

Joint Center for Housing Studies of Harvard University



THE STATE OF THE  
**NATION'S**  
**HOUSING**

## Joint Center for Housing Studies of Harvard University

Graduate School of Design | John F. Kennedy School of Government

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# 1



## Executive Summary

After setting records for home sales, single-family starts, and house price appreciation in 2005, housing markets abruptly reversed last year. In 2006, total home sales fell 10 percent, starts tumbled 13 percent, and nominal house price appreciation slowed to just a few percentage points. Suddenly, it was inventories of unsold vacant homes that set records and homes in foreclosure that were making the news.

The length and depth of the current correction will depend on the course of employment growth and interest rates, as well as the speed with which builders pare down excess supply. But the longer-term outlook for housing is more upbeat. Thanks in large part to recent immigrants and their native-born children, household growth between 2005 and 2015 should exceed the strong 12.6 million net increase in 1995–2005 by some 2.0 million. Together with the enormous increase in household wealth over the past 20 years, healthy income growth will help propel residential spending to new heights.

But housing affordability remains a pervasive problem. In just one year, the number of households with housing cost burdens in excess of 30 percent of income climbed by 2.3 million, hitting a record 37.3 million in 2005. Making real headway against this disturbing trend requires an unlikely combination of structural and public policy shifts—that state and local governments ease development regulations that drive up production costs, the federal government adds meaningfully to already significant expenditures aimed at relieving heavy housing cost burdens, and economic growth dramatically lifts the real incomes and wealth of the bottom quarter of households.

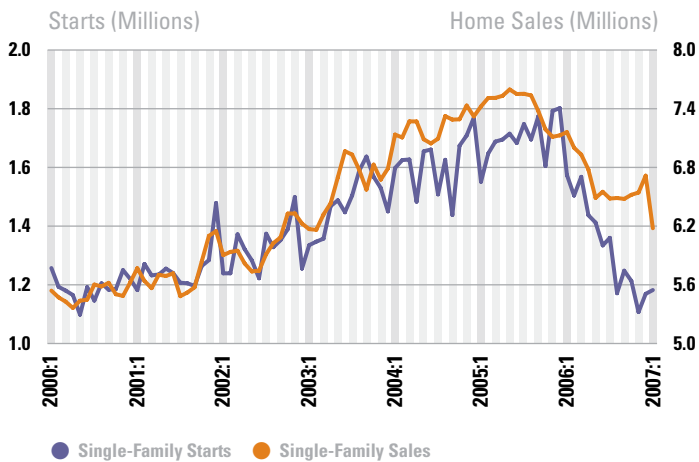
### THE CORRECTION TAKES HOLD

Although single-family starts and sales both peaked in 2005, it was not until early 2006 that year-over-year declines began to accelerate (**Figure 1**). From there, conditions eroded quickly as the air went out of the inflated demand in the for-sale market.

When housing was at its hottest, demand had been pulled forward first by falling interest rates and then by unprecedented house price appreciation. Homebuyers snapped up the limited supply of homes to get in on the rising prices and avoid having to pay more later. Investors also entered the market, intending to resell quickly. Home builders attempted to meet the surge in demand, but the long lag

## FIGURE 1 Despite the Drop in Starts and Sales...

Seasonally Adjusted Annual Rate

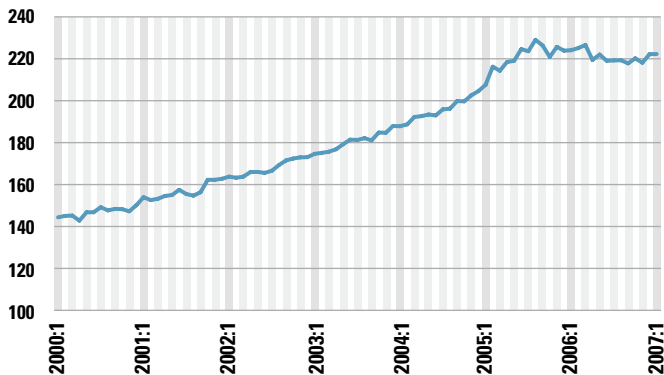


Note: Sales include new and existing homes.

Source: US Census Bureau and the National Association of Realtors®

## ...House Prices Have Yet to Fully Correct

Median House Price (Thousands of dollars)



Notes: Data are seasonally adjusted. Median house prices are nominal prices of existing single-family homes.

Source: National Association of Realtors®

between predevelopment work and housing completions led to bidding wars that drove prices up further. Meanwhile, mortgage lenders looking to increase market share supplied loans to borrowers with tarnished credit records and offered “affordability” products with lower initial payments to buyers anxious to get into the market. With this increase in credit availability, prices kept climbing.

The turning point came in late 2005 when the combined impact of rising mortgage interest rates and higher house prices finally forced out some buyers. Making matters worse, a growing number of foreclosed homes were returning to the market. With home sales softening and house price appreciation slowing, the urgency to buy evaporated and investors began their exit. Although builders pulled back hard on production, the retrenchment came too late.

The correction intensified in the second half of 2006 and spread to numerous metropolitan markets. On a year-over-year basis, 277 metros registered declines in housing permits in the fourth quarter, up from 178 in the first. At the same time, 74 of the 148 metros evaluated by the National Association of Realtors® posted a fourth-quarter over fourth-quarter drop in nominal median home prices.

## THE INVENTORY OVERHANG

Now that the downturn is in full swing, the question of its depth and duration hangs over the market. Much depends on what happens with the economy, interest rates, and credit availability. But it also depends importantly on just how much demand was inflated during the housing market run-up and how fast builders can work off the oversupply of homes.

The clearest indicator of how much excess inventory exists is the 500,000-plus jump in vacant homes for sale between the end of 2005 and the end of 2006. This figure may, however, understate the full overhang because some units classified as vacant, such as some seasonal or occasional use homes, may be brought back onto the market when conditions improve.

But assuming the half-million figure is a reasonable estimate, demand for new homes was about 250,000 units below the 2.1–2.2 million added in both 2004 and 2005. This suggests that sustainable annual demand was about 1.9 million homes over this period. Since housing starts and manufactured home placements were still at about that level last year, there was no progress toward cutting excess inventories. Starts and placements combined would thus have to fall to 1.65 million for at least two years to work off such an oversupply. If the excess is closer to 800,000 units, placements and starts would have to hold near 1.5 million per year. In the most pessimistic view, the overhang may exceed 1.0 million units, meaning some rental vacancies may need to be worked off as well.

In reality, of course, things do not work out this neatly. Builders may overshoot the mark on the downside or pull back too slowly. Demand may strengthen if interest rates decline or job growth picks up, but it could also soften further if credit is constrained or the economy falters. On a local level, some markets will correct more quickly than others based on builder behavior and general economic conditions.

## SOFTENING HOUSE PRICES

With the national nominal median house price still up for the year, housing wealth effects—the tendency of owners to spend more when home prices are rising, and to borrow more against their equity to support that spending—remained a plus for the economy in 2006. Indeed, the amount of home equity cashed out set a record even though the volume of refinances dropped off sharply. The potential impact of the housing slowdown on consumer and remodeling spending has therefore yet to hit.

Home prices are likely to soften further. Home sales and starts usually head down before prices. Declining sales, and the inventory

overhang left in their wake, increase the length of time homes are on the market as well as buyers' resistance to higher prices. Eventually motivated sellers—like home builders and investors with unoccupied homes for sale—reduce their prices. This process takes time and only began late in 2006 and only in some places.

Overbuilding, job losses, and rapid appreciation can all contribute to house price declines. Of these, major employment cuts and large excess supplies are the far greater threats. Indeed, rapid price appreciation by itself seldom leads to corrections. In the 75 largest metropolitan areas, there were 30 instances of severe overheating (at least 15-percent nominal price appreciation per year for three consecutive years) between 1980 and 2000. In the 12 cases where overheating alone occurred, only four metros saw a nominal price decline and only one saw a drop of more than five percent. In the other 18 instances where overbuilding and/or net employment loss accompanied the overheating, some 13 metros experienced nominal price declines and 12 saw a drop of more than five percent.

### MORTGAGE LOAN RISKS

Subprime lending took off after 2003, just about the same time that house price appreciation accelerated. Indeed, if borrowers with these higher-priced loans got into trouble, their rapidly rising home values enabled most to sell at a profit or refinance to avoid default.

Like subprime loans, mortgages with interest-only and payment-option features—sometimes called “affordability products”—have gone from relative obscurity to large shares of the market. Available at both prime and subprime rates, interest-only loans allow borrowers to defer principal payments for a set period, while payment-option loans allow borrowers to defer even a portion of the inter-

est payment. First American LoanPerformance reports that these products went from less than five percent of all mortgage originations in early 2002 to 38 percent in mid-2005, before falling back to 32 percent at the end of 2006.

Adjustable-rate mortgages also gained market share in 2003–2005. Despite offering only a small interest-rate advantage over fixed loans, adjustable mortgages were up sharply thanks to steep initial discounts. Large shares of subprime and Alt-A loans originated since 2004 have adjustable rates that are scheduled to reset between two and five years after origination, resulting in potentially significant increases in monthly payments. According to Credit Suisse, the amount of adjustable-rate subprime debt expected to reset in 2007 and 2008 alone could be as much as \$482 billion. Alt-A loans account for another \$57 billion scheduled to reset by 2008, and \$85 billion in 2009 and 2010. Much of this debt is, however, likely to be either refinanced or paid off at the time of sale before the reset dates hit.

In the absence of rapid house price appreciation, the risks imposed by subprime adjustable-rate products are much greater. As the first wave of these loans begins to reach their reset dates, the signs are not encouraging. Between the fourth quarter of 2005 and the fourth quarter of 2006, the share of troubled subprime loans jumped from 6.6 percent to 7.9 percent (**Figure 2**). As increasing numbers of borrowers risk losing their homes to foreclosure, higher than expected losses have driven some mortgage companies into bankruptcy and others to increase their reserves against losses.

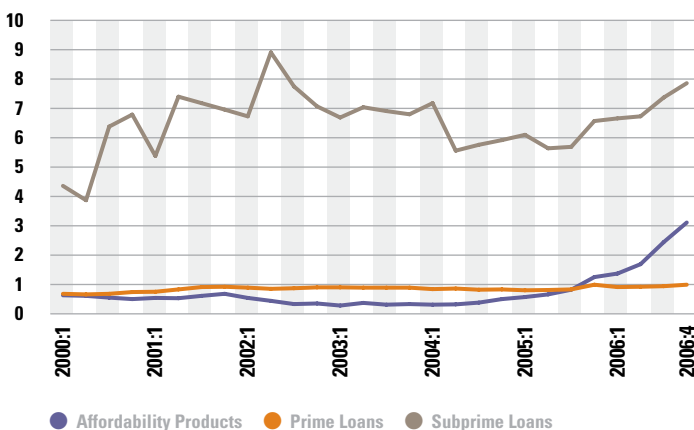
### UNRELENTING HOUSING CHALLENGES

Weak income growth among households in the bottom half of the distribution, together with restrictive land use regulations, has led to the implacable spread of affordability problems. Local restrictions on development discourage production of lower-cost housing, forcing up both rents and prices. Even with the addition of roughly 78,000 new and 55,000 renovated units through the federal tax credit program in 2005, the supply of affordable rentals continues to shrink.

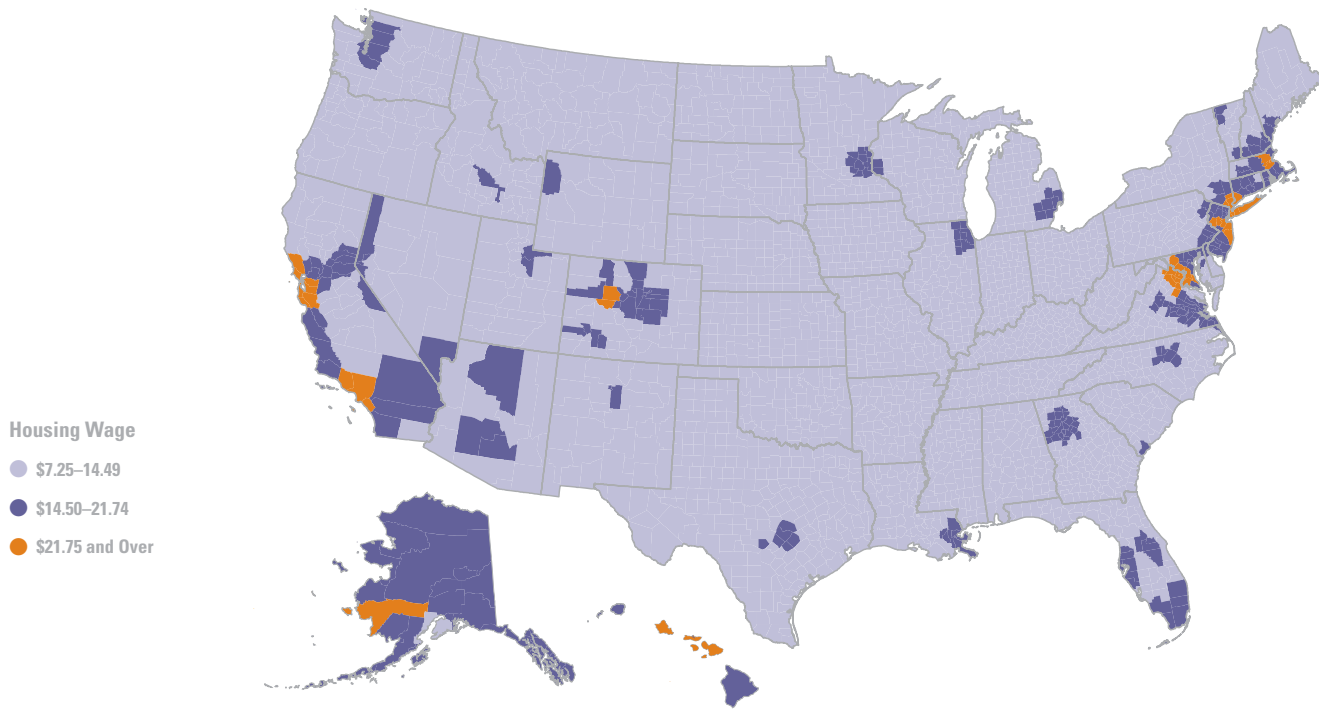
The result is that the pressures of high housing costs are moving up the income scale. Even after the minimum-wage increase is fully implemented, households with a single minimum-wage worker will still be unable to afford even a modest two-bedroom rental apartment at today's rents anywhere in the country (**Figure 3**). Meanwhile, severely cost-burdened households in the bottom expenditure quartile had just \$436 a month left to cover all other needs in 2005. To escape these heavy cost burdens, more and more households are resorting to long commutes or doubling up with other family members.

Federal assistance to very low-income households reaches only about one-quarter of eligible renters and virtually no homeowners. Still, only a handful of state and local governments have had the political will to overcome some of the barriers to development of affordable housing. With little regulatory relief in sight and slim chances for a significant expansion of federal subsidies, the prospects for a meaningful reduction in the number of housing cost-burdened households are dismal.

**FIGURE 2** Delinquency Rates on Subprime Loans and Affordability Products Rose Sharply Last Year  
Troubled Loan Share (Seasonally adjusted)



Notes: Troubled affordability products are loans with interest-only or payment-option features that are at least 60 days past due or in foreclosure as of the end of the quarter. Troubled prime and subprime loans are conventional and conforming loans that are at least 60 days past due or started foreclosure proceedings in the quarter.  
Sources: First American LoanPerformance and Mortgage Bankers Association, National Delinquency Survey.

**FIGURE 3****Even Fully Phased In, the New Federal Minimum Wage Would Not Cover Today's Rent on a Modest Apartment**

**Notes:** Housing wage is the hourly wage required to afford a modest two-bedroom apartment renting for the Fair Market Rent, paying 30% of pre-tax income for housing and working 40 hours a week for 52 weeks. Income ranges are multiples of the federal minimum wage at full rollout, expected in 2009. Analysis based on methodology developed by Cushing N. Dolbeare and the National Low Income Housing Coalition.  
**Source:** US Department of Housing and Urban Development, Fiscal Year 2006 Fair Market Rents.

**THE HOUSING OUTLOOK**

It is too early to determine when the housing slump will end. House prices are only beginning to soften, loans most at risk are just starting to hit their reset dates, and credit standards have tightened. The adjustment will be particularly painful for those homeowners overwhelmed by higher mortgage payments, lenders that underestimated risk, and builders and owners forced to sell at lower prices.

Yet however long the correction lasts, housing markets will eventually recover. Once excess inventories and credit problems are worked out and balance is restored, ongoing demand for new and improved homes promises to lift the value of new construction and remodeling to new highs. Greater productivity will help raise real incomes for many, while record wealth will allow households to spend more on housing. But between strong growth in demand and increasingly restrictive development regulations, house prices will continue to move up.

The number of new homes demanded will also increase, thanks to immigration trends and the aging of the baby-boom and echo-boom generations. Over the next 10 years, the baby boomers will pass through the age range when second-home ownership peaks, while the echo boomers will move into the prime household-forming

years. After contributing more than a third of net household growth between 1995 and 2005, new immigrants will likely account for at least that large a share between 2005 and 2015. The children of immigrants born in the United States will also add significantly to household growth.

Overall immigration is on course to hit a record-setting 12 million between 2005 and 2015. Ongoing inflows have lifted household growth, increased the racial and ethnic diversity of America's households, and driven the revitalization of many inner cities. As a result, the foreign born are increasingly vital to the housing market, representing some 14 percent of recent homebuyers and 18 percent of renters in 2005. While still concentrated in a handful of gateway metros, immigrant households are beginning to settle in a growing number of locations across the country.

With household growth accelerating, demand for second homes rising, and the housing stock aging, new home demand should total about 19.5 million units from 2005 to 2014. Although the pressures on lenders to tighten underwriting standards and on builders to work off a still-unknown surplus could reduce the total somewhat, new home completions plus manufactured home placements should easily surpass the 18.1 million added in 1995–2004.



# 2



## Housing Markets

With the sudden departure of investors and homebuyers priced out of the market, housing activity slowed dramatically in 2006. Indeed, only rental markets and remodeling activity were still expanding last year. The recovery in the for-sale market faces the triple threat of tighter lending standards in the wake of high subprime default rates, a still significant overhang of vacant homes for sale, and buyers waiting on the sidelines to see if prices drift lower.

### FROM BOOM TO BUST

Last year snapped a string of record-setting years for home sales and price appreciation (**Figure 4**). Sparked by 40-year lows in interest rates, demand took off in 2001. As markets tightened and house price appreciation began to accelerate, investors piled into the housing market along with other homebuyers hoping to ride the wave of rising house values.

But by 2006, a combination of higher prices and rising interest rates finally tempered demand. With affordability eroding, marginal buyers started to back off late in 2005. As price appreciation slowed, investor demand plummeted. From a peak of 9.5 percent in 2005, the investor share of prime loans fell to 7.7 percent in the second half of 2006.

Not only did home sales and single-family starts drop off sharply, but manufactured home placements also stood at their lowest level in more than 32 years (**Table A-1**). At the same time, national nominal house price appreciation slowed from the mid-teens in 2005 to the low single-digits in 2006.

### ECONOMIC IMPACTS

The about-face in housing markets put an end to the big lift that the economy had enjoyed since the 2001 recession. The drop in home building was so drastic that it shaved more than a full percentage point off national economic growth in the latter half of 2006. As a result, residential fixed investment went from being a significant contributor to growth to a major drag on the economy.

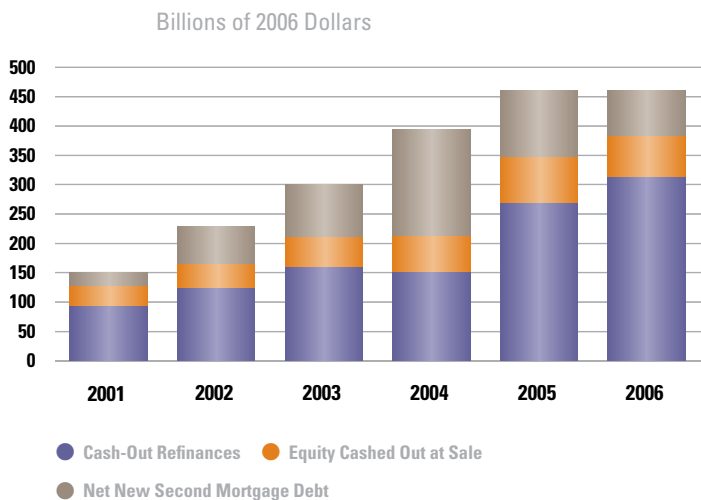
Still, one important positive remained—the support of housing wealth effects on consumer spending and remodeling. Despite significantly lower refinance activity in 2005 and 2006, the amount of home equity cashed out at refinance set records in both years (**Figure 5**). Behind this feat was a sharp increase in the share of refinancing

**FIGURE 4** By Most Measures, the Housing Boom Went Bust in 2006

			Percent Change	
	2005	2006	2001-5	2005-6
<b>Homeownership Rate (%)</b>	68.9	68.8	1.6	-0.1
<b>Home Sales</b>				
New Single-Family (Mil.)	1.3	1.1	41.3	-18.1
Existing Single-Family (Mil.)	6.2	5.7	30.6	-8.1
Existing Condo/Co-op (Th.)	896	801	49.6	-10.6
<b>Median Home Prices</b>				
New Single-Family	\$248,671	\$246,500	24.7	-0.9
Existing Single-Family	\$226,684	\$221,900	28.9	-2.1
Existing Condo/Co-op	\$231,123	\$221,900	61.1	-4.0
<b>Home Equity (Tril.)</b>	\$10.9	\$10.9	31.2	0.8
<b>Mortgage Debt (Tril.)</b>	\$9.2	\$9.7	54.3	5.5
<b>Mortgage Refinancing (Tril.)</b>	\$1.7	\$1.5	15.2	-13.2
<b>Residential Investment (Bil.)</b>	\$795.3	\$766.7	48.9	-3.6
<b>Improvements &amp; Repairs (Bil.)</b>	\$222.0	\$228.2	23.6	2.8

Notes: All values and calculations are based on 2006 dollars using the Bureau of Labor Statistics CPI-UX for All Items. Percent change is calculated with unrounded numbers. The change in homeownership rate is in percentage points.  
Sources: US Census Bureau, National Association of Realtors®, Freddie Mac, Federal Reserve Board, and Bureau of Economic Analysis.

