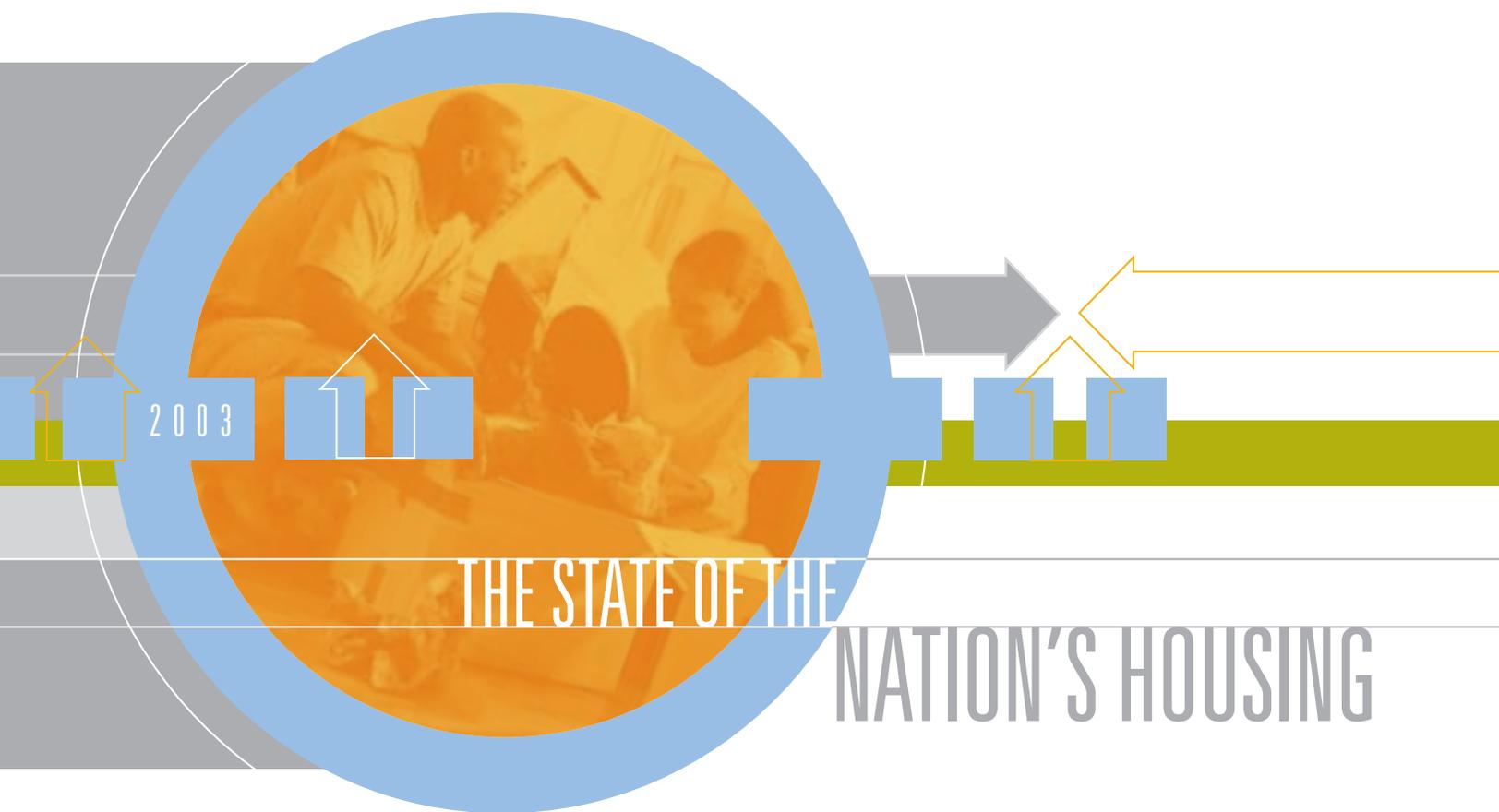


JOINT CENTER FOR HOUSING STUDIES OF HARVARD UNIVERSITY



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**

**Principal funding for this report was provided by the Ford Foundation  
and the Policy Advisory Board of the Joint Center for Housing Studies.  
Additional support was provided by:**

America's Community Bankers

Fannie Mae Foundation

FHLBanks

Freddie Mac

Housing Assistance Council

Mortgage Bankers Association of America

National Association of Homebuilders

National Association of Housing and Redevelopment Officials

National Association of Local Housing Finance Agencies

National Association of Realtors

National Council of State Housing Agencies

National Housing Endowment

National League of Cities

National Low Income Housing Coalition

National Multi Housing Council

US Conference of Mayors

©2003 President and Fellows of Harvard College.

The opinions expressed in *The State of the Nation's Housing: 2003* do not necessarily represent the views of Harvard University, the Policy Advisory Board of the Joint Center for Housing Studies, the Ford Foundation, or the other sponsoring agencies.



## EXECUTIVE SUMMARY

Despite the 2001 recession and weak ensuing recovery, by most measures 2002 was the strongest year for housing on record. Residential investment, home sales, homeownership rates, aggregate home equity, and total mortgage debt all hit new highs last year. Anemic growth has nevertheless taken its toll, sending mortgage delinquency rates up while pushing rents in some areas down.

When the economy regains momentum and the lingering effects of the recession subside, housing is well-positioned for another solid decade. Median incomes and wealth for all age groups are higher today than ten years ago. These gains, together with continued strong immigration, should lift household growth and housing investment above 1990s levels. Nevertheless, both low- and moderate-income households will continue to have difficulty finding affordable housing.

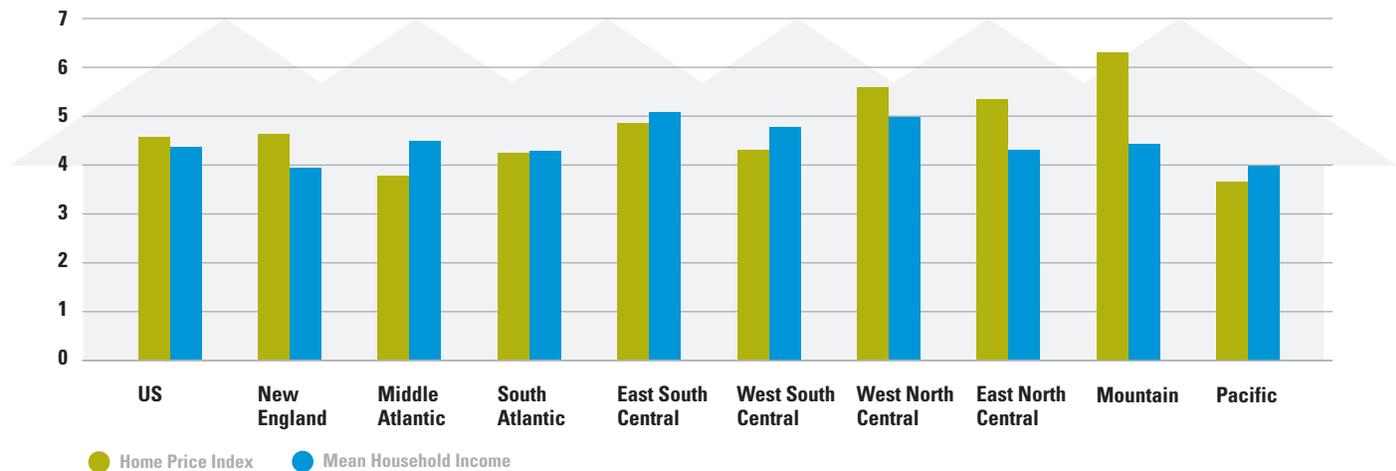
### **HOUSING'S STRENGTHS**

Rising home values and falling interest rates gave the housing sector a sturdy boost in 2002. With rates at 40-year lows, record numbers of homeowners rushed to refinance their mortgages and cash out some of their newfound housing wealth in the process. All told, cash-out refinancings pumped an estimated \$97 billion from home equity back into the economy, with another \$70 billion going toward the payoff of higher-cost second mortgages.

Meanwhile, the number of new single-family homes built in 2002 reached the highest level since 1978, while multifamily production increased slightly. The only production weak spot was manufactured housing, which suffers from withdrawal of credit and is still struggling to work off excess inventories. Although home building was unusually strong for a period of such paltry economic growth, it has kept pace with long-run housing demand. Barring a slide back into recession, residential construction should remain strong in the years ahead. With little pent-up demand in

**Figure 1 Home Values Have Risen in Line with Income Growth**

Average annual percent change, 1991-2001



Sources: Freddie Mac Conventional Mortgage Home Price Index, and Census Bureau, Current Population Survey.

evidence, though, the housing sector is unlikely to lead the economy into a more robust recovery.

While surging home prices have sparked fears of a housing market collapse, widespread price declines are unlikely because home prices in most areas have increased in line with income growth (Figure 1). History demonstrates that few localities experience the kind of concentrated job losses that precipitate severe home price deflation. Over the past 15 years, fully 53 of the 100 largest metropolitan areas have not experienced a single year of declining nominal home prices. Most areas, in contrast, have experienced slow deflation in real home prices following prolonged run-ups. In fact, real prices in 58 of the 100 largest metros have fallen ten percent or more at least once since 1987. In about a third of these locations, however, the real home values of owners who bought at least two years before the peak exceeded their purchase prices even at the bottom of the real declines.

#### NEAR-TERM VULNERABILITIES

Despite this remarkable buoyancy, housing market risks have intensified in recent years. Job losses have forced more mortgage borrowers into foreclosure, increased the number of homeowners spending half or more of their incomes on housing, and softened some rental markets. In addition, expansion of mortgage credit to borrowers with past payment problems has elevated foreclosure risks. Finally, increased mortgage debt levels and growing shares of homebuyers with high loan-to-value ratios have raised concerns about the amount of debt carried.

Though heightened, several of these risks remain relatively well-contained. The increase in mortgage debt, for example, has yet to create serious problems. Thanks to lower interest rates, owners have been able to increase their debt loads without necessarily adding to their monthly payments. In addition, strong home price appreciation has increased home values, providing fully 88 percent of mortgage borrowers with equity of 20 percent or more in 2001. By comparison, only about 4 percent of mortgage borrowers had equity of less than 5 percent in that year.

Furthermore, despite the rise in both delinquencies and foreclosures in 2001 and 2002, problem loans represent a very small fraction of active mortgages. Serious delinquency rates on conventional loans are still under one-half of one percent. Although delinquencies on government-backed loans are higher, new ways of working with borrowers promise to reduce the share of problem loans that end in foreclosure.

As for rental markets, the problems arise largely from the weakness of the economy and should subside once a sustained expansion begins. Although three-month absorption rates on newly constructed units are at 30-year lows, and overall rental vacancy rates have been rising in some areas, many markets remain in balance.

Two risks, however, could lead to more serious problems if the recovery stalls. One is the growing number of loans to borrowers with weak credit histories. Though serving

many borrowers who just ten years ago were denied access to credit, default rates on these loans are predictably higher than on standard loans. Because these loans are highly concentrated in low-income, primarily minority communities, a wave of foreclosures could put a glut of homes on the market, lowering prices and threatening the stability of entire neighborhoods.

The second serious risk factor is the dramatic jump in the number of homeowners spending more than half their incomes on housing. About 7.3 million homeowners reported cost burdens of this severity in 2001, up from 5.8 million in 1997. If more job losses occur, some homeowners in the bottom two income quintiles—who make up 84 percent of these vulnerable homeowners—could ultimately face the loss of their homes.

#### LONGER-TERM OPPORTUNITIES

While economic and geopolitical uncertainties cloud the near-term outlook, the underpinnings are in place to support another strong decade for housing. Household growth, the primary driver of housing demand, may well exceed 12 million between 2000 and 2010. Immigrants are expected to contribute more than one-quarter of this net increase and minorities fully two-thirds. The growing influence of minorities on housing markets was already evident in 2001, when they accounted for 32 percent of recent first-time buyers and 42 percent of all renters.

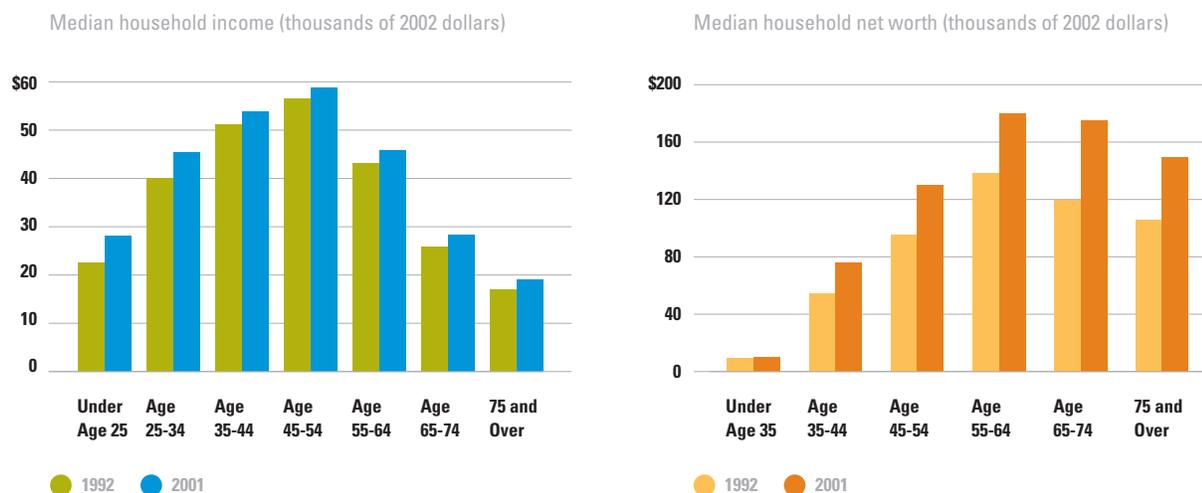
Shifts in the age distribution of the population will favor higher spending on both remodeling of existing homes

and purchases of new homes in the coming years. By 2010, older baby boomers will be in their peak wealth years and younger boomers in the peak-earning ages of 45 to 54. Because of their sheer numbers and economic clout, the boomers will still be a major force in home-buying markets even though fewer of them will move over this decade. The younger, more mobile baby-bust generation will also be important to housing markets as they continue to form new households. Meanwhile, the echo boomers will be starting to reach young adulthood and living on their own, boosting demand for apartments and starter homes.

Housing investment during this decade will benefit from the strong productivity gains of the 1990s, which helped to place each age cohort on a higher income and wealth path than the one preceding it (Figure 2). For example, households headed by people age 55 and older have much greater wealth than same-age households ten years ago. And now younger cohorts are on wealth paths nearly as high. Indeed, because the baby boomers will inherit their parents' assets, they may well set a new high for wealth among people over 55 when they begin to reach that age range next decade.

Although household growth is likely to remain concentrated in western and southern states, most of the large metropolitan areas across the country will see strong housing production at their fringes where employment is growing. Just as white households continue to move to these outlying areas, minorities are now moving out of the

**Figure 2** Incomes and Wealth Are Building Across All Age Groups



Sources: JCHS tabulations of the 1993 and 2002 March Current Population Surveys and the 1992 and 2001 Surveys of Consumer Finances.

traditional city cores to the inner suburbs (Figure 3). Over the next decade, immigrants are also expected to fan out from the handful of metro areas that are traditional gateways for foreign-born households.

### PERSISTENT CHALLENGES

With long-run income growth among lower-income households stagnating and housing costs rising, affordability pressures have intensified. Even households with

incomes well above the full-time equivalent of the minimum wage are struggling to find housing that meets their needs, at costs they can afford (Figure 4). Between 1997 and 2001, the number of lower-middle and middle-income households spending more than half their incomes on housing surged by more than 700,000.

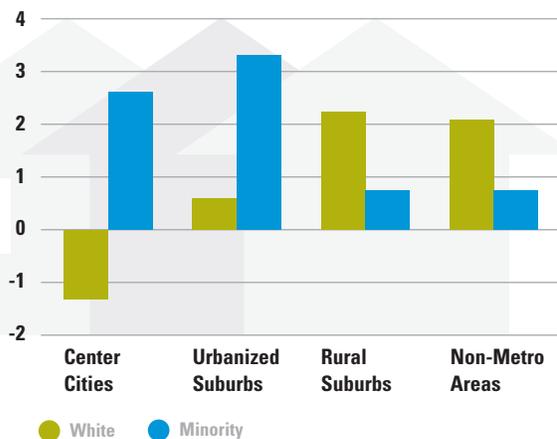
Nevertheless, housing problems fall most heavily on those in the bottom fifth of the income distribution, who can barely afford to pay enough to cover the cost of utilities, property taxes, and maintenance on even modest units in less desirable communities. Yet only 34 percent of the renters in this quintile receive housing assistance. With government deficits ballooning, the prospects for expanding this share are grim.

Meanwhile, the already scarce supply of smaller, less costly housing is shrinking, with especially sharp losses among two- to four-unit apartment buildings. Regulatory and natural constraints on land are driving up land costs in and around many of the nation's metropolitan areas, restricting development of affordable housing. Hope remains that communities will begin to find ways to balance their interests in improving environmental and housing quality with the need for a mix of housing types, suitable for a range of incomes. 🏠

Figure 3

### As White Households Move Out, Minorities Gain in Cities and Inner Suburbs

Change in millions of households, 1990-2000



Notes: Whites are non-Hispanic. Minorities include all households not headed by a non-Hispanic white. Values for 1990 are the average of 1989 and 1991, while values for 2000 are the average of 1999 and 2001.

Source: JCHS tabulations of the 1989, 1991, 1999, and 2001 American Housing Surveys, using constant 1983 metro boundaries.

Figure 4

### Millions of Working Households Nationwide Struggle to Afford Housing

Millions of households with incomes between \$10,712 and \$36,136



Notes: Working households are those with incomes between one and three times the full-time minimum wage equivalent in 2001. Moderately burdened households pay between 30% and 50% of income for housing. Severely burdened households pay more than 50% of income for housing.

Source: JCHS tabulations of the 2001 American Housing Survey.

## HOUSING AND THE ECONOMY

Housing continued to prop up the economy in 2002. Like the year before, significant interest-rate declines and robust home price appreciation lifted residential investment. Meanwhile, record cash-out refinances pumped \$96.5 billion back into the economy. Another \$69.5 billion was used to retire higher-cost second mortgages. Strong sales also triggered some spending of home equity realized as capital gains. Even with this extraction of housing wealth, home equity still hit a new high of \$7.6 trillion.

HOUSING CONTRIBUTED DIRECTLY TO GROWTH THROUGH STEADILY RISING RESIDENTIAL INVESTMENT, RECORD CASH-OUTS OF HOME EQUITY, AND SUBSTITUTIONS OF HIGHER-COST DEBT WITH LOWER-COST SECOND MORTGAGES.

The steady escalation of home prices has given rise to concerns about a housing market bubble. The good news is that home prices have grown only about as fast as incomes in most areas. In addition, large nominal home price declines are relatively rare and it takes significant and concentrated job losses—well beyond those in evidence in most places today—to precipitate a retreat. Nevertheless, a few markets have seen home price inflation outstrip income growth and a few have registered steeper job losses, making them more vulnerable to home price declines if their economies turn down.

Rising rental property valuations, together with climbing vacancy rates and rent concessions in several markets, have also led to worries that recent rental transactions are overvalued. But because lower interest rates support solid leveraged returns on these acquisitions, they are financially viable. Absent further weakening in rental markets, they should remain so.

