

# The Knox County HOUSING MARKET

Date:  
August 2007

For more information:  
MPC Contact Person:  
Bryan Berry  
215-2500

MPC Website and e-mail  
[www.knoxmpc.org](http://www.knoxmpc.org)  
[contact@knoxmpc.org](mailto:contact@knoxmpc.org)



## INTRODUCTION

In early 2000, mortgage rates fell dramatically as the Federal Reserve lowered borrowing costs to fend off a recession. This allowed more people to become first time homeowners, and it encouraged a rise in the second home market. The increased buying activity caused home prices in many major markets to climb greatly, fueling the *housing bubble* that now threatens many places nationwide.

This report looks at Knox County's housing market in light of national, state, and local trends by examining existing inventories, development activity, home prices, appreciation rates, affordability, and other market indicators. Four additional Tennessee counties are included for comparative analysis: Shelby and Davidson (largest populations) and Rutherford and Williamson (fastest population growth).

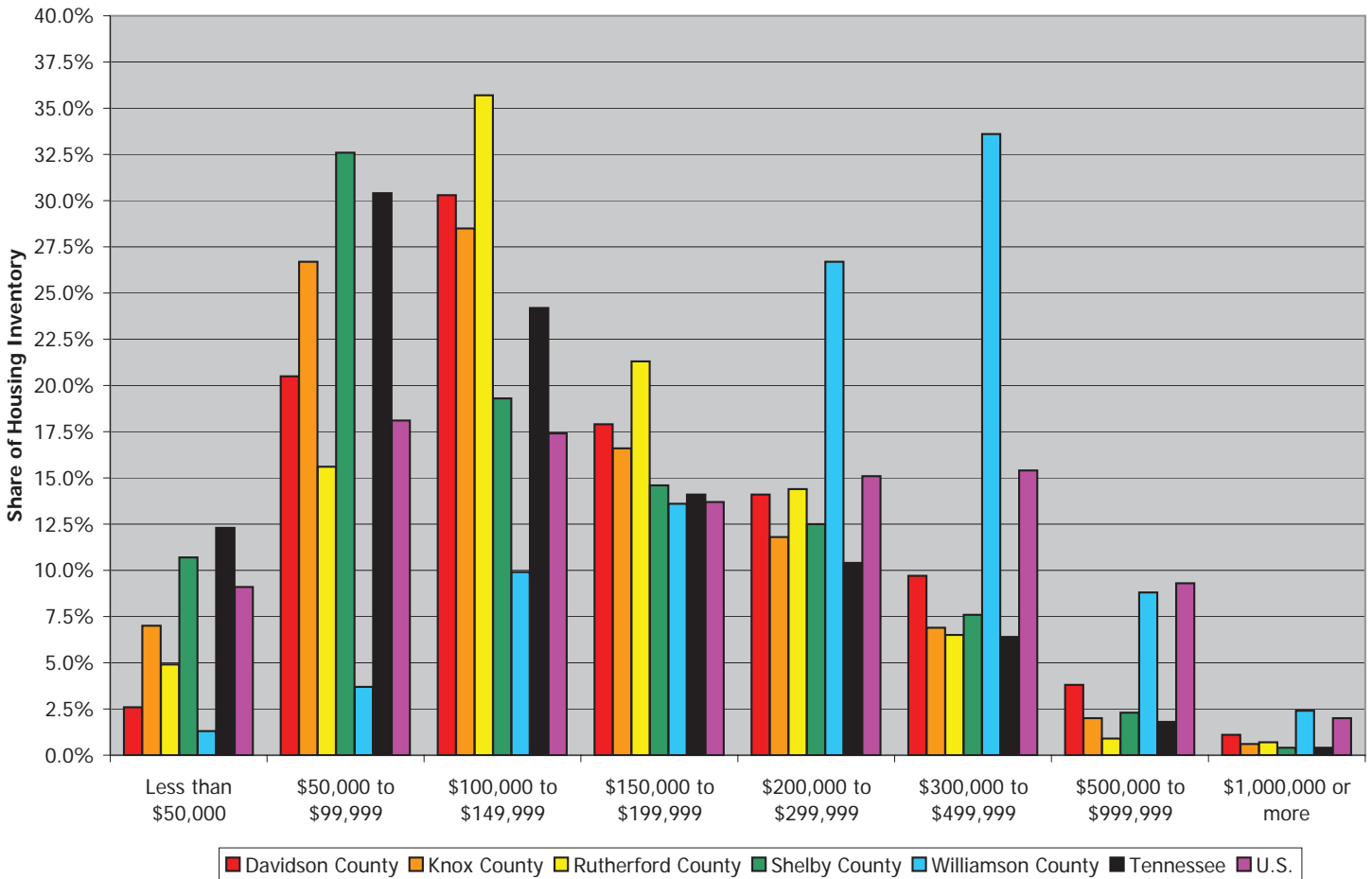


## CURRENT CONDITIONS

Knox County home values remained competitive and affordable compared to county, state, and national markets in 2005. Approximately 79 percent of the housing stock in Knox County is priced under \$200,000, a high share compared to other Tennessee counties and far greater than the 58 percent recorded nationally.