**FIGURE 5** Despite the Housing Downturn, Home Equity Cashed Out Remained At Peak Levels Last Year



Note: Adjusted for inflation by the Bureau of Labor Statistics CPI-UX for All Items.  
Sources: National Association of Realtors®, Freddie Mac, and Federal Reserve Board.

homeowners who took cash out. Indeed, the share climbed from about 36 percent in 2003 to about 85 percent in 2006—a level not seen since before the 1991 recession.

The amount of home equity loans and lines of credit also managed to set a new record. For the first time, second mortgage debt surpassed \$1 trillion, up from \$943 billion in 2005 (Table A-4). Although growth fell in real terms from \$112 billion in 2005 to \$76 billion in 2006, this slowdown primarily reflected a decline in the use of second mortgages to buy homes rather than a drop in cash-out second loan volume. Infusions of cash into home sellers' pockets from capital gains dipped only modestly from about \$79 billion in 2005 to \$70 billion in 2006.

With housing wealth effects still positive and homeowners holding billions in cashed-out equity, improvement expenditures set a record for the fifth consecutive year—up \$6.2 billion in real terms to \$228 billion. By comparison, spending on new construction fell by a much larger \$28 billion in 2006.

But as the inventory correction proceeds and house prices soften further, housing wealth effects are likely to turn negative. When consumers start to realize that their home values are not appreciating at as rapid a pace (and may even be falling), they will spend less liberally and borrow less against their equity. When they do, both consumer spending and remodeling activity will slow.

The magnitude of the impact will depend on how much prices fall nationally and in specific markets. The typical lag between a retreat in new construction and a cutback in improvement spending is about six months. Given the enormous amount of equity cashed out in 2006, the lag may be longer this time around. At some point, however, higher borrowing costs and weaker house prices will cause some homeowners to forgo or at least defer discretionary projects.

### THE SPREADING MARKET CORRECTION

Even though builders started to cut production by the middle of 2005, it was not until the beginning of 2006 that starts nationwide fell below year-earlier levels. Completions did not begin to fall on a year-over-year basis until the end of 2006 (Figure 6).

With demand dropping off faster than production, the supply of new and existing homes for sale shot past seven months. The clearest sign of the burgeoning oversupply was a more than 500,000-unit run-up in vacant existing homes for sale from the fourth quarter of 2005 to the fourth quarter of 2006. The total supply of vacant for-sale units, plus units under construction but not yet completed, was 3.3 million at the end of last year.

Housing market conditions varied considerably across the country when the inventory correction took hold. By the first quarter of 2006, single-family permits had already turned negative on a year-over-year basis in fully half of all metropolitan areas. By the fourth quarter, 78 percent of metros had registered year-over-year declines, and 74 percent also saw permits down for 2006 as a whole. Among the 50



largest metro areas, Detroit and Sacramento were hit hardest, registering a more than 40 percent plunge in permits.

Meanwhile, production in nearly all states fell last year (**Table W-1**). Some of the earliest markets to post declines were in states with depressed economies or where heavy speculation and strong employment growth had led to overbuilding. In contrast, a few metropolitan areas—including Houston, Austin, Seattle, Charlotte, and Los Angeles—managed to show strength throughout 2006 in terms of price appreciation, employment growth, and permit activity.

But even in some areas where starts and permits slid, employment growth remained robust. These markets, along with metros that had the quickest and deepest production cuts, are the most likely

to emerge first from the inventory correction. Topping this list is Phoenix, where job growth was a strong six percent in 2006 despite a 29 percent drop in housing permits. Indeed, permits there were off by more than 50 percent in the final quarter of 2006 from a year earlier. Las Vegas had nearly as strong job growth and as large a cut in permit activity.

Other markets with a combination of generally healthy job growth and significant cutbacks in permits—including many in California, Florida, and around Washington, DC—may not recover as quickly because their employment gains are not as great and their excess supplies are still high. These markets will be bellwethers for the duration and severity of the overall correction.

### MEASURING OVERSUPPLY

Except in the few areas facing real economic distress, this housing downturn has been driven largely by the market's own excesses. Chief among these is the oversupply of homes triggered by inflated demand from investors, second-home buyers, and others intent on getting in on rapidly appreciating prices.

Overbuilding does not appear to be quite as great today as in the years preceding the last major correction in 1987–1991, but it is close. One way to estimate the extent of oversupply is to consider what vacancies would have been had they remained at rates when markets were more balanced. Using this approach, the combined oversupply of vacant for-rent and for-sale units amounted to about 0.91 percent of the housing stock in 2006, compared with 1.05 percent in 1987 (**Figure 7**). In absolute terms, however, there appear to be more excess units now than during the previous cycle.

The nature of the excess inventory is also quite different. In the late 1980s, the overbuilding was on the multifamily rental side, after construction had boomed under unusually generous tax incentives early in the decade and then went bust when the incentives disappeared. This time, the single-family side is more obviously overbuilt, with both the for-sale vacancy rate (2.4 percent) and single-family for-sale vacancy rate (2.1 percent) setting new records in 2006.

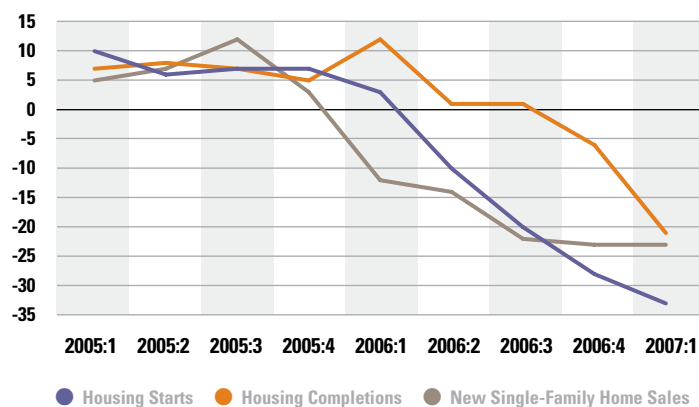
As a result, single-family starts and prices are likely to undergo the biggest correction during this cycle. Single-family starts are now running about 30 percent below 2005 peak levels—nearly matching the peak-to-trough drop in 1986–1991. For now at least, the economy is expanding, adding jobs, and delivering stable and still historically low interest rates. While it is conceivable that these conditions will help stabilize starts and sales, tightening credit standards and softening prices point to further weakness in demand.

### HOUSE PRICE RISKS

Unlike starts and sales, nominal single-family house prices held up both nationally and in the majority of metro areas in 2006. Even using the National Association of Realtors® conservative measure, median prices were down for the year in less than one-quarter of the 149 metros evaluated (**Table W-6**). The largest drop of 7.4 percent occurred

**FIGURE 6** With Completions Lagging The Decline in New Home Sales...

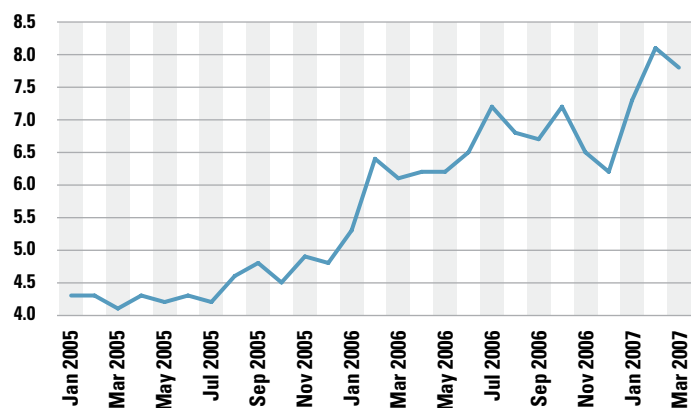
Year-over-Year Percent Change



Notes: Rates are based on seasonally adjusted data. Includes only single-family homes. Source: US Census Bureau, New Residential Construction.

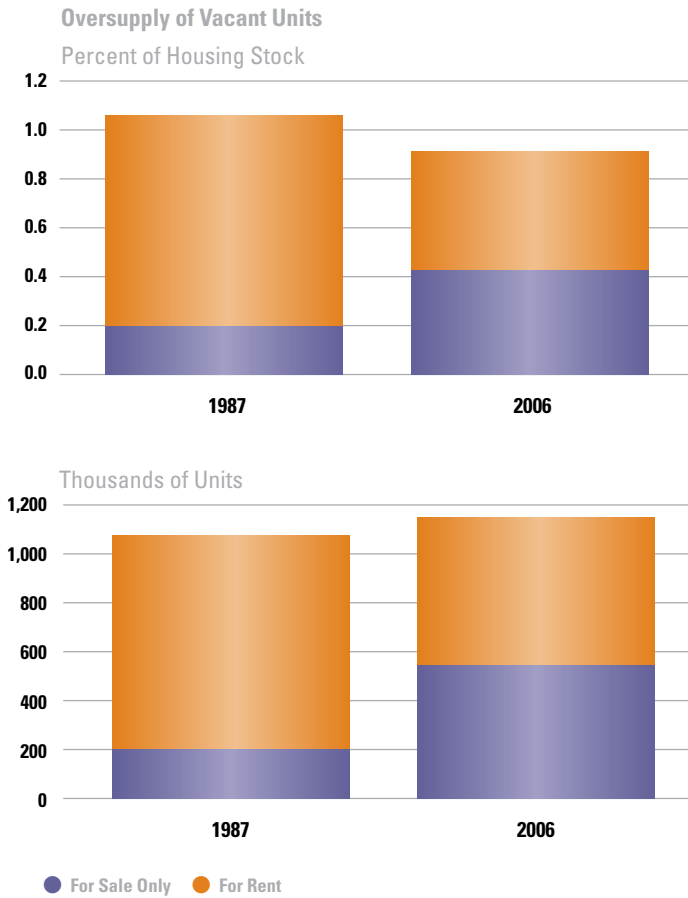
...The Unsold Inventory Rose Significantly

Months Supply of New Homes for Sale



Note: Data are seasonally adjusted. Source: US Census Bureau, New Residential Construction.

**FIGURE 7** The Current Run-up in Vacancies Rivals That Preceding the Last Major Downturn



Notes: Oversupply of vacant units in 2006 is the difference between actual and predicted 2006 vacancies based on the average vacancy rates in 1999–2001. Oversupply in 1987 is the difference between actual and predicted 1987 vacancies based on average vacancy rates in 1979–1981.  
Source: JCHS tabulations of US Census Bureau, Housing Vacancy Survey.

in Detroit, where employment also fell 2.0 percent. In fact, of the 11 metros that saw house price declines of more than 3.0 percent, all but two were in economically depressed areas of the Midwest.

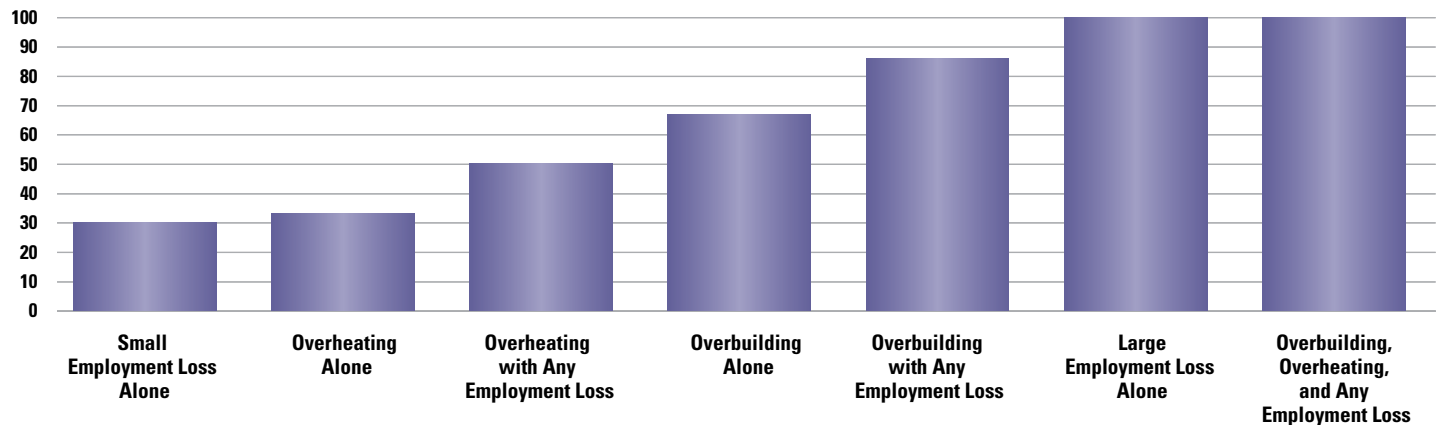
Though more volatile than annual price changes, fourth-quarter 2005 to fourth-quarter 2006 changes suggest that another 25 metro areas posted nominal price declines of more than 3.0 percent. This list includes some coastal Florida metro areas, as well as several large markets such as Dallas and San Diego. Also in these ranks are several metros that had especially strong house price appreciation, speculative buying, and overbuilding of single-family homes in 2005, such as Fort Myers, Reno, and Sacramento.

While some large markets may post significant drops merely because prices inflated ahead of income between 2000 and 2005, overbuilding and employment losses have historically been much better predictors of impending corrections than price appreciation. Indeed, the probability of any price decline—and especially a large one—is much higher in and around periods of overbuilding or a combination of overbuilding, price overheating, and employment losses than in periods of escalating house prices alone (Figure 8).

Many metro markets appear to be overbuilt when measured by the deviation of recent single-family permit intensity (permits per capita) from long-run intensity. By this yardstick, fully 148 of all 361 metros were mildly overbuilt (0–1 standard deviations from mean long-run intensity), 108 moderately overbuilt (1–2 deviations), 30 severely overbuilt (2–3 deviations), and 23 extremely overbuilt (3 or more deviations) in 2006. While an imperfect measure of overbuilding, changes in permits per capita may provide a warning of price corrections to come.

A lot is riding on how the correction in starts and sales affects house prices. Falling prices discourage sellers from selling and, more impor-

**FIGURE 8** As Risks Compound, House Prices Are More Likely to Decline  
Percent of Times that Conditions Led to Price Declines in 1980–1999



Notes: Instances of overbuilding and overheating are defined as periods when prior three-year average single-family permit intensity or price appreciation exceeded two standard deviations of the 25-year mean for the 75 largest metro areas combined. Metro area permit intensity is the ratio of permits per capita in a given year to their median level in 1980–2004. Small employment loss is 5% or less, and large employment loss is over 5%.  
Source: Eric S. Belsky and Daniel McCue, “Why Do House Prices Fall? Perspectives on the Historical Drivers of Large Nominal House Price Declines,” JCHS Working Paper W07-3, 2007.

tant, buyers from buying. They also make it harder for distressed borrowers to avoid foreclosure by refinancing or selling their homes. Furthermore, falling prices increase lender losses and ultimately turn housing wealth effects from a spur to a drag on economic growth.

## THE OUTLOOK

Housing starts showed at least temporary signs of stabilizing at the beginning of 2007. If that continues, starts will still end this year down another 19 percent to about 1.47 million units. New home sales, in contrast, were still dropping in the first quarter of 2007. Even

without further declines, sales of new homes will fall about 19 percent to 857,000 for the year. Existing home sales also slid in early 2007, down 11 percent year-over-year in March.

With credit standards tightening, mortgage defaults mounting, and house prices under pressure, demand could fall further and the supply of vacant unsold homes increase. Indeed, it would take about two years of starts running at about 1.55 million and manufactured home placements at about 100,000 to work off the half-million or so vacant for-sale units added between the end of 2005 and the end of 2006.

So far, rental vacancy rates have not risen like for-sale vacancy rates, and rising rents suggest that the market is close to balance. It is therefore possible that there is no large overhang of rental units to draw down. Still, the run-up in rental vacancies over the past few years is yet another reason to believe that total production may have to retreat even further to pare excess inventory.

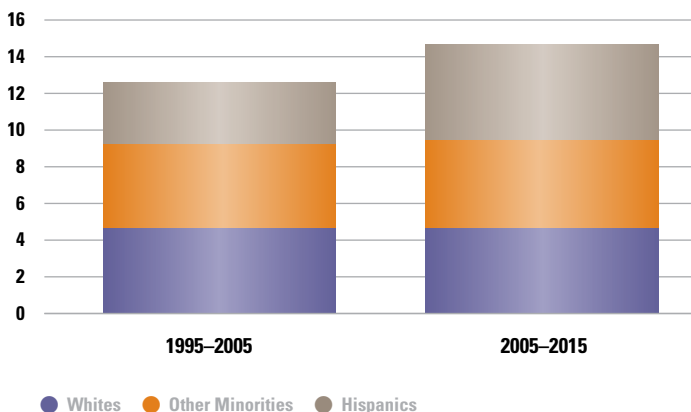
And once homeowners start to feel less secure about their housing wealth, remodeling activity will also dip. Fortunately, improvement spending is typically less volatile than residential construction spending. In the last downturn, for example, remodeling expenditures declined 8.7 percent in real terms between 1987 and 1991, and then rose 11.5 percent in the subsequent three years. By comparison, new construction spending plummeted 33 percent and then rebounded 42 percent over the same period. However, spending on major improvement projects, like room additions and kitchen and bath remodels, did tumble nearly as much as new construction in the last downturn. Indeed, it was spending on replacements of worn-out systems that kept total remodeling expenditures from falling more.

Once market balance is restored, the outlook becomes brighter. Fueled by minorities and especially Hispanics, household growth is expected to increase from 12.6 million in 1995–2005 to 14.6 million in 2005–2015 (Figure 9). As the baby boomers move into the peak vacation-home buying years with record amounts of wealth, demand for second homes will continue to grow. The aging of the housing stock will also boost demand for new homes to replace older units.

All this sums to a sustainable level of housing completions and manufactured home placements of roughly 19.5 million units in 2005–2014. Remodeling is also on a track to grow ahead of the rest of the economy. Thanks to increases in both the number of homeowners and in expenditures per household, remodeling expenditures are expected to grow at a real compound annual rate of about 3.7 percent through 2015 (Figure 10).

**FIGURE 9** Hispanics and Other Minorities Will Propel Household Growth

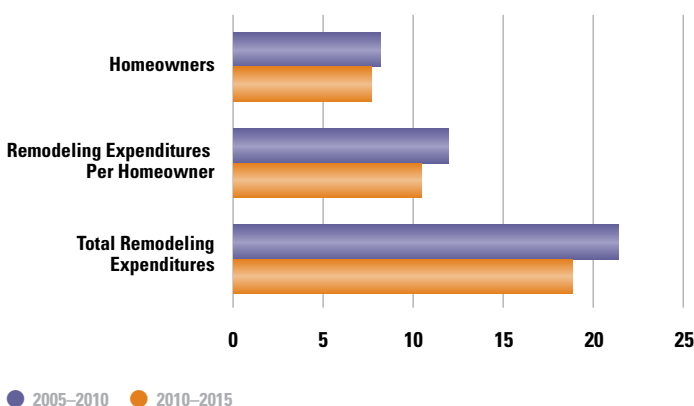
Change in Households (Millions)



Sources: JCHS tabulations of unpublished Housing Vacancy Survey tables, and George S. Masnick and Eric S. Belsky, "Addendum to Research Note N06-1: Hispanic Household Projections Including Additional Tenure Projection Detail by Age and Broad Family Type for Non-Hispanic White and Total Minority Households," JCHS Research Note N06-4, 2006.

**FIGURE 10** Strong Household Growth and Increased Spending per Household Will Contribute To Future Remodeling Gains

Percent Change



Source: Foundations for Future Growth in the Remodeling Industry, JCHS Report R07-1, 2007.

# 3



## Demographic Drivers

The demographic underpinnings of long-run housing demand remain solid. Net household growth should climb from an average 1.26 million annual pace in 1995–2005 to 1.46 million in 2005–2015. Continued immigration, together with the large number of second-generation Americans and children of the baby boomers coming of age in the next decade, will reinforce demand for rental units and starter homes. For their part, the baby boomers will be especially active in the luxury and second-home markets.

### IMMIGRANT POPULATION PATTERNS

With both legal and illegal immigration on the rise, the foreign born are giving an increasingly large boost to population growth. The number of legal immigrants has reached nearly one million per year, while the net growth in illegal immigrants is conservatively estimated between 300,000 and 500,000. Factoring in emigration of US citizens, net immigration has averaged about 1.2 million annually since 2000.