### REACHING NEW PEAKS

An unexpected decline in mortgage interest rates—prompted by the slumping economy and the movement of capital out of stocks and into bonds—kept the housing boom going in 2002. New and existing home sales both set records. Single-family starts exceeded their 1999 pre-recession levels, while overall residential investment reached a new high (Figure 5). Estimated remodeling expenditures—including maintenance,

repairs and replacements—also hit another high in 2002, on top of a strong (inflation-adjusted) 8.6 percent gain between 1998 and 2001.

While edging up in 2002, multifamily housing starts remained within the narrow 330,000-350,000 range where they have held since 1997 (Table A-2). The value of multifamily construction reached \$33.3 billion, while expenditures on remodeling of single-family and multifamily rental units totaled an estimated \$49 billion. Manufactured housing, in contrast, remained beleaguered by a credit crunch and a glut of repossessed homes. Placements sank for the fourth straight year, down 12.1 percent to 168,800 units.

Housing's strength was widespread, with existing home sales up in 46 states (including the District of Columbia) and new construction also up in 46 (Figure 6). Only one of the states where construction retreated—Michigan—was in more than a second year of decline.

#### THE CONTRIBUTION OF REFINANCES

In 2001-2, homeowners refinanced a record \$2.5 trillion in mortgage debt, more than doubling the 1998-9 high. According to a Federal Reserve Board survey, those who refinanced and took cash out in 2001 and the first half of 2002 withdrew an average of \$26,700. In total, home-

owners converted an estimated \$180.2 billion of their equity into cash during 2001-2 (Figure 7), investing as much as a third of that amount on remodeling.

Although all this refinancing activity has helped to push mortgage debt to record levels, it has been a decided plus for the economy. Indeed, the contribution of cash-out refinances to economic growth last year eclipsed that of residential construction. In addition, households that refinanced without taking out equity injected more than \$13 billion into the economy from their increased cash flow. Finally, homeowners rolled \$134.5 billion of higher-cost second mortgages into their new first mortgages, also freeing up additional cash for spending.

The drop in interest rates did, however, put a damper on the income gains of many households that own bonds. This reduction partially offset some of the lift the economy received from the new round of refinancing.

#### THE ANCHORING ROLE OF HOUSING WEALTH

Home equity remained the anchor of household wealth, climbing about \$405 billion in 2001-2 at the same time that household stock portfolios lost \$1.4 trillion in value. As a result, the share of stock-holding homeowners with more home equity than stock wealth jumped from 60.5 percent in 2001 to an estimated 66 percent in 2002.

**Figure 5** It Was Another Year for the Record Books

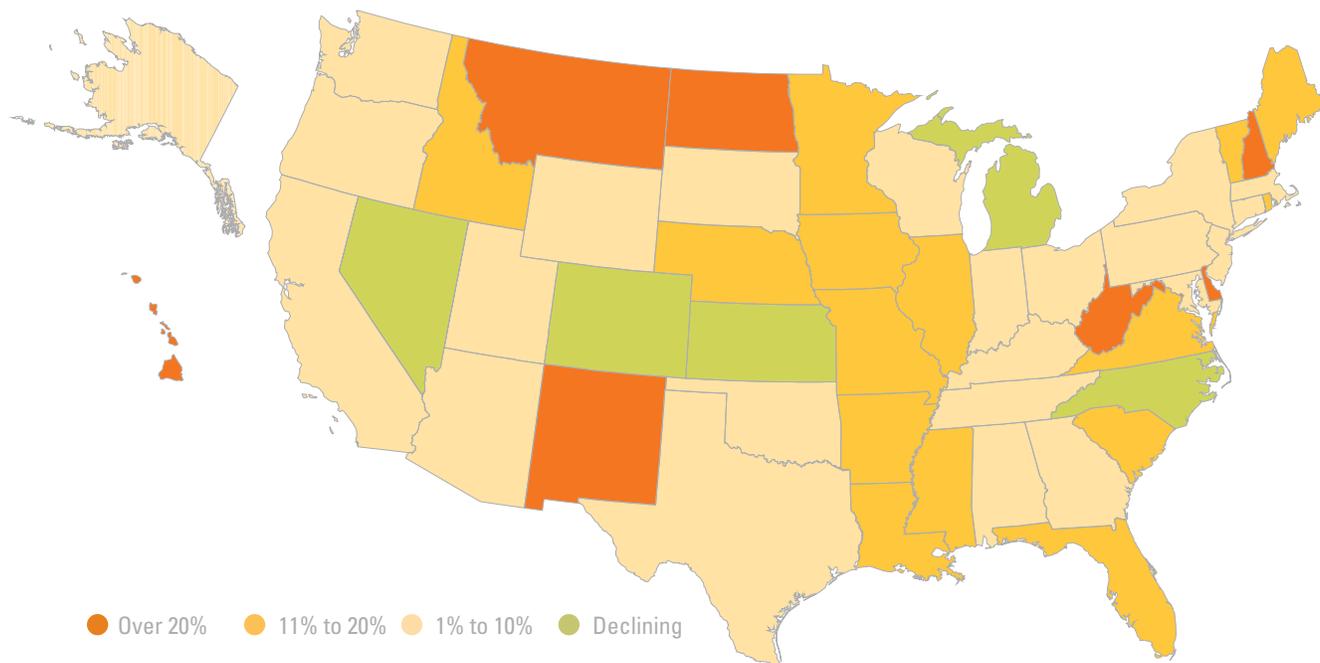
	2001	2002	Change
<b>Homeownership Rate</b>	67.8%	67.9%	0.1%
<b>New Home Sales</b>	908,000 units	976,000 units	7.7%
<b>Existing Home Sales</b>	5.3 million	5.6 million	5.7%
<b>Existing Home Price</b>	\$153,193	\$161,043	5.1%
<b>Home Equity</b>	\$7.3 trillion	\$7.6 trillion	4.1%
<b>Mortgage Debt</b>	\$5.5 trillion	\$6.1 trillion	10.9%
<b>Mortgage Refinancing</b>	\$1.1 trillion	\$1.4 trillion	27.3%
<b>Residential Fixed Investment</b>	\$442.4 billion	\$462.4 billion	4.5%
<b>Remodeling</b>	\$160 billion	\$164 billion (e)	2.5%

Note: All dollar figures are in 2002 dollars.

Sources: Table A-5; Table A-2; Federal Reserve Flow of Funds Accounts; Bureau of Economic Analysis; Mortgage Bankers Association of America; National Income and Product Accounts; Census Bureau, C-50.

## Figure 6 Home Building Rose in Nearly Every State in 2002

Change in permits, 2001-2



Notes: Single- and multifamily housing permits only. Excludes manufactured home placements.  
Source: Census Bureau.

In addition to its stabilizing role, home equity is more evenly distributed than stock wealth (Figure 8). While the top one percent of stockholders own 33.5 percent of total stock wealth, the top one percent of home equity holders own just 13 percent of total home equity. Home equity is an especially important source of wealth for those in the bottom fifth of the income distribution. In 2001, the median net wealth of these lowest-income owners was

for every \$1.00 rise in stock wealth. This explains why home equity gains have been able to offset the dampening effect of large stock losses on consumer spending.

### HOUSE PRICE CONCERNS

House price increases have been strong for so long that some analysts have predicted a slowdown, if not a drop, for two years running. Fanning the flames of concern,

### EVEN AFTER EXTRACTING SUBSTANTIAL AMOUNTS OF WEALTH FROM THEIR PROPERTIES, OWNERS STILL HELD \$7.6 TRILLION IN HOME EQUITY AT THE END OF 2002.

\$68,000, while that of lowest-income renters was only \$500. Furthermore, for half of these owners, home equity accounted for 80 percent or more of their total net wealth.

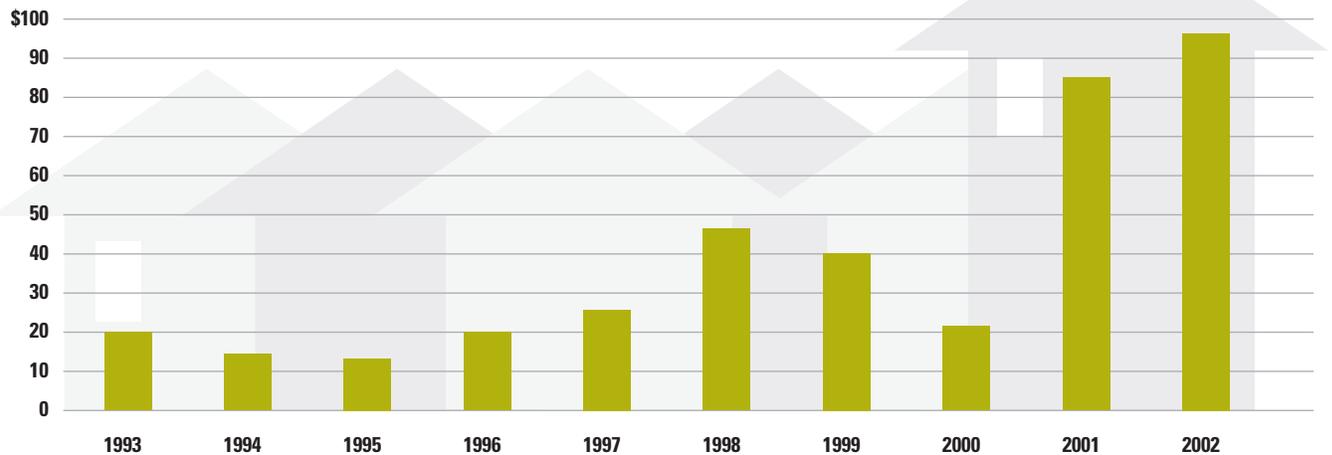
Because housing wealth is so broadly distributed, home equity gains influence the spending behavior of far more households than stock gains do. According to Federal Reserve estimates, households spend \$0.15 for every \$1.00 rise in their housing wealth, but only \$0.03-0.05

house price gains have outstripped income gains since 1997 in 48 of the 50 largest metropolitan areas. Nevertheless, inflation-adjusted home prices rose faster in 2001 than at any time since 1978, and nearly as fast again in 2002.

Signs of moderation are, however, emerging. In 2002, real home price inflation slowed in 55 of the 100 largest metro areas, was flat in 3, and declined in 2 (Austin-San Marcos and San Jose, both of which were reeling from

## Figure 7 Cash-Out Refinances Have Shattered All Records

Billions of 2002 dollars



Note: Estimates include prime conventional loans only and are net of retirement of outstanding second mortgages.  
Source: Freddie Mac.

tech-related job losses). Still, home price inflation did accelerate in the other 40 metro areas (Figure 9).

Although fears about housing market bubbles persist, they seem overblown. In the locations where home prices have moved up the most relative to incomes, such as New York, Boston, Miami, San Francisco, and Seattle, the scarcity of developable land and the cost of regulation are partly responsible. These factors, together with higher incomes, have kept these areas among the highest-cost housing markets in the nation.

More importantly, it takes concentrated job losses—the likes of which have not been seen during this business cycle—to drive down home prices. Prices fall when many people must sell their homes at the same time that demand is soft. With surplus inventory on the market, sellers are forced to accept lower prices.

Even during national or regional recessions, most metropolitan areas do not experience severe job losses or housing price declines. During the wave of house price deflation in the late 1980s and early 1990s, for example, nominal declines occurred in 47 of the 100 largest metropolitan areas. Just 24 of those areas saw a drop of five percent or more. Consequently, house prices in only one in four large metro areas fell enough to wipe out the value of a modest five percent downpayment.

Moreover, when house prices deflate, they do so slowly. Because people live in, as well as invest in, their homes,

many owners choose to stay put when prices soften. This reduces the number of homes on the market and helps bring supply and demand back in balance, thereby forestalling faster and sharper price declines.

Slow declines in inflation-adjusted home prices following sharp run-ups, however, are common. In fact, real home prices have fallen at least 10 percent in 58 of the 100 largest metro areas at some point since 1987. These declines occurred over an average of 6 years.

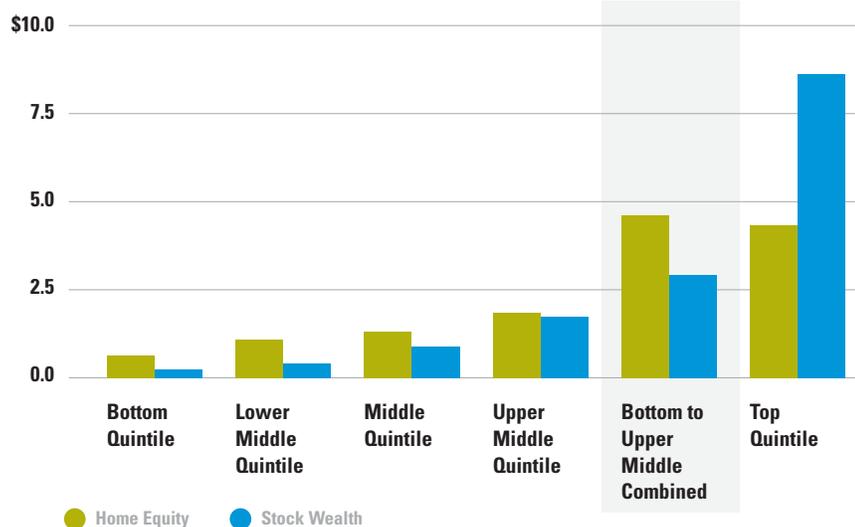
Furthermore, because housing is typically a leveraged investment, even when nominal home prices rise more slowly than general inflation, owners can earn a real return on their capital. In fact, as long as the gap between nominal home price inflation and general inflation is less than the leverage multiple, the owner comes out ahead. For example, an owner who puts \$10,000 down on a \$100,000 home has a leverage multiple of ten. If nominal home prices rise by one percent, that owner receives a return of ten percent. Unless general price inflation is ten percent or more, the owner still profits.

### THE OUTLOOK

While housing has held up remarkably well, the near-term outlook is clouded by significant economic and geopolitical uncertainties. So far, the positive effects of rising real disposable incomes and low mortgage interest rates have offset many of the depressing impacts of higher unemployment. Moreover, housing fundamentals remain solid. Production appears to be running in line with long-term

**Figure 8** Housing Wealth Is Much More Broadly Distributed Than Stock Wealth

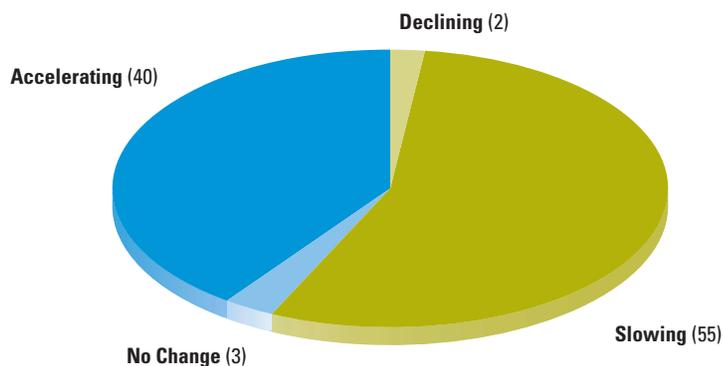
Trillions of 2002 dollars



Source: Published tables from the 2001 Survey of Consumer Finances.

**Figure 9** Inflation-Adjusted Home Prices Have Moderated in Most Metro Areas

100 largest metro areas



Notes: "Accelerating" defined as faster price growth in 2002 relative to 2001. "Slowing" defined as slower price growth in 2002 relative to 2001. "Declining" defined as a drop in real prices from 2001 to 2002.  
Source: Freddie Mac Conventional Mortgage Home Price Index.

IF INTEREST RATES REMAIN LOW THROUGHOUT 2003, HOME SALES, PRICES, AND REFINANCES COULD DEFY EXPECTATIONS YET AGAIN.

by a point or more, housing investment should hold up well because borrowers can opt for more affordable, adjustable-rate mortgages. While supporting continued strong home sales, this would also lift home prices and create higher hurdles for first-time buyers. Of course, if the economy slides back into recession, the downward pressure on housing markets would compound the lingering effects of the 2001 downturn. Mortgage delinquencies and foreclosures would likely rise, while some rental markets would soften further.

demand. Inventories of new homes for sale were lean at the end of the first-quarter of 2003 at just 4.1 months, compared with 6.8 months before the last major housing correction. Furthermore, the first-quarter 2003 drop in interest rates triggered yet another wave of refinancing that could bring this year's total within striking distance of last year's record.

If interest rates remain low for the remainder of 2003, home sales, prices, and refinances could defy expectations yet again. On the other hand, even if interest rates increase

Over the longer term, housing's direct contribution to the economy should remain strong. Spending within the housing sector (including rents, utilities, furnishings, maintenance, repair, and remodeling) has accounted for about one-fifth of national economic activity for decades, and is likely to account for at least that large a share during the current decade. 🏠



## DEMOGRAPHIC DEMAND DRIVERS

HOUSEHOLD  
GROWTH,  
THE PRIMARY DRIVER OF  
HOUSING DEMAND,  
IS PROJECTED TO  
TOP 12 MILLION  
BETWEEN 2000  
AND 2010.

Despite the sluggish economy, 1.2 million net new households have formed each year on average since 1999. With further inflows of immigrants and the aging of the population, the strong pace of household growth may even pick up over the next decade. This rising demand, together with growth in income and wealth, should spur housing investment to new heights.

Over the next ten years, the aging baby-boomers will continue to support the trade-up market, fuel spending on professional remodeling projects, and shore up demand for more expensive rentals. As the echo boomers move into their 20s, they will lift demand for smaller apartments and starter homes. At the same time, housing providers and the financial system will face the growing challenge of supplying units to low-income and minority households.

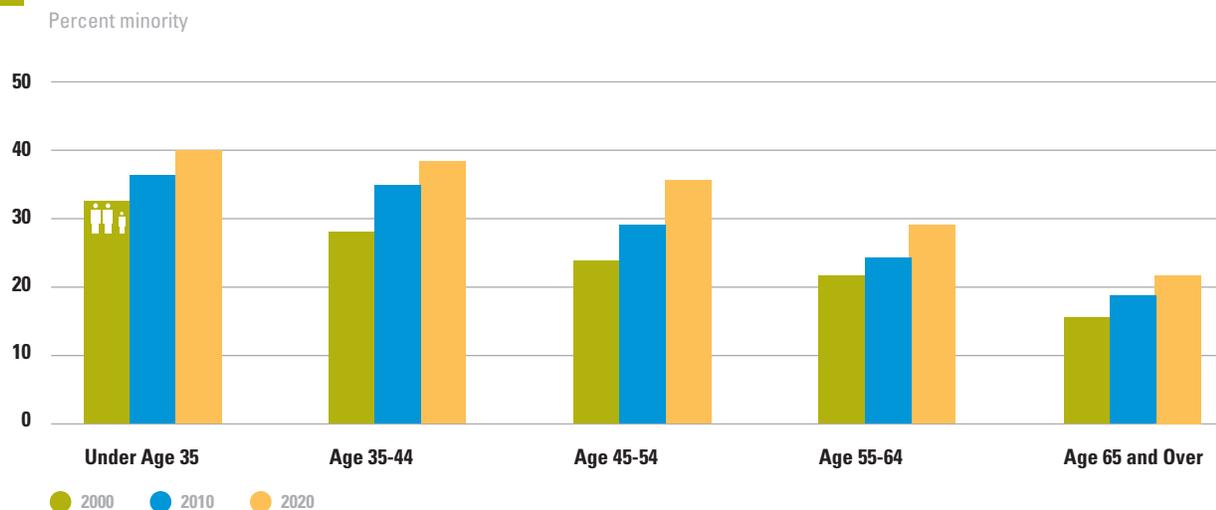
Both household growth and new construction will remain concentrated in the South and West and at the far reaches of metropolitan areas. If recent trends are any indication, whites will account for the lion's share of the households moving to the metro fringe and into non-metropolitan areas, while minorities will likely dominate growth in the center cities and in older, urbanized suburbs.