Among individual price categories, the largest share of housing was held in the \$100,000 to \$149,000 segment: Knox-29 percent, Davidson-30 percent, and Rutherford-36 percent.

Figure 1. EXISTING HOME VALUES, 2005



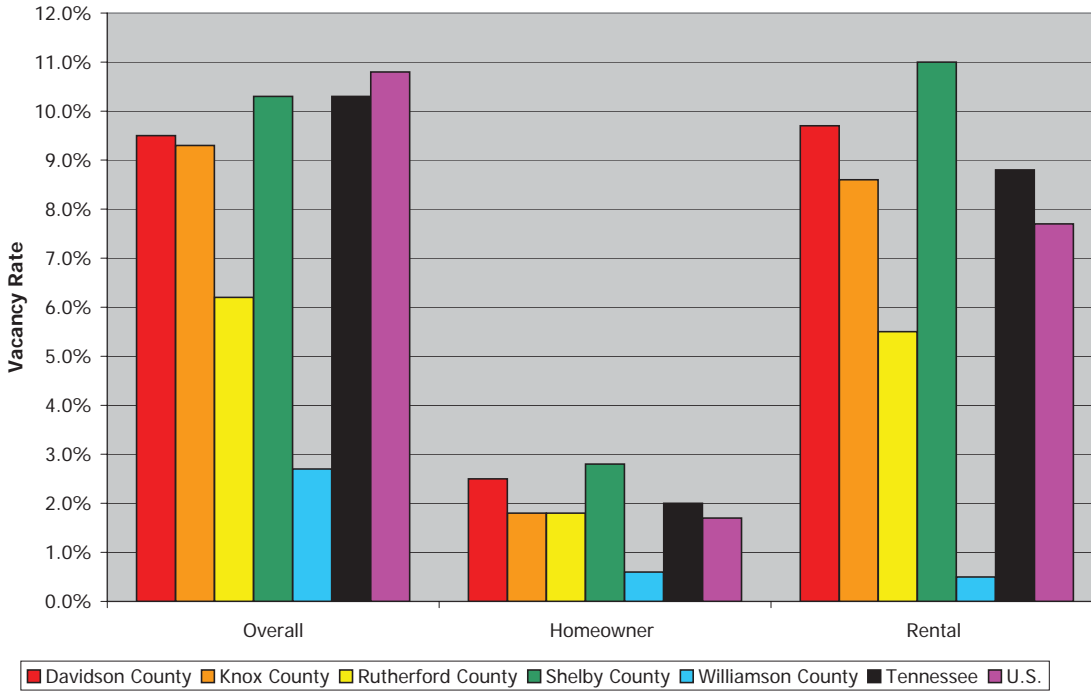
Eleven percent of all housing stock in Knox County was constructed between 2000 and 2006, compared to 10 percent for the state and eight percent for the nation. Rutherford and Williamson led all counties with 22 and 19 percent shares, respectively of post-2000 construction. Highest growth in home construction in Knox County occurred between 1990 and 2000, with a 19 percent share of the total inventory. Growth so far this decade is on pace to match the 1990s trend.

Table 1. HOUSING BY YEAR BUILT

Year Built	Knox County	Davidson County	Rutherford County	Shelby County	Williamson County	Tennessee	U.S.
2005 or Later	0.9%	0.6%	1.9%	0.3%	1.3%	0.5%	0.5%
2000 to 2004	9.7%	6.8%	20.2%	8.0%	17.2%	9.2%	7.9%
1990 to 1999	19.0%	13.2%	29.6%	14.5%	34.7%	20.2%	14.7%
1980 to 1989	13.9%	18.6%	18.3%	15.5%	16.7%	16.0%	14.9%
1970 to 1979	18.2%	20.3%	12.6%	17.4%	17.5%	18.0%	17.3%
1960 to 1969	13.2%	15.5%	7.5%	15.0%	5.9%	12.9%	12.0%
1950 to 1959	10.0%	13.5%	5.1%	14.5%	2.4%	9.9%	11.8%
1940 to 1949	6.5%	5.0%	1.3%	6.7%	1.3%	5.9%	6.3%
1939 or Earlier	8.6%	6.5%	3.6%	8.1%	3.0%	7.4%	14.7%

Source: U.S. Census Bureau, American Community Survey, 2005.