Most states gained foreign-born population between 2000 and 2005, with California alone adding about 750,000 immigrants. Texas and Florida also saw large increases in their foreign-born populations, together with strong inflows of domestic migrants. Indeed, these three states, along with Arizona and Georgia, are the fastest-growing areas of the country. Over these same five years, immigration prevented outright population losses in Illinois, New Jersey, and Indiana, while helping to limit declines in New York, Pennsylvania, Massachusetts, and Michigan.

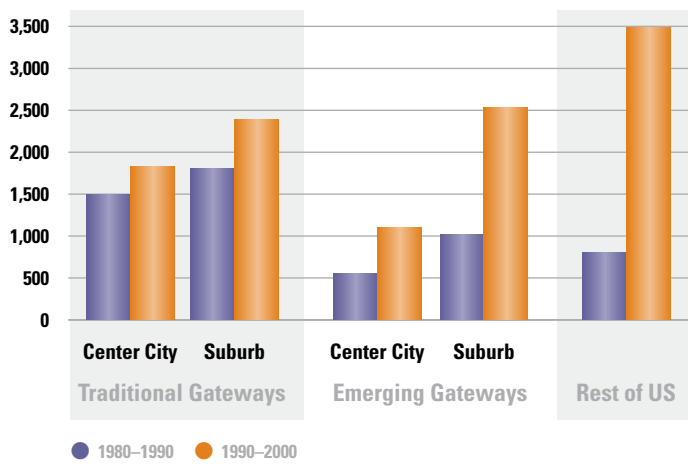
While still concentrated in a handful of locations, immigrants have begun to disperse geographically. For example, California was home to one-third of the nation's immigrants in 1990 but just over one-quarter in 2005. Still, 62 percent of the foreign born lived in just five states where only 31 percent of the native-born population lived.

But immigrants are settling in a larger number of areas. In addition to the 11 traditional gateways, another 27 large metros have become favored locations for the foreign born. Indeed, the share of immigrants living in the traditional gateway metros fell from 51 percent to 46 percent between 1990 and 2000, while the share living in the other 27 emerging gateways rose from 20 percent to almost 25 percent. In total, the 38 gateways are home to 70 percent of the foreign born.

Particularly in the 27 emerging gateways, most net growth of the immigrant population has occurred in the suburbs rather than

**FIGURE 11** Immigrant Population Growth Has Shifted Away from Traditional Gateways and Toward the Suburbs

Change in Foreign-Born Population (Thousands)



**Notes:** Traditional gateways are metros with the largest foreign-born populations in 1990. Emerging gateways had populations greater than one million and foreign-born populations greater than 200,000 in 2000, and either foreign-born shares in 2000 or foreign-born growth rates in 1990-2000 greater than the national average, or both. Four metros with foreign-born populations below 200,000 (Austin, Charlotte, Raleigh, and Salt Lake City) are included because of their very high foreign-born growth rates.  
**Sources:** JCHS tabulations of data from Audrey Singer, "The Rise of New Immigrant Gateways," The Brookings Institution, Center on Urban and Metropolitan Policy, 2004; and of the 1990 and 2000 Decennial Census.

the center cities, adding almost five million to the suburban population in the 1990s (**Figure 11**). Nevertheless, some of the most rapid recent growth rates in immigrant populations have occurred outside of metro areas altogether. Between 2000 and 2004, immigrants accounted for 31 percent of net population growth in rural areas, and for even larger shares in the resort communities of the West, major agricultural and manufacturing areas in the South and Midwest, and on the periphery of the traditional gateway metros.

### IMMIGRANTS IN HOUSING MARKETS

The foreign born contributed over 40 percent of net household formations between 2000 and 2005, up from less than 30 percent in the 1990s and a little over 15 percent in the 1980s. Immigrants have thus become an increasingly important source of housing demand, and especially in a few key states. In California, New York, New Jersey, and Florida, at least 20 percent of recent homebuyers and 25 percent of renters are foreign born. But even in smaller states without traditional gateway metros such as Connecticut, Maryland, and Rhode Island, immigrants still account for at least 14 percent of recent homebuyers and 15 percent of renters (**Table W-2**). Furthermore, without the influx of the foreign born, 16 large metro regions (including New York, Chicago, Boston, and Minneapolis) would have seen their populations fall in the 1990s.

The foreign born are not only a growing source of demand, but also a critical resource for housing production. In California, Texas,

and Arizona, the foreign-born share of the construction labor force exceeds 38 percent. And in states without a large foreign-born presence such as North Carolina and Colorado, immigrants still make up more than 25 percent of construction labor.

Three decades ago, both immigrants and second-generation Americans were concentrated among older age groups. By 2005, however, they made up a growing share of young adults and children (**Figure 12**). Indeed, one out of every five people in the 25–34 age group (peak years for household formation) is now foreign born, and another nine percent are second-generation Americans. Moreover, a quarter of children under the age of 10 have foreign-born parents.

The Department of Homeland Security estimates that 10.5 million illegal immigrants resided in the United States in January 2005. This has given rise to political pressure to do more to curb illegal inflows. But even if the net growth in illegal immigrants were reduced to half of recent levels, US household growth would be at most five percent lower, shaving as many as 750,000 households from net additions in 2005–2015. For their part, newly arrived legal immigrants are expected to contribute about 3.6 million households to total projected growth over the decade.

### MINORITY GROWTH

Largely as a result of immigration but also because of higher rates of natural increase, minorities have contributed an expanding share of household growth over the past 30 years. While uneven, the impact of minority growth has been significant throughout the country (**Figure 13**). In the Northeast, nearly all of the net growth in households since 1996 has come from minorities. Even in the Midwest, where the minority share of growth is lowest, they accounted for about half of the net gain in households between 1996 and 2006. Hispanic household growth has been particularly strong, adding about 4 in 10 net new households in the Northeast and the West.

At the metropolitan level, minority population gains have been even more dramatic. In 28 of the nation's 86 largest and growing metro regions, minority population growth from 1990 to 2000 more than offset white losses (**Table W-3**). In Los Angeles, for example, the number of minorities increased by 2.5 million while that of whites declined by nearly 700,000. In another 46 metro regions, minority gains outstripped white gains. While more modest in absolute terms, minority population growth rates in rural areas are also outpacing those of whites. Between 1990 and 2004, minorities accounted for nearly half of overall rural population growth, and the number of Hispanics in these areas nearly doubled.

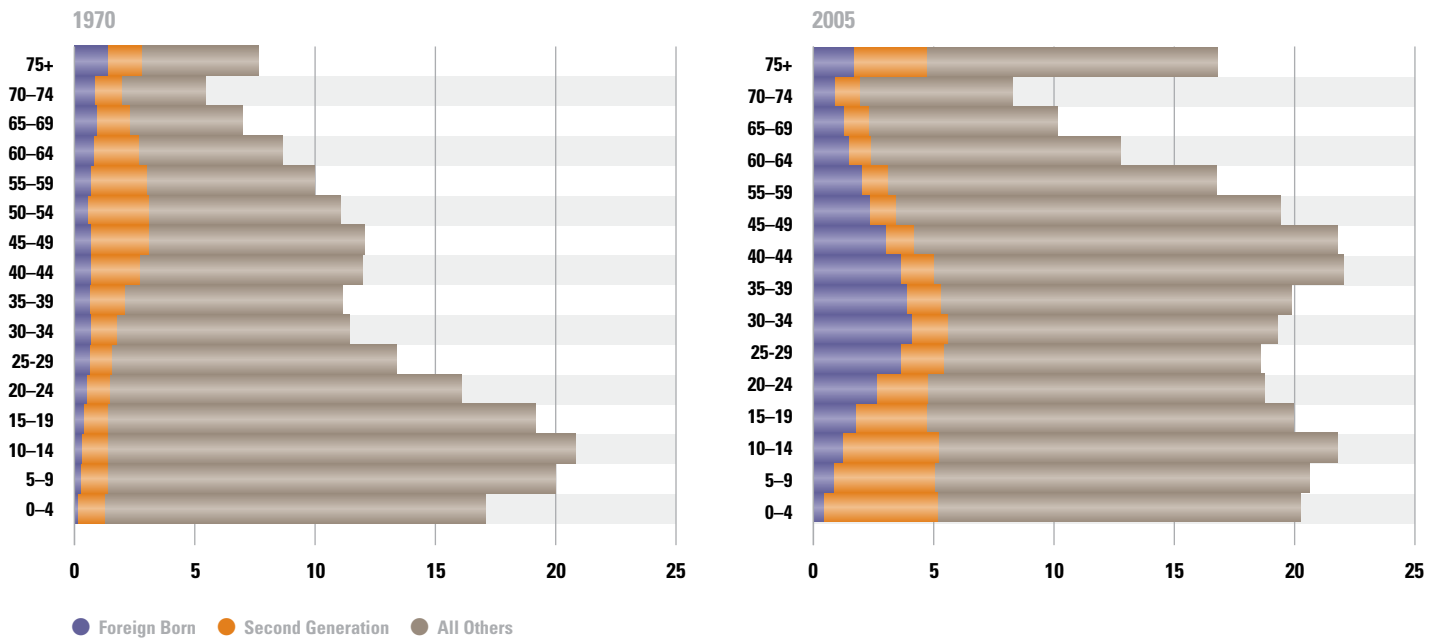
### INTRA-URBAN GROWTH PATTERNS

During the 1990s, some 38 of the nation's 91 largest metro regions saw population growth within two miles of their center cities. Contrary to perceptions that the baby boomers are leading this movement, it is the older members of the baby-bust generation—with large contingents of minority and foreign-born households—that are heading up the urban revival (**Figure 14**). The number of older baby-bust members

**FIGURE 12**

**Immigrants and Their Children Are Adding Dramatically to Housing Demand**

Population by Age Group (Millions)



Note: Second generation refers to native-born children of immigrants.  
Sources: US Census Bureau, 1970 Census Subject Report 1A, and JCHS tabulations of the 2005 Current Population Survey.

living within two miles of the central business district (CBD) increased in most of these 38 regions, with especially large gains in New York, San Francisco, Seattle, Chicago, Denver, and Portland.

The baby boomers, in contrast, are leading the march to the urban fringe. In all but 11 of the nation’s largest metropolitan regions, the number of baby boomers living 10–20 miles from the CBD rose during the 1990s. In all but six, the number living more than 20 miles out also increased. Only one large metro—Sarasota, Florida—saw an increase in the number of baby boomers living within two miles of the central business district.

With few exceptions, the generation preceding the baby boom and living within 10 miles of the CBD also declined. In general, the larger the metro, the larger the losses of this older generation in these locations, both in absolute terms and in population share.

Some metros in the Northeast and Midwest—including Detroit, Chicago, New York, and Washington, DC—registered a nearly 20 percent population loss in the older generation living 10–20 miles out. Similar declines were also recorded in San Jose, Atlanta, Los Angeles, and San Francisco. The drop in older-generation households in these locations may reflect the high demand for close-in housing, which may have encouraged these owners to sell their homes and relocate. Older-generation Americans do, however, have a growing presence 10–20 miles from the CBD in many metros, especially in retirement destinations in the South and West.

**WEALTH AND INCOME TRENDS**

Despite recent weakness, real median incomes for most Americans were still higher in 2005 than in 1995 thanks to unusually robust growth in the last half of the 1990s (Figure 15). While upper-income households saw the largest increases, most households achieved at least modest income gains over the period. Meanwhile, net household wealth nearly doubled between 1995 and 2004, hitting a record \$50.1 trillion (Table A-10). Fully 89 percent of the \$24.3 trillion increase went to households in the top quartile, reducing the share of net household wealth held by the two middle quartiles from 16 percent to 13 percent. Nevertheless, households in the upper-middle quartile did post a solid 73 percent (\$2.2 trillion) increase in net wealth while those in the lower-middle quartile saw a 44 percent (\$400 billion) gain.

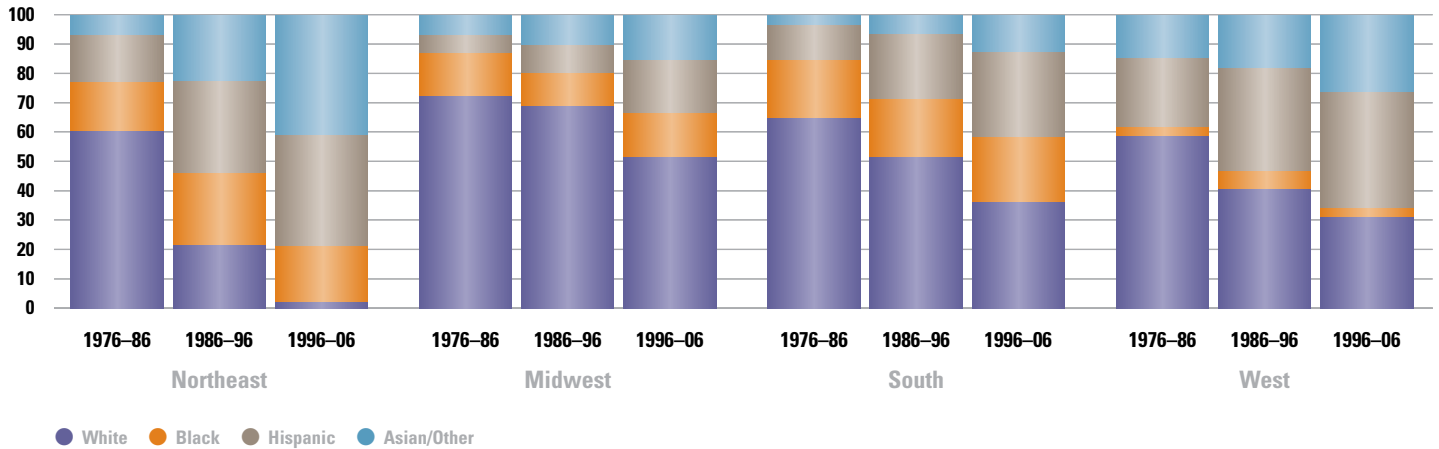
Home equity, of course, played a large part in the run-up in household wealth. Housing contributed \$6.6 trillion or 27 percent of the net gain between 1995 and 2004. Aggregate federal statistics suggest that the real value of the housing stock increased by 96 percent and home equity by 78 percent between 1995 and 2006. Indeed, home equity as a share of household wealth rose from 17 percent in 2001 to 20 percent in 2006, despite cash-out refinances of nearly \$1.2 trillion.

The massive infusion of wealth, along with its increasingly uneven distribution, has direct implications for housing markets (Table A-7). In particular, the surge in wealth means that income is no longer as good a measure of demand or of what potential buyers can afford. A large share of households can thus tap into their own or their parents’



**FIGURE 13** Minorities Have Come to Dominate Household Growth

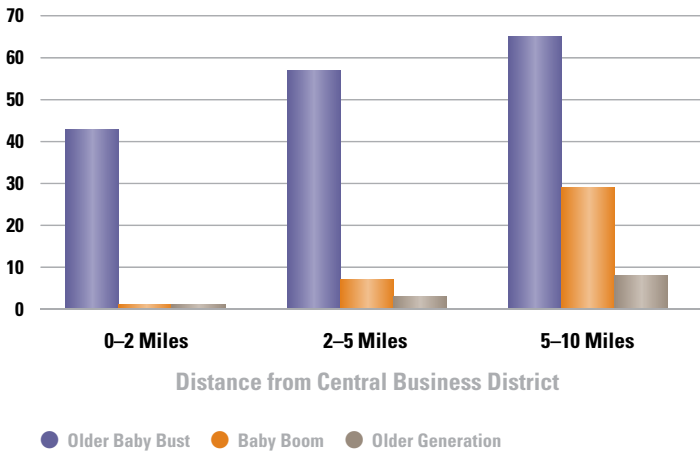
Share of Household Growth (Percent)



Notes: White, black, and Asian/other are non-Hispanic. Hispanics may be of any race. Asian/other includes Aleuts, Native Americans and Pacific Islanders. Source: JCHS tabulations of the 1976, 1986, 1996 and 2006 Current Population Surveys.

**FIGURE 14** Older Members of the Baby-Bust Generation Are Leading Urban Revitalization

Number of Metro Regions with Generational Growth, 1990-2000



Notes: The leading half of the baby-bust generation was aged 15-24 in 1990 and 25-34 in 2000. The baby-boom generation was aged 25-44 in 1990 and 35-54 in 2000. The older generation was aged 45-64 in 1990 and 55-74 in 2000. The 91 metro regions are the 100 largest metro areas in 2000, with adjacent metros in New York, Los Angeles, and San Francisco aggregated into regions with populations of at least 500,000. Distance is calculated from the CBD of the primary city of each metro region. Source: JCHS tabulations of 1990 and 2000 Decennial Census tract-level data.

resources to purchase homes. This puts households with lower net wealth—including minorities, renters, and those who buy homes later in life—at a disadvantage in the housing market. In 2004, median net wealth for homeowners was \$184,560 compared with only \$4,050 for renters and just \$2,600 for minority renters. Moreover, the inequality in wealth makes matters worse for the seven percent of households with no or negative net wealth, including many minorities whose par-

ents also have low net wealth. In 2004, only nine percent of minorities reported ever receiving an inheritance, compared with 24 percent of whites, and the average amount that minorities received was only half the amount that whites received.

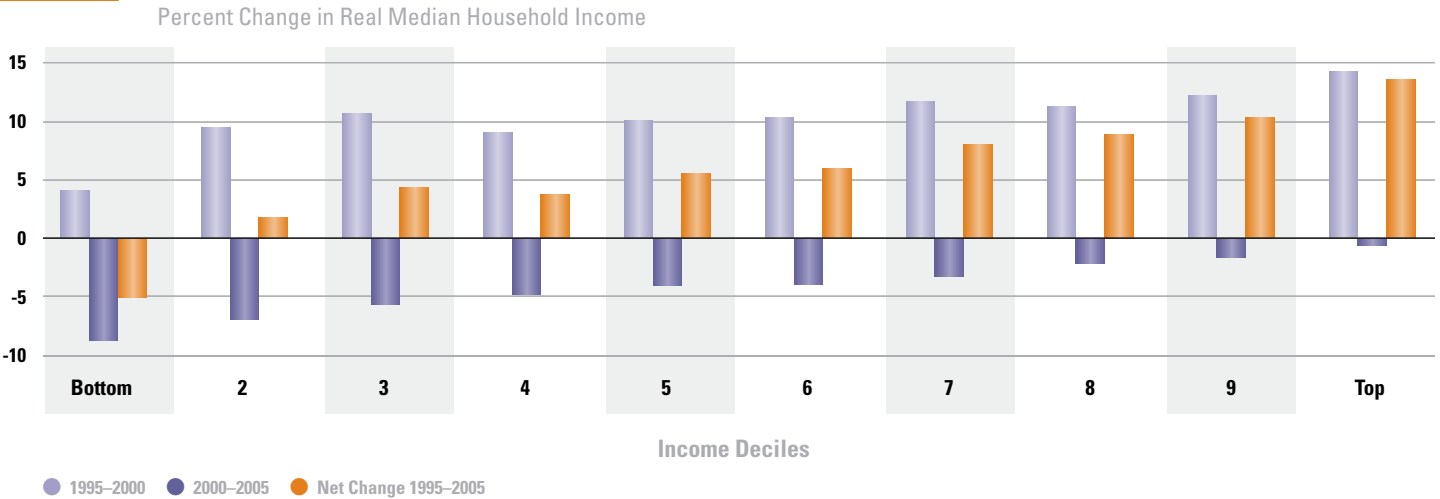
#### HOUSEHOLD GROWTH AND HOUSING DEMAND

With their higher rates of immigration and natural increase (and factoring in higher losses of white elderly households), minorities will account for 68 percent of the 14.6 million projected growth in households in 2005-2015 (Table A-11). Hispanics alone will contribute a remarkable 35 percent. Within the echo-boom generation (born 1985 to 2004), minorities will be responsible for 40 percent, and Hispanics nearly 20 percent, of household growth through 2015. Hispanics will therefore have a major presence in markets for starter homes, first trade-up homes, and entry-level apartments.

Minorities will also help to offset the 3.4 million drop in the number of white households in their 40s as older members of the baby-bust generation replace the younger baby boomers in this age range. Net growth in the number of minority household heads aged 40-49 should reach 1.4 million, with Hispanics accounting for 1.1 million of the increase (Figure 16).

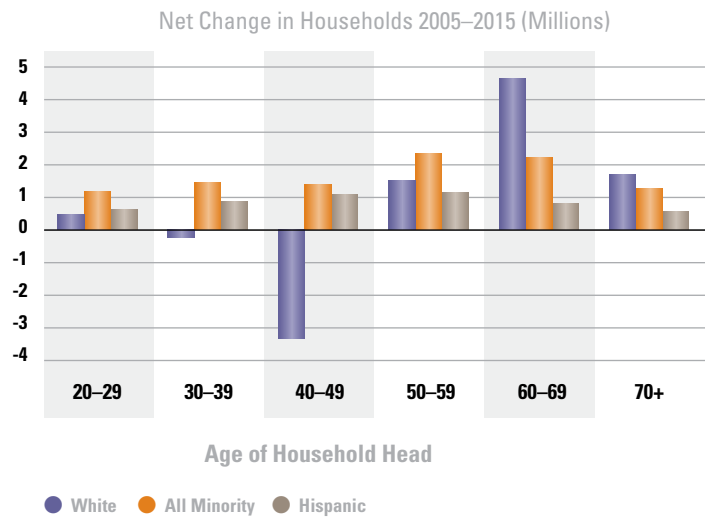
While the baby boomers will not add many households on net over the next decade, the sheer size of this generation ensures its continued influence in the housing market. With their record-breaking income and wealth, the baby boomers will set the pace for second-home demand. Even assuming no change in age-specific ownership rates, the number of households aged 50-69 that owns second homes should increase by more than half a million by 2015. The number of baby boomers with partial ownership stakes in second-home timeshares is also expected to increase by 400,000.