### OLDER, MORE DIVERSE HOUSEHOLDS

The nation's households are growing older and more diverse. As a result, the preferences of minorities, middle-aged and older singles, and empty-nesters will increasingly shape housing demand.

Minorities are on track to add 7.5 million households between 2000 and 2010, and another 7.8 million between 2010 and 2020 (Table A-6). The minority share of US households is thus expected to grow steadily from about one-quarter to nearly one-third within 20 years. Household growth among younger minorities will increasingly offset losses among older whites, with each successive wave of past immigration translating into larger and larger shares of minority households (Figure 10).

**Figure 10** The Minority Share of Households Will Increase Across All Age Groups



Making up nearly half the 25.3 million immigrants arriving in the US since 1980, Hispanics—and particularly Mexicans—will lead the growth in minority households. Even if immigration dropped to half its projected pace, increases in the number of minority households would still top 7.2 million this decade and 6.8 million the next.

Shifts in family composition, while less dramatic, also have important implications for housing demand. The number of people living alone is expected to rise by nearly 5 million over the current decade. With divorce rates high and remarriage rates trending down, many of these single-person households will be relatively affluent, middle-aged baby boomers. This is already apparent in the sharp rise in people living alone in suburban and non-metropolitan areas. From 1992 to 2002, the number of single-person households in these locations increased by four million, compared with less than one million in the urban core.

Meanwhile, growth in the number of married couples over age 55 without minor children living at home will be equally strong, up 4.3 million during this decade and 6.1 million during the next. Many of these households will, however, have their adult children living with them. As of 2002, 15 percent of married-couple households in this age group included an adult child, while 11 percent of 25 to 34 year-olds still lived with their parents.

Indeed, the baby boomers do not seem in a rush to downsize their homes as their children reach adulthood. While fully half of the oldest boomers (aged 45 to 54 in 2000) moved during the 1990s, they typically traded up to newer

homes with more amenities. Over this decade, the share of older boomers that move is expected to shrink to about 35 percent, but their sheer numbers mean they will still play a powerful role in home-buyer markets. Similarly, while younger boomers (aged 35 to 44 in 2000) will account for a smaller share of movers from 2000 to 2010, they will remain a major source of demand (Figure 11).

#### ESCALATING INCOME AND WEALTH

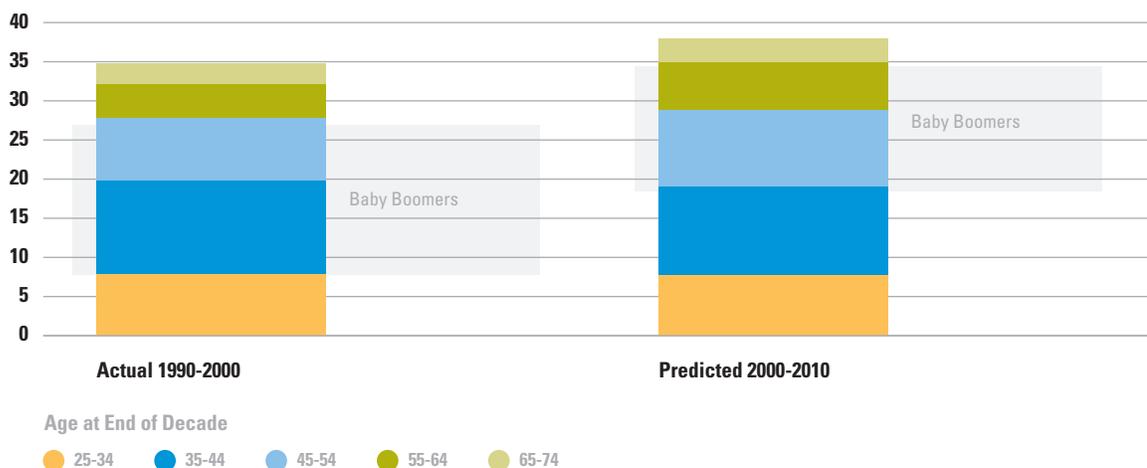
As recently as 1995, it appeared that households under age 45 were earning less than their counterparts ten years earlier. By 1999, though, strong income growth had reversed this trend. Although the relative fortunes of younger households could again change, the baby boomers and older cohorts have managed to top the median incomes of the cohorts ahead of them since at least the mid-1980s. These advances reflect a 25-year trend toward higher returns to education, skills, and experience in the workplace and the growing share of dual-earner households (Figure 12). Gains among women are particularly noteworthy, raising the average incomes of both single-person and two-worker households.

Along with income, household wealth has also built over the past ten years. Despite the stock market dive, aggregate wealth at the end of 2002 was up significantly from 1992. Indeed, household wealth in the US has grown almost uninterrupted since the end of World War II. As measured by the Federal Reserve's national balance sheets, inflation-adjusted household wealth more than doubled from \$7.8 trillion in 1950 to \$17.4 trillion in 1975, then more than doubled again to \$40 trillion in 2002.

Figure 11

## Despite Falling Mobility Rates, the Baby Boomers Will Remain A Major Force in Home-Buyer Markets

Millions of homeowners moving at least once during the decade



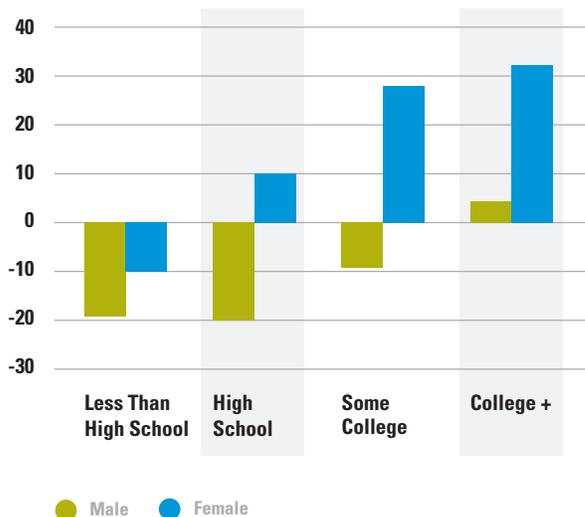
Note: Predicted movers assume 1990's mobility rates.

Sources: 1990 and 2000 Decennial Census, and JCHS projections.

Figure 12

## Higher Education Is Key to Income Gains

Median income growth of 18-35 year-olds, 1976-2001 (percent)



Notes: Some college includes three-year associate degrees. College + combines four-year degrees and post-graduate degrees.

Source: JCHS tabulations of the 1977 and 2002 March Current Population Surveys.

Gains among households over age 55 have been particularly strong. Although the oldest baby boomers have not yet attained the level of wealth their parents did at the same ages, they do stand to inherit record amounts over the next 20 years. In addition, early indications are that the baby boomers will stay in the labor force longer than their predecessors, giving them more time to build wealth on their own. With their record incomes and rising

wealth, baby boomers are thus likely to invest even more heavily in housing than earlier generations during their pre-retirement and retirement years.

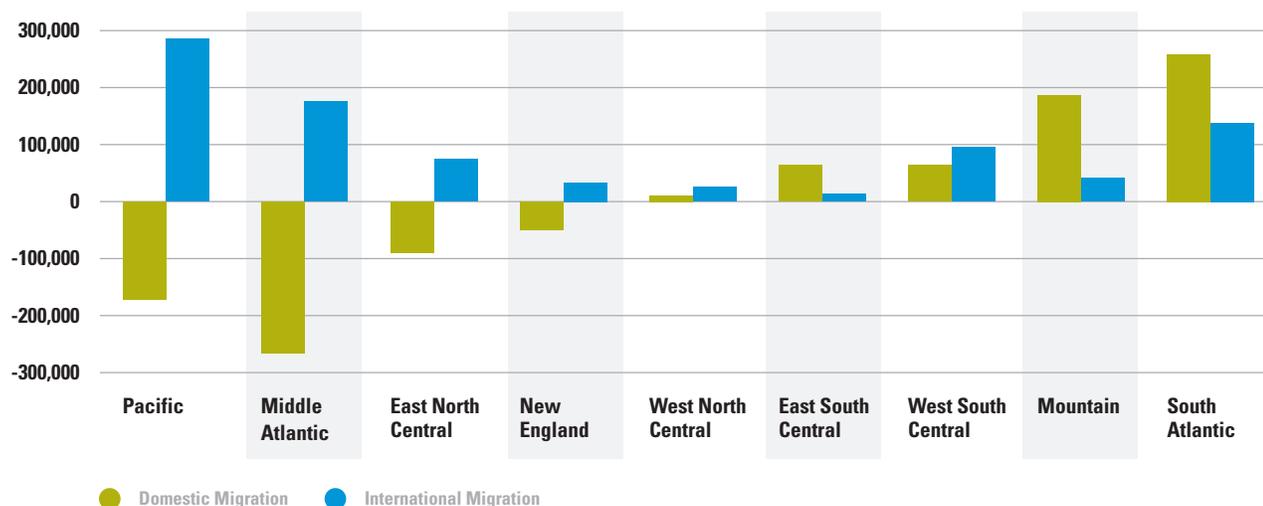
### PERSISTENT INEQUALITIES

Even though income has been on the rise, its distribution has become increasingly unequal. According to the Current Population Survey, the mean inflation-adjusted income of households in the bottom fifth rose by a healthy 11.7 percent during the 1990s. During that same period, the mean income of those in the top fifth was up 25.7 percent. Moreover, the mean income of the lowest-income group fell a full 3 percent during the 2001 recession while the highest-income group eked out yet another small increase.

This growing inequality reflects in part the lower average education level of minorities, who represent a growing segment of the population. Among 25 to 34 year-olds, some 39 percent of Hispanics and 12.3 percent of non-Hispanic blacks lack high-school diplomas, compared with only 6.5 percent of non-Hispanic whites. In addition, 10.6 percent of Hispanics and 19.3 percent of non-Hispanic blacks have college degrees, compared with 36.4 percent of non-Hispanic whites. Making matters worse, minorities also receive less return on their education in the workplace. Among college-educated males in this age group, the median 2001 income for Hispanics was \$34,900, non-Hispanic blacks \$35,000, and non-Hispanic whites \$45,600.

**Figure 13 Immigrants to Pacific and Middle Atlantic States Helped Offset Outflows of Native-Born Populations**

Average annual net migration, 1990-2000



Source: 1990 and 2000 Decennial Census.

Wealth is even more concentrated than income, and increasingly so. While households in the top fifth of the income distribution held 60 percent of aggregate income in 2001, households in the top fifth of the wealth distribution held fully 83 percent of aggregate wealth. Indeed, the top five percent of wealth holders held 57 percent of the total, while the entire bottom half of wealth holders held a paltry 3 percent.

Households with access to wealth are better able to achieve homeownership. Moreover, they may drive home prices up ahead of income growth, making it more difficult for households with less wealth to buy homes. To compete in the housing market, less wealthy households may therefore have to take out larger home mortgages and devote larger shares of their incomes to pay for comparable housing.

Given that home equity remains the primary source of household wealth, the wealth gap between whites and minorities remains stubbornly large in part because minorities have lower homeownership rates. Reducing this disparity will become more difficult over the next 20 years because white households stand to inherit significantly more wealth than minority households.

#### IMMIGRATION AND MIGRATION PATTERNS

Following longstanding trends, population growth continues to cluster in the South and parts of the West (Table A-7). During the early 1990s, several western states—

especially Arizona, Colorado and Nevada—benefited from strong outmigration from California (Figure 13). Foreign immigration nonetheless kept population growth in California and the rest of the Pacific division going strong.

In the meantime, the southern states drew population from all over the country, but particularly from the New York metropolitan area. The Northeast and the Midwest grew far more slowly, with major cities such as New York and Boston spared from population losses only by an influx of immigrants and strong natural increase among both immigrant and native-born minorities.

The southern and interior western states remain attractive locations, thanks to their relatively low costs of doing business, favorable climates, and healthy labor markets. But the fevered pace of employment and population growth in these areas has strained local resources and fueled anti-development sentiments. While these and other regulatory pressures may eventually erode some of their attractiveness, the South and West will likely continue to experience relatively rapid growth.

On a more local level, residential development in most metropolitan areas now stretches far from the urban core. While persistent expansion at the metropolitan fringe is a long-term phenomenon, the speed with which minorities have joined in this movement is noteworthy. Between 1990 and 2000, the share of Hispanic households living in suburbs rose from 39.6 percent to 42.7 percent, while the

share of non-Hispanic black households living in suburbs rose from 26.6 percent to 31.9 percent, and the share of Asian and other minority households rose from 44.9 percent to 49.6 percent.

Growth in the presence of Hispanic households has been particularly dramatic. Over the 1990s, Hispanic households grew by 58 percent and the number of Hispanic households in non-metropolitan areas increased by 71 percent. Furthermore, many census tracts that were less than 20-percent Hispanic in 1990 (primarily in the Southwest, Mountain states, West Coast, and Florida) saw their Hispanic populations grow by 25, 50, and even 100 percent or more (Figure 14).

Meanwhile, many urban core areas experienced their strongest population growth in decades. Among the 31 center cities of the largest metros that lost population in the 1970s and/or 1980s, 16 regained population during the 1990s. Many urban areas have now stabilized and some are beginning to gentrify, sparking concerns over the growing shortage of affordable housing.

#### THE OUTLOOK

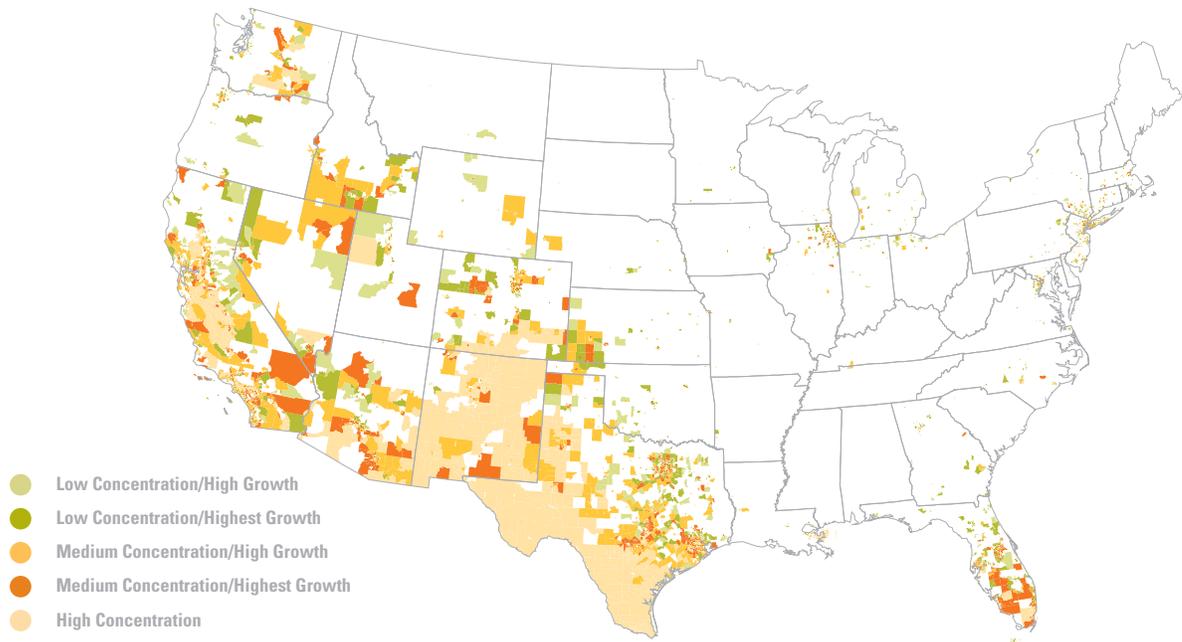
With the expected uptick in household growth, strong demand for second homes, and better balance in rental

markets, housing production during the current decade should exceed the 16.6 million units built and manufactured between 1991 and 2000. Past gains in income and wealth will also buoy investment in new construction and remodeling over the decade.

Given that minority households will make up about two-thirds of net new households, their economic progress will become increasingly critical to the robustness of housing markets. But even if their incomes and wealth grow more rapidly than those of whites for the next ten years, wide gaps will almost certainly remain.

Because of the persistent disparities between rich and poor households and between white and minority households, as well as the movement of the echo boomers into young adulthood, housing demand may shift away from single-family detached homes toward more affordable multifamily apartments, town homes, and manufactured homes. Supply-side considerations such as capital availability and zoning may, however, outweigh these demographic forces. In this case, production could tilt even more toward single-family detached homes despite growing pressure for higher-density, lower-cost housing. ▲

**Figure 14** Hispanic Households Have Dispersed from Traditional Core Areas



**Notes:** Excludes census tracts with less than 2.5% Hispanic share in 1990. Low concentration had 2.5% to 4.9%, medium concentration had 5.0% to 19.9%, and high concentration had 20% or greater Hispanic share in 1990. High growth defined as 25-100% and highest growth as greater than 100%.

**Source:** 1990 and 2000 Decennial Census.



## HOMEOWNERSHIP TRENDS

With the addition of 1.1 million owners, the homeownership rate hit another high of 67.9 percent in 2002. Historically low interest rates, expectations of home price appreciation, innovations in mortgage finance, and rising average incomes have all supported the decade-long boom. Ownership rates have risen across the board, and even faster for minorities than whites. Yet minority homeownership rates still lag those of whites of comparable age, income and family type by a significant margin.

BETWEEN  
1993 AND 2002,  
THE NUMBER  
OF MINORITY  
HOMEOWNERS  
SURGED BY 58.8  
PERCENT.

For typical home buyers, sharp declines in mortgage interest rates largely offset the impact of surging home prices on affordability in 2001-2. Lower mortgage rates also allowed many homeowners to increase their mortgage debt without adding significantly to their monthly housing costs.

For households at the lower end of the income distribution, though, affordability has clearly eroded. When the economy slowed in 2001, households in the bottom two quintiles saw their incomes fall 2-3 percent, with little or no recovery in 2002. In addition, rising home prices have forced first-time buyers to come up with more cash, take out larger loans, or settle for lower-quality homes than they would have otherwise chosen. Some have been priced out of the market altogether.

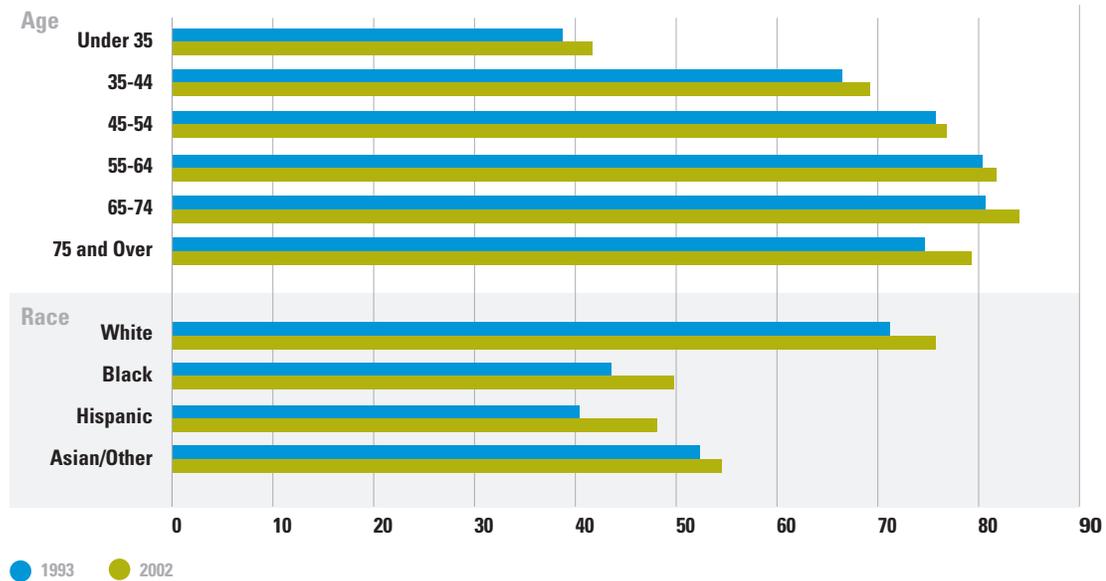
Meanwhile, the weak economy and the expansion of credit to people with past credit problems are starting to take their toll. Though still small, the shares of owners falling seriously behind on their mortgages and in the foreclosure process have increased. Especially worrisome is the concentration of foreclosures in certain low-income minority communities.