**Figure 2. HOUSING OCCUPANCY, 2005**

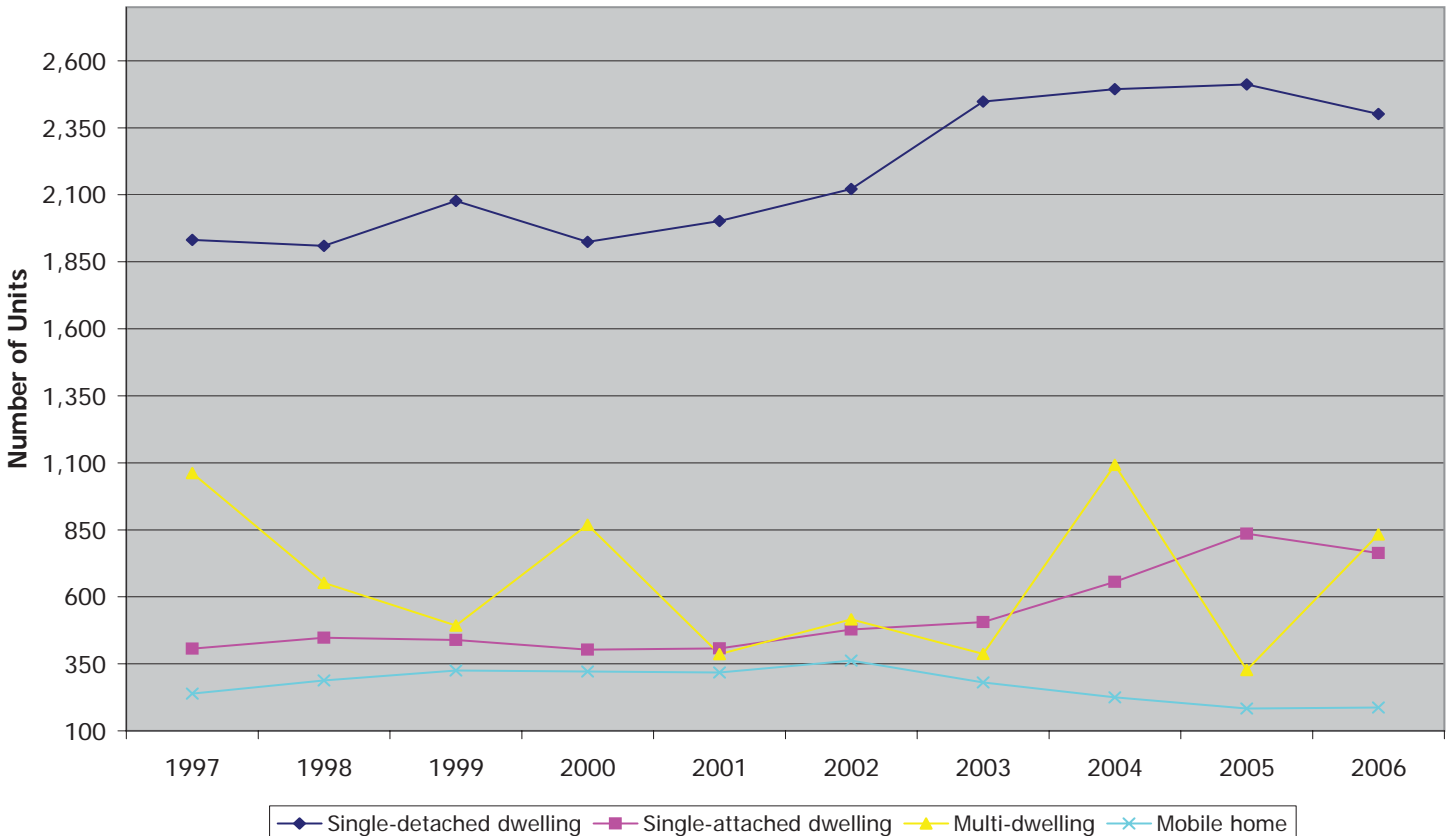


In vacancy news, 9.3 percent of all housing units sat empty in Knox County in 2005, compared to 10.3 percent statewide and 10.8 percent nationwide. Rutherford and Knox tied with a homeowner vacancy rate of 1.8 percent, while Williamson registered a tight 0.6 percent. Rental units in Knox County also performed strongly for a college city at 8.6 percent vacant.

**RESIDENTIAL DEVELOPMENT ACTIVITY**

Knox County added 36,512 residential units in the past 10 years (1997 to 2006) with the greatest amount of investment in single-detached dwellings (21,823 units) and multi-dwellings (6,617 units). Single-detached dwellings had a 2.7 percent average annual increase, while multi-dwellings (apartments), although erratic, increased an average of 26 percent each year. Single-attached dwellings (condos/townhouses) averaged 534 units per year, an annual increase of 8.0 percent, while mobile home development recorded a 10-year average of 273 units per year.

**Figure 3. KNOX COUNTY RESIDENTIAL DEVELOPMENT, 1997-2006**  
(Annual Unit Additions by Type)





Since 2000, the fastest growing counties in Tennessee (Rutherford and Williamson) experienced tremendous growth in housing stock with 35.1 percent and 21.8 percent increases respectively. Not quite at this level, Knox County registered a 12.6 percent gain in housing supply, outperforming state and national gains of 9.8 percent. In 2006, Knox County had 192,979 residential units, comprising 7.2 percent of all housing stock in Tennessee.