**FIGURE 15** Late 1990s Income Gains Exceeded 2000–2005 Losses for All But the Bottom Tenth of Households



Notes: Income deciles are equal tenths of households sorted by pre-tax income. Adjusted for inflation by the CPI-UX for All Items. Source: JCHS tabulations of the 1996, 2001, and 2006 Current Population Surveys.

**FIGURE 16** Minorities Will Contribute Importantly To Household Growth



Note: Minorities are all non-white householders, including Hispanics. Source: George S. Masnick and Eric S. Belsky, "Addendum to Research Note N06-1: Hispanic Household Projections Including Additional Tenure Projection Detail by Age and Broad Family Type for Non-Hispanic White and Total Minority Households," JCHS Research Note N06-4, 2006.

In addition, fewer baby boomers may downsize than members of older generations at similar ages. A recent National Association of Realtors® survey of baby boomers confirms this trend, with 15 percent of likely movers planning to relocate because they need larger homes and another 13 percent because they can afford to trade up. Only five percent plan to move to smaller homes.

Between 2005 and 2015, the number of pre-baby boom, primarily white households will fall by about 11 million. As a result, the homes

they currently occupy—including millions of modest houses built in the inner suburbs during the 1950s, 1960s, and 1970s—will come onto the market. This huge turnover of homes will open new opportunities for younger and more racially and ethnically diverse households to live close to city centers.

Meanwhile, as increasing numbers of white baby boomers begin to retire after 2015, their homes—typically built in the 1980s, 1990s, and 2000s in the outer-ring suburbs—will also start to come onto the market. The baby boomers who choose to remain in their homes will become an increasingly important source of demand for remodeling projects intended to help them age in place.

### THE OUTLOOK

The accelerating pace of household growth, together with the large number of households in their peak wealth and income years, bodes well for housing over the coming decade. Given the uneven distribution of income and wealth, construction demand will be weighted toward luxury homes, major remodeling projects, seniors housing, and second homes. Additional demand for rental units and starter homes will come from the echo boomers as they move into the peak household formation years.

At the same time, working families, younger households, and minorities will face new affordability challenges. Some of the need for more modest housing will be met by the existing housing stock as the homes owned by older generations in inner-ring suburbs turn over to younger buyers. But in fast-growth areas, the existing stock will be unable to accommodate the rising number of young households. Unless local governments ease some of the regulatory constraints on development, the home building industry can do little to supply additional affordable units in these areas.

# 4



## Homeownership

As housing markets peaked in 2005 and cooled over 2006, the impact on homebuying and homeownership was immediate. With concerns over the impending correction curtailing demand and affordability pressures mounting, both the national homeownership rate and the net growth in the number of homeowners fell for the second consecutive year.

### SOFTENING MARKETS

After weakening in 2005, the conditions that had promoted outsized gains in homeownership eroded further in 2006. Interest rates, while still low, were a full percentage point higher in mid-2006 than a year earlier, raising the mortgage payments on newly purchased homes. In addition, house price appreciation slowed in most areas, taking the sense of urgency out of the market.

Affordability had in fact begun to erode in some markets as early as 2003, as soaring house prices outpaced the benefits of low interest rates (**Figure 17**). By the first half of last year, nearly all markets felt the crunch. Although mortgage rates receded from 6.76 percent in July 2006 to 6.14 percent in December and price appreciation slowed dramatically, uncertainty about the direction of rates and prices kept potential homebuyers at bay.

The subsequent retreat in homebuying left new home sales down 18 percent from the record 2005 level, and existing home sales down 8 percent. Caught unaware, suppliers were unable to respond quickly enough to the large drop-off in demand. Home builders had to complete houses under contract even as buyers started to cancel orders. Meanwhile, sellers of existing homes kept their properties on the market, holding out for the prices they still believed they could get. As a result, the supply of both new and existing homes for sale rose sharply in the last quarter of 2006 and continued to climb in early 2007.

Motivated sellers in many markets finally started to reduce their prices. Home builders led the charge with concessions, discounted mortgages, and other offers. But most sellers not forced to move continued to hold out, creating a lag before areawide prices started to respond to eroding market conditions. Prices are therefore likely to remain soft for a time in most places even if the economy continues to expand.

## MIXED REGIONAL CONDITIONS

Despite the gloomy national picture, both production and homebuying were up in some metropolitan areas in 2006. Nominal median house prices increased at least 10 percent for the year in 23 of the 149 metros evaluated, including Los Angeles, Orlando, and Tampa. Although declining in many of these markets, nominal prices in half of them were still higher in the fourth quarter of 2006 than a year earlier.

At the same time, though, nominal median house prices fell for the year in 34 of the covered metropolitan areas. In most cases, these areas had either distressed economies or especially heavy speculative activity that had left them vulnerable to further trouble. Only a handful of metros—mostly in the Midwest—posted price declines of three percent or more, and just three showed a drop of more than five percent.

Meanwhile, price softness in some areas appears to reflect overbuilt markets and a fall-off in speculative activity. With the end of rapid price appreciation, the share of prime investor loans dropped by more than five percentage points in markets such as Phoenix, Sarasota, and Reno (**Figure 18**). In large markets such as Las Vegas, Washington, DC, and Riverside, CA, the retreat in investor demand translated into 4,000 fewer loans in a single year, and into more than 10,000 fewer loans in Phoenix.

In many smaller locations, the absolute decline was far more modest but the percentage drop was staggering (**Table W-4**). In Merced, CA, for example, investor loans plummeted by 70 percent. Second-home demand, which had accounted for over 30 percent of prime purchase

loans in 2005 in resort areas like Atlantic City, Myrtle Beach, Naples, and Fort Myers, fell by as much as half.

With higher interest rates offsetting even the largest price declines, affordability remained an obstacle for first-time homebuyers. In Detroit, where prices fell the most, the mortgage payment for a median-priced house bought in 2006 was still \$30 more a month in real terms than for one purchased in 2005. In Los Angeles, where prices continued to rise at double-digit rates, the monthly mortgage payment for a newly purchased home shot up \$590 in just one year and \$1,500 over three years.

## MORTGAGE PRODUCT EXPANSION

As house prices escalated over the past few years, mortgage lenders introduced more and more products designed to lower initial monthly payments but carrying higher risks of future upward adjustment. The Mortgage Bankers Association reports that adjustable-rate mortgages (ARMs) grew from 13 percent of all originations (prime and non-prime purchases and refinances) in mid-2003 to 35 percent in mid-2005.

To compete for customers, lenders also offered deep discounts on some adjustable products. Average discounts in the prime market thus rose from just 0.14 percentage point in January 2003, to 1.52 percentage points in January 2005, to 2.34 percentage points in January 2007.

When the discounts expire, payments on recently originated adjustable loans will rise not only by the discounted percentage points, but also by any increase in the indexes to which the loan rates are tied. Fully indexed adjustable rates climbed from about four percent in 2003 to almost eight percent in the second half of 2006. Some borrowers with adjustable-rate mortgages will, however, be able to refinance to fixed-rate mortgages before their payments reset. Indeed, 14 percent of refinances in the fourth quarter of 2006 involved switching from an adjustable- to a fixed-rate loan.

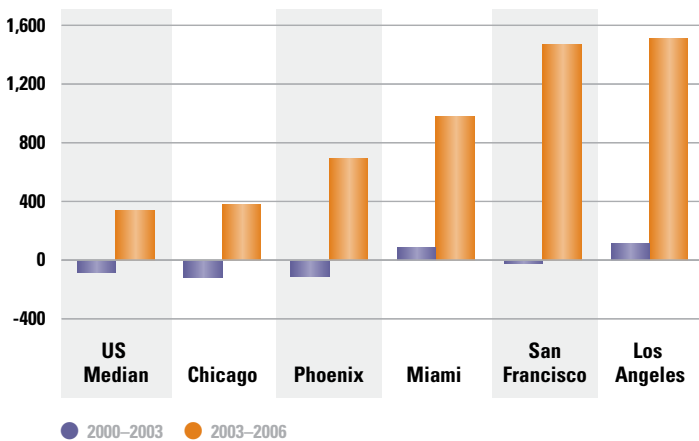
While traditional ARMs lost market share last year as interest rates rose, nontraditional products saw meteoric growth. According to First American LoanPerformance, prime and non-prime loans with interest-only and payment-option features went from serving a fringe market to over 32 percent of all originations in 2006. While concentrated primarily in high-cost states, these products also took off nationally as a tool to help offset rising interest rates and home prices.

From less than five percent in 2002, interest-only prime and non-prime loans accounted for almost 30 percent of all originations in 2005, before falling back to 20 percent at the end of 2006. Most of these are adjustables that entail not only interest-rate resets, but also higher payments to amortize the principal over a shortened term.

The share of payment-option loans grew even more rapidly, more than tripling in just two years. In 2006, these loans—allowing borrowers to defer a portion of principal and interest by paying credit-card-like minimums—made up about 12 percent of originations. When these loans first became available, most borrowers exceeded their minimum pay-

**FIGURE 17** Affordability Eroded in Both Rapidly And Slowly Appreciating Housing Markets After 2003

Change in Real Monthly Mortgage Cost for a Median-Priced Home (Dollars)

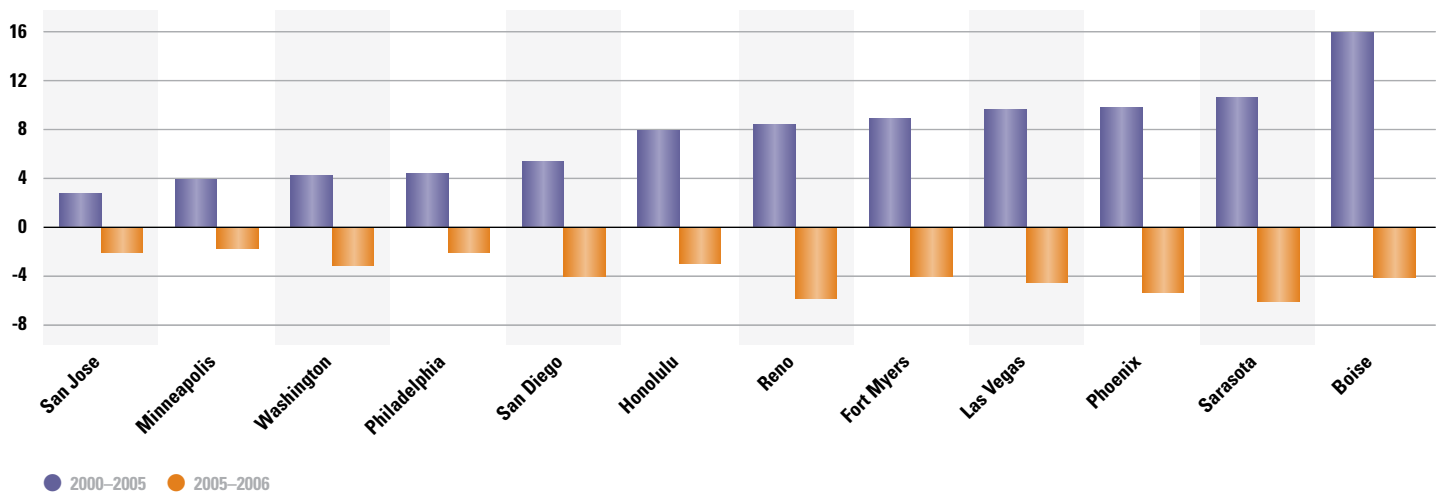


Note: Monthly mortgage costs are for a newly purchased home, assuming a 30-year fixed-rate mortgage and a 10% downpayment.

Source: National Association of Realtors® 2006 Median Existing Single-Family House Price, adjusted by the Freddie Mac Conventional Mortgage Home Price Index and the Bureau of Labor Statistics CPI-UX for All Items.

**FIGURE 18** After Pumping Up Demand, Investors Began to Exit Markets in 2006

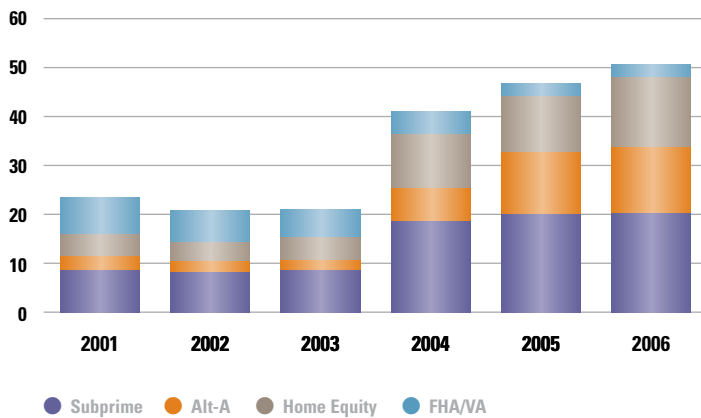
Change in Investor Share of Loan Originations (Percentage points)



Source: First American LoanPerformance.

**FIGURE 19** Non-Prime Lending Has Surged

Share of Mortgage Originations (Percent)



Note: Shares are of total dollar value of originations.  
Source: Inside Mortgage Finance, *Mortgage Market Statistical Annual*.

ments. By March 2006, however, UBS’s Mortgage Strategist reported that more than three-quarters of borrowers with payment-option loans originated since 2004 were making only minimum payments and thus adding to rather than paying down principal.

Despite the recent run-up, the share of homeowners with these so-called “affordability” products is likely less than eight percent. Furthermore, borrowers with interest-only and payment-option loans are more apt to refinance than borrowers with fixed-rate loans. As a result, the share that retains their loans long enough to reach fully amortizing payments is even smaller. Still, as many as six million households could face sharply higher mortgage payments in the next three to five years if they do not refinance or sell first.

### THE RISE OF SUBPRIME LENDING

Subprime lending soared from near zero in the early 1990s to 8.6 percent of originations in 2001 and 20.1 percent in 2006 (Figure 19). At least seven percent of homeowners, or more than five million households, have subprime loans. These mortgages carry higher rates to cover the risks associated with lending to people who have had problems making payments in the past and many who choose not to state or confirm their incomes and assets when they apply for a loan.

Meanwhile, Alt-A loans, which fall between prime and subprime loans on the risk spectrum, increased from 2.7 percent of originations in 2001 to 13.4 percent in 2006 (Table A-8). These loans allow some combination of low documentation, slightly subpar credit scores, and features such as interest-only or payment options. FHA loans, once the only haven for non-prime borrowers, went from a 10–15 percent market share in the 1990s to just 2.7 percent in 2006.

Loans with risky features found their way into the subprime market just a few years after arriving in the prime market. First American LoanPerformance reports that almost half of securitized subprime debt originated in 2006 was in “2/28” adjustable-rate loans with deep two-year discounts, and nearly a fifth had interest-only features. With the introduction of these products and looser credit standards, the risks associated with subprime loans multiplied for borrowers and lenders alike.

### TROUBLED LOANS

While inching up in the prime market, the incidence of troubled loans in the subprime market has risen rapidly since 2005. Stating the share of troubled loans at any point in time, however, masks the often higher, cumulative default rate on a group of loans several years after the loans are made. As an example, the share of subprime loans

originated in 2000 and foreclosed as of May 2005 was a distressing 12.9 percent—even though fewer were the riskier payment-option and interest-only types, and they benefited from falling interest rates from 2000 to 2003 and from rising prices since 2000.

Recently originated loans, which make up a much larger share of outstanding subprime mortgage debt, are on track to accumulate defaults at an even higher rate. Among subprime adjustable-rate loans originated in 2006, data as of March 2007 show that the share at least 60 days delinquent or in foreclosure within six months was already over seven percent. This compares with shares of less than four percent for 2005 loans and less than two percent for 2003 loans shortly after their origination. This is the worst performance for subprime loans since they became a major force in the market.

Job loss, illness, divorce, and death remain the principal causes of defaults. Even so, the geographic concentration of certain loan products puts some states especially at risk. On the subprime side, First American LoanPerformance data for 2006 indicate that shares are particularly high in some Southern states, including 20 percent in Mississippi, 18 percent in Tennessee, and 17 percent in Florida, compared with 13 percent nationally (**Table W-9**).

Loans with interest-only and payment-option features have been popular in states with high housing prices. Interest-only loans accounted for over 30 percent of originations last year in California, Nevada, Colorado, and Arizona, compared with 22 percent nationally. California also led with a 24 percent share of payment-option loans, followed

by Nevada, Florida, and Hawaii at 13–17 percent, compared with 11 percent nationally.

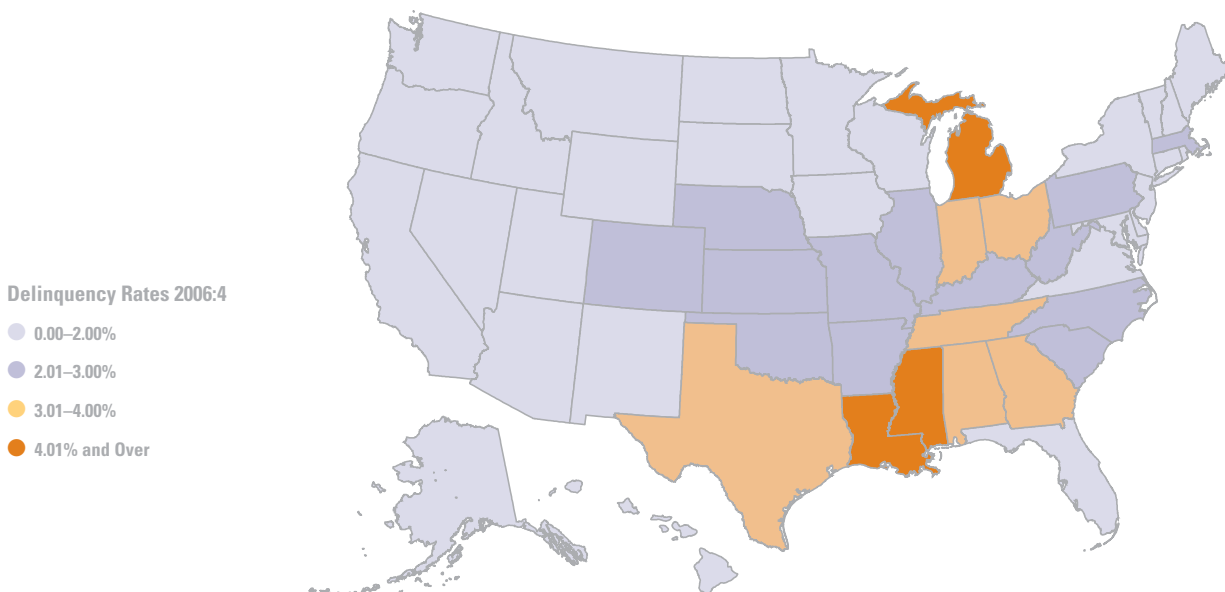
So far, the highest default rates are primarily in states with weak economies or recovering from natural disasters, such as Michigan, Louisiana, and Mississippi. Still, other states with stronger economies but significant exposure to subprime loans—including Tennessee and Texas—are now showing distress (**Figure 20**).

With mortgage performance worsening, the number of prime loans at least 90 days delinquent or in foreclosure at the end of 2006 almost reached 290,000 and subprime loans 465,000 (**Figure 21**). As a result, dozens of smaller subprime mortgage lenders went out of business and some larger lenders had to boost their loan reserves. Even more disconcerting, nearly 250,000 homeowners entered foreclosure proceedings in the fourth quarter of 2006 alone, up from 150,000 in the second quarter of 2005 on a non-seasonally adjusted basis.

### INCREASING DEBT LOADS

Americans have grown much more tolerant of debt. Indeed, total household debt exceeded total personal income starting in 2003. Home mortgages make up a growing share of this outstanding debt, increasing from 65 percent in 2000 to 73 percent in 2006. Even more telling, a larger portion of households are spending considerable portions of their incomes on debt service. Between 1995 and 2004, the share of households devoting more than one-fifth of their monthly incomes to debt climbed from 30 percent to 34 percent, while the

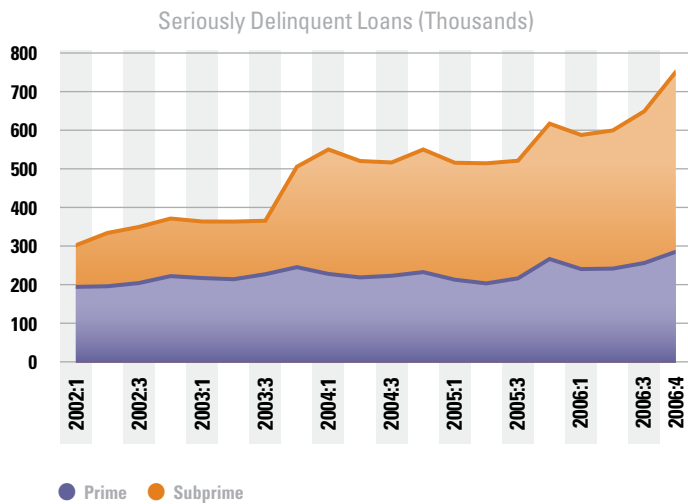
**FIGURE 20** States with the Highest Delinquency Rates Have Struggling Economies Or Are Recovering from Natural Disasters



**Notes:** Delinquency rates are the share of all loans 60+ days past due or that entered foreclosure. Data are based on seasonally adjusted rates.  
**Source:** Mortgage Bankers Association, National Delinquency Survey.