### MINORITY OWNERSHIP GAINS

Since homeownership rates started to climb in 1993, the number of minority homeowners has increased by 5.2 million—more than 40 percent of the net growth in owners (Figure 15). Indeed, the Fannie Mae

**Figure 15 Homeownership Rates Have Increased for All Groups**

Percent that are homeowners



Notes: White, black and Asian/other are non-Hispanic. Hispanic householders may be of any race. Asian/other includes Pacific Islanders, Aleuts and Native Americans.  
Source: Table A-5.

Foundation estimates that minorities contributed at least half the 1990s growth in homeowners in 10 states and nearly all of the increase in California.

Minority households therefore make up a key home-buyer market (Figure 16). In 2001, minorities accounted for about 32 percent of recent, first-time buyers, up from about 19 percent just eight years before. Foreign-born minorities alone now constitute about one in ten first-time buyers, and account for even greater shares in the handful of metropolitan areas that are home to large foreign-born populations.

Minority home-buying trends differ from those of whites in a number of notable ways. In addition to having lower average incomes and wealth, some minorities tend to be older when they make their first move to homeownership. The median age at first purchase is 30 for native-born non-Hispanic whites. By comparison, the median age for Hispanics is 31, for Asians and others 33, and for non-Hispanic blacks 36. The median ages of foreign-born minority home buyers are higher by about two years.

Interestingly, older minority homeowners are far more likely to stay in the first homes they buy. Indeed, fully 65 percent of non-Hispanic black and 55 percent of Hispanic owners over the age of 65 still live in their first homes, compared with just 32 percent of non-Hispanic whites.

While the reasons for this lack of mobility are unclear, it may be a legacy of housing, mortgage and labor market discrimination or it may reflect differences in preferences.

#### ENDURING OWNERSHIP AND EQUITY GAPS

Strong gains notwithstanding, the gap between white and minority homeownership rates has improved little in 40 years. The disparity still stood at 25.3 percent in 2002.

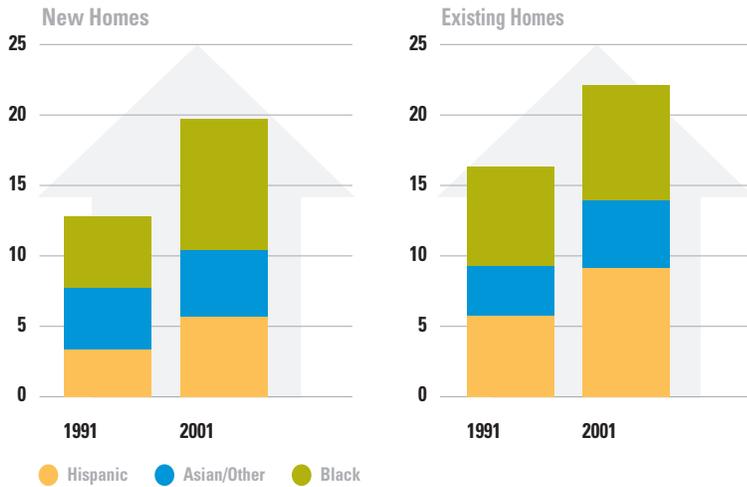
Differences in income, age and family composition account for about 15 percentage points of the 25 percentage-point lag (Figure 17). Studies attempting to control for other variables, such as wealth and geographic location, also fail to account for much more of the homeownership gap. The weaker average credit scores of minorities may well play a role, however, and the mortgage industry has stepped up efforts to address this factor.

Past and present gaps in homeownership rates have profound impacts on minority household wealth. Today, homeowners age 55 and older hold an estimated \$3.3 trillion in home equity. If just three-quarters of these owners pass their properties on to their heirs over the next 20 years, the transfer of wealth would involve 12.3 million homes—fully 10.7 million of which are owned by non-Hispanic whites. Under the simple assumption that equity in these homes does not grow at all in inflation-adjusted terms, the housing wealth passing to white heirs would

Figure 16

### Minorities Account for a Growing Share of the Home-Buying Market

Percent of buyers



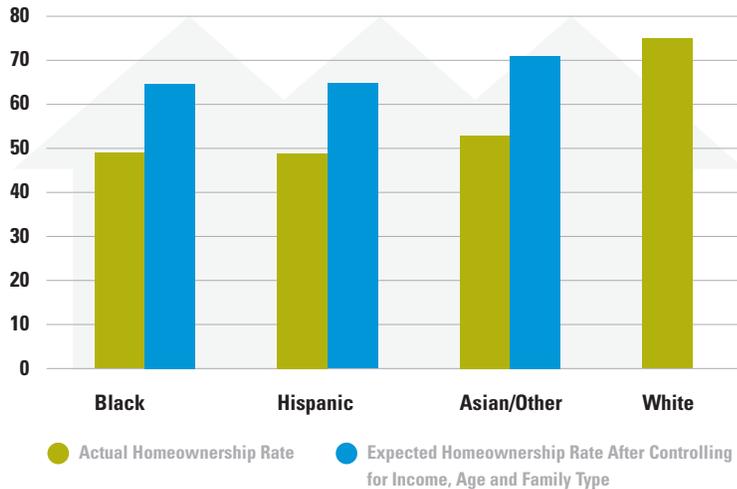
Notes: Black and Asian/other are non-Hispanic. Hispanic householders may be of any race. Asian/other includes Pacific Islanders, Aleuts and Native Americans.  
Source: JCHS tabulations of the 1991 and 2001 American Housing Surveys.

EVEN THOUGH MORE AND MORE MINORITIES ARE BUYING HOMES, THEIR HOMEOWNERSHIP RATE STILL LAGS THAT OF WHITES BY ABOUT 25 PERCENTAGE POINTS.

Figure 17

### Income and Demographic Factors Cannot Fully Explain Homeownership Gaps

Percent that are homeowners



Notes: White, black, and Asian/other are non-Hispanic. Hispanic householders may be of any race. Asian/other includes Pacific Islanders, Aleuts and Native Americans.  
Source: JCHS tabulations of the 2001 American Housing Survey.

percent of residential value, up from 31.6 percent in 1980.

Most of this gain occurred before 1994, after tax reform eliminated the deductibility of many other forms of interest, encouraging homeowners to substitute mortgage debt for unsecured consumer loans. Since then, mortgage debt has in fact risen in line with home values.

While homeowners of all ages are carrying more mortgage debt, the increase among older households is striking. Only 41 percent of those aged 55 to 64 in 2001 had paid off their mortgages, compared with 52 percent of their same-age counter-

total about \$1.4 trillion. In sharp contrast, the 1.6 million homes passing to minority heirs would represent just \$135 billion in wealth.

#### RECORD-LEVEL MORTGAGE DEBT

As a result of strong homeownership gains and house price appreciation, mortgage debt outstanding has grown at a 7.5 percent compound annual rate since 1994, even after adjusting for inflation. Mortgage debt now accounts for 43

parts in 1989. Even more remarkable is the level of debt they are carrying into late middle age. After adjusting for inflation, the median mortgage debt of 55 to 64 year-olds nearly doubled from \$28,158 in 1989 to \$55,869 in 2001 (Figure 18). The mortgage debt of slightly younger mortgage borrowers (aged 45 to 54) shot up even more.

In the future, owners may increasingly tap the wealth in their homes to finance consumption during their longer

lifetimes. This shift would boost the popularity of reverse mortgages, which pay owners an annuity that is then repaid when their homes pass on to their estates.

To date, the run-up in mortgage debt has increased the exposure of only a small fraction of homeowners. Thanks to the interest-rate cuts of the 1990s, homeowners have been able to hold down their monthly mortgage payments even if they add to their housing debt. For many, substituting mortgage debt for higher-cost consumer loans has

foreclosure rates on conventional loans are still under 0.2 percent while those on government-backed FHA loans are about 2.5 percent.

Serious delinquencies are low because declining interest rates have reduced the monthly payments on adjustable-rate mortgages and because lenders have more effective tools for managing problem loans. In 1996, Fannie Mae and Freddie Mac “worked out” only about 30 percent of problem loans. In 2002, the share was nearly 50 percent.

## AS OF 2001, SOME 88 PERCENT OF MORTGAGE BORROWERS HAD EQUITY OF AT LEAST 20 PERCENT IN THEIR HOMES.

also lowered their total debt burden. Moreover, strong home price inflation has quickly added to the home equity of all owners—including those who opted for low-downpayment loans when they bought.

### PROBLEM LOAN RISKS

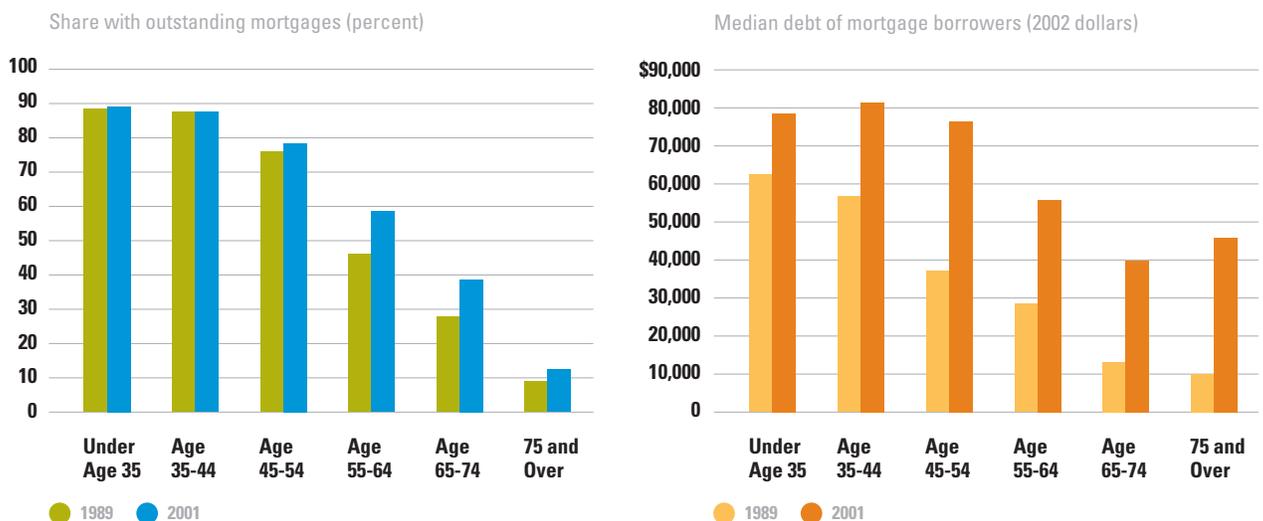
The risks are, however, increasing. Mounting job losses hurt many homeowners in 2002, with both the number and share of problem loans on the rise. It is important to recognize, though, that the share of mortgage borrowers who are seriously behind on their payments or in foreclosure is still relatively low. Delinquency rates on conventional loans have held under 0.5 percent and remain well below past peaks (Figure 19). Although at record levels,

In addition, the pre- and post-purchase counseling efforts of community-based organizations have helped first-time homebuyers stay current on their mortgages.

Nevertheless, roughly 400,000-450,000 homeowners were in the foreclosure process at the end of 2002. The likely reason foreclosures are at record levels is because of the increased share of loans extended to borrowers with weak credit histories. Such problem loans are less likely to be cured within 90 days and therefore more likely to end in foreclosure.

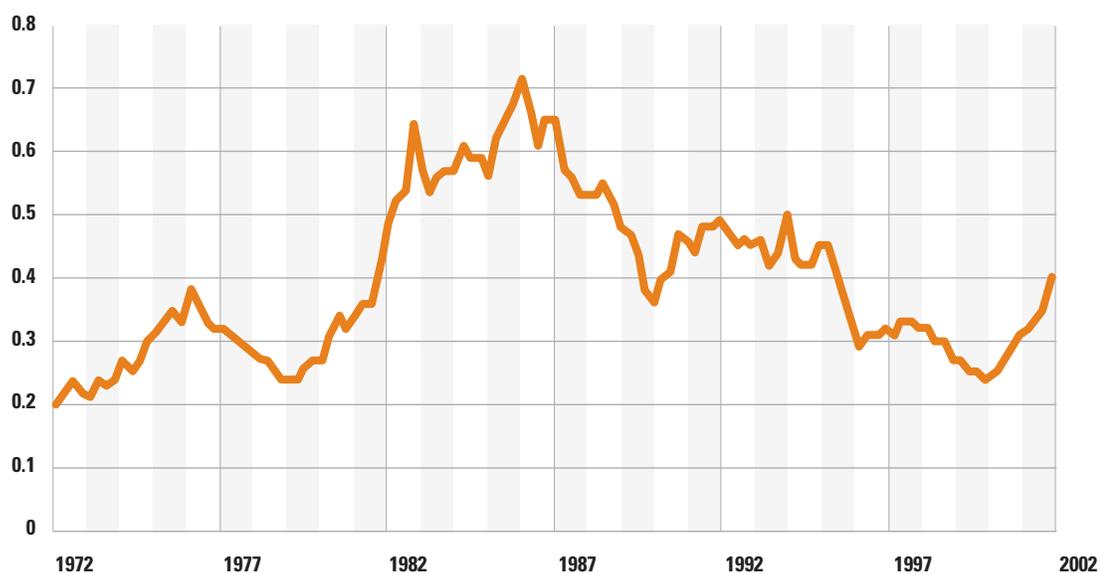
The popularity of subprime loans thus presents a growing risk factor. These loans, primarily made to borrowers with

**Figure 18 Homeowners Now Hold More Mortgage Debt**



## Figure 19 Serious Mortgage Delinquencies Remain Below Past Peaks

Percent of conventional loans 90 days past due (seasonally adjusted)



Notes: Conventional loans include both prime and subprime mortgages that are not federally insured.  
Source: Mortgage Bankers Association of America, National Delinquency Survey.

a history of missed payments, have default rates on the order of ten times higher than those on prime loans given to borrowers with solid credit records. Between 1993 and 2001, the subprime lender share of home purchase loans in metro areas climbed from 1.3 percent to 6.5 percent, while the share of subprime refinance loans jumped from 2.1 percent to 10.1 percent.

Roughly nine out of ten subprime borrowers pay off their loans, and subprime lending has greatly expanded credit to borrowers and neighborhoods that were once denied. However, the geographic concentration of these high-cost loans is troubling. Between 1993 and 2001, the subprime share of home purchase loans in low-income, predominantly minority communities shot up from 2.4 percent to 13.4 percent and the subprime share of refinances from 6.8 percent to 27.5 percent. Because these loans have relatively high default rates, some of these communities have become vulnerable to a rash of foreclosures that place a glut of homes on the market just when demand is weakening.

Loan risks are rising among lowest-income homeowners. According to the 2001 American Housing Survey, 2.2 million borrowers in the bottom income quintile spent more than half their incomes on housing (including property taxes and utilities), up from 1.7 million in 1997.

These lowest-income owners also have lower savings and non-housing wealth to fall back on during hard times. Indeed, estimates from the Survey of Consumer Finances show 69 percent had savings of \$1,000 or less in 2001. A job loss or major unexpected expense would thus leave these owners hard-pressed to meet their monthly obligations. Furthermore, some 16 percent of the mortgage borrowers in the bottom income quintile had equity cushions of 5 percent or less in 2001.

### THE OUTLOOK

While further homeownership gains are likely during this decade, they are not assured. Additional progress depends in part on preserving the recent increases achieved by low-income households. It also rests on whether the conditions that have fueled homeownership growth since 1993 can be sustained.

Nevertheless, the past ten years have established a momentum that should keep homeownership rates—especially among minorities—headed higher. If conditions remain favorable and the momentum persists, as many as 11.0 million more households will join the homeowner ranks between 2000 and 2010. If age- and household-specific ownership rates remain constant, however, the number of net new homeowners added over the decade would be only about 6.0 million. 🏠



## RENTAL HOUSING TRENDS

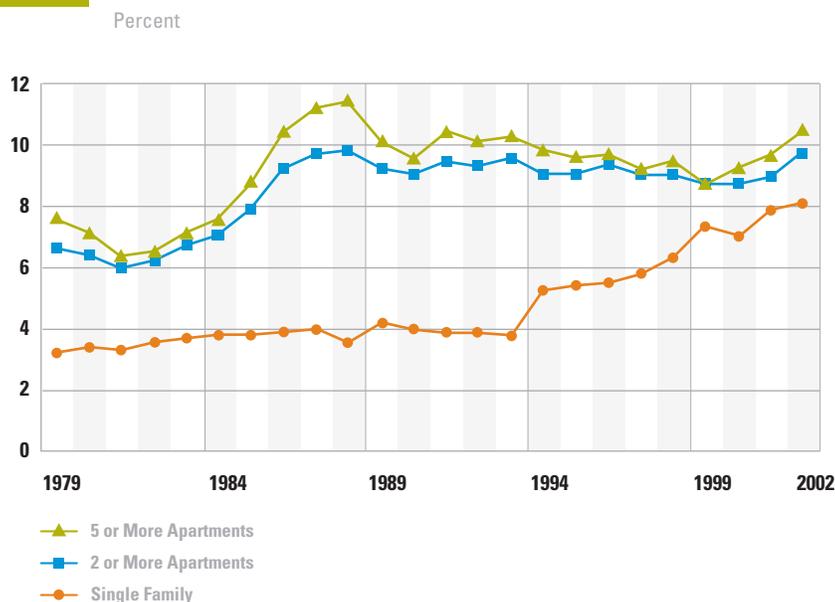
RENTAL  
PAYMENTS  
EXCLUDING  
UTILITY COSTS  
TOP \$217 BILLION  
ANNUALLY.

With the strength of homeownership demand and the weakness of the economy, some rental housing markets have softened since 1999. Even though national measures indicate that rents have risen, high vacancy rates in some locations have pushed rents down or prompted landlords to offer concessions to attract tenants—especially for newer and higher-end rental units. Nevertheless, the rental market is not nearly as out of balance as it was the last time a major correction occurred. As a result, rental markets are likely to recover relatively quickly once the economy picks up again.

In fact, since the homeownership boom began in 1993, multifamily construction has barely kept up with losses from the stock. Despite the addition of nearly 1.8 million new multifamily rentals over this period, the multifamily rental stock has expanded by only about 100,000 units. While the number of rentals did rise in the fast-growing South and West, the Northeast lost some 264,000 rental units while the Midwest lost 240,000.