**Table 2. HOUSING UNITS, 2000-2006**

	2000	2001	2002	2003	2004	2005	2006	Increase 2000-06
<b>Knox County</b>	<b>171,396</b>	<b>174,401</b>	<b>177,757</b>	<b>181,245</b>	<b>185,227</b>	<b>188,917</b>	<b>192,979</b>	<b>12.6%</b>
Davidson County	252,977	256,529	259,994	264,307	269,115	274,135	279,263	10.4%
Rutherford County	70,616	74,043	77,161	80,711	86,301	91,312	95,390	35.1%
Shelby County	362,954	367,714	373,050	378,560	384,086	389,802	394,920	8.8%
Williamson County	47,005	48,352	49,912	51,683	53,630	55,571	57,260	21.8%
Tennessee	2,439,443	2,471,813	2,506,086	2,543,616	2,586,897	2,633,512	2,679,515	9.8%
U.S.	115,904,641	117,541,317	119,288,995	121,178,209	123,230,270	125,385,586	127,224,489	9.8%

Sources: U.S. Census Bureau, Census 2000 Sample Data File and Building Permits 2001-2006.  
Knoxville/Knox County Metropolitan Planning Commission, Development Activity Reports 2001-2006.

Residential construction permit values in Knox County averaged a 2.8 percent increase annually since 2000 for a seven-year average of \$106,044 per permit, while the state and national levels experienced 5.9 and 5.2 percent annual gains respectively. In 2006, an average residential construction permit cost \$106,992 in Knox County. This was 27 percent less than the average residential permit of \$135,621 in Rutherford County.

**Table 3. AVERAGE RESIDENTIAL PERMIT VALUES, 2000-2006**

	2000	2001	2002	2003	2004	2005	2006	7-Year Average	Average Annual Increase
<b>Knox County</b>	<b>\$92,374</b>	<b>\$100,193</b>	<b>\$107,364</b>	<b>\$117,806</b>	<b>\$104,237</b>	<b>\$113,339</b>	<b>\$106,992</b>	<b>\$106,044</b>	<b>2.8%</b>
Davidson County	\$151,965	\$157,319	\$151,430	\$138,162	\$146,823	\$146,576	\$165,004	\$151,040	1.6%
Rutherford County	\$71,266	\$83,099	\$98,705	\$103,982	\$101,471	\$120,195	\$135,621	\$102,048	11.6%
Shelby County	\$117,559	\$131,048	\$138,441	\$136,833	\$179,179	\$190,496	\$198,826	\$156,055	9.6%
Williamson County	\$238,197	\$227,471	\$212,097	\$234,180	\$268,810	\$336,572	\$323,443	\$262,967	5.9%
Tennessee	\$104,886	\$109,366	\$115,578	\$119,338	\$131,749	\$141,609	\$147,417	\$124,278	5.9%
U.S.	\$116,654	\$119,903	\$125,417	\$132,167	\$141,380	\$152,764	\$158,417	\$135,243	5.2%

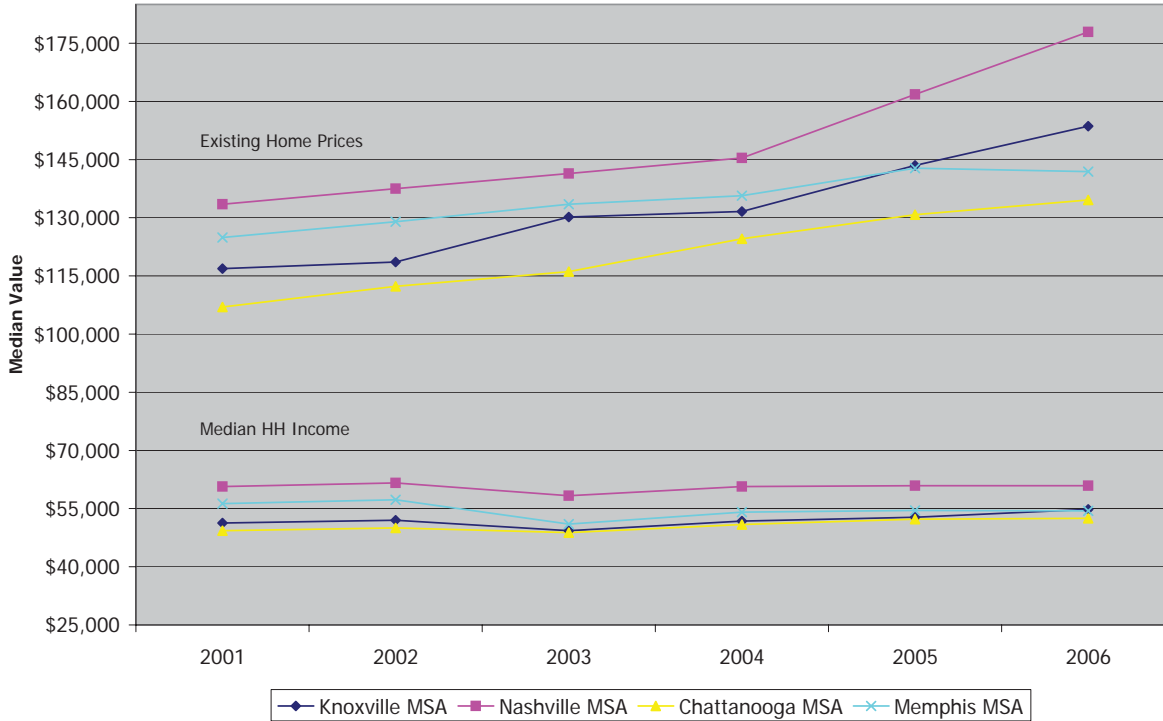
Note: Numbers are based on all residential building permit types.

