

# Land, Lots of Land How Texas Dodged the Housing Bubble

By Ali Anari

Former Federal Reserve Chairman Alan Greenspan argued in 2005 that the Fed saw “a lot of local bubbles” but not a nationwide housing bubble. Texas’ local housing markets were among those that did not record booming home prices followed by collapsing prices in the late 2000s.

Real Estate Center research reveals why Texas dodged a home price bubble in that housing crisis. The research found that what is commonly known as a “home price” bubble was actually a “land price” bubble. With abundant supplies of land and an efficient statewide land acquisition and development process, Texas’ residential real estate market managed to avoid the home price bubble that affected many regions of the United States.

## Home Cost Components

The two main components of home prices are construction costs and land costs. Construction costs consist of material costs plus labor costs. From time to time these go up or down because of short-run supply-and-demand imbalances, but generally they revert to their long-term trends, which are influenced by technology and resource substitution possibilities.

By contrast, land supply is constrained by natural endowment, acquisition and development regulations, and competition among those advocating for alternative land uses.

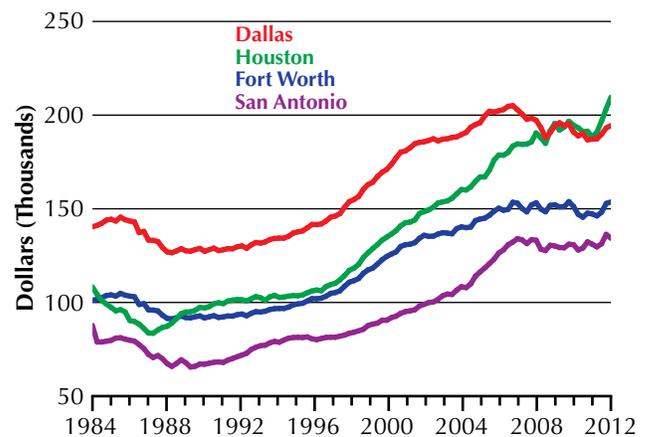
## A Tale of Two States

Texas’ major local housing markets had not recorded a home price bubble since 1990, in the aftermath of the real estate bubble of 1985–86. This crisis was mainly attributable to the worldwide oil price bubble of the early 1980s (Figure 1).

From 1990 to 2007, Dallas, Houston, Fort Worth and San Antonio posted a gradual increase in home values measured by the *average* value of the *average* single-family detached owner-occupied housing unit. The upward trends in home values stalled during the Great Recession of 2008–11 but resumed in 2012 (Figure 1). For the period of this study’s datasets, the average annual growth rate of home values for Dallas, Houston, Fort Worth and San Antonio from 1985 to 2012 was 1.8 percent, 3.8 percent, 2.2 percent, and 3 percent, respectively.

California, like Texas, experienced a gradual upward trend in home values until 1999. From 2000 to 2006, rapid increases in

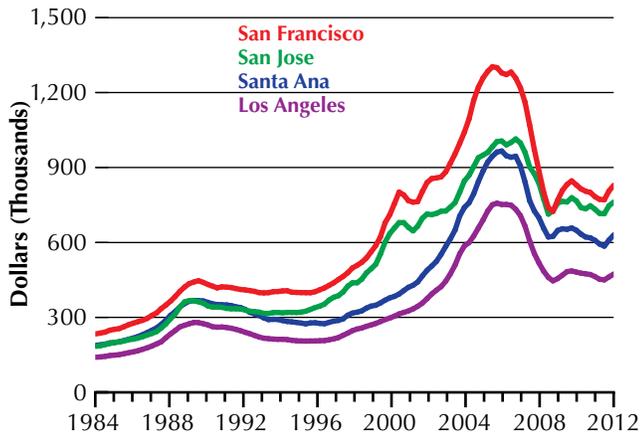
**Figure 1. Texas Average Values of Average Single-Family Detached Home**



Sources: Lincoln Institute of Land Policy and Real Estate Center at Texas A&M University

home values created a statewide home price bubble that burst after 2007 (Figure 2). From first quarter 2000 to first quarter 2006, home values in San Francisco, San Jose, Santa Ana and Los Angeles increased by 109.4 percent, 77.6 percent, 164.2 percent, and 164.9 percent, respectively.

