

A Reprint from *Tierra Grande*

Housing Market Mirrors Population Growth



By M.A. Anari

Texas is big and getting bigger. The state's population grew by 3.9 million residents from 1990 to 2000, ranking eighth nationally in population growth (Table 1). Between 1987 and 2003, the state's per capita income more than doubled, from \$14,479 to \$29,372.

A growing population coupled with growing income means increasing demand for new housing units. Fortunately for Texans, the state's building industry has been able to meet the growing demand for housing units at affordable prices. The number of housing units (all types) in Texas increased 23.5 percent from 1990 to 2003 to stay on pace with the 30.2 percent increase in the Texas population during that period (Table 2).

Builders Come Through

The building industry's ability to meet the growing demand for housing units resulted in Texas housing units that were on average about 30 percent less expensive than the national average. The median value of owner-occupied housing units in Texas in 2003 was \$99,139 compared with the nationwide average of \$147,275.

Future Texas population growth is expected to significantly impact demand for residential housing units. To investigate the relationships between the state's population growth and housing demand, the Real Estate Center conducted an econometric study of the relationship between population and housing stock using the latest data from the U.S. Bureau of the Census and projections based on Texas State Data Center (TSDC) scenarios (see *Projecting Texas Population Growth*).

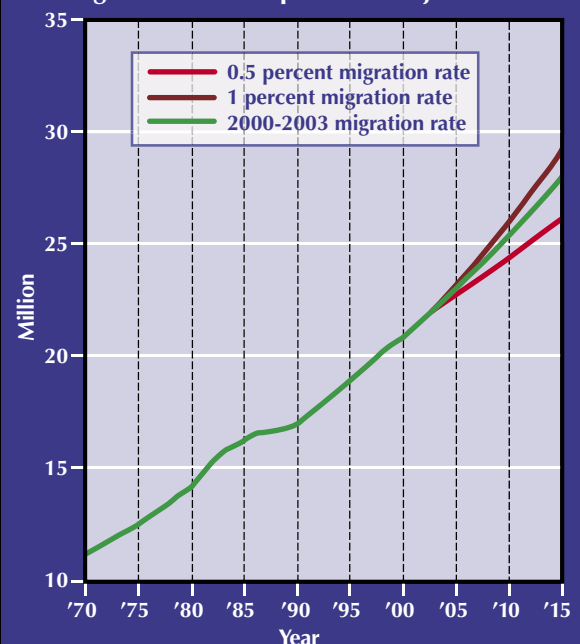
The research project considered three scenarios: the one-half 1990–2000 migration rate (0.5 percent per year) and the 1990–2000 migration rate (1.0 percent per year) scenarios

Table 1. States Ranked by Population Growth, 1990–2000

Rank	State	Population		Change	Percent Change
		1990	2000		
1	Nevada	1,201,675	1,998,257	796,582	66.3
2	Arizona	3,665,339	5,130,632	1,465,293	40.0
3	Colorado	3,294,473	4,301,261	1,006,788	30.6
4	Utah	1,722,850	2,233,169	510,319	29.6
5	Idaho	1,006,734	1,293,953	287,219	28.5
6	Georgia	6,478,149	8,186,453	1,708,304	26.4
7	Florida	12,938,071	15,982,378	3,044,307	23.5
8	Texas	16,986,335	20,851,820	3,865,485	22.8
9	North Carolina	6,632,448	8,049,313	1,416,865	21.4
10	Washington	4,866,669	5,894,121	1,027,452	21.1

Source: U.S. Bureau of the Census

Figure 1. Texas Population Projections



Source: Texas State Data Center and Real Estate Center at Texas A&M University

Table 2. Population and Housing Data for Texas and U.S., 1990–2003

	Texas			United States		
	1990	2003	Percent Change	1990	2003	Percent Change
Population	16,986,510	22,118,509	30.2	248,709,873	290,809,777	16.9
Housing Units	7,008,999	8,658,290	23.5	102,263,678	120,879,390	18.2

