

# the **State** of the **Nation's** Housing

2 0 0 4

JOINT CENTER FOR HOUSING STUDIES OF HARVARD UNIVERSITY

## 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  
Federal Home Loan Banks  
Freddie Mac  
Housing Assistance Council  
Mortgage Bankers Association  
National Association of Affordable Housing Lenders  
National Association of Home Builders  
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 Conference  
National Housing Endowment  
National League of Cities  
National Low Income Housing Coalition  
National Multi Housing Council  
U.S. Conference of Mayors

©2004 President and Fellows of Harvard College.

The opinions expressed in *The State of the Nation's Housing: 2004* 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 job losses in the rest of the economy, housing had another record-breaking year in 2003. Home sales, single-family housing starts, residential fixed investment, homeownership rates, mortgage originations, refinances, and home prices all reached new peaks. The only weak spots were the uneven rental market and the depressed manufactured housing sector.

This housing boom has been both longer and more broadly based than previous expansions (*Figure 1*). Construction activity has remained strong in most states and real house prices have climbed in nearly all metropolitan areas. Rents have increased in more areas than they have decreased, and industry indicators suggest that rents are stabilizing in some locations that have seen recent declines.

With the economic recovery under way, the question now is whether housing will achieve a soft landing in which house prices, sales, and new construction ease rather than drop off sharply. Several factors favor this possible outcome. Housing construction appears to be in line with long-run demand, and a strengthening economy should support house prices. In addition, changes in the housing finance system have made markets more resilient and better able to adjust quickly to interest-rate movements.

Although refinancing activity would drop off significantly if interest rates rise even gradually, construction would probably hold near its current pace and house price inflation moderate rather than turn negative. If job growth falters or interest rates spike, however, housing could be in for a rougher ride.

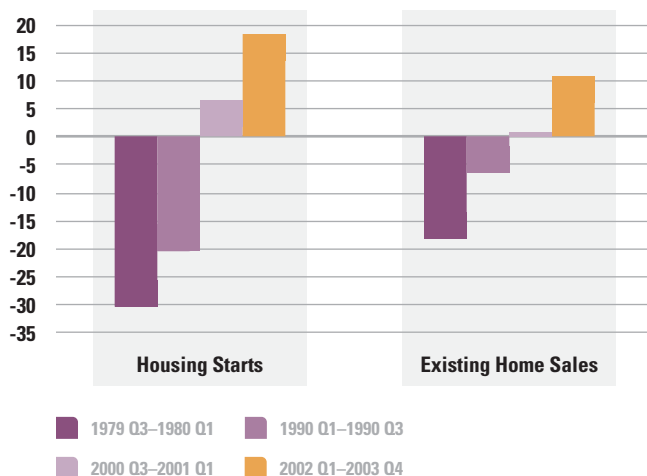
### Uninterrupted Growth

The housing boom has outlasted an international finance crisis in 1998, an economic recession in 2001, and job losses in 2002–3. Throughout most of this period, low interest rates kept housing markets thriving as home prices and sales continued to climb. Rising home values in turn generated wealth effects that helped to sustain consumer spending. In fact, the wealth effects related to home price appreciation, realized capital gains, and heavy home equity borrowing appear to have contributed more than one-quarter of the growth in personal consumption in both 2002 and 2003.

Figure 1

### This Housing Boom Has Outlasted Both the Recent Recession and Jobless Recovery

Percent change in housing starts and home sales



Notes: Percent change is measured from two quarters preceding the start of a recession/softening through the first quarter of the recession/softening. Recessions are defined by the NBER Business Cycle Dating Committee. The last time period reflects the recovery.  
Sources: Census Bureau, Construction Statistics and National Association of Realtors.®

Residential construction has been on the rise for most of the last 12 years, adding significantly to the housing stocks in both metropolitan and nonmetropolitan areas—particularly in the South and West (*Figure 2*). While large metros such as Atlanta and Las Vegas have seen spectacular increases in new construction, the rate of growth in many small and medium metros exceeded 25 percent.

Despite growing concern over the pace of development, housing construction over the next 10 years is likely to exceed that over the last 10. The Census Bureau’s newly revised population estimates imply that household growth from 2005–15 will be as much as 1.1–2.0 million more than the Joint Center for Housing Studies previously projected. Add to that the growing demand for second homes and replacements of units lost from the stock, and the total number of homes built in 2005–15 could reach 18.5–19.5 million units. This compares with 16.4 million homes added in the 1990s.

