2003.

Through the fourth quarter of 2005, Texas’ home price increase rate (5.5 percent) was less than half the national average (13 percent) and only a fraction of that reported in states with the fastest-increasing rates. Similarly, increases in home prices within the four largest Texas metropolitan areas have been significantly less than the national rate (Figure 2).

Between 1995 and 2001, the major Texas metropolitan areas’ home price index paralleled the national rate of increase. Home prices surged in Austin during the high-tech expansion from 1999 to 2001 but flattened during the following four years. Since the third quarter of 2003, however, the surge in the U.S. median center has far outpaced increases in Texas’ major metropolitan areas.

Texas Market Lacks Fizz

Over time, a housing market normally reflects trends supported by fundamental changes in employment, income, population, households and family formation. Housing price bubbles typically are characterized by sharp, short-term price increases caused by excessive demand, overexuberance, speculation, generally unsustainable expectations in the market and easily obtainable, low-cost capital.

A bubble may be enhanced by a short-term shortage of available units. Increased new construction typically fills the gap between greater demand and existing supply, although this process may take considerable time, especially in markets with stringent development regulations or land shortages.

Home price changes in Texas during recent years have trended toward long-term average or normal levels. The median home price doubled from $68,100 in 1990 to $136,500 in 2005. Similarly, the average home price went from $87,300 to an estimated $174,100 during this period (Figure 3). Sales volume during the period went from 100,047
to an estimated 265,886. Sales volume has exhibited a marked increase since mid-2002.

The state’s housing appreciation rate had been on a steady decline since 2000 but rebounded significantly in 2004 and 2005. As Figure 4 illustrates, the annual rate of appreciation in Texas housing is trending toward normal, with normal defined as the 15-year average rate of increase of 4.4 percent. Based on the Real Estate Center’s end-of-year estimate, the median home price increased about 5 percent in 2005 — a rate greater than the long-term average of 4.4 percent, and significantly better than 2004’s 1.7 percent increase.

**Prices and Mortgage Interest Rates**

Much of the nation’s and state’s increase in home prices over the past several years has been a result of historically low mortgage interest rates. Lower mortgage rates allow more people to buy a home for the first time, allow everyone to buy more expensive houses than before and allow existing homeowners to sell and trade up. The relationship of lower mortgage interest rates and higher prices is apparent (Figure 5).

Since 1990, mortgage interest rates have steadily trended downward while home prices have steadily trended upward. A significant rise in interest rates would cause home prices to stop their rapid upward climb, especially in states reporting the greatest rates of increase (California, Florida, Arizona and Nevada). Interestingly, mortgage rates have not increased as much as expected over the past year given the regular increases in the federal funds rate by the Federal Reserve. Mortgage rates remained flat, but modest rate increases are likely to occur over the next two years as the Fed continues to push short-term rates upward.

A significant change in mortgage lending underwriting standards and cutbacks or elimination of so-called “exotic” mortgage loans could also impact home prices. Residential loans have been extraordinarily easy to obtain, and many have been made at below-market initial rates with little to no equity paid by the borrower. These lending practices depend on continued increases in home values. Federal regulators have issued warnings to lending institutions about the risky loans and procedures and threatened changes in loan guidelines. The possibility of direct regulatory changes remains well founded.

**Rule-of-Thumb Income Requirement**

For decades a rule of thumb has held that a family could afford to purchase a home priced about 2.5 times its annual income. This figure originated during the early 1950s when the Federal Housing Administration calculated this figure based on prices, incomes and financing costs at the time. The rule held fairly well until around 1980, when interest rates spiked to record levels and the prime rate reached more than 20 percent with mortgage interest rates not far behind.

Mortgage interest rates have declined steadily since the 1980s, allowing homebuyers to purchase homes at a significant multiple of income. But only recently has the Texas homebuyers’ overall ratio of median family income to median house price reached the historical rule level (Figure 6). Nationally, higher home prices pushed the median-price-to-median-family-income ratio from 3.06 in 2002 to 3.66 in the second quarter of 2005 according to the NAR.

**Supply and Demand**

Except during the oil bust of the 1980s, Texas’ pace of residential construction has tracked closely with home sales, maintaining a balance between housing supply and demand. Figure 7 depicts indexed home sales volume and single-family permits statewide. The Texas residential construction
market’s ability to produce new housing units at a rate commensurate with demand and without escalating costs is a prime factor in balancing the market and keeping price changes modest.

Most experts agree that a balanced housing market typically maintains a six-month inventory of homes for sale. The current statewide available inventory of homes for sale of 5.3 months is slightly less than the rule-of-thumb balance [Figure 8]. Available inventory will be an important early indicator of any potential market weakness.

The Texas housing market experienced a relative shortage of houses for sale between 1998 and 2003, during which time prices recorded their greatest rates of increase. Since 2003, however, inventory has hovered close to “normal,” thereby foretelling any significant price changes.

By comparison, NAR reported the national inventory of existing homes for sale in 2005 was 4.5 months, significantly less than Texas’ 5.3 months and 1.5 months less than a “normal” six-month level. This shortage has contributed to drastic price increases, especially in high demand areas.

Absent those states’ increases [or if those states’ appreciation rates were not so extreme compared with other states’ increases], the national appreciation rate would not be at record-setting levels. There probably would be no price bubble discussion at all. A look at the top and bottom ten states ranked by rate of home price increases shows the wide variance in appreciation rates among the states [Figure 9].

Texas’ rate of home appreciation is less than half the national average rate and a fraction of the rates reported by the fastest-increasing states. The wide range of appreciation rates also demonstrates the house price explosion on the coasts. The highest rates of increase occur primarily in east and west coast states, while the lowest are concentrated in mid-America.

Evidence presented here strongly suggests Texas does not have a housing price bubble and that the risk of a sudden “bubble burst” is quite low or nonexistent.

Markets continually change and adjust to the primary factors that impact them. Some factors become more important at certain times, and other factors may have surprising effects, either good or bad. The economic outlook for the rest of 2006 includes modestly higher interest rates and continued increases in employment and personal income levels. These factors are among the most important to the housing market and housing prices.

If the rate of new home construction continues at the current pace with small-to-modest cost increases, there is no reason to anticipate a housing shortage that would drive prices up. If mortgage interest rates increase, as is generally regarded as probable, sales volume may decline somewhat, leading to more modest price gains.

As the overheated coastal housing markets begin to cool, Texas may see increased investor enthusiasm as focus shifts to areas of the country where price appreciation has been more moderate. 

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What’s to Come?

Extraordinary home price increases reported in a few states appear to be influencing the national home appreciation rate.
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