**Figure 2. California Average Values of Average Single-Family Detached Home**

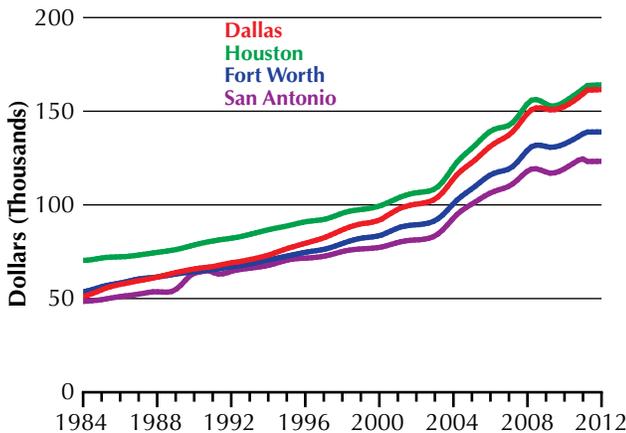


Sources: Lincoln Institute of Land Policy and Real Estate Center at Texas A&M University

After the home price collapse, the average value of San Francisco homes in 2012 returned to its 2002 level after falling by 38.2 percent from its peak in 2006. Average 2012 home values in San Jose fell to their 2003 level after decreasing by 28.9 percent from their 2006 peak. Home values in Santa Ana and Los Angeles fell by 36.9 percent and 37.5 percent, respectively, from their peaks in 2006 to their troughs in 2012. The average annual growth rate of home values from 1985 to 2012 was 7.2 percent, 8.2 percent, 6.8 percent, and 7 percent for San Francisco, San Jose, Santa Ana and Los Angeles, respectively.

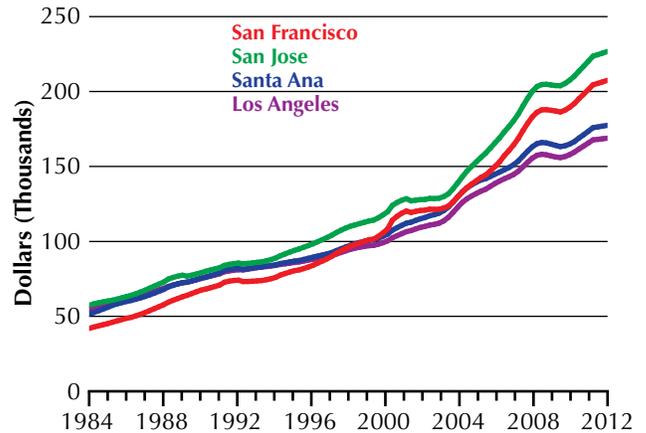
Construction costs of homes in Texas and California showed no rapid increases or decreases (Figures 3 and 4). Structure costs for Dallas, Houston, Fort Worth and San Antonio rose slowly from 1984 to 2004 (Figure 3). This slow upward trend

**Figure 3. Texas Structure Costs of Average Single-Family Detached Home**



Sources: Lincoln Institute of Land Policy and Real Estate Center at Texas A&M University

**Figure 4. California Structure Costs of Average Single-Family Detached Home**

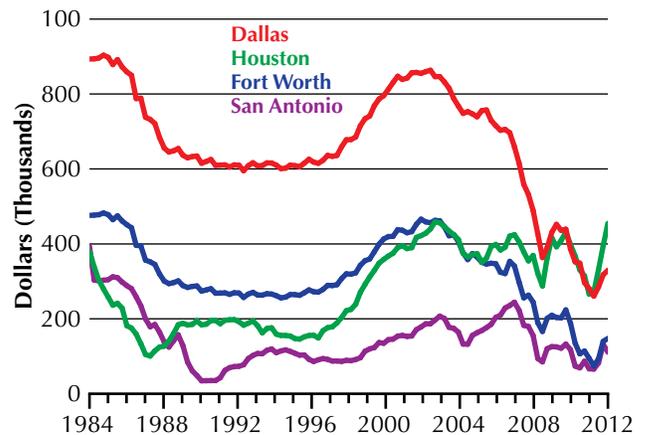


Sources: Lincoln Institute of Land Policy and Real Estate Center at Texas A&M University

became steeper from 2004 to 2008, and even continued during the Great Recession of 2008–11. Structure costs in San Francisco, San Jose, Santa Ana, and Los Angeles displayed similar trends, which is not surprising given the free movements of labor, capital and construction technologies among states.

Economists Morris A. Davis and Michael G. Palumbo of the Lincoln Institute deducted construction costs from home values to determine land values for the average single-family detached home in 46 large U.S. metros. After the Texas oil price collapse and real estate market dive in Texas in 1984–85, values of the land component of home prices in Dallas, Houston, Fort Worth, and San Antonio dropped until reaching a trough in 1992 (Figure 5). Those values remained near the trough until 1996.