In the meantime, house prices in many areas of the country have risen considerably faster than household incomes. This rapid appreciation has raised concerns that housing is headed

for a crash. Although more locations are now at greater risk of a home price decline than a year or two ago, a sharp correction is unlikely unless the economy unexpectedly contracts. Sharply higher interest rates would, however, quickly erode affordability for homebuyers. In that case, home prices would come under pressure unless employment and income growth were strong enough to offset the rate increases.

The first line of defense that potential homebuyers can take against rising rates is to choose mortgages that adjust annually or hybrid mortgages that have fixed rates for a set number of years before adjusting. While these maneuvers blunt the short-run impact of higher rates, they do expose owners to higher monthly payments if interest rates continue to climb.

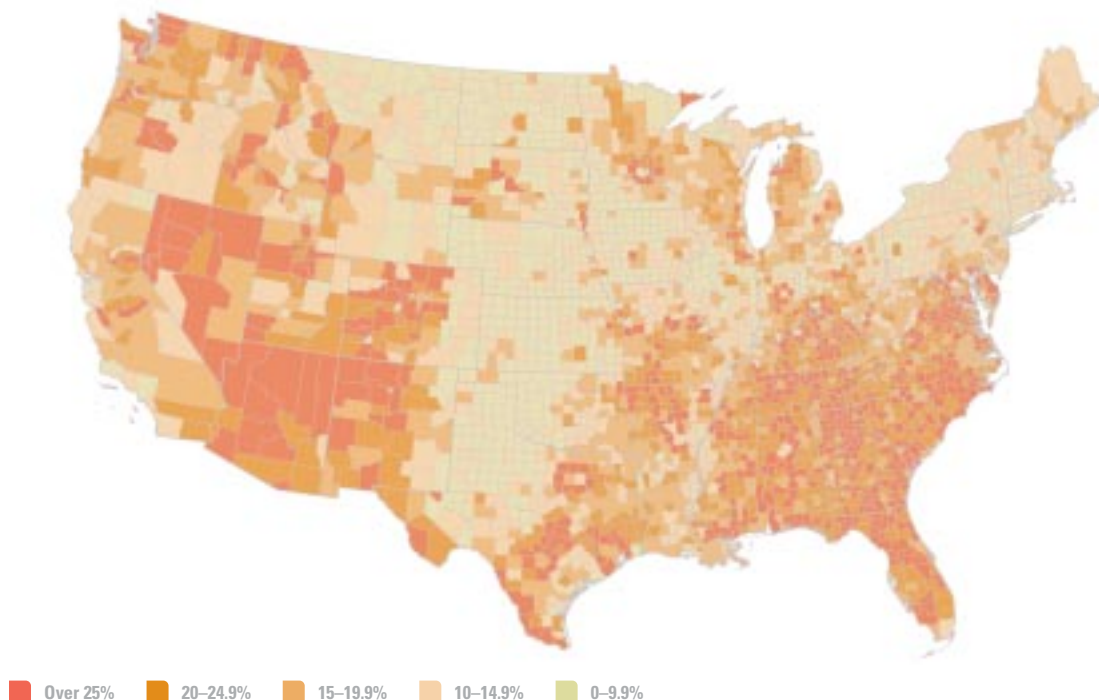
### Demand Transformed

The changing demographic structure of the population is reshaping housing demand. Immigration has been, and will continue to be, an important driver. Immigrants have accounted for more than a third of household growth since the 1990s—adding not only directly to the number of households, but also indirectly as their native-born children begin

Figure 2

### During the 1990s, Construction Contributed Significantly to the Housing Stock

Share of 2000 housing stock built in the 1990s

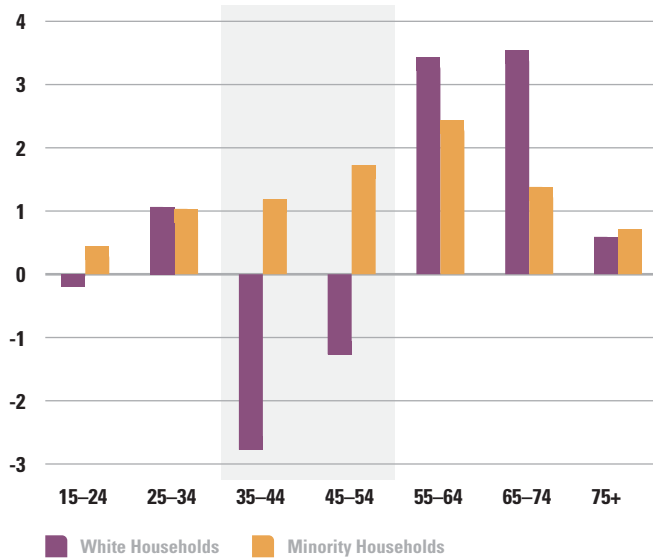


Source: 2000 Decennial Census.