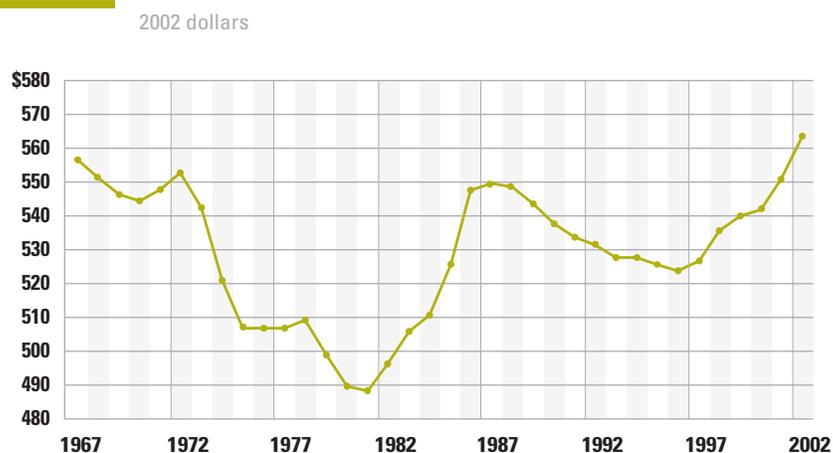
The new multifamily apartments being built are substantially more expensive on average than the ones being lost. This trend—fueled in part by local resistance to multifamily construction and escalating development costs—threatens to leave the nation with a dwindling supply of modest rentals. Not surprisingly, then, vacancy rates on units affordable to households in the bottom income quintile are lower than those on more expensive units.

The return of inflation-adjusted rent increases has made it more difficult for many renters to afford their housing. The recent recession made matters worse, dragging median renter incomes down by 1.8 percent in 2000-2. The share of income a typical renter spends on housing thus stood at 26.9 percent in 2002.

**Figure 20** Vacancy Rates for Single-Family Rentals Have Surged

Note: Definition of single-family units changed in 1999 to include attached structures. Data collection procedures also changed in 1993.  
 Source: Census Bureau, Housing Vacancy Survey.

MOUNTING  
 VACANCIES  
 ARE BEGINNING  
 TO EXERT  
 DOWNWARD  
 PRESSURE ON  
 RENTS IN SOME  
 MARKETS.

**Figure 21** Contract Rents Have Reached New Highs

Source: Table A-1.

economy slowed, hitting 9.7 percent by 2002. Properties with five or more units were particularly affected as their rates rose to 10.5 percent.

Although information collected by M/PF and REIS show that higher vacancy rates drove down rents on some apartments that came on the market last year, the rent drop may be smaller and the recovery quicker than during the last cycle. In the 1980s, significant overbuilding led to soaring vacancy rates in structures with five or more units. Today, however, the softening economy is more to blame for any excesses in the supply. The correction in rents and in multifamily construction should therefore be more modest this time around.

But developers of newly constructed units may face a bumpy road. Newer properties often target higher-income households relocating to new jobs. Favorable homeownership conditions and employment cutbacks have therefore dampened this high-end demand. Absorption rates for new units hit 30-year lows last year, with only 57 percent of apartments completed in the third quarter of 2002 leased within three months.

### SOFTENING RENTAL MARKETS

Vacancy rates for both single- and multifamily rentals have been on the rise since 1993. In fact, the single-family rate hit a new high of 8.1 percent in 2002 (Figure 20). Although the number and share of renters living in single-family homes increased over this period, the growing supply of single-family rentals overshot demand in most regions. The exception was the Midwest, where a fall-off in demand, rather than an increase in supply, was responsible for the rising vacancies. Meanwhile, multifamily vacancy rates began to climb more sharply as the

In stark contrast, the prices of multifamily rental properties have surged. As interest rates dropped and capital flowed into real estate from the stock market, investors became more willing to accept lower returns on properties. In 2002 alone, lower capitalization rates for multifamily rentals pushed valuations on transacted properties up by about 10 percent. With lower debt costs, investors can pay more for properties while still earning attractive

previous peaks last year (Figure 21). Although slower to reflect market softness than other indexes, the CPI nonetheless provides the best sense of broad, long-term rent trends.

Contract rents have outpaced renter income gains for households across the board. While gross rents (including utilities) are still a few dollars shy of their 1980s peak, it is

**WITH THE CONTINUAL RISE IN OPERATING COSTS SINCE 1985, RENTS FOR LOWEST-COST UNITS HAVE SHOWN DOUBLE-DIGIT INCREASES.**

returns. Investors are counting on a cyclical recovery and strong future demand to justify these valuations when they go to sell the properties in several years.

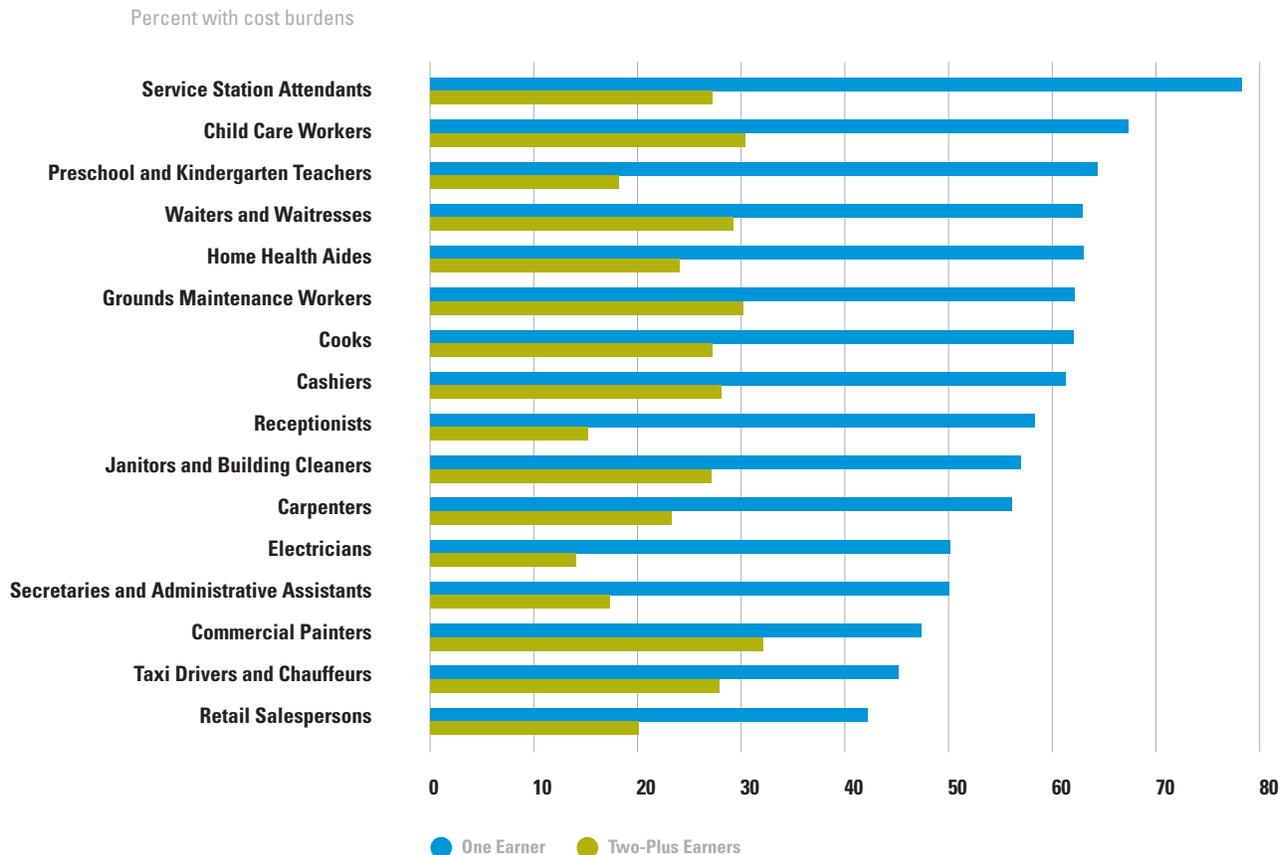
only because energy costs are much lower than they were 15 years ago. A rise in energy prices would thus drive gross rents back up and increase the already large number of cost-burdened renters (Table A-1).

**THE WIDENING INCOME-RENT MISMATCH**

According to the Consumer Price Index (CPI), contract rents began to rise ahead of inflation in 1997 and eclipsed

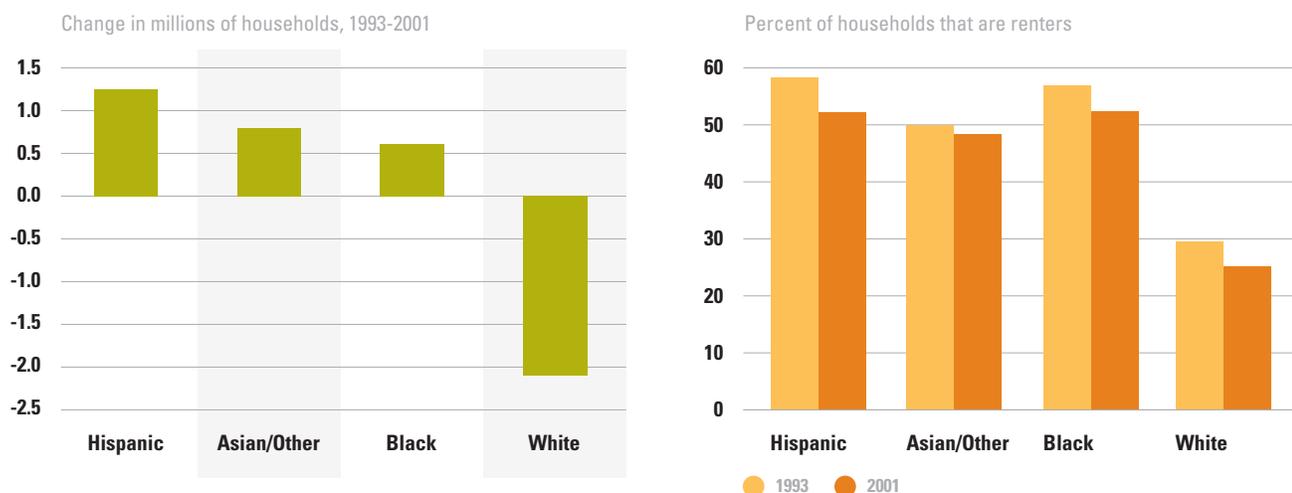
Many households working in lower-wage jobs are struggling to keep up with escalating rents. Of the 2.1 million

**Figure 22 Many Renters in Low-Wage Occupations Are Cost-Burdened Even When Several Household Members Work**



Source: JCHS tabulations of the 2000 Census Supplemental Survey.

**Figure 23 The Number of Minority Renter Households Is Growing Despite Falling Rentership Rates**



Notes: White, black, and Asian/other are non-Hispanic. Hispanic householders may be of any race. Asian/other includes Pacific Islanders, Aleuts and Native Americans.  
Source: JCHS tabulations of the 1993 and 2001 American Housing Surveys.

waiters, waitresses, and cooks who rent, nearly half spend more than 30 percent of their incomes on housing. More than 40 percent of renter households with an earner employed as a childcare worker, home health aide, cashier, library assistant, maid, housekeeper or janitor are similarly cost-burdened (Figure 22). If they are the sole wage earner, renters in several other moderate-paying occupations—including receptionist, carpenter, and electrician—also have a hard time affording their housing.

#### INCREASING RENTER DIVERSITY

Since the homeownership boom began in 1993, growth in rental demand has been contained to about half a million households. Although the number of renters has changed little during this time, the composition of renter households has undergone dramatic changes.

Even though their rentership rates dropped, strong household growth pushed the number of minority renters up by 2.7 million between 1993 and 2001 (Figure 23). With the number of white renters down by 2.1 million, the minority share of renter households thus increased from 34 percent to 42 percent.

Immigration has also added substantially to the demand for rental units. Foreign-born households now account for nearly one in five renters. Half of these renter households arrived in this country only within the past ten years. Moreover, foreign-born households now account for 73 percent of the growth in Hispanic renters since 1997 and

are expected to have an even larger presence in rental markets in the coming years.

#### MAKING THE RENTAL CHOICE

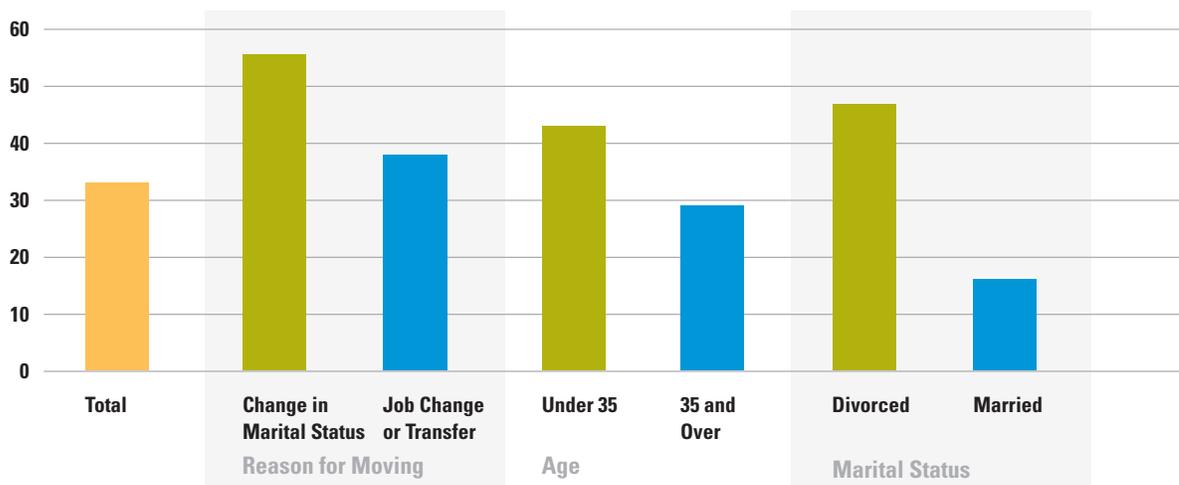
For some households, renting is the only housing option because they lack the income or savings to buy a home. For many others, though, it is the preferred housing choice because it offers greater flexibility than ownership. For example, people who are in the midst of major life transitions, such as a career or family change, often choose to rent their homes rather than buy. Another group that can particularly benefit from renting includes senior homeowners either facing significant changes to their families or incomes, or simply looking for the convenience and community of renting.

Under many circumstances, making the switch from owning to renting also makes sound economic sense. This is the case when households intend to relocate again within a few years, and when falling house prices make renting a haven from asset depreciation. Renting leaves households free to invest the money they would otherwise tie up in their homes, to move without incurring the high transaction costs of home buying and selling, and to avoid spending time and money on home maintenance and repairs.

As a result, it is not uncommon for homeowners to become renters when the circumstances are right. Indeed, one-third of the 7.1 million owners that moved in 2001 rented rather than purchased their next homes. Overall,

## Figure 24 A Large Share of Homeowners Move Back to Renting

Percent of moving owners that became renters in 2001



Note: Includes all householders that moved in the previous 12 months from a home they owned or co-owned.  
Source: JCHS tabulations of the 2001 American Housing Survey.

### THE ECHO BABY BOOMERS WILL LIKELY ACCOUNT FOR OVER FOUR IN TEN RENTERS BY 2010.

these former homeowners accounted for one in six households that moved into rental housing (Table A-8). Those who make the switch from owning to renting are usually facing a change in job or marital status, or are simply at the stage in life when their careers and family situations are in flux (Figure 24).

While renting might be only a temporary choice for many of these former owners, the need for housing markets to satisfy this type of short-term demand is ongoing. Although many of these households may decide to buy homes again, other homeowners making the switch to renting will be there to take their places.

#### THE OUTLOOK

In the near term, rental housing markets appear headed for a modest correction. Rising vacancy rates should lower rents in many locations, particularly at the high end of the market. Dips in rents could well be fleeting, however, given the relatively small run-up in multifamily vacancy

rates as well as the barriers to, and the high cost of, developing new units.

Over the longer term, rental housing demand should grow even if the national homeownership rate continues its steady ascent. The number of renter households is currently expected to increase by about a million in each of the next two decades. But if conditions turn unfavorable for homeownership, the number of renters could easily grow by five to six million. In any case, the renter share should hover near three in ten households for the next 20 years.

Regardless of the overall growth in renters, the composition of renter households will continue to reflect changes in the overall population. Given their strong household growth, minorities will make up an even larger share of renters in the years ahead. Current projections point to an increase in minority share from 42 percent today to over 50 percent in 2020.

The increase in renter diversity, along with the aging of the population, will bolster rental demand at the margins. Growth in young adult households will increase demand for moderate rentals, especially when the echo boomers reach their mid-20s after 2010. Meanwhile growth among those between the ages of 45 and 64 will lift demand for higher-end rentals. 🏠



## HOUSING CHALLENGES

Affordability remains America's most widespread housing challenge. The shortage of affordable housing directly affects the quality of life for the millions who eke out their housing payments every month, sacrifice the purchase of other essentials, commute long distances to work, and/or suffer overcrowded or unsafe conditions. Worse yet, some must live in shelters or on the street. These pressures not only undermine their physical and mental health, but also their ability to find suitable work, perform well in school, and advance economically.

The affordability problem has worsened over the past 25 years. Even though inflation-adjusted incomes of households in the bottom two quintiles increased over the 1990s, they have been nearly flat since 1975, while home prices and rents have continued to outpace general price inflation. Indeed, housing affordability problems increasingly affect middle-income families, including those who own homes. Any significant increase in interest rates would price more people out of the home-buying market and place further financial burdens on adjustable-rate mortgage holders.

Several factors have conspired to push home prices and rents higher. The stock of lower-cost housing is disappearing on net. Land supplies in many metropolitan areas are extremely limited as a result of past development, natural impediments, or set-asides for parks and other open spaces. At the same time, environmental and other regulations, along with hefty development fees and fierce community opposition, have made higher-density construction difficult as well as expensive.

### WIDESPREAD HOUSING PROBLEMS

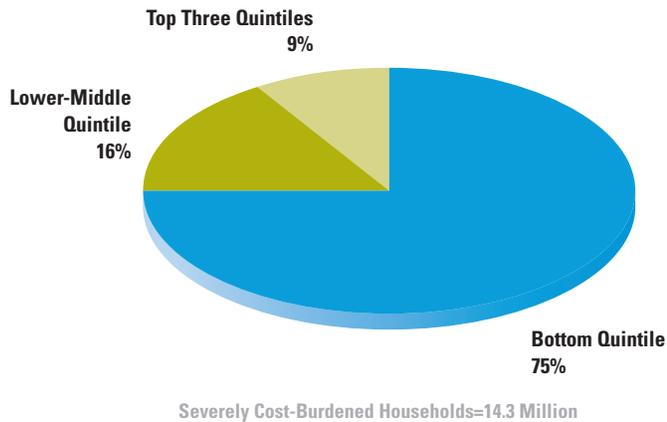
A staggering three in ten US households have housing affordability problems. Fully 14.3 million are severely cost-burdened (spend more than 50 percent of their incomes on housing) and another 17.3 million are moderately cost-burdened (spend 30-50 percent of their incomes on housing)

14.3 MILLION  
HOUSEHOLDS,  
OR ONE IN SEVEN,  
SPEND MORE  
THAN HALF  
THEIR INCOMES  
ON HOUSING.

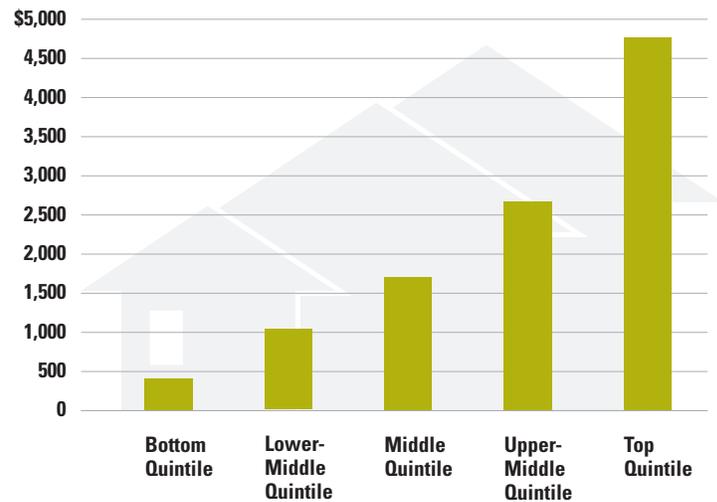
Figure 25

## Most Households With Severe Cost Burdens Are in the Bottom Income Quintile, And Have Little Left Over for Other Living Expenses

Share of severely cost-burdened households



Residual monthly income at 50% cost burden (2002 dollars)



Notes: Severe cost burden defined as spending more than 50% of monthly before-tax income for housing. Residual income is median monthly income for each quintile minus housing costs at 50% cost burden. Income quintiles are defined in Table A-9.  
Source: JCHS tabulations of the 2001 American Housing Survey.