**Figure 5. Texas Land Values of Average Single-Family Detached Home**



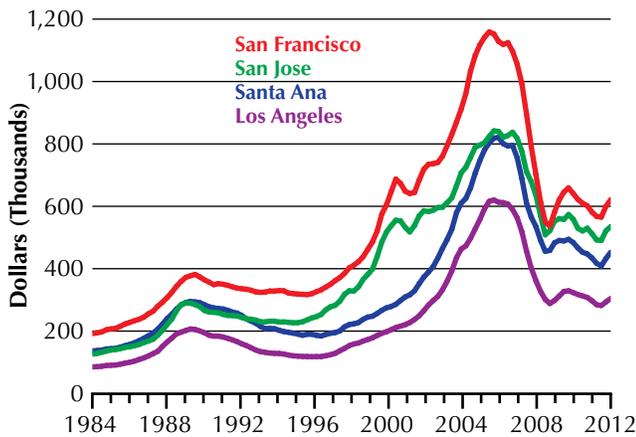
Sources: Lincoln Institute of Land Policy and Real Estate Center at Texas A&M University

Beginning in 1997, land values took an upward trend that peaked in 2003. The following year, Dallas area land values started downward and, together with Houston, Fort Worth and San Antonio, reached their troughs during the Great Recession of 2008–11.

The decrease in the land value component of Texas home prices occurred despite growing demand for housing units fueled by a growing population as well as more credit availability. From 2000 to 2010, the number of housing units in Texas rose 22.3 percent compared with 12 percent for California. The supply side of the Texas housing market succeeded in meeting the growing demand for homes while retaining affordable prices by developing and supplying more low-cost land for housing developments.

This housing supply-side flexibility was absent in California. Increases and decreases in land values for San Francisco, San Jose, Santa Ana and Los Angeles mirrored home values in these metro areas during the study period (Figures 2 and 6). Land values in the four metro areas showed a slow upward trend from 1984 to 2000. Thereafter, rapid rises and falls generated land value bubbles. What was described as a home price bubble was instead a land value bubble (Figures 2 and 6).

**Figure 6. California Land Values of Average Single-Family Detached Home**



Sources: Lincoln Institute of Land Policy and Real Estate Center at Texas A&M University

## Blame Land Supply Constraints

The availability of cheap credit has been blamed for the home price bubble of the late 2000s in U.S. regional residential real estate markets. But cheap credit was as widely available in Texas as in California.

This analysis shows that Texas avoided a home price bubble thanks to the flexibility of the supply side of the state's housing market. Home price bubbles occurred in areas where the housing supply was not flexible enough to respond to growing demand for homes fueled by more credit availability.

## Inflation-Adjusted Home Values

Inflation-adjusted home values in San Francisco and Los Angeles in 2012 were close to their respective 1989 values (Figure 7). Inflation-adjusted home values in Dallas and Houston in 2012 were close to their respective values in 1990. So nothing has changed in real terms in Texas or California. But homeowners can have peace of mind knowing that along with offering shelter, their homes are good hedges against inflation. ♣

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### THE TAKEAWAY

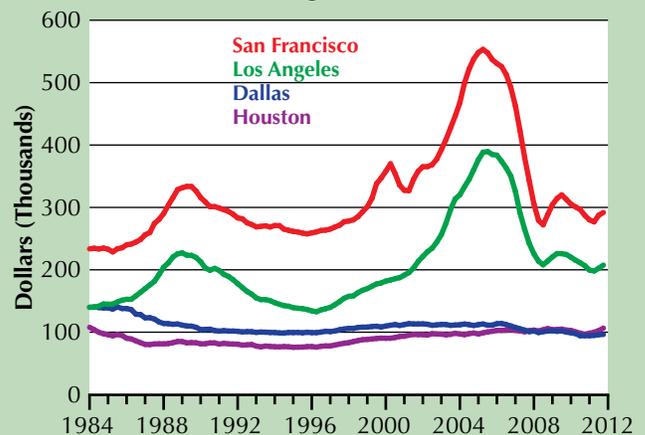
The "housing price bubble" in the past decade was in fact a "land price bubble" according to Center research. As the land component of housing prices soared elsewhere, Texas had plenty of relatively low-cost land combined with efficient statewide land acquisition and development processes. As a result, Texas avoided the devastating effects when the bubble burst.

## Data and Methodology

This research project used quarterly data from fourth quarter 1984 to third quarter 2012 on housing values, construction costs, and land values from the Lincoln Institute of Land Policy for four major metropolitan areas in Texas (Dallas, Houston, Fort Worth, San Antonio) and California (San Francisco, San Jose, Santa Ana, Los Angeles). The local housing markets for California were elected for comparison with Texas local housing markets because those major metro areas experienced the most dramatic home price bubbles.

This analysis was conducted by analyzing home values, construction costs and land values in current dollars, not adjusted for inflation. Consumer price indexes (CPI) are compiled by the U.S. Bureau of Labor Statistics for Dallas, Houston, San Francisco and Los Angeles. Dividing home values for Dallas, Houston, San Francisco and Los Angeles by the CPIs for the areas produces the inflation-adjusted home values (Figure 7).