Figure 3

### Growth in Minority Households Will Offset Baby Bust Led Reductions in the 35–54 Age Range

Net change in households 2005–15 (millions)



Source: JCHS Interim Household Projections.

to live on their own. Although recent immigrants have lower homeownership rates than native-born Americans of comparable races, ethnicities, and ages, with time many foreign-born households eventually join the ranks of owners.

Owing to immigration and higher rates of natural increase, the minority share of households increased from 17 percent in 1980 to 26 percent in 2000, and will likely reach about

34 percent by 2020. Minority household growth over the next 10 years will add significantly to the growth in household heads aged 55 to 74 and help to offset losses of white household heads aged 35 to 54 as the baby bust cohort reaches middle age (*Figure 3*).

This will only add to the already important contributions that minorities have made to housing demand in recent years. In particular, without the rapid growth in minorities, the number of renter households would have fallen during the 1990s. Instead, the renter population increased modestly and the minority share of renter households surged from 31 percent to 39 percent over the decade.

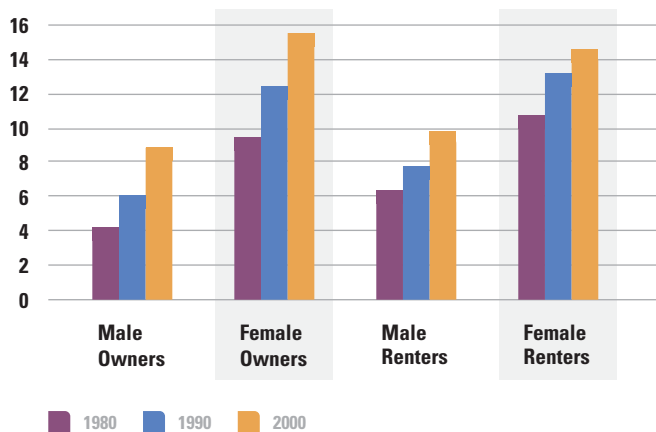
In addition to keeping rental demand from sagging, minorities also accounted for fully two out of every five net new homeowners from 1994 to 2003. Despite these strong gains, though, minority homeownership rates still lag those of whites by nearly 25 percentage points. Narrowing this persistent gap remains a challenge for both the government and the mortgage finance industry.

Meanwhile, social and economic trends have given women a more powerful presence in housing markets. Between 1980 and 2000, the number of households headed by unmarried women increased by almost 10 million (*Figure 4*). Over the same period, the median contribution of wives' earnings to dual-earner households rose from 30 percent to 37 percent. As a result, unmarried women now head a larger share of households and married women make larger contributions to household income than ever before.

Figure 4

### Unmarried Women Are Increasingly Heading Up Their Own Households

Millions of unmarried household heads



Source: JCHS tabulations of the 1980, 1990 and 2000 Census 1% PUMS.

While both women and minorities make up increasing shares of middle-income households, they are still over-represented in the lowest-income category. The incidence of housing problems is therefore higher among minorities than whites and among unmarried women than unmarried men of comparable ages.

#### Housing Finance Innovations

Several changes in the finance industry have served to strengthen housing markets. Consolidation has brought new economies of scale, reducing the costs of mortgage originations and servicing. The ability to fund mortgages in domestic and global capital markets has also reduced the risk of credit

crunches by tapping a larger investor base through the broadening of secondary mortgage markets.

In addition, automation has accelerated approvals, lowered costs, expanded access to credit, and reduced blatant discrimination. Loan loss mitigation tools have also limited the share of problem loans that end in foreclosure, which is costly to all parties. And finally, multiple mortgage products are available with a range of amortization lengths, loan terms, and repayment options, helping to keep homebuyers in the market even when interest rates rise.

Today, capital is far more readily available in low-income and minority communities. While the number and share of prime loans to these borrowers have increased steadily since the 1990s, the growth of higher-cost subprime loans has been even greater. Indeed, the subprime share in low-income, predominantly minority communities mushroomed from only a few percentage points in 1993 to 13 percent of home purchase and 28 percent of refinance loans in 2001.