(Table A-10). Some 9.3 million households live in overcrowded units or housing classified as physically inadequate. And a disheartening 3.7 million households face more than one of these problems.

Of course, the poor suffer the most. Three-quarters of severely cost-burdened households have incomes in the bottom fifth of the distribution (Table A-9). With a median income of only \$10,000, half of these households can allot \$250 a month at most for housing under the 30-percent-of-income standard for affordability. Households with incomes that low have only \$583 left over to cover all other expenses. Severely burdened households, spending 50 percent of their income on housing, have just \$417 left over (Figure 25).

Women, the young, and the old are also over-represented among those with housing problems. Single-parent households are particularly at risk. Children are present in 37 percent of all households but in 93 percent of overcrowded households and in 56 percent of households with multiple housing problems. Almost one-quarter of households with children live in older housing units with high risks of lead hazards, while 41 percent live in units with potential risk of lead hazards.

But housing problems are by no means confined to poor and minority households. Fully 64 percent of households with problems are white, and 55 percent own their

homes. In addition, 76 percent of households with at least one housing problem have incomes well above the poverty level. Nearly half report work as their only source of income. Although the incidence is highest in the nation's cities, housing problems afflict urban and rural households alike.

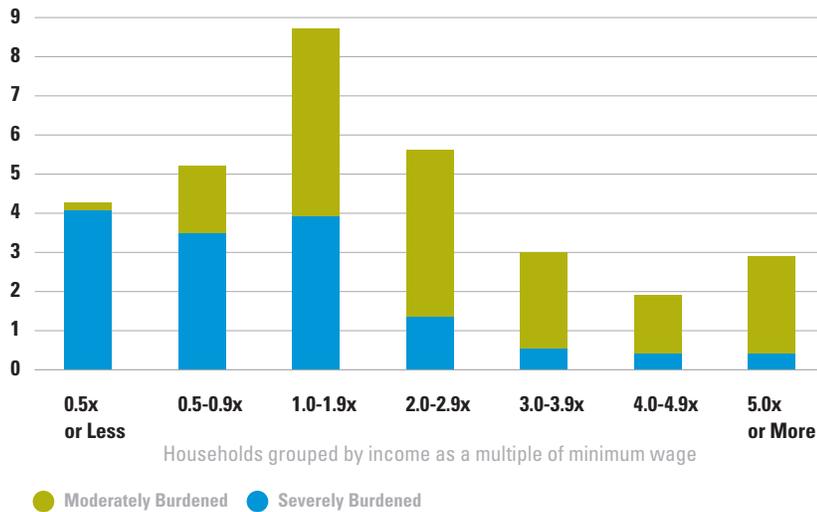
### HOMEOWNER AND WORKING FAMILY PRESSURES

Working is less and less of an assurance that people will find homes they can afford, in the places they want to live, without stretching their incomes perilously thin. Despite having incomes between \$10,712 and \$36,136, some 5.3 million households with incomes one to three times the full-time minimum wage equivalent now pay more than half their incomes for housing (Figure 26). Indeed, those with incomes in this range account for 37 percent of all severely cost-burdened households.

What is more, nearly all the increase in households with affordability problems since 1997 has been among homeowners (Figure 27). Between 1997 and 2001, the incidence of severe cost burdens among owners climbed from 8.8 percent to 10.1 percent, affecting 7.3 million households. Of these, 2.7 million did not even have a mortgage. This is the first time on record that homeowners have outnumbered renters with severe affordability problems. Without low-interest rates and downpayment assistance programs administered through housing finance and other agencies, the number would be even higher.

**Figure 26 High Housing Costs Stretch the Incomes of Working Americans**

Millions of households

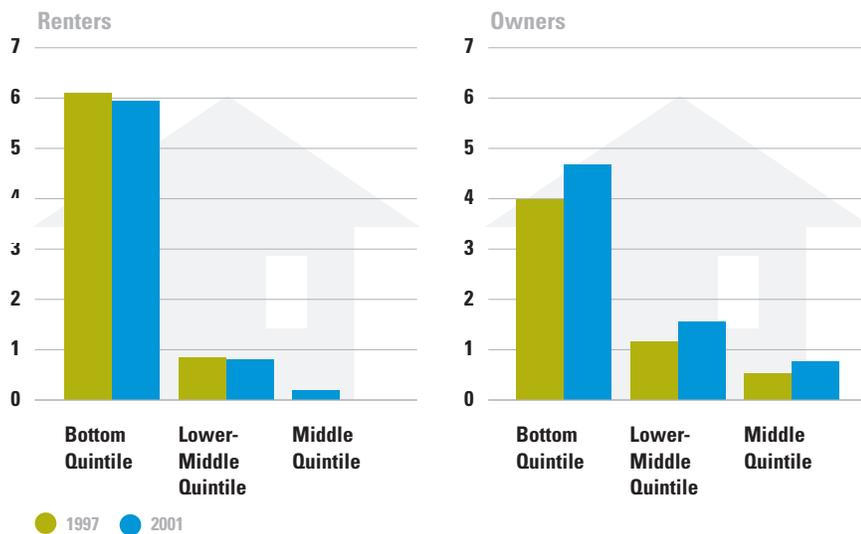


Note: Categories are groups of households by the ratio of household income to the full-time minimum wage equivalent (\$10,712 in 2003). Source: JCHS tabulations of the 2001 American Housing Survey.

HOUSEHOLDS WITH ONE FULL-TIME MINIMUM WAGE EARNER CANNOT AFFORD TO RENT A MODEST ONE-BEDROOM APARTMENT ANYWHERE IN THE COUNTRY.

**Figure 27 Affordability Problems Persist Among Renters and Are Growing Among Owners**

Millions of severely cost-burdened households



Note: See Table A-9 for definitions of income quintiles. Source: JCHS tabulations of the 1997 and 2001 American Housing Surveys.

ing wage”—the amount it takes to afford an apartment at 30 percent of income—is two to three times the minimum wage in 92 metropolitan areas and 63 non-metropolitan counties, and more than triple the minimum wage in 24 metro areas and 12 non-metro counties (Figure 28).

In total, 6.3 million renter households report receiving a subsidy. But many of these households receive subsidies that do not cap the recipient’s contribution to housing payments at 30 percent of income. As a result, 24 percent of these subsidized renters report severe cost burdens and another 23 percent report moderate cost burdens.

**ASSISTING THE NEEDIEST**

The simple fact is that the cost of supplying even the most modest housing far exceeds the amount many lower-income households can pay. Based on HUD’s fair market rent measure, households with one full-time minimum wage earner cannot afford to rent even a one-bedroom apartment anywhere in the country. The National Low Income Housing Coalition estimates the current “hous-

Similarly, some recipients of housing assistance live in poor-quality units. Approximately 705,000 subsidized tenants are now housed in units with at least moderate structural deficiencies. These inadequate conditions are found most commonly in older federally assisted properties that have received insufficient funding for maintenance and operations.

Making matters worse, the shortage of affordable market-rate rentals is dire. In 2001, the 9.9 million renters in the bottom income quintile outnumbered the supply of these lowest-cost units by fully 2 million (Figure 29). Reducing the pool even further, higher-income households occupied 2.7 million of the 7.9 million lowest-cost units.

Furthermore, market-rate low-cost units are at risk of being lost from the housing stock due simply to economic realities. Because landlords can only charge lowest-income renters so much rent, their revenues cannot cover basic operating and upkeep costs. Under-maintenance then begins the downward spiral that leads to a unit's deterioration and eventual removal from the housing stock. While some public funds are available to rehabilitate this stock, they can only preserve a small fraction of these low-cost units. Once they are lost, these private-market units will be difficult, if not impossible, for the housing sector to replace.

The inventory of directly subsidized rental properties is also under pressure. Working in partnership with local and state agencies, the federal government has embarked on a program to replace severely distressed public housing. While the nation is gaining far better housing and restoring communities, replacement is not one for one.

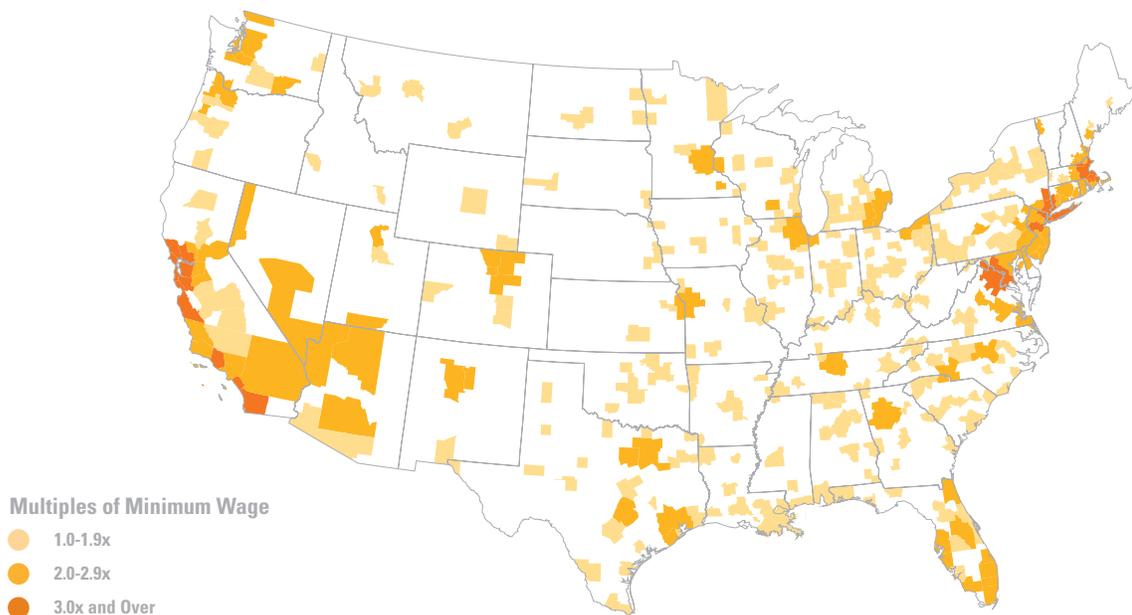
In addition, about 150,000 units of privately owned but publicly assisted housing have been lost since 1997 as owners opt out of their contracts. At a time of rising demand, the remaining federal production programs—the Low Income Housing Tax Credit, HOME, and CDBG—are vital to forestall net reductions from the low-cost housing stock.

#### LAND USE AND DEVELOPMENT RESTRICTIONS

In their efforts to manage residential growth and preserve open space, state and local jurisdictions have passed numerous land use regulations that have made it increasingly difficult to add market-rate units to the affordable supply. Although aimed at achieving several worthy public interests—including environmental quality, housing quality, and safety and health—these restrictions also serve to make all housing more costly.

Large-lot zoning for single-family homes, for example, contributes to sprawl, ties up more land for fewer homes, and creates incentives to build for households that can afford the high land costs. Restrictions on multifamily and manufactured housing development also limit the supply of low-cost units. And fees on new developments intended to cover infrastructure and other incremental costs to communities drive housing costs up even further.

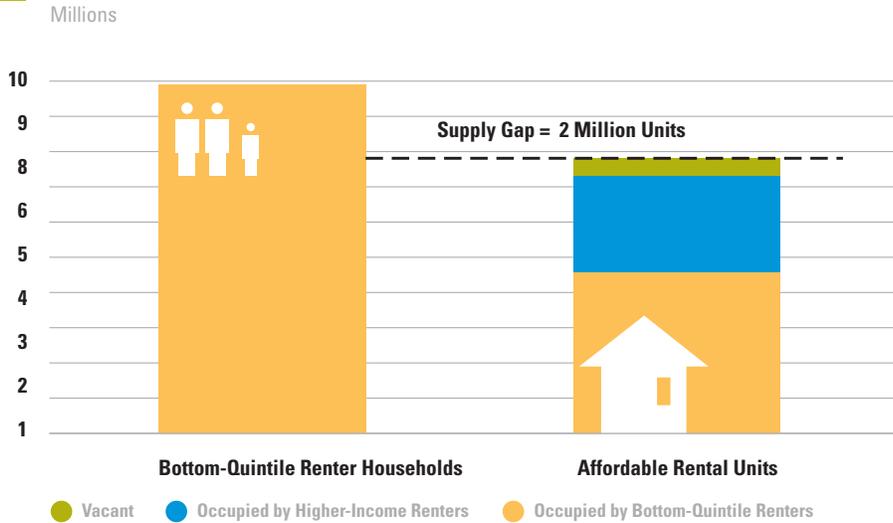
**Figure 28 Housing in Most Metro Areas Costs Several Times the Minimum Wage**



Notes: Categories are multiples of minimum wage needed to afford a modest one-bedroom apartment at HUD's 2003 Fair Market Rent. Full-time minimum wage in 2003 is \$10,712.

Figure 29

## Demand For Units Most Affordable to Bottom Quintile Renters Far Outstrips Supply



Notes: See Table A-9 for income quintile definitions. Units affordable to bottom quintile renters are those renting at or below 30% of the maximum income for the bottom quintile (\$17,500 in 2001).  
Source: JCHS tabulations of the 2001 American Housing Survey.

### THE OUTLOOK

Progress in tackling the nation's housing challenges has stalled. The nation's neediest households now stand to lose rather than gain resources, the stock of affordable units is under pressure, and the ongoing rise in home prices points to even greater affordability problems ahead—particularly if interest rates increase.

Fiscal pressures at all levels of government threaten to reduce the already insufficient resources devoted to housing assistance. Even stable funding for federal housing assistance—which accounts for just 8 percent of non-defense discretionary spending—is in jeopardy. And with state officials forced to trim spending by \$25.7 billion in fiscal 2003 alone, states are unlikely to expand, and some may shrink, their housing programs.

Meeting the housing needs of lowest-income Americans poses a dual challenge. Because it is so difficult to build affordable units, a priority must be to preserve—and improve where necessary—the existing supply of lowest-cost housing. The other is to recognize that, absent stronger income gains among the nation's poor, subsidies are the only way to provide decent housing for lowest-income households because developers simply cannot build and operate units at rents they can afford. Unfortunately, in the face of growing federal deficits and fierce state and local budget-cutting, the prospects for providing this assistance to the nation's neediest are grim.

Furthermore, lack of subsidies and community cooperation hinders the ability to replace low-cost units that are lost from the housing stock. Only a few communities to date are conditioning their approvals for higher-density developments on affordable housing set-asides. The hope remains that local planning efforts will succeed in providing housing for households across the income spectrum, while at the same time ensuring high housing quality and improving the quality of life for the entire community. To realize that hope, however, public attitudes will need to change from resistance to acceptance of a mix of housing types, prices, and rents. 🏠

# APPENDIX TABLES

<b>Table A-1</b>	Income and Housing Costs, 1975-2002 .....	31
<b>Table A-2</b>	Housing Market Indicators, 1975-2002 .....	32
<b>Table A-3</b>	Terms on Conventional Single-Family Mortgages, 1980-2002 .....	34
<b>Table A-4</b>	Median Net Wealth of Owner and Renter Households, 1989-2001 ...	34
<b>Table A-5</b>	Homeownership Rates by Age and Race/Ethnicity, 1993-2002 .....	35
<b>Table A-6</b>	Household Projections by Age, Race and Family Type, 2000-2020 ...	36
<b>Table A-7</b>	Net Migration and Household Growth by State, 1990-2002 .....	37
<b>Table A-8</b>	Tenure Choices of Recent Movers, 2001 .....	38
<b>Table A-9</b>	Lowest-Income Households by Cost Burdens, 1997 and 2001 .....	39
<b>Table A-10</b>	Incidence of Housing Problems, 1997-2001 .....	40

## Web Tables

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).