**FIGURE 21** While Prime Loan Performance Is Stable, Subprime Problems Are Rising

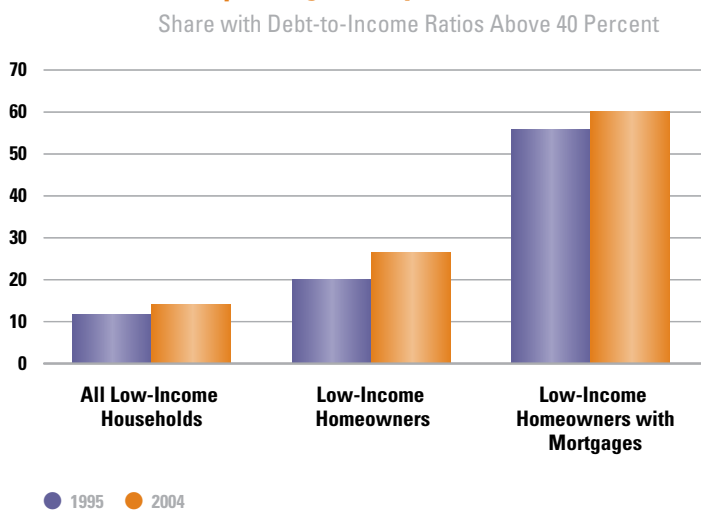


Notes: Seriously delinquent loans were at least 90 days past due or in foreclosure during the quarter. Prime and subprime loans are conventional and conforming. Data are based on non-seasonally adjusted rates. Source: Mortgage Bankers Association, National Delinquency Survey.

house prices, while lenders have relaxed loan-to-value ratios to attract customers. In addition, many households have substituted mortgage debt for other debt, using home equity loans and lines of credit to pay off credit cards and other expenses. By the Federal Reserve's measure, nominal consumer debt rose by 21 percent between 2002 and 2006, while mortgage debt was up by 62 percent.

The run-up in debt is perhaps less shocking when compared with equity holdings. Mortgage debt as a share of total housing value, though up from 31 percent in 1985, is still under 50 percent despite the huge increase in volume. Aggregate home equity therefore remains higher than aggregate mortgage debt. Still, as house prices climbed during the recent boom, homeowners used their equity gains to add nearly equal amounts to their debt rather than to strengthen their balance sheets. If house prices and values should fall sharply, the debt-to-value ratio would set new records. Meanwhile, American Housing Survey estimates indicate that the share of homeowners with negative net equity (owing more than their homes are worth) was already over three percent in 2005, and up to 13 percent among owners that had bought in the prior two years. These shares likely increased in 2006 and will do so again in 2007.

**FIGURE 22** Larger Shares of Low-Income Households Are Spending Heavily to Service Debt



Note: Low-income households are in the bottom income quartile. Source: JCHS tabulations of the 1995 and 2004 Surveys of Consumer Finances.

share devoting more than 40 percent of their incomes rose from 8.5 percent to 9.3 percent—an increase of two million households. The rise in both mortgage and overall debt is evident for all households, all homeowners, and homeowners with mortgages, but is especially marked for low-income households (Figure 22).

The rise in mortgage debt is not just a function of the increase in homeownership. Individual buyers have taken on more debt to offset rising

## THE OUTLOOK

Over the next year or so, house prices are likely to rise slowly in most places, drift down in some, and fall more sharply in others. Weaker prices should help to work off the oversupply of homes for sale and sow the seeds for the next expansion. But several factors could extend the correction. The contraction of subprime credit and affordability products could lead to a prolonged reduction in demand, interest rates could rise, the economy could weaken, and many consumers could hold off on buying until the trough is reached.

Uncertainty about credit availability hangs over the housing market. While it is clear that lenders underestimated subprime risks, it is unknown how much worse conditions may get. It is especially troubling that subprime losses have been heavier than expected at only the first sign of softer prices and loan rate resets. Much of the hope for a recovery in the for-sale markets now rests on the economy staging a soft landing, markets drawing down the excess supply, and loan performance improving.

Looking past the current correction, homeownership is still clearly the tenure of choice. In addition, strong gains in income and wealth will favor ownership of both first and second homes. As a result, fully 88 percent of the net growth in households over the next ten years is expected to come from gains in the number of homeowners. Indeed, even if homeownership rates by age and family type remained at 2005 levels through 2015, the owner share of household growth would still be 72 percent.

But affordability will remain a problem. A rare combination of unusually favorable economic conditions and mortgage innovation was responsible for the exceptional growth of homeownership in the latter half of the 1990s and first half of the 2000s. The immediate return of these extraordinary conditions is unlikely.

# 5



## Rental Housing

With the economy generating jobs and homeownership faltering, rental markets continued their gradual recovery last year. In fact, the 1.2 million growth in renter households in 2004–2006 more than made up for losses in 2002–2004. This renewed demand helped to reduce vacancy rates and firm up rents across much of the country.

### RENTAL MARKET TRENDS

With the national rental market slowly picking up, multifamily vacancy rates retreated slightly and the single-family rate finally leveled off (**Figure 23**). Demand strengthened in every region but the Northeast in both 2005 and 2006. The South showed the largest absolute increase in renters last year, accounting for three out of five net renter households added nationally. Even with a faltering economy and stagnant job growth, the Midwest posted the second-largest increase in renters and the biggest percentage gain.

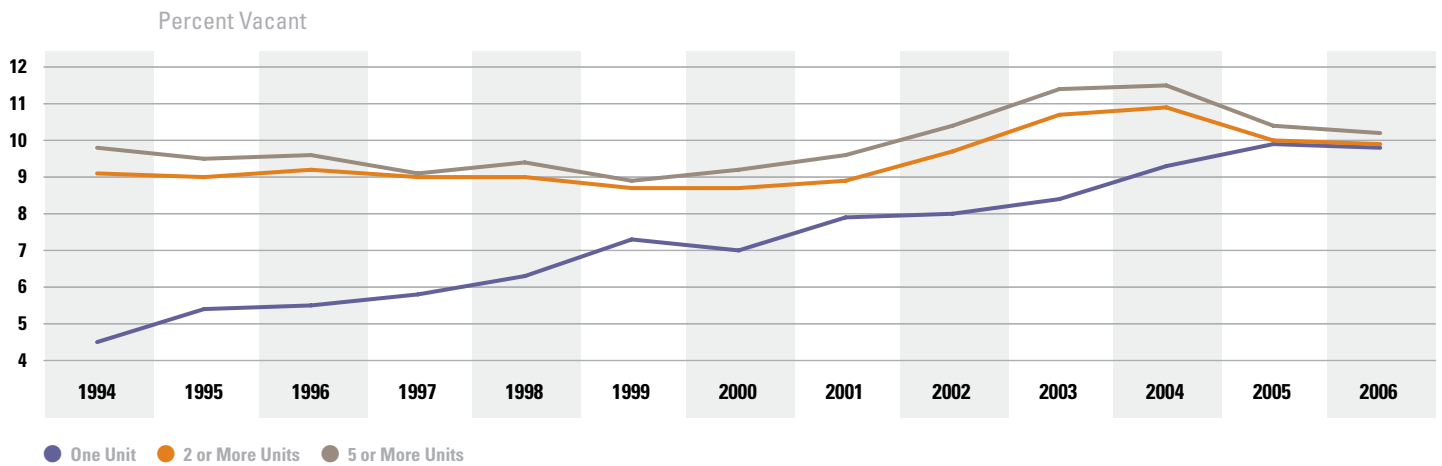
Despite anemic demand, rents in the West rose more than twice as fast as in any other region, with eight metros registering increases of at least five percent (**Table W-5**). These gains reflect the third straight year of vacancy rate reductions, driven by the declining supply of rental units in the West. In contrast, strong demand helped to reduce vacancy rates in the South and the Midwest, but left them still well above the national average. Meanwhile in the Northeast, the short-lived rental recovery ended in 2006 with slackening demand and rising vacancy rates.

With rents back on the rise in most areas, the net operating incomes of apartment properties finally rebounded. After an unusual period when property values were climbing even as operating incomes were falling, growth in value and income once again aligned in 2006. Now that the yields available from other investments have improved, investors are less likely to drive up the prices of rental properties much ahead of operating incomes.

### RENTAL SUPPLY CHANGES

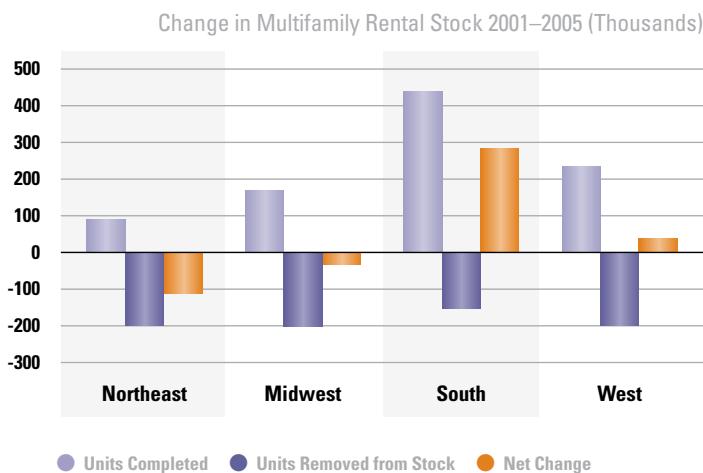
Despite the completion of nearly one million units, American Community Survey estimates indicate that the multifamily rental supply increased by less than 200,000 units between 2002 and 2005. Many of the new units thus replaced apartments converted to condos

**FIGURE 23** After Years of Increase, the Single-Family Vacancy Rate Has Levelled Off and Multifamily Markets Have Tightened



Source: US Census Bureau, Housing Vacancy Survey.

**FIGURE 24** Most of the Recent Multifamily Rental Construction Has Merely Offset Losses



Notes: Multifamily rental units are renter-occupied and vacant for-rent apartments in structures with at least two units. Units removed from stock represent the difference between units completed in 2002–2005 and the net change in units 2001–2005 and include conversions as well as losses to abandonment, demolition, and disasters.  
Sources: JCHS tabulations of the 2001 Census Supplemental Survey and the 2005 American Community Survey; US Census Bureau, New Residential Construction.

or removed through abandonment, disasters, and demolitions. In the Northeast and Midwest, the new multifamily rentals primarily met replacement demand (Figure 24). In the South, the additional supply went largely to house a growing number of renter households.

The rush of condo conversions driven by the home-selling boom persisted into 2006, helping to reduce rental vacancies. According to Real Capital Analytics, the number of rentals in larger multifamily properties converted to for-sale units jumped from just a few thou-

sand in 2003 to 235,000 in 2005, before dropping to about 60,000 in 2006. At the same time, new construction of multifamily buildings intended for rental use dipped from 262,000 units in 2003 to 184,000 in 2006. But now that condo sales are softening in some locations, sellers unable to get their prices may return their units to the rental market, while some newly built multifamily properties intended for sale may also be converted to rentals.

On the single-family side, the rental market has absorbed some of the net increase resulting from the heavy production of recent years. As a result, the single-family share of vacant for-rent units rose from 26 percent in 2003 to 31 percent in 2006, lifting the single-family rental vacancy rate by 1.4 percentage points over this period. Despite easing in 2006, the single-family rental vacancy rate may resume its climb if owners of for-sale homes decide to wait for the inventory correction to play out, and rent their units rather than drop their prices.

### RENTAL PROPERTY OWNERSHIP

In 2001, individuals and married couples owned 19.3 million of the nation’s rental units, while partnerships, corporations, and other institutions owned another 15.6 million. With more than half of the stock in their hands, smaller owners thus have a significant impact on the direction of the market as a whole.

Individuals and couples are more likely to own smaller properties, holding 84 percent of the rental properties with 1–4 units and 65 percent of those with 5–19 units. After controlling for property size, though, individual and institutional owners are surprisingly similar. For example, while owners of smaller properties are less likely to have mortgages than owners of large properties, nearly equal shares of institutional and individual owners in each property-size category carry mortgages and have similar loan-to-value ratios (Figure 25).

Structure type rather than ownership therefore appears to govern financing decisions, with smaller properties less leveraged relative to larger properties.

Individuals and couples do, however, tend to own older properties and charge lower rents. As a result, they hold much of the affordable rental stock and may face low or negative net operating incomes. The fate of the affordable housing supply therefore relies critically on finding ways to assist these small property owners in preserving their rental buildings.

### RENTAL DEMAND CHANGES

While rental demand has barely increased in the past decade, the composition of demand has changed markedly. In particular, the minority share of renter households climbed from 37 percent in 1995 to 43 percent in 2005, and is expected to exceed 50 percent by 2015.

In 10 states plus the District of Columbia, minorities already constitute more than half of all renter households. Eight of these states are located in the South and West, joined by New York and New Jersey in the Northeast. Minorities also make up the majority of renters in 9 of the nation's 10 largest metropolitan areas. Indeed, they account for two out of every three renters in Los Angeles and Miami, and even larger percentages in some smaller Texas metros.

Much of the increase in the minority renter population reflects the dramatic growth in Hispanic households. From just 5 percent in 1995, Hispanics represented 16 percent of all renters in 2005. With families accounting for 72 percent of Hispanic renter households, the minority share of family households rose to more than 50 percent (Figure 26). Given that their presence is greatest where immigration is highest, Hispanics make up more than 40 percent of

renter households in traditional gateway metropolitan areas such as Los Angeles and Miami.

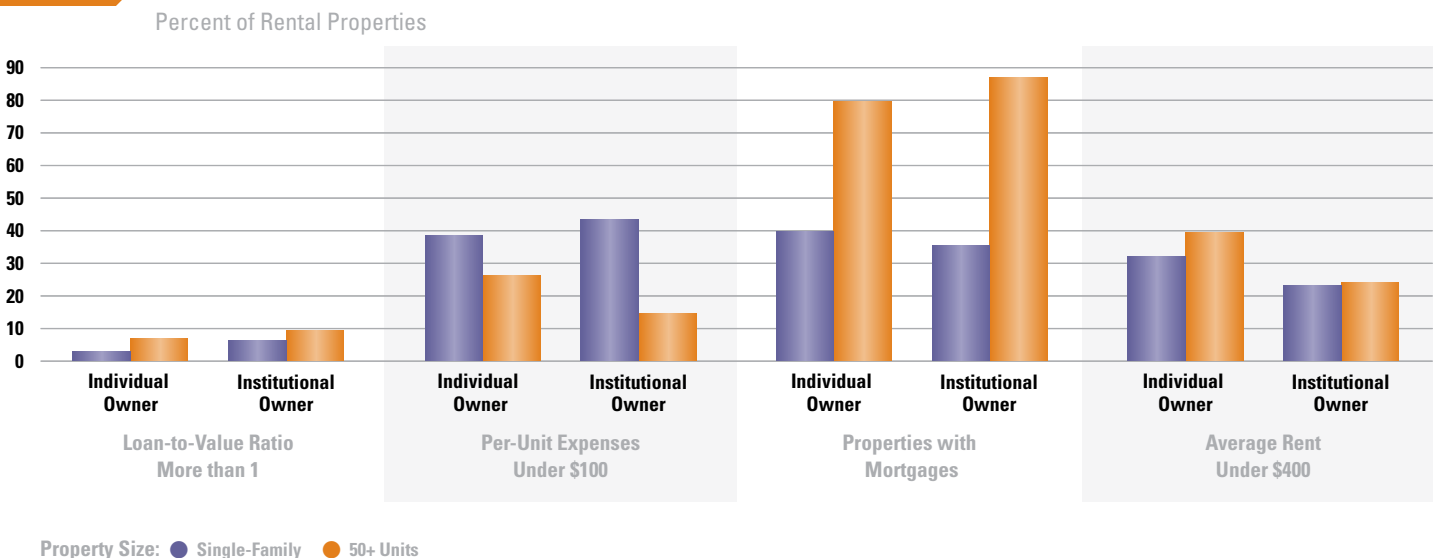
The age distribution of renter households has also changed over the past decade. As the baby boomers moved into their 40s and 50s, the share of renters in this age range grew from 27 percent to 32 percent (Table A-9). With the aging of the baby-bust generation, the share of renters in their 30s dropped from 28 percent to 23 percent over this same period. Shares of renters in their 20s and 60s held steady. As a result, the marginal growth in rental demand has come primarily from middle-aged households.

Meanwhile, the share of renters living in family households declined from 54 percent in 1995 to 51 percent in 2005. This decrease reflects lower rates of remarriage as well as the longer lifespans of the widowed. Despite the sharp increase in Hispanic households with their much higher propensity to live in families, the family share of minority renter households also fell, from 66 percent to 62 percent.

The extended homeownership boom siphoned many moderate- and higher-income households from the rental market, raising the share of renters in the bottom income quartile from 38 percent in 1995 to 41 percent in 2005. While still overrepresented in this group, the share of minority renters in the bottom quartile actually shrank from 47 percent to 44 percent thanks to strong minority income gains in the latter half of the 1990s.

Rental markets have thus become more racially and ethnically diverse, as well as more skewed toward middle-aged and lower-income households. To meet this new mix of demand, housing suppliers need to pay greater attention to affordability issues, provide more amenities for middle-aged and senior citizens, and address the cultural differences of people born outside the United States.

**FIGURE 25** Except for Average Rent Levels, Rental Property Financials Vary More by Property Size than by Ownership



Note: Institutional owners are primarily partnerships and corporations.  
Source: JCHS tabulations of the 2001 Residential Finance Survey.

## DECENTRALIZATION OF RENTER HOUSEHOLDS

While many have joined in the migration to the suburbs, renters are still much more likely than homeowners to live near the urban core. In 2000, the median distance from the central business districts (CBDs) of the nation's 91 largest metropolitan regions for renters was 9.4 miles, while the median distance for homeowners was 13.8 miles.

Minority renters, in particular, remain highly concentrated in center cities. For black renters, the median distance from the CBD increased from 4.3 miles in 1970 to 7.4 miles in 2000. But for white renters, the median distance started at 7.7 miles and then increased to 10.6 miles over the same three decades.

With minorities expected to account for all of the net growth in renter households but with most new rental opportunities located in the suburbs, the decentralization of minority renters should continue and may even accelerate. But for many low-income center-city renters, moving to the suburbs poses an economic hardship because they have to rely on public transportation to get to work.

Indeed, members of renter households made up less than 30 percent of all commuters in 2005 but 60 percent of those commuting by public transit (Figure 27). The fact that 38 percent of center-city renters and 52 percent of low-income center-city renters do not own cars underscores the importance of access to public transit—a resource that most suburban communities lack.

## THE RENT VS. OWN CHOICE

Over a million households joined the ranks of renters in the last two years. While part of this increase undoubtedly reflects the large number of newly formed households that made the choice to rent, some share is likely due to an increase in households making the move

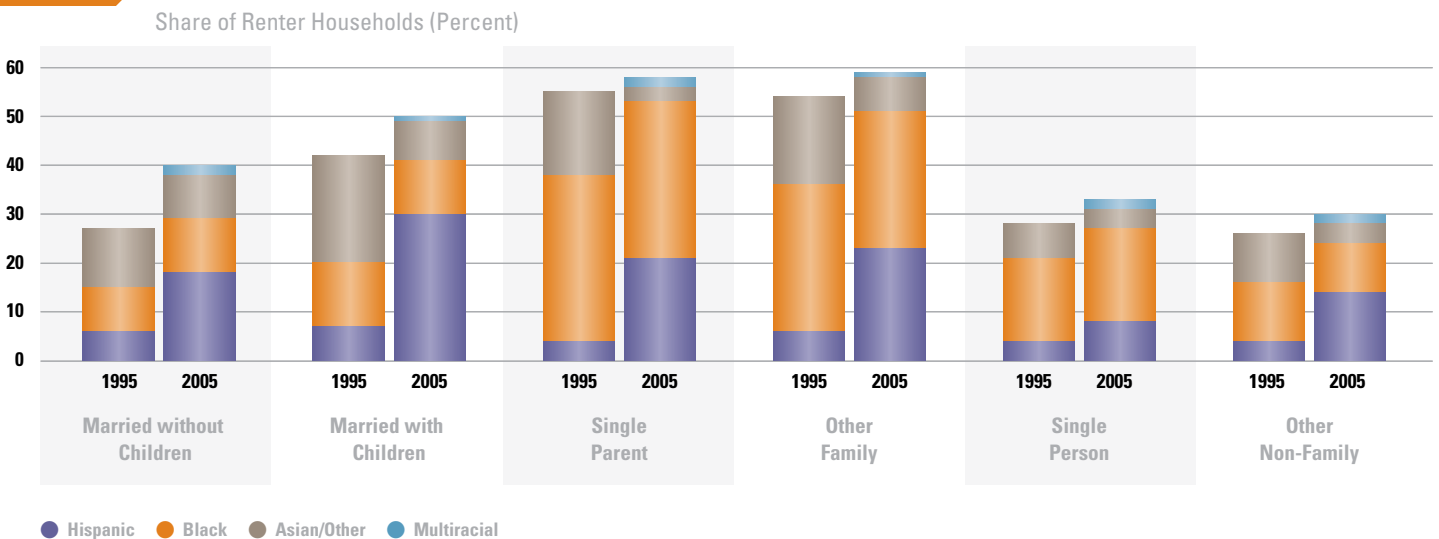
from owning to renting. Normally, millions of owner households revert to renting every year. When last measured in 2005, fully 2.7 million former owners reported moving to rental units in the prior 12 months. Half of these owners became renters because of a change in their family or employment situation, but only a handful switched to reduce their housing costs.