Although innovation in housing finance has expanded access to credit, it has also brought new risks and challenges. The proliferation of mortgage choices and prices can confuse homebuyers and provide fertile soil for predatory lending. In

addition, statistical credit scores now govern both access to and the pricing of mortgage credit. These scores are lower on average for minorities than for whites of comparable incomes, implying that some minority borrowers pay more for their loans. Furthermore, the growth in subprime lending has resulted in rising foreclosures in some of the low-income and minority communities where these loans are concentrated.

### Housing Challenges

Although the overwhelming majority of Americans are well housed, nearly a third of all households spend 30 percent or more of their incomes on housing and 13 percent spend 50 percent or more. In addition to widespread affordability problems, crowding is on the increase, some 2.5–3.5 million people are homeless at some point in a given year, and nearly 2 million households still live in severely inadequate units.

Not surprisingly, housing challenges are most severe among those at the bottom of the income distribution. Fully half of lowest-income households spend at least 50 percent of their incomes on housing. Severely cost-burdened households in the bottom quintile by expenditures have little left over to pay for other basic necessities, spending just \$161 on average each month on food and \$34 on healthcare (*Figure 5*). By comparison, households in the bottom expense quintile that devote less than 20 percent of their budgets to housing managed to spend \$80 more a month on food and \$49 more on healthcare on average.

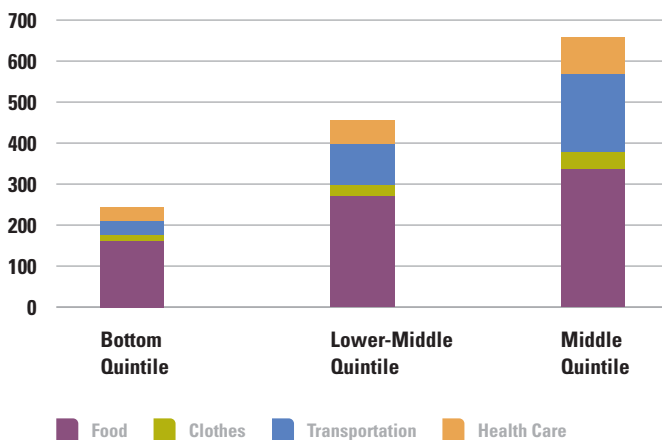
Unfortunately, affordability pressures are unlikely to ease. Many of the low-wage jobs created by the economy do not pay enough for a household to afford (at 30 percent of income) even a modest one-bedroom rental anywhere in the country. Similarly, retirement incomes are so meager that many seniors face heavy housing cost burdens on top of escalating healthcare costs.

Adding to the pressures on low-income households is the cost of supplying new affordable housing. Restrictive regulations and public resistance to high-density development make it difficult to replace or add lower-cost units. Prospects for additional income supports or housing subsidies are equally bleak. As the federal deficit balloons, the calls to cut spending on social and housing programs are growing even as the demand for and costs of these programs continue to escalate. ■

Figure 5

### Severely Cost-Burdened Households Have Little to Spend on Other Basic Needs

Average monthly expenditures (2003 dollars)



Notes: Refers to households devoting more than half their outlays to housing. Housing costs include mortgage principal and interest, insurance, taxes, maintenance, rents and utilities. Quintiles are defined by total expenditures rather than income because one out of five households in the survey fails to report income.

Source: JCHS tabulations of the Consumer Expenditure Survey, using the Quarterly Interview Surveys data for calendar 2001.

## Housing and the Economy

Housing helped to shore up the economy again in 2003. Residential fixed investment alone accounted for about one-tenth of GDP growth, while commissions from home sales pumped an estimated \$80 billion into the economy. In fact, it was a record-setting year not just for residential fixed investment, but also for home sales, prices, rents, and mortgage originations (*Figure 6*).

Starts totaled 1.85 million, driven by 1.5 million single-family starts (*Table A-2*). Not since the 1970s, when the baby boomers started to form their own households, have starts been so strong. And buoyed by the lowest interest rates in over four decades, mortgage originations hit a staggering \$3.8 trillion as both home purchase and refinance loans eclipsed

previous peaks. Fully half of mortgage debt outstanding was originated or refinanced last year.