Sources: U.S. Census Bureau, Building Permits 2000-2006.  
Knoxville/Knox County Metropolitan Planning Commission, Development Activity Reports 2000-2006.

## HOME PRICES

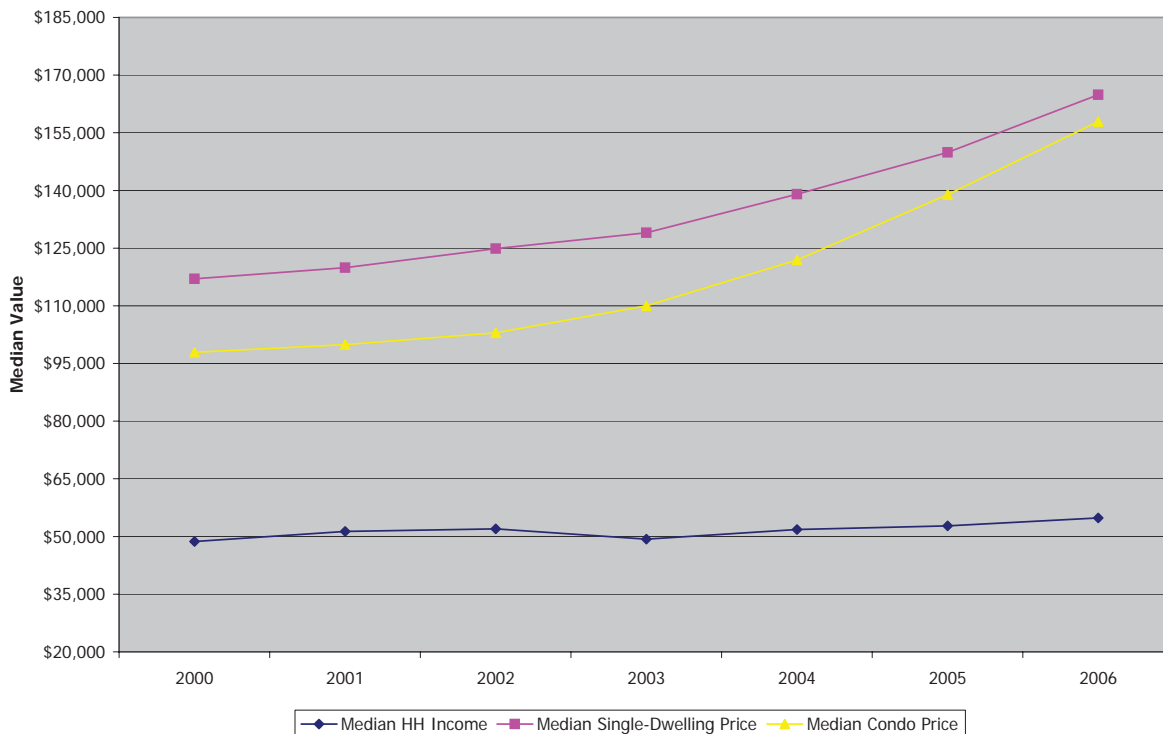
Home prices across the country have climbed in most major markets over the past few years. A closer look at the four major metropolitan statistical areas in Tennessee revealed existing home prices in Nashville grew 33 percent from 2001 to 2006 or an average of 6.0 percent each year. Knoxville ranked second in the state with a 31 percent increase or 5.7 percent growth per year.