In 2004, the difference between the median monthly living expenses for owners and renters was just \$200. Since most owners were still benefiting from double-digit price appreciation, few saw renting as more financially attractive. As interest rates and house prices rose and rents remained stable, however, the difference between the median costs of buying a home and renting jumped to more than \$400 per month in 2006 (Table A-2). This suddenly made renting both a bargain and a safer bet. With house price appreciation less assured in the coming year or two, more newly formed households and existing owners may choose to rent, at least for a time.

The rising number of foreclosures has also increased the demand for rental housing. Even though loan problems had just started to surface in 2006, the number of homes entering foreclosure at the end of the year was up by more than 75,000 from the end of 2005 on a non-seasonally adjusted basis—equivalent to 14 percent of the net growth in renters last year. While some households that lost their homes may have dissolved, most are likely to have moved into rental housing.

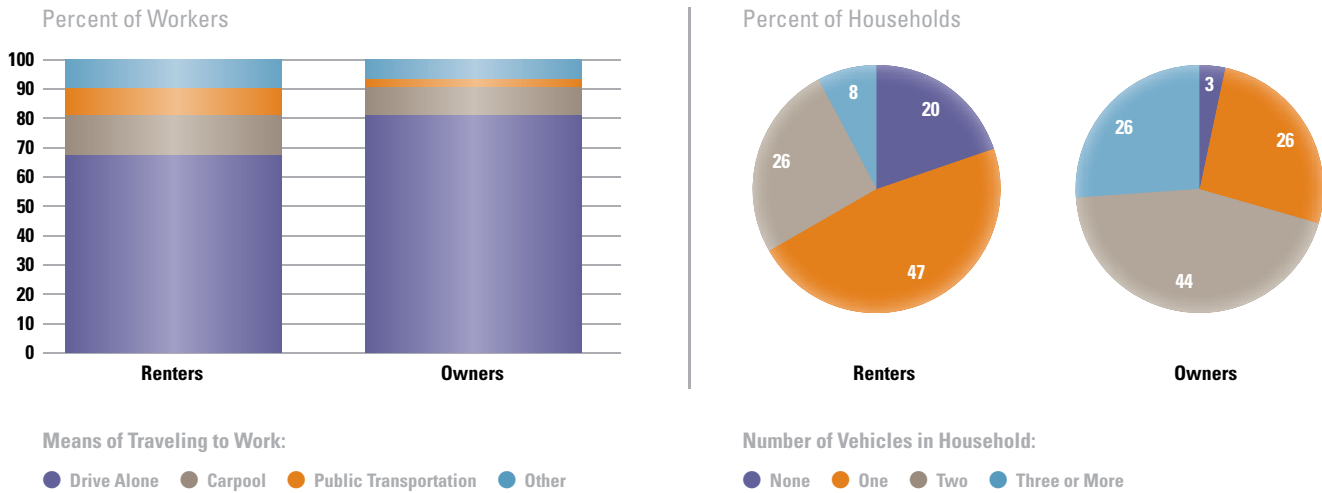
Indeed, the number of households that rent out of necessity may well grow. The combination of higher ownership costs, tighter underwriting standards, and the erosion in credit quality among the current pool of renters will prevent many from buying homes. Even improved market conditions are unlikely to help, given that both house prices and interest rates would have to fall dramatically to make ownership as affordable as it was in 2000–2003.

**FIGURE 26** Hispanics Are Driving Growth in the Minority Share of Renters Across All Household Types



Notes: Black, Asian/other and multiracial are non-Hispanic. Hispanics may be of any race. Asian/other includes Aleuts, Native Americans and Pacific Islanders. The American Housing Survey added the multiracial category in 2003. Respondents choosing this category are assumed to have selected one of the other minority racial/ethnic categories in prior years. JCHS-adjusted weights used in 2005 data. Source: JCHS tabulations of the 1995 and 2005 American Housing Surveys.

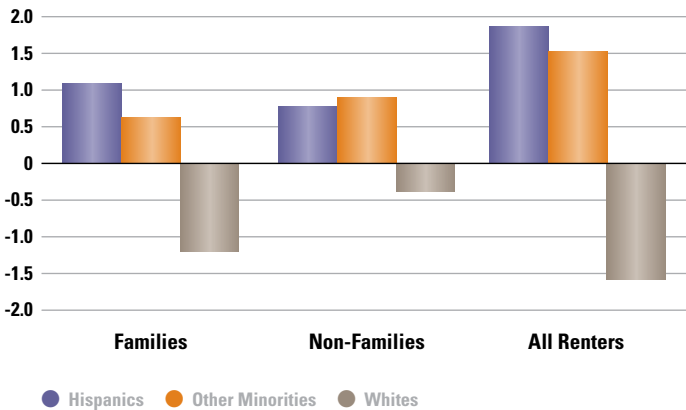
**FIGURE 27 Renters Are More Reliant on Public Transportation and Less Likely to Have Cars than Homeowners**



Notes: Transportation data is for all workers over age 16 living in households. Public transportation excludes taxicabs.  
 Source: US Census Bureau, 2005 American Community Survey.

**FIGURE 28 Hispanics and Other Minorities Will Fuel Renter Household Growth Over the Next Decade**

Projected Change in Renter Households  
 2005–2015 (Millions)



Notes: Other minorities and whites are non-Hispanic. Hispanics can be of any race. Non-family households include single persons and non-relatives living together.  
 Source: George S. Masnick and Eric S. Belsky, "Addendum to Research Note N06-1: Hispanic Household Projections Including Additional Tenure Projection Detail by Age and Broad Family Type for Non-Hispanic White and Total Minority Households," JCHS Research Note N06-4, 2006.

homebuying conditions, it should be temporary. Indeed, a quicker-than-expected rebound in home sales could prevent discouraged sellers from renting out their homes, thereby keeping rental markets tight. Even if home prices continue to drop, the correction is unlikely to close the growing gap between the costs of homeownership and what many renters can afford.

And even if today's high homeownership rates persist, the rapid growth in minority and immigrant households should still boost the number of renter households by about 1.8 million over the next decade (Figure 28). Hispanics will account for 55 percent of the growth in minority renter households between 2005 and 2015, increasing by 1.9 million and more than offsetting the 1.6 million drop in white renters. By 2015, Hispanics should thus make up 22 percent of all renter households and 29 percent of all family renter households.

At the same time, the share of renters in their 20s will increase as the older members of the echo-boom generation and young immigrants form new households. The share of renters in their 30s and 40s, in contrast, will shrink significantly as the baby-bust generation moves through these age ranges. The share of renters in their 60s and 70s will increase only slightly, given that many seniors prefer to remain in their own homes or to move to supportive housing rather than to rental units.

All of these shifts in demand will keep the need for decent, affordable rental housing strong. Rental production will likely continue to be concentrated in the suburbs, providing units for primarily higher-income renters who can afford to live some distance from public transportation and other services. Meanwhile, cities will have to find new ways to stimulate in-fill production and preserve existing units to meet the housing needs of the growing low-income renter population.

**THE OUTLOOK**

Just how the recent run-up in condo construction and conversions, as well as the oversupply of single-family homes, will affect the rental market is hard to guess. It is possible that strengthening rental demand will stimulate more production and/or that weakening homeownership demand will encourage owners to rent their unsold properties. But whatever lift rental demand gets from today's weaker



# 6



## Housing Challenges

Affordability problems remain the nation's fastest-growing and most pervasive housing challenge. Although middle-income households increasingly feel the pinch, it is the nation's low-wage service workers, part-time workers, the disabled, and retirees that bear the heaviest burdens. Moreover, 2.1 million households live in severely inadequate housing while about three-quarters of a million people are homeless on any given night.

### HEAVIER COST BURDENS

The number of American households spending more than half their incomes on housing is rising rapidly (**Figure 29**). In 2005, the number of such severely cost-burdened households jumped by 1.2 million to a total of 17 million. This brings the increase since 2001 to an astonishing 3.2 million households. Today, one in seven US households is severely housing cost-burdened (**Table A-6**).

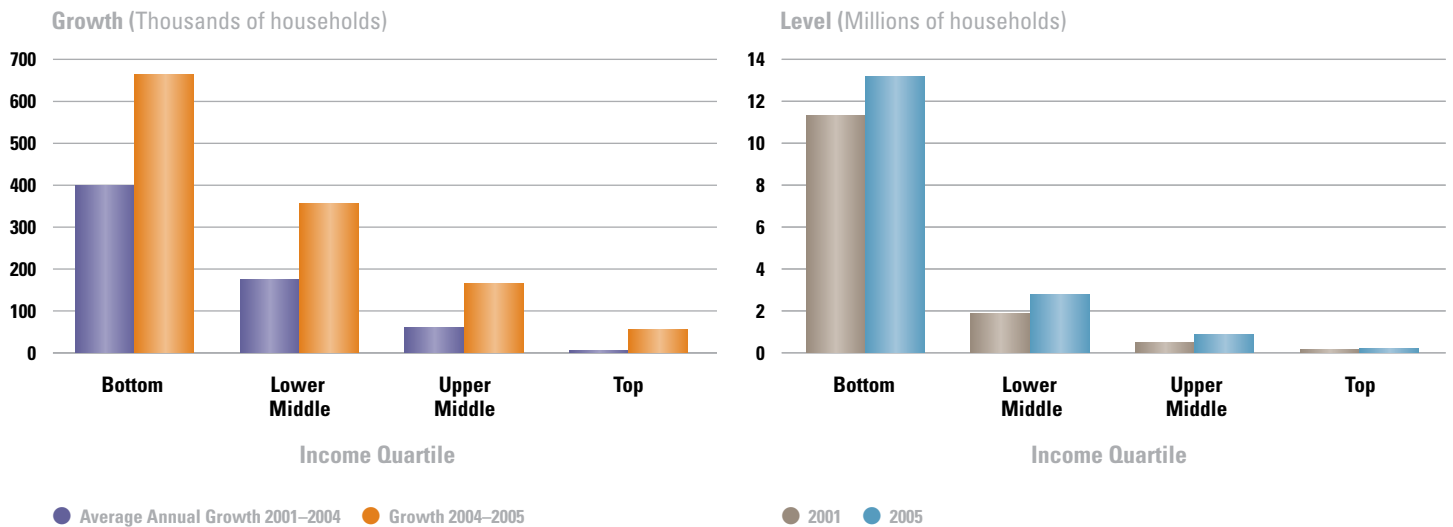
In 2005, households in the bottom quarter of the income distribution (earning \$23,000 or less) accounted for 78 percent of the severely housing cost-burdened. Indeed, nearly half of low-income households—a total of 8.2 million renters and 5.0 million homeowners—have severe burdens. One out of eight of these households works at least full-time, a fifth are elderly, and an additional fifth are non-elderly but disabled. And their numbers are climbing, with 1.9 million low-income households added to the ranks of the severely cost-burdened in 2001–2005 alone.

Middle-income households increasingly face housing cost pressures as well. A hefty 42 percent of the 2005 increase in severe cost burdens occurred among households in the middle two income quartiles. Among lower middle-income households (earning \$23,000 to \$45,000), fully 12 percent of owners and 6 percent of renters were severely cost-burdened. Even households with above-median incomes are feeling the pinch of high housing costs. Indeed, the number of these households with severe cost burdens increased more in 2004–2005 than over the entire 2001–2004 period.

### STATE AND LOCAL AFFORDABILITY TRENDS

The hardships created by high housing costs are becoming more and more widespread. From 2001 to 2005, the share of low-income households with severe cost burdens was up in 47 states, with increases of over five percentage points reported in 24 states.

**FIGURE 29** Growth in Severely Cost-Burdened Households Has Accelerated Across Income Groups



Notes: Severely cost-burdened is defined as spending more than 50% of household income on housing costs. Income quartiles are equal fourths of all households sorted by pre-tax income. Source: JCHS tabulations of the 2001, 2004, and 2005 American Community Surveys.

In 2001, over half of low-income households in four states (New Jersey, New York, California, and Hawaii) had severe housing cost burdens. By 2005, this condition had spread to 13 states (Figure 30). Joining the list are four New England states, plus several high-growth states such as Florida, Colorado, and Nevada (Table W-7). Even middle-income homeowners are not immune to the high housing prices in these locations. For example, one in four homeowners earning \$23,000–45,000 and living in California, Nevada, New Jersey, and Massachusetts spends more than half of income on housing.

At the metro level, severe housing cost burdens are especially concentrated in a mix of high-cost coastal areas, rapidly growing Southern metros, and high-poverty Midwestern cities. In San Diego, San Francisco, and Boston, where median rents exceed \$1,000, over one-quarter of renter households were severely burdened in 2005.

Even in more “affordable” areas such as Memphis, Cleveland, and Detroit, where median rents are under \$720, some 30 percent of renter households also face severe cost burdens. Cost burdens in these lower-priced markets reflect lower incomes as well as high poverty rates. Still, even in metros where both housing costs and poverty rates are low, it is common for more than one in five renter households to have severe housing cost burdens (Table W-8).

### WORKING FAMILY WOES

Five years of stagnating or declining incomes have added to housing affordability problems. Despite meager gains in 2005, the median real income for all households fell 2.7 percent between 2000 and 2005. The lower the income group, the greater the drop was in real wages. Indeed, the incomes of households in the bottom decile fell some 10.4 percent over this period. Fortunately, the weakness

in 2000–2005 was not enough to wipe out the strong income gains in 1995–2000 for most households.

In part, these income trends reflect the fact that the economy is producing fewer middle-wage and more low-wage jobs. As a result, a growing number of America’s working families—including those employed full time or with more than one earner—has severe housing cost burdens. For example, 16 percent of low-income households are headed by a full-time worker, but a dispiriting 39 percent of these households are severely cost burdened.

Among those saddled with high housing costs and low wages are some of the nation’s most critical workers—the people who take care of our children, care for the sick and infirm, and sell everyday necessities. Although higher-paid service professionals such as teachers, police, and firefighters have more than the \$62,000 median household income for full-time workers, many service workers receive far less. Indeed, childcare workers, home health aides, and retail cashiers have median annual household incomes between \$32,000 and \$36,000. For entry-level employees, household income may be as low as \$13,000 to \$17,000.

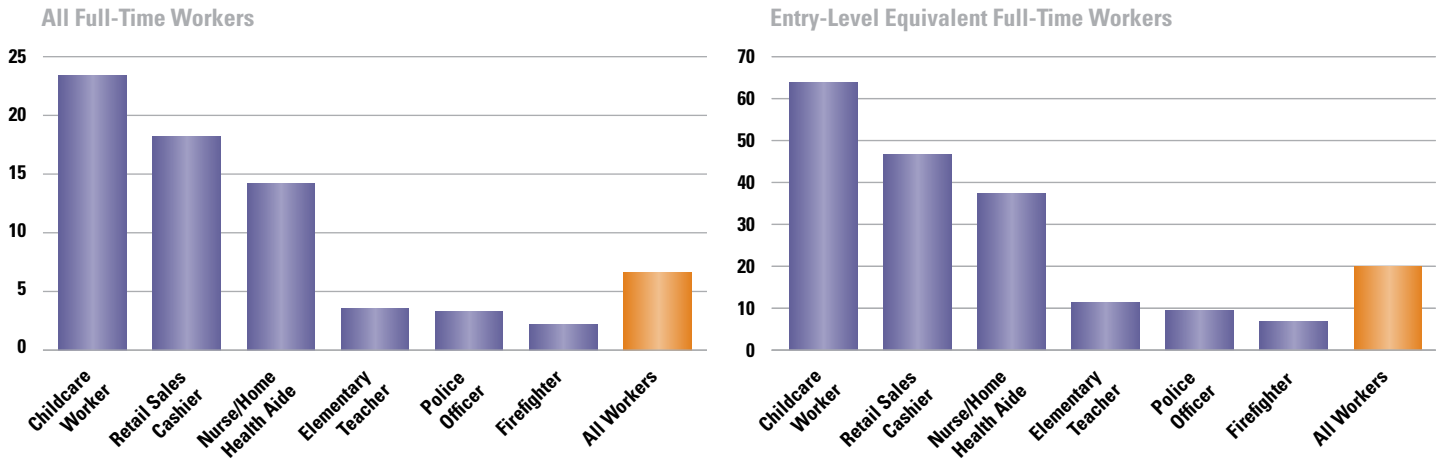
As a result, the incidence of severe housing cost burdens among full-time workers in these fast-growing but low-wage occupations is more than twice the average (Figure 31). Worse, nearly half of the workers earning the entry-level equivalent salary head households with severe cost burdens. This is especially noteworthy because many people starting out in these occupations have other earners contributing to household income.

The problems compound for those unable to work full time. Part-timers account for half of household heads employed in retail and



**FIGURE 31 Households Headed by Lower-Paid Essential Workers Face Daunting Affordability Problems**

Share with Severe Housing Cost Burdens (Percent)



Note: Entry-level equivalent workers are in the bottom quartile of income for their occupation. Severe housing cost burden is defined as spending more than 50% of household income on housing costs. Source: JCHS tabulations of the 2005 American Community Survey.

In fact, the prevalence of foreign-born households seems to drive nearly all the difference in crowding rates between more and less affordable large metro areas (Figure 33). More than one-quarter of the population in the less affordable large metros is foreign born, compared with only one-eighth in the more affordable areas. While overall crowding has eased since 2001, it is possible that current rates understate the problem because they may not account for the large numbers of illegal immigrants living in this country.

**FEDERAL PRIORITIES**

Despite about \$38 billion in annual appropriations for housing and community development, the federal government has been unable to assist more than a quarter of eligible renters. And even with another \$4.7 billion in annual expenditures from federal tax credits to build and rehabilitate affordable housing, the government has made little progress in stopping the loss of low-cost rentals from the nation’s housing stock.

Although not directly subsidized, homeowners get federal support in the form of mortgage interest and property tax deductions, plus capital gains exclusions. In fact, foregone revenues from these tax programs dwarf federal outlays for low-income renters and rental housing. Even so, low-income homeowners benefit little from the tax breaks because standard deductions typically exceed the small amount of mortgage interest they might report. Still, federal regulations that promote the flow of credit to low-income households and communities have helped to improve outreach to these underserved constituencies.

While encouraging homeownership both directly and indirectly, the federal government does little to ensure low-income households

can meet the costs of owning and maintaining their homes. In the absence of this support, the number of low-income homeowners with severe housing cost burdens has risen along with the number in delinquency or foreclosure, at the same time that their homeownership rates have lost ground.

Meanwhile, less and less of the federal nondefense discretionary budget—which is itself shrinking—is being devoted to housing programs (Figure 34). Housing assistance as a share of total nondefense discretionary spending dropped from 10.2 percent in 1998 to 7.7 percent in 2006. In the past year, spending on housing assistance also failed to keep up with inflation, amounting to a 2.3 percent cut in real terms.

Federal regulators are now weighing in on the subprime mortgage troubles, calling for increased oversight and stricter underwriting standards. There has been little discussion, however, about creating or extending federal programs that would help borrowers whose rising mortgage payments and falling house values place them at risk of foreclosure. In fact, increased federal regulation might even backfire on these households if new qualifying guidelines prevent them from refinancing on better terms. Nevertheless, a few state housing finance agencies—in Ohio, Colorado, and Maryland—are stepping up to the plate and offering to help homeowners refinance out of risky products.

**COSTLY DEVELOPMENT REGULATIONS**

State and local regulations are among the principal culprits behind the nation’s persistent affordability problems. By limiting the land available for and density of new development, as well as imposing impact fees and subdivision requirements that raise production costs, state

and local governments make it difficult to build affordable housing. While many of these regulations serve other public policy purposes, they exacerbate affordability pressures.

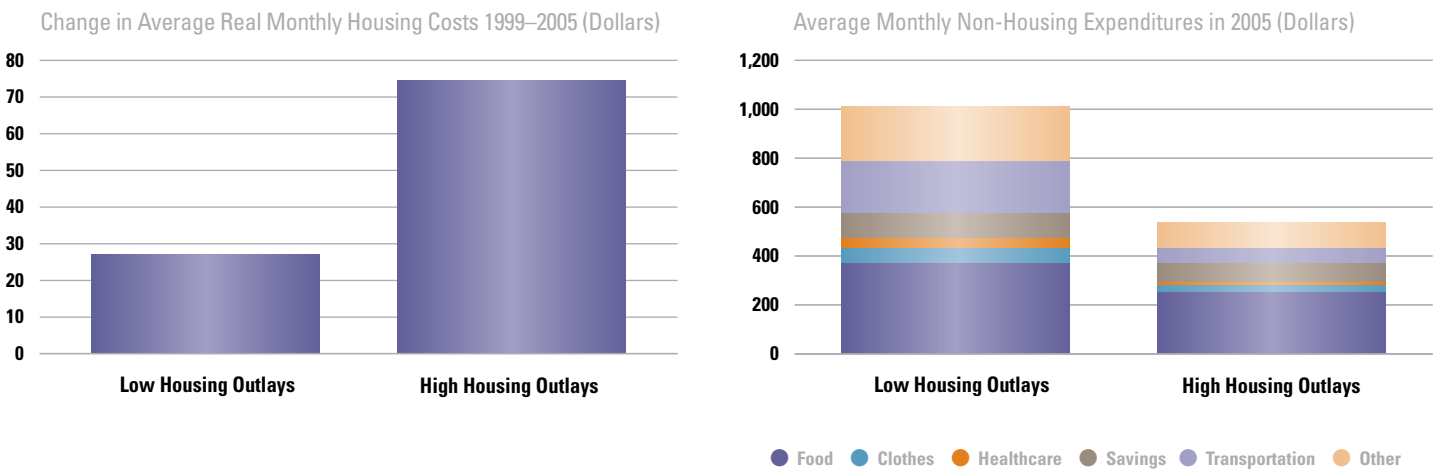
Metropolitan areas with stringent constraints on residential development see higher house price increases and lower job growth than they would otherwise. The most restrictive areas also have a higher incidence of severely cost-burdened households, especially among those in the lower-middle quartile of the rent distribution. Restrictive

zoning, rather than land shortages, makes homes in high-cost areas even more expensive.