### Sales and Production Still Strong

Low interest rates pushed home sales to new heights, fueling owner-occupied housing markets from coast to coast even as some rental markets softened. After dipping in mid-year to levels not seen since the early 1950s, rates on 30-year fixed mortgages averaged 5.83 percent for the year. This is more than two percentage points (or 38 percent) below their average when the housing boom started to build steam in 2000.

Buyers took advantage of the low rates to push sales of existing single-family homes to 6.1 million units and of new single-family homes to 1.1 million units. Low rates also helped to hold down monthly mortgage payments and keep home prices on the rise. Indeed, the median sales prices of both new and existing single-family homes hit all-time highs in 2003.

Starts of single-family homes stood at their highest level in over 40 years, while starts of multifamily housing edged up to 348,700 units on the strength of higher condominium

Figure 6

### Strong Homeownership Demand Has Propelled Housing to New Heights

	2002	2003	Change (%)
Homeownership Rate (%)	67.9	68.3	0.6
New Single-Family Home Sales (Units)	973,000	1.1 million	11.5
Existing Single-Family Home Sales (Units)	5.6 million	6.1 million	9.6
New Single-Family Home Price	\$188,708	\$195,000	3.3
Median Existing Single-Family Home Price	\$162,569	\$170,000	4.6
Home Equity	\$7.9 trillion	\$8.4 trillion	6.1
Mortgage Debt	\$6.2 trillion	\$6.8 trillion	9.9
Mortgage Refinancing	\$1.4 trillion	\$2.4 trillion	71.4
Residential Fixed Investment	\$507.4 billion	\$554.3 billion	9.2

Notes: All dollar figures are in 2003 dollars. Homeownership rate is from the Housing Vacancy Survey. Percent change was calculated using unrounded numbers.  
Sources: Tables A-2, A-6; Federal Reserve Flow of Funds Accounts; Bureau of Economic Analysis, National Income and Product Accounts; Census Bureau, C-50.

production. Manufactured housing placements, meanwhile, declined for the fifth consecutive year to 134,800—a low not seen since the 1960s. This segment may, however, have reached bottom now that dealer inventories are leaner.

Just five states—Florida, California, Texas, Georgia, and North Carolina—accounted for 40 percent of housing permits issued in 2003. Of these, Georgia and North Carolina posted small dips from a year earlier, while permits in Florida and California continued a climb that began in 1997. Overall, just 10 states and the District of Columbia issued fewer permits in 2003 than in 2002, with only Colorado and North Carolina reporting a second straight year of decline (*Figure 7*).

Condominium markets are also booming. Both sales and prices of existing condos/co-ops have risen steadily for eight consecutive years, with sales at a record 898,000 units in 2003. The median price of condos/co-ops has increased roughly twice as fast as that of existing single-family homes in all four regions. Even so, the median price remains below that of single-family homes, making condos/co-ops attractive to first-time and other buyers in expensive housing markets.

After more than a nine percent surge in 2002, growth in homeowner spending on improvements and repairs fell in 2003. Rising home values have given homeowners a ready source of equity to finance remodeling projects, while simultaneously providing an incentive to protect their increased equity. Strong home sales should support higher levels of improvement spending in the future, since buyers are most likely to remodel soon after purchasing their homes.