**Figure 4. EXISTING HOME PRICES AND MEDIAN HOUSEHOLD INCOME IN TENNESSEE METRO AREAS**



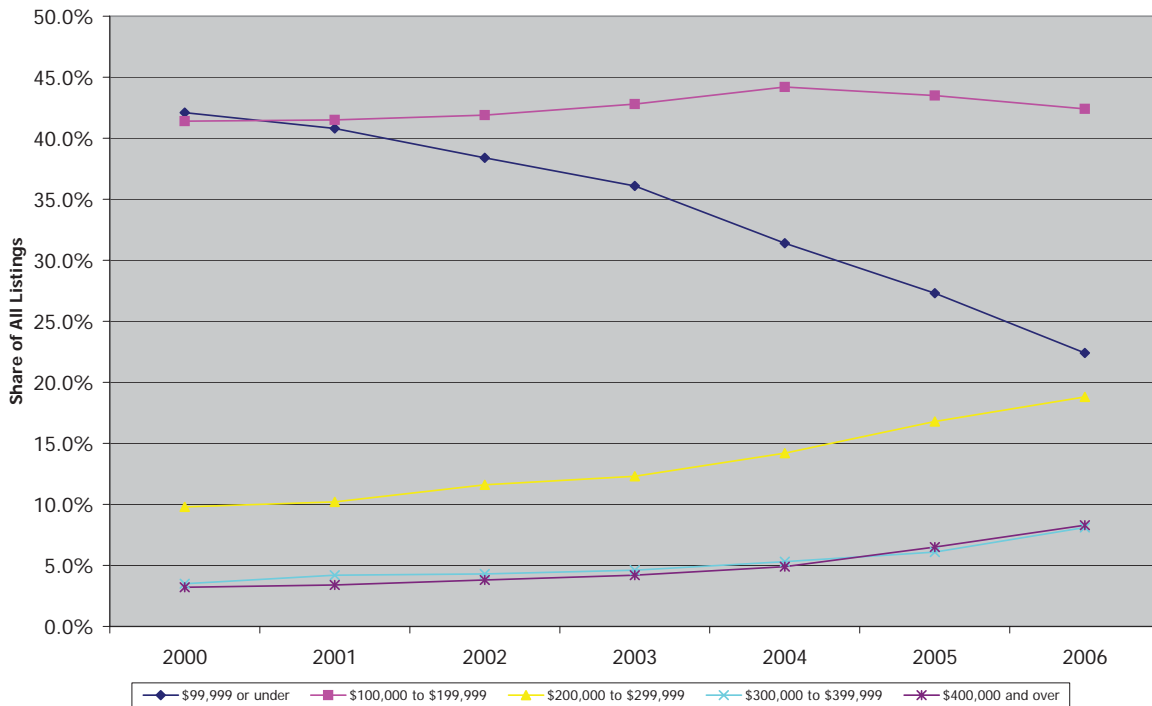
Median household incomes did not increase as quickly as home values over the past seven years. The highest average annual increase was measured in Knoxville at 1.4 percent, while Chattanooga was close behind with 1.3 percent growth.

**Figure 5. KNOXVILLE MULTIPLE LISTING SERVICES (MLS) MEDIAN HOUSING PRICES AND HOUSEHOLD INCOME**



According to Knoxville Multiple Listing Services (MLS), median household income hovered around the \$50,000 mark with a seven-year average of \$51,521. Median prices for existing housing climbed greatly during the same seven year span, as single-dwelling prices increased 41 percent and condominiums up 61 percent. Single-dwelling values increased at an average yearly rate of 5.9 percent, while condominium prices grew an average of 8.4 percent per year.

**Figure 6. KNOXVILLE MULTIPLE LISTING SERVICES (MLS) REAL ESTATE LISTINGS: SHARES OF LISTINGS BY PRICE**



In 2000, the share of all residential real estate valued at \$200,000 or greater listed in the Knoxville MLS was 16.5 percent. That share grew to 35.2 percent by 2006. Homes valued under \$99,999 showed the greatest declining shares, down from 42 percent of all listings in 2000, to just 22 percent in 2006.

According to the National Association of Realtors, housing prices in the Knoxville MSA historically appreciate at an average annual rate of 4.3 percent. Nationwide, annual increases average 5.0 percent. In 2005, Knoxville area home values appreciated 9.0 percent. Even at that lofty rate, Knox measures were 3.0 percentage points lower than national numbers in 2005. The greatest three-year appreciation rate among all southeast metro areas was found in Knoxville, at 21 percent.

As home prices continue to grow in the Knoxville market, are prices still affordable for buyers? Experts typically agree the total amount paid toward a home mortgage should not exceed 28 percent of gross household income. In 2005, the national ratio of mortgage debt to income was 22 percent, while in the southeast, Knoxville tied Nashville for having the third lowest ratio at 13.3 percent. Historically, Knoxville's mortgage debt to income ratio is 18 percent, ranking fourth in housing affordability among southeastern metropolitan areas.