<b>Table W-1</b>	Home Prices by Region and Metropolitan Area, 1990-2002
<b>Table W-2</b>	Home Purchase and Refinance Lending, 1993-2001
<b>Table W-3</b>	Change in Households by Tenure and Demographic Characteristics, 1993-2001
<b>Table W-4</b>	Absorption Rates and Asking Rents for Newly Constructed Apartments, 1975-2002

Table A-1

## Income and Housing Costs, 1975-2002

In 2002 dollars

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	4,069	2,411	117,595	8.9	845	710	507	577	20.8	17.5	21.0	23.9
1976	4,045	2,340	119,746	8.9	857	719	507	581	21.2	17.8	21.7	24.8
1977	4,058	2,356	124,648	8.8	888	775	507	585	21.9	19.1	21.5	24.8
1978	4,101	2,386	132,482	9.4	991	842	509	589	24.2	20.5	21.3	24.7
1979	4,107	2,335	133,718	10.6	1,109	932	499	580	27.0	22.7	21.4	24.8
1980	3,857	2,214	127,843	12.5	1,224	1,005	490	574	31.7	26.1	22.1	25.9
1981	3,746	2,185	122,122	14.4	1,336	1,080	488	576	35.7	28.8	22.3	26.4
1982	3,751	2,206	118,418	14.7	1,325	1,088	496	591	35.3	29.0	22.5	26.8
1983	3,836	2,201	118,556	12.3	1,119	920	506	604	29.2	24.0	23.0	27.5
1984	3,937	2,268	118,155	12.0	1,093	905	511	610	27.8	23.0	22.5	26.9
1985	4,041	2,301	119,808	11.2	1,041	863	526	623	25.8	21.4	22.8	27.1
1986	4,184	2,329	125,806	9.8	976	813	548	643	23.3	19.4	23.5	27.6
1987	4,210	2,306	129,840	9.0	936	811	550	640	22.2	19.3	23.9	27.8
1988	4,233	2,375	132,392	9.0	957	850	549	636	22.6	20.1	23.1	26.8
1989	4,290	2,455	134,157	9.8	1,043	920	544	629	24.3	21.4	22.2	25.6
1990	4,163	2,377	131,450	9.7	1,016	897	538	620	24.4	21.6	22.6	26.1
1991	4,101	2,278	128,519	9.1	937	832	534	616	22.8	20.3	23.5	27.0
1992	4,070	2,215	128,116	7.8	832	748	532	613	20.5	18.4	24.0	27.7
1993	4,036	2,192	127,020	6.9	755	685	528	609	18.7	17.0	24.1	27.8
1994	4,077	2,163	127,076	7.3	785	714	528	607	19.3	17.5	24.4	28.1
1995	4,115	2,220	127,560	7.7	818	741	526	603	19.9	18.0	23.7	27.2
1996	4,184	2,239	128,811	7.6	817	740	524	602	19.5	17.7	23.4	26.9
1997	4,280	2,290	130,834	7.5	825	747	527	605	19.3	17.5	23.0	26.4
1998	4,407	2,336	135,592	7.0	809	736	536	611	18.4	16.7	23.0	26.1
1999	4,505	2,419	140,016	7.1	850	770	541	614	18.9	17.1	22.4	25.4
2000	4,459	2,434	145,670	7.9	949	850	542	617	21.3	19.1	22.3	25.3
2001	4,368	2,414	153,193	6.9	912	824	551	630	20.9	18.9	22.8	26.1
2002	4,383	2,390	161,043	6.4	910	827	564	638	20.8	18.9	23.6	26.7

**Notes and Sources:** All dollar amounts are in 2002 constant dollars using the Bureau of Labor Statistics' Consumer Price Index (CPI-UX) for All Items. Owner and renter median incomes through 2001 from Current Population Survey P60 published reports. Renters exclude those paying no cash rent. 2002 incomes estimated from the change in HUD median family income applied to 2001 CPS income for all households and adjusted by three-year average ratio of owner and renter incomes to all household incomes. Home price is the 1990 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 from the Federal Housing Finance Board Monthly Interest Rate Survey. Mortgage payments assume a 30-year term with 10% down. After-tax mortgage payment equals mortgage payment less tax savings of homeownership. Tax savings are based on the excess of housing deductions (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% in 1988 on. Contract rent equals median 1991 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-2

## Housing Market Indicators, 1975-2002

Year	Permits (1) (Thousands)		Starts (2) (Thousands)			Size (3) (Median sq. ft.)		Sales Price of Single-Family Homes (2002 dollars)		Residential Upkeep and Improvement (6) (Millions of 2002 dollars)	
	Single-family	Multi-family	Single-family	Multi-family	Manu- factured	Single-family	Multi-family	New (4)	Existing (5)	Owner - occupied	Rental
1975	676	263	892	268	229	1,535	942	154,439	117,595	63,718	27,289
1976	894	402	1,162	375	250	1,590	894	158,638	119,746	72,971	26,661
1977	1,126	564	1,451	536	258	1,610	881	168,094	124,648	77,801	23,712
1978	1,183	618	1,433	587	280	1,655	863	180,590	132,482	83,458	29,762
1979	982	570	1,194	551	280	1,645	893	189,575	133,718	87,352	29,319
1980	710	481	852	440	234	1,595	915	187,833	127,843	88,812	26,716
1981	564	421	705	379	229	1,550	930	185,177	122,122	76,653	28,183
1982	546	454	663	400	234	1,520	925	178,560	118,418	71,224	25,423
1983	902	703	1,068	636	278	1,565	893	175,035	118,556	73,907	26,980
1984	922	757	1,084	665	288	1,605	871	174,564	118,155	80,993	41,244
1985	957	777	1,072	670	283	1,605	882	170,671	119,808	85,829	51,482
1986	1,078	692	1,179	626	256	1,660	876	174,185	125,806	96,465	58,369
1987	1,024	510	1,146	474	239	1,755	920	177,043	129,840	93,040	61,226
1988	994	462	1,081	407	224	1,810	940	176,342	132,392	103,186	59,323
1989	932	407	1,003	373	203	1,850	940	175,009	134,157	95,746	61,019
1990	794	317	895	298	195	1,905	955	169,164	131,450	92,596	66,289
1991	754	195	840	174	174	1,890	980	164,499	128,519	88,148	54,097
1992	911	184	1,030	170	212	1,920	985	161,795	128,116	97,047	51,141
1993	987	212	1,126	162	243	1,945	1,005	163,848	127,020	99,350	52,413
1994	1,068	303	1,198	256	291	1,940	1,015	167,416	127,076	110,046	48,520
1995	997	335	1,076	278	319	1,920	1,040	167,419	127,560	99,052	48,469
1996	1,070	356	1,161	316	338	1,950	1,030	165,656	128,811	101,510	49,108
1997	1,062	379	1,134	340	336	1,975	1,050	166,636	130,834	105,319	44,403
1998	1,188	425	1,271	346	374	2,000	1,020	168,227	135,592	109,706	37,849
1999	1,247	417	1,302	339	338	2,028	1,041	172,704	140,016	107,207	47,101
2000	1,198	394	1,231	338	281	2,057	1,039	174,182	145,670	109,261	50,555
2001	1,236	401	1,273	329	192	2,103	1,104	175,380	153,193	111,375	48,884
2002	1,321	407	1,359	346	169	2,113	1,069	180,307	161,043	115,124(e)	49,431(e)

Note: All dollar amounts are in 2002 constant dollars using the Bureau of Labor Statistics' Consumer Price Index (CPI-UX) for All Items.

## Sources:

1. Census Bureau, Construction Statistics, New Residential Construction, New Privately Owned Housing Units Authorized by Building Permits, <http://www.census.gov/pub/const/bpann.pdf> (as of April 2003).
2. Census Bureau, Construction Statistics, New Residential Construction, New Privately Owned Housing Units Started, <http://www.census.gov/const/startsan.pdf> (as of April 2003); and Manufactured Housing Statistics, Placements of New Manufactured Homes, <http://www.census.gov/pub/const/mhs/mhstablcmnt.pdf> (as of April 2003). Manufactured housing starts defined as placements of new manufactured homes.
3. Census Bureau, Construction Statistics, New Residential Construction, New Privately Owned Housing Units Started in the United States, by Intent and Design, <http://www.census.gov/const/start-sintenta.pdf> (as of April 2003).
4. New home price is the 1990 national median home price indexed by the Census Bureau, Construction Statistics, New Residential Sales, Price Indexes of New One-Family Houses Sold, [http://www.census.gov/const/price\\_indexes.pdf](http://www.census.gov/const/price_indexes.pdf) (as of April 2003).

5. Existing home price is the 1990 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. Census Bureau, Construction Statistics, Residential Improvements, Expenditures by Region and Property Type, <http://www.census.gov/pub/const/C50/tables2.pdf> (as of April 2003). Figures for 2002 are JCHS estimates.
7. Census Bureau, Housing Vacancy Survey. Definition of one-unit structures changed in 1999 to explicitly include single-family attached structures. Caution should be used in comparing vacancy rates by structure type before and after 1999.
8. Census Bureau, Construction Statistics, Value of Construction Put in Place, Annual Value of Construction Put in Place, <http://www.census.gov/pub/const/C30/c30tab1.rpt> (as of April 2003).
9. Census Bureau, Construction Statistics, New Residential Sales, New One-Family Houses Sold, <http://www.census.gov/const/soldann.pdf> (as of April 2003).
10. National Association of Realtors, Existing Home Sales.

Vacancy Rates (7) (Percent)					Value Put in Place (8) (Billions of 2002 dollars)			Home Sales (Thousands)	
All Units		For Rent (by Structure Type)							
For Sale	For Rent	One Unit	Two or More Units	Five or More Units	Single-family	Multi-family	Additions & Alterations	New (9)	Existing (10)
1.2	6.0	n/a	n/a	n/a	99.1	22.3	51.0	549	2,476
1.2	5.6	n/a	n/a	n/a	138.7	21.8	55.3	646	3,064
1.2	5.2	n/a	n/a	n/a	184.7	29.7	58.7	819	3,650
1.0	5.0	n/a	n/a	n/a	200.8	35.4	66.9	817	3,986
1.2	5.4	3.2	6.6	7.6	179.1	42.2	67.3	709	3,827
1.4	5.4	3.4	6.4	7.1	115.5	36.5	67.1	545	2,973
1.4	5.0	3.3	6.0	6.4	102.8	34.6	59.0	436	2,419
1.5	5.3	3.6	6.2	6.5	77.3	29.0	51.6	412	1,990
1.5	5.7	3.7	6.7	7.1	131.0	40.5	55.8	623	2,719
1.7	5.9	3.8	7.0	7.5	149.6	48.9	69.9	639	2,868
1.7	6.5	3.8	7.9	8.8	146.0	47.7	74.6	688	3,214
1.6	7.3	3.9	9.2	10.4	170.9	50.9	91.1	750	3,565
1.7	7.7	4.0	9.7	11.2	185.6	40.3	90.2	671	3,526
1.6	7.7	3.6	9.8	11.4	182.6	33.9	94.4	676	3,594
1.8	7.4	4.2	9.2	10.1	175.4	32.4	88.5	650	3,346
1.7	7.2	4.0	9.0	9.5	155.4	26.5	81.2	534	3,211
1.7	7.4	3.9	9.4	10.4	131.3	20.0	68.3	509	3,220
1.5	7.4	3.9	9.3	10.1	156.4	16.8	82.5	610	3,520
1.4	7.3	3.8	9.5	10.3	174.5	13.4	92.3	666	3,802
1.5	7.4	5.2	9.0	9.8	197.0	17.1	99.7	670	3,967
1.6	7.6	5.4	9.0	9.5	181.2	21.1	89.7	667	3,812
1.6	7.9	5.5	9.3	9.6	195.8	23.3	103.2	757	4,196
1.6	7.8	5.8	9.0	9.1	196.4	25.6	101.9	804	4,382
1.7	7.9	6.3	9.0	9.4	220.1	27.1	100.0	886	4,970
1.7	8.1	7.3	8.7	8.7	241.7	29.6	107.2	880	5,205
1.6	8.0	7.0	8.7	9.2	247.4	29.5	114.3	877	5,152
1.8	8.4	7.9	8.9	9.6	253.0	31.2	110.7	908	5,296
1.7	9.0	8.1	9.7	10.5	263.6	33.3	118.7	976	5,563

Table A-3

## Terms on Conventional Single-Family Mortgages, 1980-2002

Annual Averages, All Homes

Year	Effective Interest Rate (%)	Term to Maturity (Years)	Mortgage Loan Amount (Thousands of 2002 dollars)	Purchase Price (Thousands of 2002 dollars)	Loan-to-Price Ratio (%)	Percent of Loans with	
						Loan-to-Price Ratio Above 90%	Adjustable Rates
1980	12.8	27.2	113.0	160.4	72.9	10	na
1981	14.9	26.4	107.2	152.3	73.1	15	na
1982	15.3	25.6	103.5	147.5	72.9	21	41
1983	12.7	26.0	108.2	150.1	74.5	21	40
1984	12.5	26.8	111.7	149.9	77.0	27	62
1985	11.6	25.9	117.4	160.7	75.8	21	51
1986	10.2	25.6	130.2	181.5	74.1	11	30
1987	9.3	26.8	141.1	192.9	75.2	8	43
1988	9.3	27.7	148.1	200.1	76.0	8	58
1989	10.1	27.7	151.6	207.2	74.8	7	38
1990	10.1	27.0	143.1	196.3	74.7	8	28
1991	9.3	26.5	140.4	193.8	74.4	9	23
1992	8.1	25.4	139.4	187.7	76.6	14	20
1993	7.1	25.5	133.2	178.2	77.2	17	20
1994	7.5	27.1	133.4	172.4	79.9	25	39
1995	7.9	27.4	130.3	168.6	79.9	27	32
1996	7.7	26.9	136.1	177.8	79.0	25	27
1997	7.7	27.5	141.9	184.4	79.4	25	22
1998	7.1	27.8	145.5	191.4	78.9	25	12
1999	7.3	28.2	150.4	198.9	78.5	23	21
2000	8.0	28.7	154.9	207.8	77.8	22	24
2001	7.0	27.6	158.2	218.9	76.2	21	12
2002	6.5	27.3	163.4	231.2	75.1	21	17

Notes: The effective interest rate includes the amortization of initial fees and charges. "na" indicates data not available.  
Source: Federal Housing Finance Board, Monthly Interest Rate Survey.

Table A-4

## Median Net Wealth of Owner and Renter Households, 1989-2001

2001 dollars

	1989		1992		1995		1998		2001	
	Owners	Renters								
Total	139,153	2,772	122,379	3,960	119,972	5,571	143,900	4,572	171,800	4,810
Age										
Under 35	54,747	2,079	58,702	2,871	50,682	4,854	44,367	2,917	60,180	3,100
35 to 64	159,667	3,118	135,248	5,729	131,495	6,472	158,399	5,965	185,420	6,950
65 and Over	151,073	5,059	146,075	4,826	165,857	7,419	184,773	6,770	244,950	6,500
Race/Ethnicity										
White	155,023	6,861	135,334	7,115	133,842	9,420	162,382	6,313	198,900	8,120
Black	60,429	0	62,118	991	59,790	1,040	73,234	1,808	69,000	1,890
Hispanic	49,106	568	59,445	817	77,150	2,254	76,195	2,177	70,560	2,650
Income										
Under \$20,000	62,369	554	66,226	841	75,936	1,410	76,195	1,045	72,750	900
\$20,000 - 49,999	116,672	8,316	98,373	8,662	98,532	9,847	111,571	7,837	111,890	7,670
\$50,000 and Over	222,562	30,284	207,661	36,974	199,433	45,192	246,110	46,261	291,120	37,700

Notes: Income categories are based on 2001 dollars adjusted by Survey of Consumer Finances inflators. White and black householders are non-Hispanic. Hispanic householders can be of any race.  
Source: JCHS tabulations of the 1989, 1992, 1995, 1998, and 2001 Surveys of Consumer Finances.

Table A-5

## Homeownership Rates by Age and Race/Ethnicity, 1993-2002

Percent

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<b>Total</b>	63.7	64.0	64.7	65.4	65.7	66.3	66.8	67.4	67.8	67.9
<b>White</b>										
Under Age 35	44.6	44.0	44.8	45.9	45.5	46.0	45.9	47.2	48.0	48.4
Age 35-44	72.3	71.3	71.9	71.6	72.6	73.1	74.0	73.7	75.2	76.1
Age 45-54	80.1	80.2	80.4	80.8	80.1	80.4	81.2	82.0	81.9	81.9
Age 55-64	83.5	83.5	84.1	85.2	84.5	84.7	85.0	84.6	85.8	85.0
Age 65-74	83.5	83.0	84.0	85.5	85.5	85.5	86.3	86.9	86.0	86.3
Age 75 and Over	75.8	75.6	75.8	76.4	76.8	77.1	78.4	78.6	79.2	79.7
<b>Total</b>	70.4	70.0	70.7	71.6	71.7	72.2	73.0	73.5	74.2	74.7
<b>Black</b>										
Under Age 35	17.4	16.6	17.4	20.4	21.2	23.9	22.0	24.7	24.7	25.9
Age 35-44	41.4	41.5	40.5	41.4	44.9	45.3	44.8	45.7	49.1	47.4
Age 45-54	56.0	57.0	54.7	54.5	58.1	58.0	58.6	56.0	55.6	56.4
Age 55-64	62.6	62.1	62.5	63.3	62.0	60.2	58.4	63.8	61.4	63.8
Age 65-74	61.5	67.3	63.2	66.5	68.0	68.9	67.1	69.8	72.0	69.7
Age 75 and Over	63.2	67.7	64.1	68.3	69.9	67.1	68.6	70.9	75.9	73.5
<b>Total</b>	42.6	42.7	42.2	44.3	46.0	46.6	46.1	47.5	48.4	48.9
<b>Hispanic</b>										
Under Age 35	20.5	22.9	23.4	24.4	27.1	27.0	26.0	28.2	28.0	30.4
Age 35-44	43.3	45.8	46.1	42.9	45.9	47.3	46.7	51.2	49.0	51.1
Age 45-54	52.6	53.2	56.2	55.2	54.5	56.6	59.4	53.5	60.1	58.0
Age 55-64	62.8	60.5	62.4	56.4	58.6	64.7	68.4	61.4	61.8	65.0
Age 65-74	58.6	58.4	58.5	61.4	58.8	62.3	67.0	65.8	65.3	69.3
Age 75 and Over	52.0	58.8	63.2	58.2	54.4	59.9	59.0	56.3	64.2	65.0
<b>Total</b>	40.0	41.5	42.4	41.2	43.1	44.8	45.1	45.5	46.4	47.4
<b>Asian/Other</b>										
Under Age 35	29.3	27.1	29.9	27.7	27.5	30.0	26.4	29.7	29.5	30.5
Age 35-44	56.1	58.4	54.1	51.4	55.2	57.3	58.7	56.2	57.5	57.1
Age 45-54	66.0	64.7	62.8	65.8	69.9	66.8	69.1	69.6	71.4	67.7
Age 55-64	71.0	73.5	64.7	67.4	71.4	72.5	78.2	72.5	75.5	73.0
Age 65-74	59.3	70.6	68.1	68.3	75.2	63.5	68.6	69.8	66.5	69.7
Age 75 and Over	64.3	54.1	53.8	67.8	65.1	63.6	61.8	64.7	54.4	58.9
<b>Total</b>	51.9	51.4	50.7	50.3	52.7	53.5	53.4	53.9	53.9	53.9
<b>All Races</b>										
Under Age 35	38.0	37.3	38.0	39.1	39.0	39.6	38.8	40.4	40.7	41.3
Age 35-44	65.8	65.0	65.2	64.5	65.8	66.4	66.9	67.1	68.2	68.6
Age 45-54	75.2	75.2	75.1	75.5	75.4	75.5	76.5	76.3	76.6	76.2
Age 55-64	79.6	79.5	80.1	80.4	79.7	80.3	80.7	80.3	81.1	80.9
Age 65-74	79.9	80.2	80.5	82.2	82.3	82.3	83.0	83.6	83.0	83.1
Age 75 and Over	74.0	74.3	74.3	75.1	75.4	75.6	76.8	77.1	77.8	78.4

Note: White, black and Asian/other are non-Hispanic. Hispanic householders can be of any race. Asian/other includes Pacific Islanders, Aleuts and Native Americans. Caution should be used in interpreting year-over-year changes for certain age/race categories because of small sample sizes.

Sources: Total homeownership rate from the Census Bureau Housing Vacancy Survey's annual estimates; all other data from JCHS tabulations of the March Current Population Surveys.