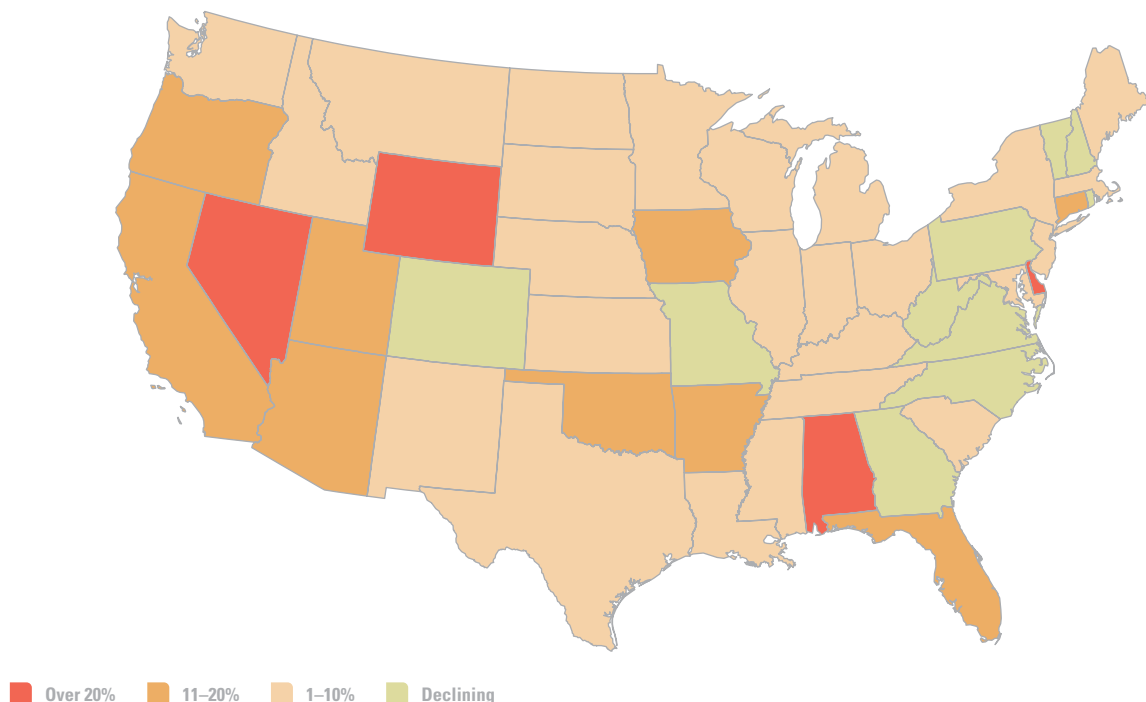
After adjusting for inflation, home prices were up 5.9 percent nationally in 2002–3 (fourth-quarter to fourth-quarter). The largest real gains were in the Pacific states (10.6 percent), followed by the Middle Atlantic (9.4 percent) and New England (8.7 percent) states. Even though appreciation slowed in 81 of the 163 metropolitan areas tracked by Freddie Mac, inflation-adjusted house prices continued to rise in all but 4 (Austin, Boulder, Provo and Salt Lake City). Two of these areas were hard-hit by the end of the technology boom, while Utah suffered from a post-Olympics slump.

Even in these four places, though, house prices were still up in nominal terms. Given that housing is typically a leveraged

**Figure 7**

### Housing Production Expanded in Four Out of Five States Last Year

Change in single-family and multifamily permits, 2002–3

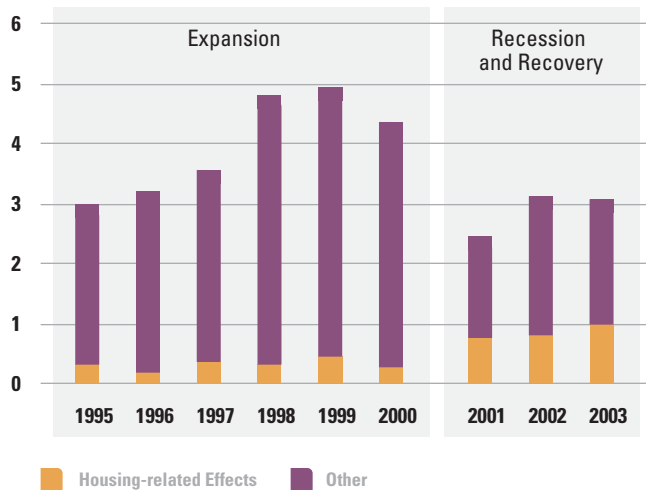


Source: Census Bureau, Construction Statistics.



## Housing Wealth Buoyed Consumer Spending During and After the Recession

Growth in personal consumption expenditures (Percentage points)



Notes: 1995 to 2002 is a four-quarter average. 2003 is the average of the first three quarters.  
Source: JCHS and Macroeconomic Advisers, LLC, under contract to the National Association of Realtors.

investment, owners may therefore still earn real capital gains even when nominal home prices rise more slowly than general inflation.

### Support for the Economy

In 2003, investment in new homes and remodeling directly contributed to economic growth and helped to anchor job markets. At the same time, housing wealth supported consumer spending as never before. In fact, housing-related wealth effects were responsible for about a third of the growth in personal consumption last year (*Figure 8*).

What has made this possible is the unique confluence of strong house price appreciation, low interest rates, record cash-out refinances, high home-equity lending, and brisk home sales. Home price appreciation alone drove about half of housing's contribution to consumer spending gains. The Joint Center and Macroeconomic Advisers estimate that households spend on average about 5.5 cents a year out of every dollar increase in house values. This additional spending hits its long-run average within a year of when the increase in value occurs—much more quickly than households spend gains in stock wealth, which they may view as less secure.