**Table 4. HOUSING APPRECIATION RATES IN SOUTHEASTERN METRO AREAS**

	1-Year (2005)	3-Year (2003-05)	Historic Annual Average
<b>Knoxville, TN</b>	<b>9.0%</b>	<b>21.0%</b>	<b>4.3%</b>
Atlanta, GA	6.5%	14.1%	5.1%
Birmingham, AL	7.4%	14.3%	4.2%
Charlotte, NC	2.2%	15.2%	4.4%
Chattanooga, TN	5.0%	16.5%	4.6%
Greenville, SC	6.4%	8.7%	4.0%
Lexington, KY	6.0%	15.6%	4.3%
Memphis, TN	5.3%	10.8%	4.1%
Nashville, TN	11.2%	17.7%	4.6%
Raleigh-Cary, NC	12.0%	18.9%	4.9%
U.S. Average	12.0%	31.0%	5.0%

Note: Historic Annual Average: 1980 to 2005

Source: National Association of Realtors, *Home Price Analysis*, 2006.

**Table 5. HOUSING AFFORDABILITY IN SOUTHEASTERN METRO AREAS**

	2005 Mortgage Debt to Income	Historic Mortgage Debt to Income
<b>Knoxville, TN</b>	<b>13.3%</b>	<b>18.0%</b>
Atlanta, GA	14.0%	17.6%
Birmingham, AL	13.9%	20.1%
Charlotte, NC	14.1%	20.0%
Chattanooga, TN	12.2%	15.9%
Greenville, SC	14.5%	19.5%
Lexington, KY	12.4%	17.5%
Memphis, TN	11.7%	19.0%
Nashville, TN	13.3%	18.7%
Raleigh-Cary, NC	16.3%	20.1%
U.S. Average	22.0%	22.0%

Notes:

1. Historic Mortgage Debt to Income: 1980 to 2005.
2. Mortgage Debt to Income is the ratio of monthly mortgage payment (for a median-priced home financed at the prevailing mortgage rate) to median household income.
3. Mortgage Debt to Income ratios are first quarter 2005 figures.

Source: National Association of Realtors, *Home Price Analysis*, 2006.

## MARKET INDICATORS

One way to gauge the health of a housing market is to look at local employment figures. Since employment is a significant factor in the location and relocation of people to a particular place, and job growth creates demand for housing, the ratio of employment gain (over a 12-month period) to total number of building permits (over the same period) is a good estimate of demand.

The Employment Growth/Total Permit Ratio (EP) will equal 1.0 if demand (new employment) matches supply (new housing) each year. From 2000 to 2006 the EP ratio in Knox County recorded a seven-year average of 0.58, as housing starts seemed to outpace job creation. Factors such as second home construction and out-of-county employment overstated the gap between housing starts and job growth in some measure.

**Table 6. KNOX COUNTY HOUSING MARKET INDICATORS, 2000-2006**

	2000	2001	2002	2003	2004	2005	2006	7-Yr. Avg.
<b>Total Employment</b>	<b>196,033</b>	<b>198,949</b>	<b>202,219</b>	<b>202,999</b>	<b>204,703</b>	<b>205,883</b>	<b>211,920</b>	<b>203,244</b>
1-Year Change	-1,288	2,916	3,270	780	1,704	1,180	6,037	2,086
<b>Population</b>	<b>382,032</b>	<b>384,664</b>	<b>387,453</b>	<b>390,386</b>	<b>393,486</b>	<b>396,741</b>	<b>399,254</b>	<b>390,574</b>
<b>Total Residential Permits</b>	<b>3,425</b>	<b>3,005</b>	<b>3,356</b>	<b>3,488</b>	<b>3,982</b>	<b>3,690</b>	<b>4,062</b>	<b>3,573</b>
<b>Total Housing Units</b>	<b>171,396</b>	<b>174,401</b>	<b>177,757</b>	<b>181,245</b>	<b>185,227</b>	<b>188,917</b>	<b>192,979</b>	<b>181,703</b>
<b>Employment Growth/Total Permit Ratio</b>	<b>-0.38</b>	<b>0.97</b>	<b>0.97</b>	<b>0.22</b>	<b>0.43</b>	<b>0.32</b>	<b>1.49</b>	<b>0.58</b>
<b>Total Employment/Housing Ratio</b>	<b>1.14</b>	<b>1.14</b>	<b>1.14</b>	<b>1.12</b>	<b>1.11</b>	<b>1.09</b>	<b>1.10</b>	<b>1.12</b>
<b>Housing Growth Ratio</b>	<b>9.0</b>	<b>7.8</b>	<b>8.7</b>	<b>8.9</b>	<b>10.1</b>	<b>9.3</b>	<b>10.2</b>	<b>9.2</b>

Note: Total Residential Permits 2000-2006 are net annual numbers (new units - demolitions = net units).

Sources: Tennessee Department of Health, *Tennessee Population Projections 2000-2010*, Tennessee Department of Labor and Statistics, *Knox County Employment 2000-2006*, and Knoxville/Knox County Metropolitan Planning Commission, *Development Activity Reports 1999-2006*.