Table A-6

## Household Projections by Age, Race/Ethnicity, and Family Type, 2000-2020

Thousands

Year	Age	White			Hispanic			Black			Asian/Other		
		Family	Nonfamily	Total	Family	Nonfamily	Total	Family	Nonfamily	Total	Family	Nonfamily	Total
2000													
	15-24	1,946	1,813	3,759	645	172	817	635	278	913	122	142	264
	25-34	8,427	4,026	12,454	1,966	339	2,305	1,922	707	2,629	586	319	905
	35-44	13,797	3,988	17,785	2,233	354	2,587	2,479	823	3,302	874	195	1,069
	45-54	11,726	3,990	15,716	1,339	274	1,613	1,727	767	2,494	706	133	839
	55-64	7,604	3,157	10,762	711	230	941	923	596	1,518	387	95	481
	65-74	5,739	3,525	9,263	425	248	673	565	519	1,084	201	87	289
	75+	3,919	5,743	9,662	211	232	443	323	434	757	127	80	206
	Total	53,158	26,242	79,400	7,530	1,850	9,380	8,574	4,124	12,697	3,002	1,052	4,053
2010													
	15-24	2,108	1,956	4,064	838	226	1,064	741	325	1,066	160	188	348
	25-34	8,089	3,958	12,047	2,417	403	2,820	2,078	779	2,857	683	388	1,071
	35-44	10,984	3,361	14,345	2,722	414	3,136	2,381	827	3,207	1,063	266	1,329
	45-54	12,815	4,543	17,358	2,176	446	2,622	2,240	1,071	3,311	971	199	1,170
	55-64	10,563	4,746	15,310	1,220	413	1,633	1,417	983	2,400	665	172	837
	65-74	6,312	3,970	10,282	603	369	971	668	660	1,328	314	135	449
	75+	4,155	6,114	10,270	345	379	724	374	538	913	215	133	348
	Total	55,028	28,648	83,676	10,321	2,650	12,971	9,899	5,183	15,081	4,071	1,481	5,552
2020													
	15-24	1,929	1,788	3,717	1,046	280	1,326	684	300	985	200	234	434
	25-34	8,468	4,113	12,581	2,986	500	3,487	2,371	887	3,258	860	489	1,349
	35-44	10,721	3,291	14,012	3,211	488	3,699	2,561	888	3,449	1,234	309	1,543
	45-54	10,193	3,621	13,814	2,559	529	3,088	2,149	1,030	3,179	1,169	240	1,409
	55-64	11,785	5,315	17,100	1,912	650	2,562	1,883	1,317	3,200	904	235	1,139
	65-74	9,088	5,752	14,840	1,020	621	1,641	1,090	1,073	2,163	515	223	738
	75+	4,786	7,043	11,829	517	568	1,084	482	694	1,175	330	203	533
	Total	56,970	30,923	87,893	13,250	3,637	16,887	11,220	6,189	17,409	5,212	1,933	7,146

Notes: Numbers for 2000 are projections utilizing Census Bureau population projections and JCHS headship projections, based on analysis of the Current Population Survey. Family householders are defined as two or more related individuals sharing living quarters. White, black and Asian/other are non-Hispanic, and Hispanic householders can be of any race. Asian/other include Pacific Islanders, Aleuts and Native Americans.

Source: George Masnick and Zhu Xiao Di, *Projections of U. S. Households by Race/Hispanic Origin, Age, Family Type and Tenure: A Sensitivity Analysis*, prepared for the Department of Housing and Urban Development, February 2003.



Table A-8

## Tenure Choices of Recent Movers, 2001

Thousands of Households

Previous Tenure Current Tenure	Own			Rent			Percent of Current Owners That Moved Within Previous Year	Percent of Moving Owners That Became Renters
	Own	Rent	All	Own	Rent	All		
<b>Total</b>	4,783	2,315	7,098	5,028	11,172	16,200	13.6	32.6
<b>Age</b>								
Under Age 35	1,068	808	1,877	2,554	6,625	9,179	35.2	43.1
35-44	1,448	606	2,055	1,342	2,312	3,654	17.1	29.5
45-54	982	442	1,424	660	1,230	1,891	9.9	31.1
55-64	705	202	907	308	518	827	8.8	22.3
65 and Over	579	256	835	163	486	649	4.2	30.7
<b>Family Type</b>								
Married without Children	1,551	292	1,844	1,236	1,232	2,468	10.9	15.9
Married with Children	1,751	327	2,078	1,624	1,931	3,556	17.3	15.7
Single Parent	260	402	662	555	2,188	2,743	19.4	60.8
Other Family	243	135	378	252	631	883	10.0	35.6
Single Person	786	972	1,759	966	3,520	4,486	11.4	55.3
Other Nonfamily	191	186	378	395	1,669	2,064	23.2	49.3
<b>Race/Ethnicity</b>								
White	4,152	1,634	5,786	3,605	6,579	10,184	13.2	28.2
Hispanic	269	238	507	556	1,735	2,291	17.4	47.0
Black	213	325	538	534	2,118	2,652	12.0	60.4
Asian/Other	149	117	266	333	740	1,073	20.0	44.0
<b>Region</b>								
Northeast	651	312	964	740	1,654	2,394	10.7	32.4
Midwest	1,188	495	1,683	1,080	2,213	3,294	12.6	29.4
South	1,868	932	2,800	1,885	4,294	6,179	14.0	33.3
West	1,076	576	1,651	1,323	3,010	4,333	16.5	34.9
<b>Metropolitan Status</b>								
Center City	856	858	1,713	1,347	5,066	6,413	13.6	50.1
Suburban	2,727	982	3,709	2,684	4,311	6,995	14.2	26.5
Non-Metropolitan	1,200	475	1,675	997	1,795	2,792	12.2	28.4
<b>Marital Status</b>								
Married, Spouse Present	3,302	619	3,922	2,860	3,163	6,024	13.6	15.8
Married, Spouse Absent	64	80	144	67	254	321	13.0	55.6
Widowed	337	214	551	136	416	552	5.2	38.8
Divorced	711	643	1,353	792	1,900	2,692	15.9	47.5
Separated	58	205	263	109	598	707	16.2	78.0
Never Married	311	554	865	1,063	4,841	5,904	21.1	64.0
<b>Stated Reasons for Moving</b>								
All reasons of equal importance	102	39	141	119	170	289	na	27.4
Private company or person wanted to use it	10	10	20	29	211	239	na	49.5
Forced to leave by the government	18	0	18	7	40	47	na	0.0
Disaster loss (fire, flood, etc.)	15	19	34	16	57	73	na	56.6
New job or job transfer	497	303	799	292	1,313	1,606	na	37.9
To be closer to work/school/other	269	170	440	178	1,120	1,298	na	38.7
Other, financial/employment related	73	87	160	78	375	453	na	54.5
To establish own household	135	156	291	833	717	1,550	na	53.8
Needed a larger house or apartment	866	57	922	433	1,359	1,791	na	6.1
Married, widowed, divorced, or separated	296	370	666	113	316	429	na	55.5
Other, family/personal related	360	211	571	190	772	962	na	37.0
Wanted a better quality house (apartment)	633	58	691	309	1,065	1,374	na	8.5
Change from owner to renter OR renter to owner	68	92	160	1,330	46	1,376	na	57.2
Wanted lower rent or less expensive house to maintain	100	72	172	79	763	842	na	41.7
Other housing related reasons	263	90	353	103	614	716	na	25.6
Other	785	276	1,061	334	1,360	1,695	na	26.0

Notes: Recent movers are householders who changed their primary residences in the preceding year. Moving homeowners are current householders that moved in the previous 12 months from a home they owned or co-owned. White, black and Asian/other householders are non-Hispanic. Hispanic householders may be of any race. Asian/other includes Pacific Islanders, Aleuts and Native Americans. Married-couple households with one spouse absent are not included in the counts of married couples with and without children. Source: JCHS tabulations of the 2001 American Housing Survey.

Table A-9

## Lowest-Income Households By Cost Burdens, 1997 and 2001

Thousands of Households in the Bottom Income Quintile

	1997				2001			
	Not Burdened	Moderately Burdened	Severely Burdened	Total	Not Burdened	Moderately Burdened	Severely Burdened	Total
<b>Total</b>	5,326	4,561	10,078	19,966	5,918	4,867	10,593	21,377
<b>Age</b>								
Under Age 35	760	921	2,775	4,455	701	1,125	2,693	4,518
35-44	531	575	1,728	2,834	567	525	1,458	2,55
45-54	444	495	1,195	2,134	630	559	1,379	2,568
55-64	526	492	1,265	2,282	698	548	1,398	2,644
65 and Over	3,066	2,079	3,115	8,261	3,321	2,110	3,665	9,096
<b>Race/Ethnicity</b>								
Asian/Other	156	118	414	688	163	146	443	752
Black	937	930	2,190	4,057	966	950	2,379	4,295
Hispanic	481	473	1,338	2,292	468	569	1,297	2,335
White	3,751	3,040	6,136	12,928	4,319	3,201	6,474	13,994
<b>Family Type</b>								
Married without Children	864	718	1,586	3,168	1,116	740	1,787	3,643
Married with Children	286	296	937	1,519	202	319	700	1,221
Single Parent	620	638	1,787	3,045	560	668	1,787	3,015
Other Family	345	343	841	1,530	427	364	847	1,638
Single Person	3,092	2,413	4,397	9,902	3,494	2,595	4,877	10,966
Other Nonfamily	118	152	531	802	118	180	595	893
<b>Tenure</b>								
Owners with Mortgages	126	393	1,648	2,166	157	517	2,168	2,841
Owners without Mortgages	3,060	1,716	2,341	7,117	3,521	1,742	2,481	7,743
Renters	2,140	2,452	6,090	10,682	2,240	2,609	5,944	10,793
<b>Region</b>								
Northeast	676	935	2,408	4,019	902	881	2,349	4,132
Midwest	1,303	1,084	1,864	4,251	1,406	1,207	2,045	4,657
South	2,508	1,732	3,525	7,765	2,749	1,939	4,038	8,725
West	840	811	2,281	3,931	861	840	2,161	3,862
<b>Metropolitan Status</b>								
Center City	1,403	1,698	4,228	7,329	1,550	1,741	4,225	7,516
Suburban	1,633	1,488	3,787	6,909	1,937	1,672	4,167	7,776
Non Metropolitan	2,290	1,375	2,063	5,728	2,431	1,454	2,201	6,085

**Notes:** Unburdened households pay 30% or less of monthly income for housing, including utilities. Moderately burdened households pay between 30% and 50% of income for housing. Severely burdened households pay more than half their incomes for housing. White, black and Asian/other are non-Hispanic, and Hispanic households may be of any race. Asian/other includes Native Americans, Aleuts and Pacific Islanders. Income quintiles are equal fifths of households grouped by income, adjusted for data anomalies. Households with income below half of the full-time minimum wage equivalent (\$10,712 in 2003), but with high housing costs and no other apparent housing problems, or with reported investment income in excess of \$25,000, were assumed to have the local median income, prior to the quintile definitions. The cut-offs for the quintiles in 2001 were \$17,000, \$32,000, \$50,000 and \$81,000.

**Source:** JCHS tabulations of the 1997 and 2001 American Housing Surveys, using consistent 1983 metro boundaries.

Table A-10

## Incidence of Housing Problems, 1997-2001

Thousands of Households

Income Quintiles	1997						2001					
	Bottom	Lower-Middle	Middle	Upper-Middle	Top	Total	Bottom	Lower-Middle	Middle	Upper-Middle	Top	Total
<b>Owner Households</b>	9,283	11,232	12,563	14,946	17,463	65,487	10,585	12,424	13,700	16,654	19,002	72,365
<b>Owner Households with Problems</b>	6,481	4,121	3,088	2,093	1,175	16,958	7,255	4,862	4,069	2,719	1,385	20,290
<b>Cost Burdens</b>												
No Burden	3,186	7,667	10,100	13,500	16,800	51,253	3,678	8,091	10,300	14,500	18,200	54,769
Moderate Burden	2,109	2,408	1,970	1,347	633	8,467	2,258	2,786	2,722	1,799	687	10,253
Severe Burden	3,988	1,157	493	142	15	5,795	4,649	1,547	721	316	110	7,343
<b>Crowding</b>												
Not Crowded	9,157	11,100	12,300	14,700	17,300	64,557	10,500	12,300	13,400	16,400	18,800	71,400
Crowded	126	164	220	223	183	916	110	173	255	233	208	979
<b>Inadequate Units</b>												
Adequate	8,501	10,600	12,000	14,500	17,100	62,701	9,731	11,800	13,100	16,200	18,600	69,431
Moderately Inadequate	560	508	463	348	290	2,170	599	463	390	305	250	2,007
Severely Inadequate	222	138	125	133	107	725	255	201	174	165	160	955
<b>Multiple Problems</b>	513	243	181	97	53	1,087	595	298	195	95	31	1,213
<b>Renter Households</b>	10,682	9,173	6,924	4,808	2,413	34,000	10,793	8,865	7,482	4,767	2,135	34,042
<b>Renter Households with Problems</b>	8,956	5,167	1,617	681	305	16,726	8,886	4,788	1,869	842	304	16,689
<b>Cost Burdens</b>												
No Burden	2,140	4,828	6,154	4,655	2,409	20,186	2,240	4,838	6,451	4,478	2,089	20,097
Moderate Burden	2,452	3,531	751	150	5	6,889	2,609	3,252	880	241	46	7,027
Severe Burden	6,090	814	19	2	0	6,925	5,944	776	151	48	0	6,918
<b>Crowding</b>												
Not Crowded	10,100	8,544	6,553	4,586	2,333	32,116	10,300	8,395	7,101	4,515	2,033	32,344
Crowded	589	629	371	222	80	1,891	468	471	381	252	102	1,674
<b>Inadequate Units</b>												
Adequate	8,904	8,129	6,274	4,430	2,170	29,907	9,170	7,938	6,875	4,383	1,958	30,324
Moderately Inadequate	1,283	793	464	300	181	3,021	1,093	652	440	252	102	2,538
Severely Inadequate	495	250	186	78	62	1,072	530	275	167	133	75	1,181
<b>Multiple Problems</b>	1,801	756	171	71	23	2,822	1,653	602	149	74	21	2,499
<b>All Households</b>	19,966	20,405	19,486	19,754	19,876	99,487	21,377	21,289	21,182	21,421	21,137	106,407
<b>All Households with Problems</b>	15,436	9,288	4,704	2,775	1,480	33,684	16,141	9,650	5,937	3,561	1,689	36,978
<b>Cost Burdens</b>												
No Burden	5,326	12,500	16,300	18,100	19,200	71,426	5,918	12,900	16,700	19,000	20,300	74,818
Moderate Burden	4,561	5,938	2,721	1,498	638	15,356	4,867	6,038	3,602	2,040	733	17,280
Severe Burden	10,100	1,972	511	144	15	12,742	10,600	2,323	872	363	110	14,268
<b>Crowding</b>												
Not Crowded	19,200	19,600	18,900	19,300	19,600	96,600	20,800	20,600	20,500	20,900	20,800	103,600
Crowded	716	793	591	445	263	2,806	578	644	636	485	310	2,653
<b>Inadequate Units</b>												
Adequate	17,400	18,700	18,200	18,900	19,200	92,400	18,900	19,700	20,000	20,600	20,500	99,700
Moderately Inadequate	1,843	1,302	927	648	471	5,191	1,691	1,115	830	557	352	4,545
Severely Inadequate	718	388	311	211	169	1,796	785	476	341	297	236	2,136
<b>Multiple Problems</b>	2,313	1,000	352	168	76	3,909	2,248	899	344	169	51	3,712

Notes: Housing problem categories are not mutually exclusive. Severely cost-burdened households are those spending more than 50% of monthly income on housing. Moderately cost-burdened households are those spending between 30% and 50% of monthly income on housing. Crowded households are those with more than one occupant per room. Severely and moderately inadequate housing units are defined by HUD. See Table A-9 for description of income quintiles. Source: JCHS tabulations of the 1997 and 2001 American Housing Surveys, using consistent 1983 metro boundaries.

**Prepared by the  
Joint Center for Housing Studies of Harvard University**

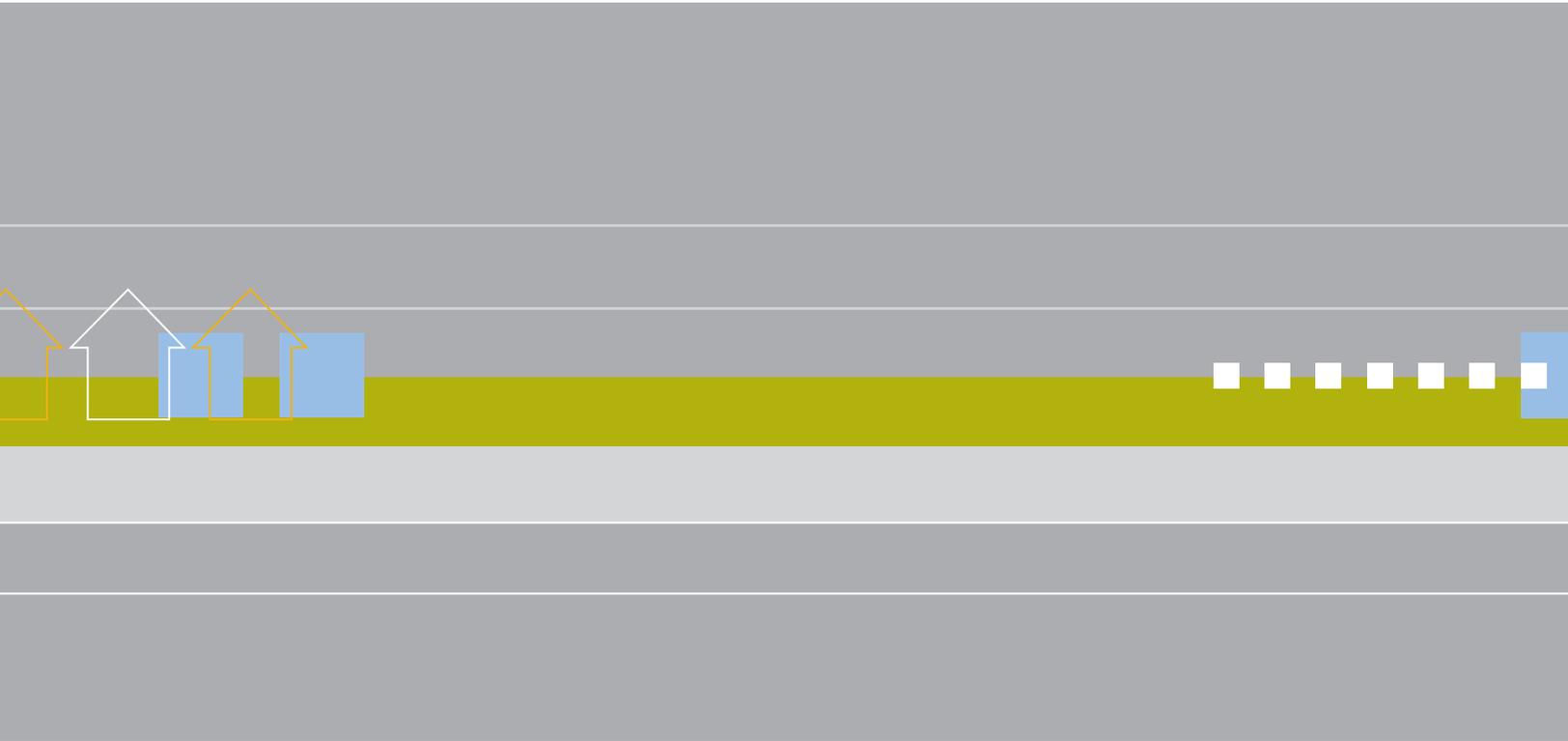
Barbara Alexander  
Martha Andrews  
William Apgar  
Kermit Baker  
Pamela Baldwin  
Michelle Barnes  
Eric Belsky  
Allegra Calder  
Jennifer Chen  
Edward Crane  
James DeNormandie  
Zhu Xiao Di  
Cushing Dolbeare  
Rachel Bogardus Drew  
Elizabeth England  
Gary Fauth  
Ruby Henry  
Jackie Hernandez  
Xiaodong Liu  
Alvaro Martin-Guerrero  
George Masnick  
John Meyer  
Rachel Roth  
Nicolas Retsinas  
Charlotte Taboso  
Laurel Trayes  
Alexander von Hoffman  
Yi Yang

**Design and Project Management**  
Oxygen LLC

**For additional copies, please contact**

Joint Center for Housing Studies of Harvard University  
1033 Massachusetts Avenue, 5th Floor  
Cambridge, MA 02138  
(617) 495-7908 *p*  
(617) 496-9957 *f*

[www.jchs.harvard.edu](http://www.jchs.harvard.edu)



Joint Center for Housing Studies of Harvard University  
1033 Massachusetts Avenue, 5th Floor, Cambridge, MA 02138

(617) 495-7908 *p*

(617) 496-9957 *f*

[www.jchs.harvard.edu](http://www.jchs.harvard.edu)