Spending from home equity extracted through cash-out refinances and realized capital gains (made possible by home

price increases) accounted for the other half of housing's wealth effects. Freddie Mac estimates that homeowners with prime mortgages not insured by the government cashed out about \$86 billion in 2001, \$108 billion in 2002, and \$139 billion in 2003. The total of \$333 billion dwarfs the next highest three-year level of \$114 billion posted in 1998–2000.

### Sustaining the Boom

Housing remains in uncharted territory. The strength and endurance of the boom have raised concerns that a significant correction may be in store. During a typical national recession, housing investment, residential construction, employment, and home sales all plunge while average home prices dip slightly. These cyclical downswings often set the stage for upswings as deferred demand and a strengthening job market push housing activity sharply higher.

This time around, though, housing construction climbed straight through the recession and into the recovery—even as total employment declined. Rather than dropping precipitously before and during the recession, residential fixed investment in fact rose 2.2 percent in 2001. Indeed, even without the typical slowdown in household growth, fixed investment grew faster two years into this recovery than it did after the 1990–1 downturn. And rather than edging lower (or even plummeting in some locations as they did in the early 1990s), average house prices continued to soar as lower interest rates kept monthly payments stable.

At this stage of the cycle, the biggest threats are that job growth will stall or interest rates climb. If jobs are shed, the housing market will have a hard time sustaining its heady pace unless rates fall as well, setting up another scenario like 2003. A significant increase in mortgage rates would surely put an end to the refinance boom and, if large enough, also dampen both existing home sales and home price inflation.

But even interest rate increases of one percentage point or more may not have much of an impact on home sales and prices as long as job growth and productivity gains continue. If long-term interest rates rise, many homebuyers would choose a hybrid adjustable-rate mortgage with a 5- or 7-year fixed term instead of a 30-year fixed-rate mortgage. This could blunt some of the impact of higher rates and keep buyers in the market. Higher rates would, however, likely reduce the

number of homes on the market because owners would think twice before selling and giving up their current low fixed-rate mortgages. This reduction in supply would help stabilize house prices.

As for housing starts and new home sales, both depend less on interest rates and more on whether construction is growing in line with demand. So far, household growth appears to be running near trend while the months' supply of new housing (a measure of the leanness of the inventory) has stayed low. During past cycles, new construction activity did not retreat until the months' supply had reached at least eight months. For current inventory to exceed even a six-month level, though, new home sales would have to drop by more than a third—a magnitude of decline not seen since interest rates skyrocketed in the early 1980s. This makes a sharp inventory correction unlikely.

Still, the blistering pace of home price appreciation in many metropolitan areas has heightened fears that price bubbles have developed in at least some markets. But steep declines even at the metropolitan level are rare in the absence of con-

centrated job losses. In the event of such an employment drop, homes for sale often flood the market at a time when few are in a position to buy.

In today's market, though, house prices have continued to escalate even in areas where sizable job losses have occurred. In Boston, for example, prices were up by 7.8 percent at the end of 2003 even though payroll employment fell by 1.5 percent. This has only added to concerns about an impending crash.

But the current house price run-up is still less extreme than that preceding the retreat in the late 1980s and early 1990s (*Figure 9*). In addition, labor markets are stabilizing or improving in most areas. With a resumption of job growth, overheated housing markets may well see only modest house price corrections.