Only a handful of states have enacted laws to pressure local jurisdictions to accept workforce housing development. Massachusetts has taken the lead in so-called “anti-snob” regulations, allowing developers to bypass local zoning exclusions in communities with limited affordable housing. Other states now put pressure on local governments to plan for or accept some fair share of affordable housing.

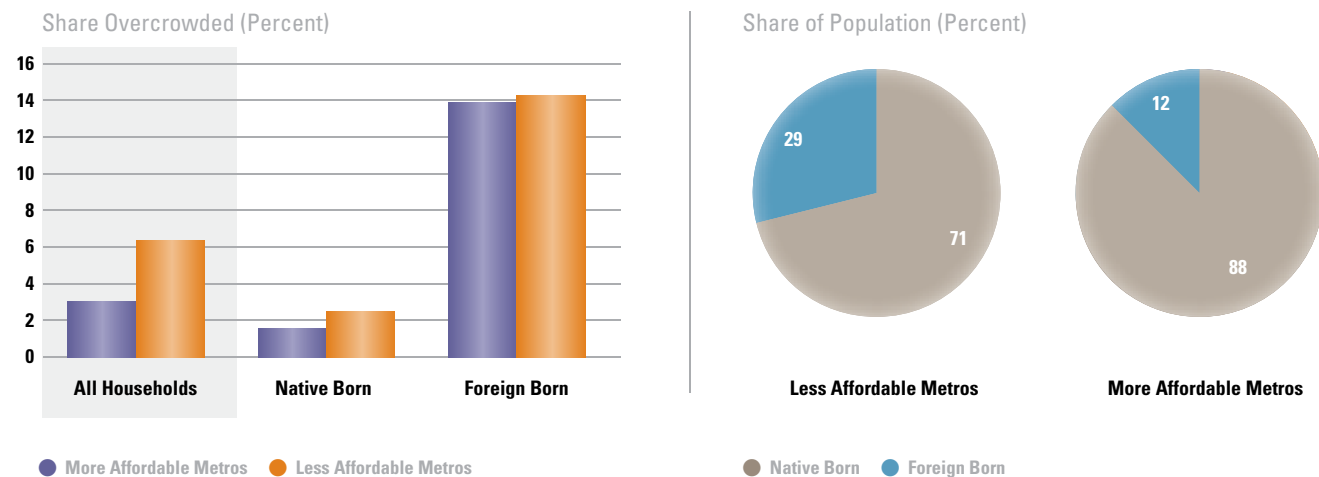
### FIGURE 32 Soaring Housing Costs Leave the Most Burdened Low-Income Families With Even Less to Spend on Other Needs

Households with Children in the Bottom Expenditure Quartile



Notes: High housing outlays are more than 50% of total household expenditures, and low housing outlays are less than 30% of total household expenditures. Low-income households are those in the bottom fourth of households sorted by total monthly expenditures. Dollar values are adjusted by the CPI-UX for All Items. Source: JCHS tabulations of the 1999 and 2005 Consumer Expenditure Surveys.

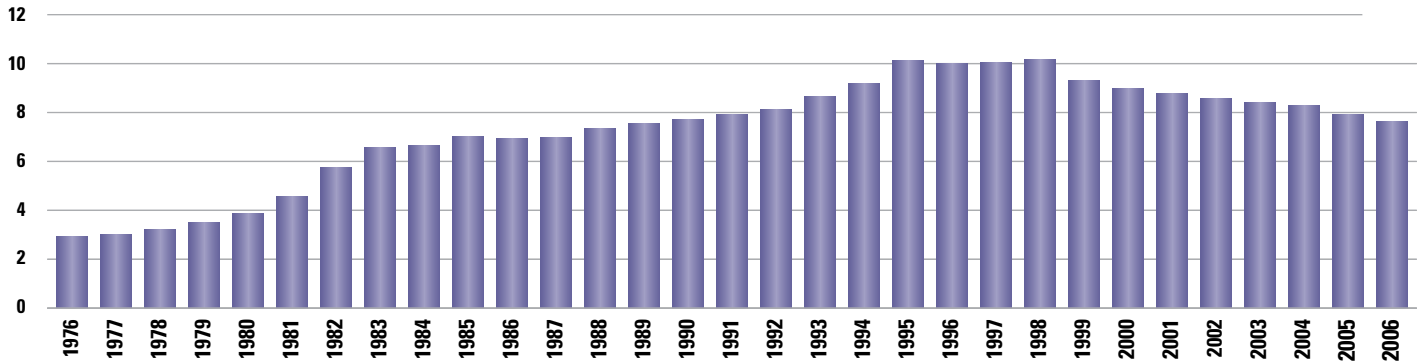
### FIGURE 33 Higher Overcrowding in Less Affordable Metros Mostly Reflects Their Larger Immigrant Populations



Notes: Percent overcrowded is the share of households with more than one person per room. Nativity of household head is used to determine whether the household is native or foreign born. Less and more affordable metros are the top and bottom ten of the 50 largest metros, ranked by the ratio of median home value to median household income. Metro areas are based on US Census definitions from 2000. Source: JCHS tabulations of the 2005 American Community Survey Sample, Minnesota Population Center Integrated Public Use Microdata Series.

## FIGURE 34 Housing Assistance Is Losing Out to Other Federal Spending Priorities

Housing Assistance as a Share of Nondefense Discretionary Spending (Percent)



Source: US Office of Management and Budget, Budget of the United States Government, Fiscal Year 2008, Table 8.7.

While many states are also supplementing federal resources with their own funding, these affordable housing measures are small relative to the problem.

Developing housing for extremely low-income households is even more difficult. Given the design of federal subsidy programs, it is difficult to produce housing affordable to the poor without multiple subsidies and onerously complex financing packages. According to the National Council of State Housing Agencies, 76 percent of all tax-credit projects in 2005 demanded some additional form of federal subsidy. Without this added assistance to fill the gap between what extremely low-income renters can pay and the rents needed to cover development costs, even successful programs like Low-Income Housing Tax Credits cannot adequately serve the poor. Furthermore, the combination of higher construction and operating costs, along with stagnant or even declining rents tied to household income limits, can undermine the fundamental viability of affordable housing projects.

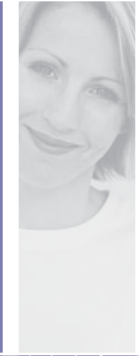
### THE OUTLOOK

With the widening gap between what low- and moderate-income households can afford and what they actually spend on housing, enormous political will and resources are required to reduce the number of severely cost-burdened households. While more states may take action to stimulate the production of at least some affordable housing, little progress has occurred in easing regulatory barriers to such development. In the meantime, the need to address housing affordability problems is intensifying as the pressures grow more acute and spread up the income scale.

Still, trailblazing states offer useful approaches for others to follow. Perhaps most encouraging is the passage of inclusionary zoning ordinances that provide incentives for developers to set aside a fraction of units for affordable housing. According to a recent report released by the Brookings Institution, nearly 23 percent of jurisdictions in the nation's 50 largest metropolitan areas have some kind of an incentive-based affordable housing program, while 15 percent have a dedicated source of funds for affordable housing. Indeed, well over half the population in the 50 largest metros lives in an area with an affordable housing program. While these measures are promising, it will nevertheless take much greater federal, state, and local efforts to address the nation's affordability problems.



# A



## Appendix Tables

- Table A-1 Housing Market Indicators: 1975–2006
- Table A-2 Income and Housing Costs, US Totals: 1975–2006
- Table A-3 Terms on Conventional Single-Family Mortgages: 1980–2006
- Table A-4 Mortgage Refinance, Cash-out and Home Equity Loan Volumes: 1995–2006
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- Table A-7 Median Net Wealth of Owner and Renter Households: 1989–2004
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- Table A-9 Characteristics of Renter Households by Race/Ethnicity: 1995 and 2005
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**The following tables can be downloaded in Microsoft Excel format from the Joint Center's website at [www.jchs.harvard.edu](http://www.jchs.harvard.edu).**

- Table W-1 Building Permits by State: 2005–2006
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- Table W-3 Population in the 91 Largest Metropolitan Regions by Race/ Ethnicity: 1990 and 2000
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- Table W-5 Average Rents and Vacancy Rates by Metropolitan Area: 2005–2006
- Table W-6 Existing Single-Family Median House Prices by Region and Metropolitan Area: 2004–2006
- Table W-7 Median and Severe Housing Cost Burdens by Income, Tenure and State: 2005
- Table W-8 Housing and Income Characteristics of the 50 Largest Metropolitan Areas: 2005
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**Table A-1 Housing Market Indicators: 1975–2006**

Year	Permits <sup>1</sup> (Thousands)		Starts <sup>2</sup> (Thousands)			Size <sup>3</sup> (Median sq. ft.)		Sales Price of Single-Family Homes (2006 dollars)	
	Single-Family	Multifamily	Single-Family	Multifamily	Manufactured Housing	Single-Family	Multifamily	New <sup>4</sup>	Existing <sup>5</sup>
1975	676	263	892	268	229	1,535	942	195,792	125,715
1976	894	402	1,162	375	250	1,590	894	200,986	128,186
1977	1,126	564	1,451	536	258	1,610	881	212,756	133,138
1978	1,183	618	1,433	587	280	1,655	863	226,419	141,279
1979	982	570	1,194	551	280	1,645	893	232,178	142,420
1980	710	481	852	440	234	1,595	915	225,400	135,853
1981	564	421	705	379	229	1,550	930	220,463	130,235
1982	546	454	663	400	234	1,520	925	212,521	126,369
1983	902	703	1,068	636	278	1,565	893	210,294	126,167
1984	922	757	1,084	665	288	1,605	871	209,703	125,902
1985	957	777	1,072	670	283	1,605	882	205,103	127,580
1986	1,078	692	1,179	626	256	1,660	876	209,050	133,979
1987	1,024	510	1,146	474	239	1,755	920	212,680	138,341
1988	994	462	1,081	407	224	1,810	940	211,883	141,125
1989	932	407	1,003	373	203	1,850	940	210,198	143,070
1990	794	317	895	298	195	1,905	955	203,244	140,223
1991	754	195	840	174	174	1,890	980	197,558	137,105
1992	911	184	1,030	170	212	1,920	985	194,232	136,711
1993	987	212	1,126	162	243	1,945	1,005	196,795	135,554
1994	1,068	303	1,198	256	291	1,940	1,015	201,150	135,590
1995	997	335	1,076	278	319	1,920	1,040	201,137	136,168
1996	1,070	356	1,161	316	338	1,950	1,030	198,949	137,646
1997	1,062	379	1,134	340	336	1,975	1,050	200,127	139,919
1998	1,188	425	1,271	346	374	2,000	1,020	202,036	145,054
1999	1,247	417	1,302	338	338	2,025	1,054	207,413	149,277
2000	1,198	394	1,231	338	281	2,079	1,091	209,188	154,563
2001	1,236	390	1,273	329	196	2,102	1,094	219,627	162,193
2002	1,333	415	1,359	346	174	2,115	1,092	216,645	170,422
2003	1,461	428	1,499	349	140	2,127	1,108	223,765	177,827
2004	1,613	457	1,611	345	124	2,160	1,159	234,485	191,603
2005	1,682	473	1,716	353	123	2,245	1,180	244,702	209,547
2006	1,378	461	1,465	336	111	2,263	1,191	246,500	221,900

Note: All value series are deflated by the Bureau of Labor Statistics' Consumer Price Index (CPI-UX) for All Items.

Sources: 1. US Census Bureau, Construction Statistics, New Privately Owned Housing Units Authorized by Building Permits, [www.census.gov/pub/const/bpenn.pdf](http://www.census.gov/pub/const/bpenn.pdf) (as of May 2007).

2. US Census Bureau New Privately Owned Housing Units Started, [www.census.gov/const/startsan.pdf](http://www.census.gov/const/startsan.pdf) (as of May 2007); and Placements of New Manufactured Homes, [www.census.gov/pub/const/mhs/mhstablplmnt.pdf](http://www.census.gov/pub/const/mhs/mhstablplmnt.pdf) (as of May 2007). Manufactured housing starts defined as placements of new manufactured homes.

3. US Census Bureau, New Privately Owned Housing Units Started in the United States, by Purpose and Design, [www.census.gov/const/startsusintenta.pdf](http://www.census.gov/const/startsusintenta.pdf) (as of May 2007).

4. New home price is the National Association of Home Builders' 2006 national median home price, indexed by the US Census Bureau's Price Indexes of New One-Family Houses Sold, [www.census.gov/const/price\\_sold.pdf](http://www.census.gov/const/price_sold.pdf) (as of May 2007).

5. Existing home price is the 2006 median sales price of existing single-family homes determined by the National Association of Realtors® indexed by the Freddie Mac Conventional Mortgage Home Price Index.

6. US Census Bureau, Expenditures by Region and Property Type, [www.census.gov/const/C50/histtab2.pdf](http://www.census.gov/const/C50/histtab2.pdf) (as of May 2007).

7. US Census Bureau, Housing Vacancy Survey.

8. US Census Bureau, Annual Value of Private Construction Put in Place, [www.census.gov/const/C30/private.pdf](http://www.census.gov/const/C30/private.pdf) (as of May 2007).

9. US Census Bureau, Construction Statistics, New Residential Sales, Houses Sold by Region, [www.census.gov/const/soldann.pdf](http://www.census.gov/const/soldann.pdf) (as of May 2007).

10. National Association of Realtors®, Existing Home Sales, [www.realtor.org/Research.nsf/files/EHReport.pdf/\\$FILE/EHReport.pdf](http://www.realtor.org/Research.nsf/files/EHReport.pdf/$FILE/EHReport.pdf) (as of May 2007).

Residential Upkeep and Improvements <sup>6</sup> (Millions of 2006 dollars)		Vacancy Rates <sup>7</sup> (Percent)		Value Put in Place <sup>8</sup> (Millions of 2006 dollars)			Home Sales (Thousands)	
Owner-Occupied	Rental	For Sale	For Rent	Single-Family	Multifamily	Additions & Alterations	New <sup>9</sup>	Existing <sup>10</sup>
62,627	31,945	1.2	6.0	111,064	25,028	57,197	549	2,476
71,676	31,193	1.2	5.6	155,399	24,483	62,011	646	3,064
76,349	27,708	1.2	5.2	206,969	33,324	65,779	819	3,650
81,302	34,529	1.0	5.0	225,004	39,677	74,941	817	3,986
83,781	33,494	1.2	5.4	200,648	47,248	75,453	709	3,827
83,468	29,902	1.4	5.4	129,477	40,878	75,238	545	2,973
71,494	31,305	1.4	5.0	115,249	38,723	66,129	436	2,419
66,392	28,226	1.5	5.3	86,619	32,461	57,816	412	1,990
69,546	30,234	1.5	5.7	146,775	45,435	62,488	623	2,719
90,765	46,219	1.7	5.9	167,635	54,758	78,387	639	2,868
96,183	57,690	1.7	6.5	163,659	53,471	83,623	688	3,214
108,102	65,410	1.6	7.3	191,540	57,092	102,102	750	3,565
106,037	68,611	1.7	7.7	208,017	45,168	101,127	671	3,526
115,633	66,477	1.6	7.7	204,656	37,999	105,836	676	3,594
107,295	68,380	1.8	7.4	196,607	36,262	99,212	650	3,346
103,765	74,285	1.7	7.2	174,123	29,692	90,953	534	3,211
98,781	60,619	1.7	7.4	147,169	22,422	76,490	509	3,220
108,756	57,310	1.5	7.4	175,270	18,815	92,427	610	3,520
111,333	58,735	1.4	7.3	195,493	15,051	103,459	666	3,802
123,323	54,372	1.5	7.4	220,793	19,155	111,781	670	3,967
110,999	54,316	1.6	7.6	203,075	23,664	100,465	667	3,812
113,754	55,032	1.6	7.9	219,447	26,114	115,643	757	4,196
118,023	49,759	1.6	7.8	220,038	28,743	114,241	804	4,382
122,939	42,414	1.7	7.9	246,631	30,393	112,085	886	4,970
120,138	52,783	1.7	8.1	270,862	33,197	120,149	880	5,205
122,440	56,652	1.6	8.0	277,215	33,084	128,090	877	5,152
124,810	54,780	1.8	8.4	283,545	34,497	124,003	908	5,296
136,165	58,067	1.7	9.0	297,961	36,927	137,916	973	5,566
131,388	62,431	1.8	9.8	340,282	38,475	142,709	1,086	6,175
153,076	58,830	1.7	10.2	402,941	42,629	157,231	1,203	6,778
171,660	50,306	1.9	9.8	447,494	49,784	165,717	1,283	7,076
177,677	50,531	2.4	9.7	413,245	56,133	160,635	1,051	6,478

**Table A-2** Income and Housing Costs, US Totals: 1975–2006

Year	Monthly Income		Owner Costs				Renter Costs		Cost as Percent of Income			
	Owner	Renter	Home Price	Mortgage Rate (%)	Before-Tax Mortgage Payment	After-Tax Mortgage Payment	Contract Rent	Gross Rent	Owners		Renters	
									Before-Tax Mortgage Payment	After-Tax Mortgage Payment	Contract Rent	Gross Rent
1975	4,559	2,702	125,715	8.9	904	769	632	678	19.8	16.9	23.5	25.3
1976	4,532	2,623	128,186	8.9	918	786	632	682	20.2	17.3	24.2	26.2
1977	4,548	2,640	133,138	8.8	949	868	631	687	20.9	19.1	24.0	26.2
1978	4,596	2,674	141,279	9.4	1,057	936	629	687	23.0	20.4	23.7	25.9
1979	4,603	2,617	142,420	10.6	1,181	1,028	608	665	25.7	22.3	23.4	25.6
1980	4,322	2,481	135,853	12.5	1,301	1,104	585	646	30.1	25.5	23.7	26.2
1981	4,198	2,448	130,235	14.4	1,425	1,188	578	643	33.9	28.3	23.7	26.5
1982	4,204	2,472	126,369	14.7	1,414	1,195	587	659	33.6	28.4	23.9	26.9
1983	4,299	2,466	126,167	12.3	1,191	1,013	604	680	27.7	23.6	24.6	27.8
1984	4,411	2,542	125,902	12.0	1,165	996	611	687	26.4	22.6	24.2	27.2
1985	4,528	2,579	127,580	11.2	1,108	950	628	701	24.5	21.0	24.5	27.4
1986	4,689	2,610	133,979	9.8	1,040	895	654	723	22.2	19.1	25.2	28.0
1987	4,718	2,584	138,341	9.0	997	889	657	721	21.1	18.8	25.6	28.1
1988	4,744	2,661	141,125	9.0	1,020	931	655	716	21.5	19.6	24.8	27.1
1989	4,807	2,751	143,070	9.8	1,112	1,006	650	708	23.1	20.9	23.8	26.0
1990	4,666	2,664	140,223	9.7	1,083	982	642	698	23.2	21.1	24.3	26.4
1991	4,596	2,553	137,105	9.1	999	913	638	693	21.7	19.9	25.1	27.4
1992	4,561	2,482	136,711	7.8	888	824	635	690	19.5	18.1	25.7	28.0
1993	4,523	2,457	135,554	6.9	806	758	631	686	17.8	16.7	25.8	28.2
1994	4,568	2,424	135,590	7.3	837	788	630	684	18.3	17.2	26.2	28.4
1995	4,611	2,487	136,168	7.7	873	817	628	679	18.9	17.7	25.4	27.5
1996	4,689	2,509	137,646	7.6	873	816	626	677	18.6	17.4	25.1	27.2
1997	4,796	2,566	139,919	7.5	882	824	630	681	18.4	17.2	24.7	26.8
1998	4,939	2,617	145,054	7.0	866	812	640	687	17.5	16.4	24.6	26.5
1999	5,048	2,711	149,277	7.1	906	845	646	691	18.0	16.7	24.0	25.7
2000	4,997	2,728	154,563	7.9	1,007	927	648	694	20.2	18.5	23.9	25.7
2001	4,895	2,705	162,193	6.9	965	895	658	710	19.7	18.3	24.5	26.5
2002	4,867	2,604	170,422	6.4	963	897	673	719	19.8	18.4	26.0	27.8
2003	4,892	2,516	177,827	5.7	926	888	677	727	18.9	18.1	27.1	29.1
2004	4,857	2,481	191,603	5.7	999	949	678	728	20.6	19.5	27.5	29.6
2005	4,903	2,497	209,547	5.9	1,113	1,044	675	732	22.7	21.3	27.2	29.5
2006	4,989	2,552	221,900	6.5	1,265	1,169	681	745	25.4	23.4	26.7	29.2

**Notes and Sources:** All dollar amounts are expressed in 2006 constant dollars using the Bureau of Labor Statistics' Consumer Price Index (CPI-UX) for All Items. Owner and renter median incomes through 2005 are from Current Population Survey P60 published reports. Renters exclude those paying no cash rent. 2006 income is based on Moody's Economy.com estimate for all households, adjusted by the three-year average ratio of CPS owner and renter incomes to all household incomes. Home price is the 2006 median sales price of existing single-family homes determined by the National Association of Realtors® indexed by the Freddie Mac Conventional Mortgage Home Price Index. Mortgage rates are contract interest rates from the Federal Housing Finance Board Monthly Interest Rate Survey; 2006 value is the average of monthly rates. Mortgage payments assume a 30-year mortgage with 10% down. After-tax mortgage payment equals mortgage payment less tax savings of homeownership. Tax savings are based on the excess of housing (mortgage interest and real-estate taxes) plus non-housing deductions over the standard deduction. Non-housing deductions are set at 5% of income through 1986, 4.25% in 1987, and 3.5% from 1988 on. Contract rent equals median 2005 contract rent from the American Housing Survey, indexed by the CPI residential rent index with adjustments for depreciation in the stock before 1987. Gross rent is equal to contract rent plus fuel and utilities.