Source: U.S. Bureau of the Census

Table 3. Projected Average Annual Demand for New Residential Housing Units, 2005 to 2010

Region	0.5 migration			1.0 migration			2000–2003 Growth Rate		
	Single-family	Multifamily	Total	Single-family	Multifamily	Total	Single-family	Multifamily	Total
Texas	90,356	44,858	135,214	158,757	78,817	237,574	131,664	65,366	197,030
Austin	7,323	4,900	12,223	15,327	10,257	25,584	13,640	9,128	22,768
Dallas	18,591	11,146	29,737	31,360	18,801	50,161	29,213	17,514	46,727
Houston	18,670	11,378	30,048	30,547	18,616	49,163	30,128	18,361	48,488

Source: Real Estate Center at Texas A&M University

projected by the TSDC and the 2000–2003 Texas population growth rate (Figure 1). Based on similar sets of assumptions, population projections for Austin, Dallas and Houston metropolitan areas prepared by the TSDC were used to model the relationship between housing stock and population in the three metro areas.

The estimated models were used to forecast demand for new residential units for the period 2005–2015 using population projections. The Texas model simulations suggest that the average annual demand for new single-family housing units in Texas from 2005 to 2015 will exceed 90,000 units. Average annual demand for multifamily units (including manufactured homes) during this period is expected to exceed 44,800 using the 0.5 scenario migration rate.

How Will the State Grow?

If the state’s population continues to grow at the rate that prevailed from 2000–2003, average annual demand for single-family and multifamily units is expected to exceed 131,000 and 65,000 units, respectively, from 2005–2015. Texas population projections based on a 1.0 scenario migration rate indicate that the demand for single family and multifamily units is expected to exceed 158,000 and 78,000, respectively (Table 3).

Simulation of Austin’s housing market suggests that average annual demand for residential housing units would exceed 12,000 units in the case of the 0.5 scenario migration rate. That number is expected to double if the metro area experiences a migration rate following the 1.0 scenario. If the area continues its 2000–2003 population growth rate, the average annual demand for new housing units is expected to exceed 22,000 (Table 3).

Depending on the various population growth rate scenarios, average annual demand for single-family housing units in Dallas from 2005 to 2015 is expected to range from 18,000 to 31,000 units. Demand for multifamily units is projected to be between 11,000 and 19,000 units. Similar ranges are expected for average annual demand for housing units in the Houston metro areas (Table 3).

There is a caveat. Projected demand for housing units is based on the assumption that mortgage interest rates will

remain at 2004 levels (that is, 6 percent). Higher mortgage interest rates would dampen demand for housing units and decrease estimated projections. For more about the impact of interest rates on demand for new homes, see “What Goes Down Must Come Up: How Fed Funds Rate Affects Housing Market,” <http://recenter.tamu.edu/pdf/1705.pdf>. ➔

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Projecting Texas Population Growth

The Texas State Data Center’s (TSDC; <http://txsdc.tamu.edu>) State Population Estimates and Projections Program prepares population projections for the state and for its metropolitan areas and counties. Given uncertainties in net migration (immigration minus outmigration), the TSDC has created four scenarios for estimating population projections.

Scenario	Projected Texas Population in 2015
Zero migration (0.0)	23.6 million
One-half 1990–2000 (0.5) migration	26.2 million
1990–2000 migration (1.0)	29.2 million
2000–2002 population growth	28.0 million

According to the TSDC, the 1990s is seen as the high growth alternative because the decade’s pattern of rapid, substantial growth is unlikely to be sustained over time. The center offers scenario four to accommodate users who believe that the 2000–2002 period has produced fundamental long-term changes in population patterns.

The latest estimate of Texas’ population shows an increase to 22.1 million in 2003, close to the 22.8 million projected for 2010 based on a zero percent migration rate (the first scenario). Thus it is more likely that the growth rate of the state’s population will be similar to either 0.5 or 1.0 migration rate scenario.



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