When compared to national and state levels, Knox County's housing market performed well. Williamson County led all markets with a seven-year average EP ratio of 1.09, as employment growth outpaced housing permits. Rutherford County followed with a ratio of 0.75, while Knox County trailed with its 0.58 rate. The national average was 0.85. Even though in 2004, Rutherford County was recognized by the Bureau of Labor Statistics as having the largest percentage increase in employment among large counties in the U.S., its housing starts occurred at an even faster rate.

**Table 7. HOUSING MARKET INDICATORS, 2000-2006**

	2000	2001	2002	2003	2004	2005	2006	7-Yr. Avg.
<b>EMPLOYMENT GROWTH/PERMIT RATIO</b>								
U.S.	2.14	0.03	-0.26	0.66	0.74	1.15	1.47	0.85
Tennessee	1.07	-0.86	-0.39	0.15	0.30	0.52	1.71	0.42
Davidson County	0.92	-1.58	-2.04	-0.32	0.13	0.85	1.37	0.02
<b>Knox County</b>	<b>-0.38</b>	<b>0.97</b>	<b>0.97</b>	<b>0.22</b>	<b>0.43</b>	<b>0.32</b>	<b>1.49</b>	<b>0.58</b>
Rutherford County	1.22	0.32	0.39	0.77	0.69	0.32	1.60	0.75
Shelby County	-1.01	-1.22	-1.44	-0.38	-1.10	0.24	2.09	-0.42
Williamson County	0.15	0.64	0.49	1.14	1.33	0.58	2.97	1.09
<b>TOTAL EMPLOYMENT/HOUSING RATIO</b>								
U.S.	1.18	1.16	1.14	1.14	1.13	1.13	1.14	1.15
Tennessee	1.13	1.10	1.08	1.07	1.06	1.05	1.06	1.08
Davidson County	1.19	1.15	1.11	1.09	1.07	1.07	1.07	1.11
<b>Knox County</b>	<b>1.14</b>	<b>1.14</b>	<b>1.14</b>	<b>1.12</b>	<b>1.11</b>	<b>1.09</b>	<b>1.10</b>	<b>1.12</b>
Rutherford County	1.42	1.37	1.33	1.30	1.26	1.21	1.23	1.30
Shelby County	1.17	1.14	1.10	1.08	1.05	1.04	1.05	1.09
Williamson County	1.46	1.44	1.41	1.40	1.40	1.37	1.41	1.41
<b>HOUSING GROWTH RATIO</b>								
U.S.	5.7	5.7	6.1	6.5	7.0	7.3	6.1	6.3
Tennessee	5.7	5.6	5.9	6.4	7.4	7.8	7.5	6.6
Davidson County	5.4	6.2	6.0	7.4	8.2	8.5	8.6	7.2
<b>Knox County</b>	<b>9.0</b>	<b>7.8</b>	<b>8.7</b>	<b>8.9</b>	<b>10.1</b>	<b>9.3</b>	<b>10.2</b>	<b>9.1</b>
Rutherford County	19.2	18.4	16.4	18.3	28.1	24.7	19.6	20.8
Shelby County	7.5	5.3	5.9	6.0	6.0	6.2	5.6	6.1
Williamson County	9.6	10.4	11.7	13.0	13.9	13.5	11.4	12.0

Another market indicator, the Total Employment/Housing (TH) ratio, measures the existing balance between total employment and total housing units. Over the past seven years, Knox County's ratio decreased from 1.14 in 2000 to 1.10 in 2006, revealing an increase in housing stock over employment.

TH ratios nationwide and across Tennessee revealed a trend of housing stocks growing at a faster rate than employment. Rutherford, Davidson, and Shelby Counties experienced this at higher levels than Knox County.

A third indicator of housing market health is the Housing Growth ratio (HG). The HG ratio measures total residential construction permits per 1,000 people and is an indicator of how fast a market is expanding. Rutherford and Williamson Counties had the greatest seven-year averages at 20.8 and 12.0, respectively. Knox County came in third with an average of 9.1, while the national rate was 6.3.

Note: Total Residential Permits for Knox County only are net annual numbers (new units - demolitions = net units).

Sources: U.S. Census Bureau, *Building Permits 2000-2006*, Bureau of Labor and Statistics, *Annual Employment 2000-2006*, U.S. Census Bureau, *2006 Population Estimates*, U.S. Census Bureau, *Summary File 1*.

## FINAL REMARKS

Early in 2007, national housing markets were facing mounting turmoil. New home starts dropped sharply in late 2006 and continued in the first quarter of 2007, and prices slumped in the face of declining demand. The Federal Reserve has resisted



interest rate cuts in the hopes of steering a soft landing for the sector, however, the potential for declines later in 2007 exists.

The Knox County market has also cooled as sales have slowed in 2007. It is anticipated that longstanding trends, however, will prevail. Knoxville enjoyed robust housing growth in the surge of the past few years, but that elevated activity was not as high as seen elsewhere in the country. In keeping with past trends, Knoxville should be insulated from extremes in a down turning market – a moderate drop may be expected but a market bust is not likely.