Table A-3

## Terms on Conventional Single-Family Mortgages: 1980–2006

Annual Averages, All Homes

Year	Effective Interest Rate (%)	Term to Maturity (Years)	Mortgage Loan Amount (Thousands of 2006 dollars)	Purchase Price (Thousands of 2006 dollars)	Loan-to-Price Ratio (%)	Percent of Loans with:	
						Loan-to-Price Ratio More than 90%	Adjustable Rates
1980	12.8	27.2	126.7	179.8	72.9	10	na
1981	14.9	26.4	120.2	170.7	73.1	15	na
1982	15.3	25.6	116.0	165.3	72.9	21	41
1983	12.7	26.0	121.3	168.2	74.5	21	40
1984	12.5	26.8	125.2	168.0	77.0	27	62
1985	11.6	25.9	131.5	180.1	75.8	21	51
1986	10.2	25.6	145.9	203.5	74.1	11	30
1987	9.3	26.8	158.1	216.2	75.2	8	43
1988	9.3	27.7	166.0	224.3	76.0	8	58
1989	10.1	27.7	169.9	232.2	74.8	7	38
1990	10.1	27.0	160.4	220.0	74.7	8	28
1991	9.3	26.5	157.4	217.2	74.4	9	23
1992	8.1	25.4	156.2	210.4	76.6	14	20
1993	7.1	25.5	149.3	199.7	77.2	17	20
1994	7.5	27.1	149.5	193.2	79.9	25	39
1995	7.9	27.4	146.0	188.9	79.9	27	32
1996	7.7	26.9	152.5	199.3	79.0	25	27
1997	7.7	27.5	159.0	206.6	79.4	25	22
1998	7.1	27.8	163.0	214.5	78.9	25	12
1999	7.3	28.2	168.6	222.9	78.5	23	21
2000	8.0	28.7	173.6	232.9	77.8	22	24
2001	7.0	27.6	177.3	245.3	76.2	21	12
2002	6.5	27.3	183.1	259.1	75.1	21	17
2003	5.7	26.8	184.0	266.7	73.5	20	18
2004	5.7	27.9	198.0	279.6	74.9	18	35
2005	5.9	28.5	218.7	309.5	74.7	15	30
2006	6.6	29.0	229.4	316.3	76.5	19	22

Notes: The effective interest rate includes the amortization of initial fees and charges. Loans with adjustable rates do not include hybrid products. na indicates data not available. 2006 data are the averages of monthly data.  
Source: Federal Housing Finance Board, Monthly Interest Rate Survey.

**Table A-4 Mortgage Refinance, Cash-Out and Home Equity Loan Volumes: 1995–2006**

Year	Percentage of Refinances Resulting in:		Median Statistics on Loan Terms and Property Valuation			Billions of 2006 Dollars		
	5% or Higher Loan Amount	Lower Loan Amount	Ratio of Old to New Rate	Age of Refinanced Loan (Years)	Appreciation Rate of Refinanced Property (%)	Home Equity Cashed Out at Refinance	Total Refinance Originations	Home Equity Loans
1995	51.4	15.3	1.16	2.8	8.5	15	270	314
1996	57.2	11.5	1.17	3.2	11.0	22	375	337
1997	58.8	14.6	1.08	3.7	13.9	27	427	373
1998	46.2	17.0	1.16	3.5	10.0	49	1,074	383
1999	56.8	12.5	1.15	4.5	12.1	45	664	405
2000	77.9	8.7	0.94	4.3	23.8	31	365	477
2001	53.3	13.6	1.17	2.6	14.9	94	1,464	500
2002	46.9	17.9	1.20	3.0	13.4	125	2,132	562
2003	36.3	15.6	1.26	1.8	5.4	161	2,944	650
2004	46.7	15.0	1.19	2.1	9.5	152	1,598	831
2005	71.9	9.2	1.08	2.6	22.9	270	1,686	943
2006	85.7	5.5	0.94	3.2	30.9	352	1,462	1,019

Notes: Dollar values are adjusted for inflation using the CPI-U-X for All Items. Home equity cashed out at refinance is the difference between the size of the mortgage after refinance less 105% of the balance outstanding on the original mortgage. Sources: Freddie Mac, Cash Out and Refinance data; Federal Reserve Board Flow of Funds, Table L.218.

**Table A-5 Homeownership Rates by Age, Race/Ethnicity and Region: 1995–2006**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>All Households</b>	64.7	65.4	65.7	66.3	66.8	67.4	67.8	67.9	68.3	69.0	68.9	68.8
<b>Age</b>												
Under 35	38.6	39.1	38.7	39.3	39.7	40.8	41.2	41.3	42.2	43.1	43.0	42.6
35-44	65.2	65.5	66.1	66.9	67.2	67.9	68.2	68.6	68.3	69.2	69.3	68.9
45-54	75.2	75.6	75.8	75.7	76.0	76.5	76.7	76.3	76.6	77.2	76.6	76.2
55-64	79.5	80.0	80.1	80.9	81.0	80.3	81.3	81.1	81.4	81.7	81.2	80.9
65-74	80.9	81.9	82.0	82.1	82.9	82.8	82.5	82.7	82.3	83.3	82.8	82.7
75 and Over	74.6	75.3	75.8	76.2	77.1	77.7	78.1	78.4	78.7	78.8	78.4	79.1
<b>Race/Ethnicity</b>												
White	70.9	71.7	72.0	72.6	73.2	73.8	74.3	74.7	75.4	76.0	75.8	75.8
Hispanic	42.0	42.8	43.3	44.7	45.5	46.3	47.3	47.0	46.7	48.1	49.5	49.7
Black	42.9	44.5	45.4	46.1	46.7	47.6	48.4	48.2	48.8	49.7	48.8	48.4
Asian/Other	51.5	51.5	53.3	53.7	54.1	53.9	54.7	55.0	56.9	59.7	60.3	60.8
All Minority	43.7	44.9	45.8	46.8	47.4	48.1	49.0	48.9	49.5	51.0	51.3	51.3
<b>Region</b>												
Northeast	62.0	62.2	62.4	62.6	63.1	63.4	63.7	64.3	64.4	65.0	65.2	65.2
Midwest	69.2	70.6	70.5	71.1	71.7	72.6	73.1	73.1	73.2	73.8	73.1	72.7
South	66.7	67.5	68.0	68.6	69.1	69.6	69.8	69.7	70.1	70.9	70.8	70.5
West	59.2	59.2	59.6	60.5	60.9	61.7	62.6	62.5	63.4	64.2	64.4	64.7

Notes: White, black and Asian/other are non-Hispanic. Hispanics may be of any race. Asian/other includes Pacific Islanders, Aleuts, Native Americans, and persons of more than one race. Caution should be used in interpreting changes before and after 2002 because of rebenchmarking. Source: US Census Bureau, Housing Vacancy Survey.



**Table A-6 Housing Cost-Burdened Households by Tenure and Income: 2001 and 2005**

Tenure and Income	2001				2005				Percent Change 2001-2005			
	No Burden	Moderate Burden	Severe Burden	Total	No Burden	Moderate Burden	Severe Burden	Total	No Burden	Moderate Burden	Severe Burden	Total
<b>Owners</b>												
Bottom Decile	771	709	2,506	3,986	633	640	2,674	3,947	-17.9	-9.7	6.7	-1.0
Bottom Quintile	3,381	1,906	3,921	9,208	3,010	1,932	4,328	9,270	-11.0	1.4	10.4	0.7
Bottom Quartile	5,065	2,549	4,428	12,042	4,576	2,598	4,993	12,167	-9.6	1.9	12.8	1.0
Lower-Middle Quartile	10,695	3,630	1,456	15,781	10,496	4,236	2,065	16,797	-1.9	16.7	41.8	6.4
Upper-Middle Quartile	16,015	2,882	465	19,362	16,335	3,749	786	20,870	2.0	30.1	69.3	7.8
Top Quartile	21,457	1,208	137	22,802	22,405	1,850	204	24,459	4.4	53.1	49.2	7.3
Total	53,231	10,270	6,485	69,986	53,812	12,433	8,048	74,293	1.1	21.1	24.1	6.2
<b>Renters</b>												
Bottom Decile	1,309	789	4,559	6,657	1,328	738	5,093	7,158	1.4	-6.5	11.7	7.5
Bottom Quintile	2,731	2,798	6,550	12,079	2,641	2,666	7,636	12,943	-3.3	-4.7	16.6	7.2
Bottom Quartile	3,705	3,962	6,901	14,567	3,510	3,891	8,198	15,600	-5.2	-1.8	18.8	7.1
Lower-Middle Quartile	7,698	2,710	419	10,828	6,999	3,278	694	10,970	-9.1	20.9	65.4	1.3
Upper-Middle Quartile	6,771	437	39	7,247	6,211	622	64	6,897	-8.3	42.4	63.3	-4.8
Top Quartile	3,735	71	2	3,807	3,239	67	2	3,308	-13.3	-5.4	28.8	-13.1
Total	21,908	7,180	7,361	36,449	19,959	7,858	8,959	36,776	-8.9	9.4	21.7	0.9
<b>All Households</b>												
Bottom Decile	2,080	1,498	7,065	10,643	1,961	1,378	7,767	11,106	-5.7	-8.0	9.9	4.3
Bottom Quintile	6,112	4,704	10,472	21,287	5,651	4,598	11,964	22,213	-7.5	-2.2	14.3	4.3
Bottom Quartile	8,769	6,511	11,328	26,609	8,087	6,489	13,191	27,766	-7.8	-0.3	16.4	4.4
Lower-Middle Quartile	18,393	6,340	1,876	26,609	17,495	7,514	2,758	27,767	-4.9	18.5	47.1	4.4
Upper-Middle Quartile	22,786	3,319	504	26,609	22,545	4,371	851	27,767	-1.1	31.7	68.8	4.4
Top Quartile	25,191	1,280	138	26,609	25,644	1,917	206	27,767	1.8	49.8	48.9	4.4
Total	75,140	17,450	13,846	106,436	73,771	20,291	17,006	111,068	-1.8	16.3	22.8	4.4

Notes: Income deciles/quintiles/quartiles are equal tenths/fifths/fourths of all households sorted by pre-tax income. Moderate (severe) burdens are defined as housing costs of 30-50% (over 50%) of household income. Source: JCHS tabulations of the 2001 and 2005 American Community Surveys.

**Table A-7 Median Net Wealth of Owner and Renter Households: 1989–2004**

2004 Dollars

	1989		1992		1995		1998		2001		2004	
	Owners	Renters	Owners	Renters	Owners	Renters	Owners	Renters	Owners	Renters	Owners	Renters
<b>Age</b>												
Under 35	58,306	2,214	62,077	3,071	53,984	5,171	47,253	3,107	64,098	3,302	66,000	3,220
35-64	170,048	3,321	144,670	6,128	140,062	6,894	168,701	6,353	197,896	7,402	219,100	5,141
65 and Over	160,895	5,388	156,278	5,162	177,032	7,902	196,791	7,211	268,043	6,923	230,180	4,330
<b>Race/Ethnicity</b>												
White	165,249	7,307	144,762	7,611	142,808	10,033	172,944	6,724	213,190	8,649	213,730	6,200
Black	64,358	0	66,445	1,060	63,685	1,108	77,998	1,926	74,482	2,013	81,581	1,810
Hispanic	52,298	605	63,586	874	82,176	2,401	81,151	2,319	77,848	2,823	86,400	3,100
<b>Household Income</b>												
Under \$20,000	65,687	531	69,489	860	80,022	1,477	78,902	997	76,208	905	68,460	1,700
\$20,000–49,999	116,022	6,613	104,766	8,736	101,750	10,095	118,249	7,651	115,255	7,765	118,080	6,000
\$50,000 and Over	230,862	28,784	208,255	33,686	200,965	42,596	250,989	44,517	302,755	39,089	332,300	35,490

Source: JCHS tabulations of the 1989, 1992, 1995, 1998, 2001, and 2004 Surveys of Consumer Finances.

**Table A-8 Mortgage Originations by Product: 2001–2006**

	Prime			Non-Prime					All Originations
	Conventional/Conforming	Jumbo	Total Prime	Subprime	Alt-A	Home Equity	FHA/VA	Total Non-Prime	
<b>Billions of 2006 Dollars</b>									
2001	1,443	489	1,933	216	68	116	188	589	2,521
2002	1,919	645	2,564	259	76	126	208	669	3,233
2003	2,695	718	3,413	367	93	197	252	909	4,322
2004	1,291	550	1,841	576	213	342	144	1,275	3,116
2005	1,125	588	1,714	645	392	377	93	1,507	3,221
2006	990	480	1,470	600	400	430	80	1,510	2,980
<b>Share of Originations (%)</b>									
2001	57.2	19.4	76.7	8.6	2.7	4.6	7.4	23.3	100.0
2002	59.3	20.0	79.3	8.0	2.4	3.9	6.4	20.7	100.0
2003	62.4	16.6	79.0	8.5	2.2	4.6	5.8	21.0	100.0
2004	41.4	17.6	59.1	18.5	6.8	11.0	4.6	40.9	100.0
2005	34.9	18.3	53.2	20.0	12.2	11.7	2.9	46.8	100.0
2006	33.2	16.1	49.3	20.1	13.4	14.4	2.7	50.7	100.0

Note: Dollar values are adjusted for inflation by the CPI-UX for All Items.  
Source: Inside Mortgage Finance, 2007 Mortgage Market Statistical Annual.

Table A-9

## Characteristics of Renter Households by Race/Ethnicity: 1995 and 2005

Thousands

	1995					2005					
	White	Black	Hispanic	Asian/ Other	Total	White	Black	Hispanic	Asian/ Other	Multiracial	Total
<b>All Renters</b>	21,530	6,502	1,606	4,512	34,150	21,096	7,004	6,065	1,993	618	36,776
<b>Family Type</b>											
Married without Children	3,136	383	241	524	4,284	2,576	443	731	357	68	4,174
Married with Children	3,263	766	424	1,279	5,732	2,654	591	1,641	457	74	5,417
Single Parent	2,693	2,054	220	1,042	6,008	2,588	1,993	1,299	203	114	6,197
Other Family	1,155	773	156	463	2,547	1,203	842	687	213	45	2,990
Single Person	8,783	2,118	427	864	12,192	9,424	2,750	1,183	592	230	14,180
Other Non-Family	2,500	408	137	341	3,386	2,650	385	524	171	88	3,817
<b>Age</b>											
Under 20	251	71	26	77	424	443	143	98	40	23	746
20-29	5,884	1,670	453	1,347	9,355	5,535	1,579	1,723	480	165	9,482
30-39	5,785	1,934	512	1,411	9,642	4,235	1,709	1,789	575	160	8,468
40-49	3,555	1,380	302	756	5,992	3,827	1,577	1,211	407	107	7,129
50-59	1,895	619	164	409	3,086	2,755	1,025	632	227	89	4,729
60-69	1,390	397	72	274	2,133	1,588	509	324	122	42	2,585
70 and Over	2,770	432	77	239	3,518	2,713	461	288	142	34	3,638
<b>Income Quartiles</b>											
Bottom	7,179	3,348	1,972	582	13,082	7,982	3,581	2,385	685	263	14,897
Lower-Middle	6,744	1,814	1,450	439	10,448	6,607	2,186	2,142	542	184	11,661
Upper-Middle	5,147	1,047	810	365	7,369	4,336	884	1,135	480	88	6,923
Top	2,459	293	279	220	3,251	2,172	352	403	286	84	3,296

Notes: White, black, Asian/other and multiracial are non-Hispanic. Hispanics may be of any race. Asian/other includes Aleuts, Native Americans and Pacific Islanders. The American Housing Survey added the multiracial category in 2003. Respondents choosing this category are assumed to have selected one of the other minority categories in prior years. JCHS-adjusted weights used in 2005 data.

Source: JCHS tabulations of the 1995 and 2005 American Housing Surveys.

Table A-10

## Household Net Wealth by Decile: 1995 and 2004

2004 Dollars

Decile	Mean		Median		Aggregate (Billions)	
	1995	2004	1995	2004	1995	2004
<b>Bottom</b>	-7,940	-11,351	-1,884	-2,910	-78	-125
<b>2</b>	2,857	2,960	2,708	2,770	28	34
<b>3</b>	12,416	13,632	12,200	13,100	124	152
<b>4</b>	29,977	37,158	29,670	37,600	297	417
<b>5</b>	56,214	71,800	55,744	70,720	557	806
<b>6</b>	87,794	123,648	87,285	124,070	869	1,379
<b>7</b>	130,256	196,414	128,785	193,500	1,290	2,202
<b>8</b>	197,449	330,347	197,887	327,740	1,954	3,713
<b>9</b>	331,636	602,256	317,870	589,950	3,284	6,765
<b>Top</b>	1,774,634	3,101,434	836,963	1,429,500	17,569	34,769
<b>All Households</b>	261,562	447,041	70,973	93,001	25,895	50,112

Source: JCHS tabulations of the 1995 and 2004 Surveys of Consumer Finances.

**Table A-11 Household Projections by Race/Ethnicity, Age and Tenure: 2005 and 2015**

	2005			2015			Change 2005–2015		
	Owners	Renters	All Households	Owners	Renters	All Households	Owners	Renters	All Households
<b>Hispanic</b>									
Under 30	534	2,232	2,766	648	2,795	3,443	115	563	678
30–39	1,563	1,843	3,405	2,005	2,264	4,270	443	422	865
40–49	1,541	1,137	2,678	2,363	1,417	3,780	823	280	1,103
50–59	1,122	536	1,658	1,950	869	2,820	828	333	1,161
60–69	669	258	927	1,322	410	1,732	653	151	805
70 or Over	569	246	815	1,011	363	1,375	443	117	560
Total	5,997	6,252	12,249	9,301	8,119	17,419	3,304	1,867	5,171
<b>Other Minority</b>									
Under 30	479	2,798	3,277	563	3,260	3,824	84	463	547
30–39	1,726	2,583	4,310	1,969	2,930	4,899	243	347	590
40–49	2,668	1,928	4,596	3,010	1,893	4,903	342	-35	306
50–59	2,238	1,200	3,438	3,141	1,497	4,638	903	297	1,200
60–69	1,448	646	2,094	2,530	989	3,519	1,082	342	1,424
70 or Over	1,397	513	1,910	1,997	631	2,628	599	118	718
Total	9,957	9,668	19,626	13,210	11,200	24,410	3,253	1,532	4,784
<b>White</b>									
Under 30	3,267	6,723	9,990	3,484	6,920	10,404	217	197	414
30–39	9,529	4,274	13,803	9,400	4,154	13,554	-129	-120	-249
40–49	14,062	3,344	17,406	11,820	2,203	14,022	-2,242	-1,142	-3,384
50–59	13,492	2,301	15,793	15,330	1,985	17,314	1,838	-316	1,521
60–69	9,702	1,244	10,946	14,276	1,351	15,627	4,573	107	4,681
70 or Over	12,201	2,025	14,226	14,204	1,717	15,921	2,003	-308	1,695
Total	62,253	19,911	82,164	68,512	18,329	86,841	6,259	-1,582	4,677
<b>All Households</b>									
Under 30	4,275	11,757	16,032	4,694	12,977	17,671	419	1,220	1,638
30–39	12,797	8,721	21,518	13,359	9,364	22,723	561	643	1,205
40–49	18,256	6,424	24,680	17,166	5,539	22,705	-1,089	-886	-1,975
50–59	16,855	4,035	20,889	20,420	4,352	24,772	3,565	317	3,882
60–69	11,828	2,139	13,967	18,143	2,735	20,877	6,315	596	6,910
70 or Over	14,196	2,755	16,951	17,242	2,682	19,923	3,045	-74	2,972
Total	78,207	35,831	114,038	91,023	37,647	128,670	12,816	1,816	14,632

Notes: White and other minority are non-Hispanic. Hispanics can be of any race.

Source: George S. Masnick and Eric S. Belsky, "Addendum to Research Note N06-1: Hispanic Household Projections Including Additional Tenure Projection Detail by Age and Broad Family Type for Non-Hispanic White and Total Minority Households," JCHS Research Note N06-4, 2006.

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