**Figure 7. Inflation-Adjusted Home Values San Francisco, Los Angeles, Dallas and Houston**



Sources: Lincoln Institute of Land Policy and Real Estate Center at Texas A&M University



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The Real Estate Center at Texas A&M University is the nation's largest publicly funded organization devoted to real estate research. The Center was created by the Texas Legislature in 1971 to conduct research on real estate topics to meet the needs of the real estate industry, instructors and the public.

Most of the Center's funding comes from real estate license fees paid by more than 135,000 professionals. A nine-member advisory committee appointed by the governor provides research guidance and approves the budget and plan of work.

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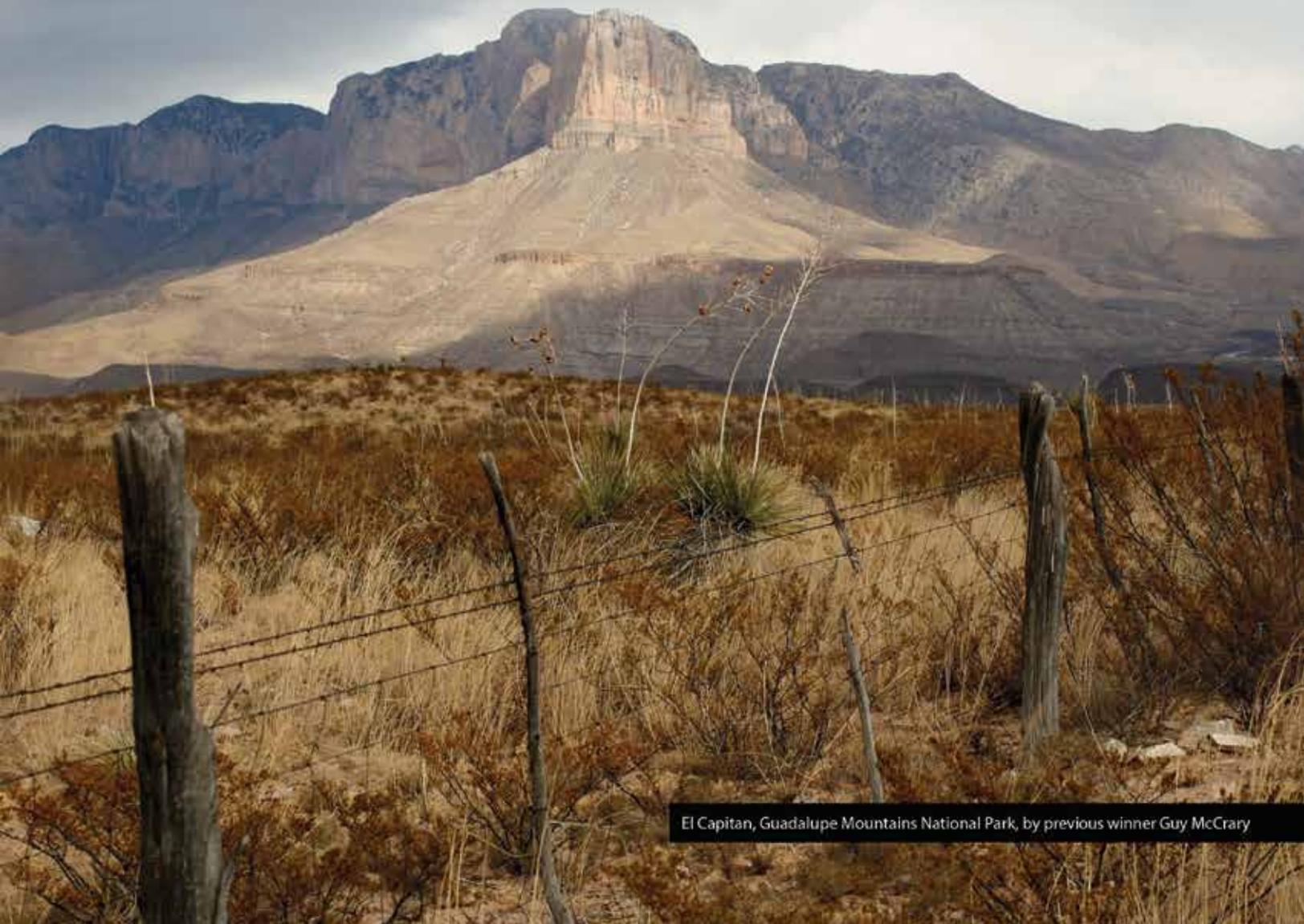
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