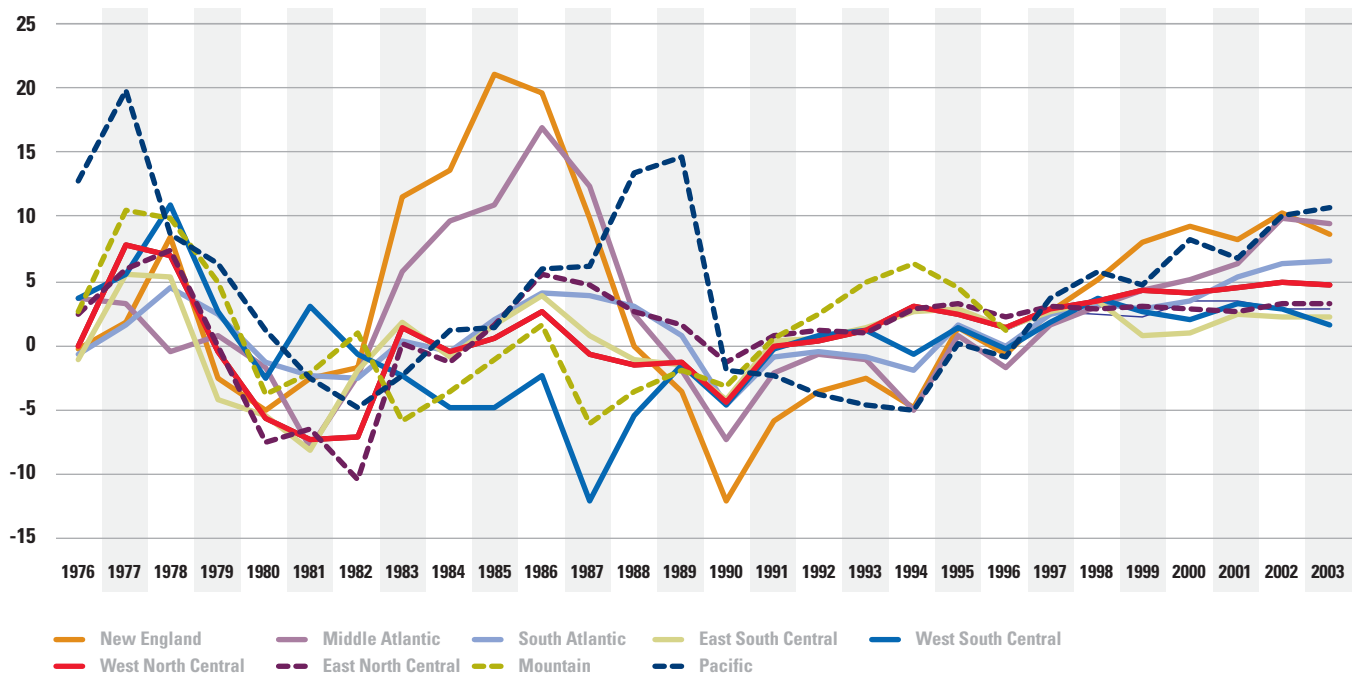
### Diverse Growth Patterns

Since 1990, housing construction has been concentrated in large metropolitan areas (with populations of more than 1 million). Nevertheless, medium-size metros (with populations

Figure 9

### House Prices Have Appreciated Steadily Since the Mid-1990s Across the Nation

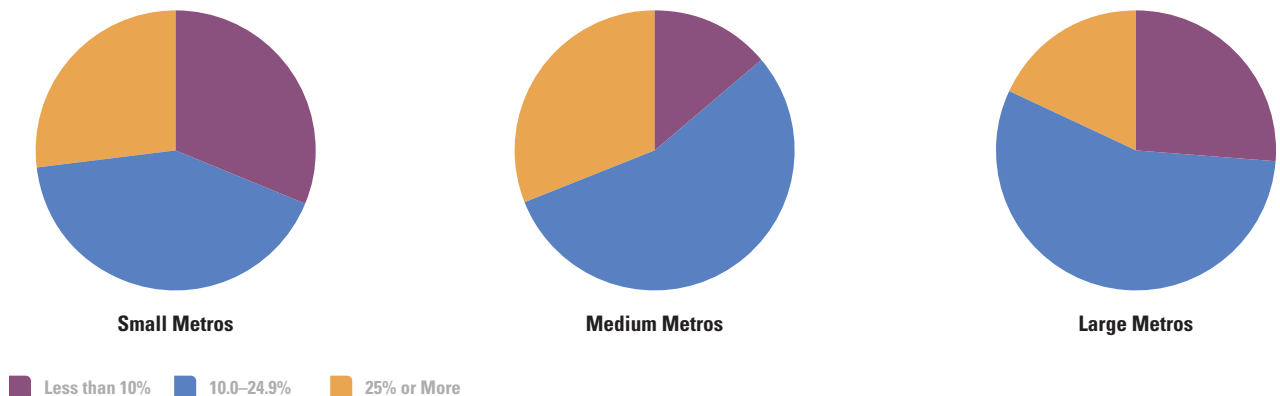
Real percent change in home prices (Q4 to Q4)



Source: Freddie Mac Conventional Mortgage Home Price Index.

## Metros of All Sizes Saw Their Housing Stocks Expand by More Than One-Fourth in the 1990s

Metro area permits issued 1990–2002 as shares of 1990 stock



Note: The 141 small metros had populations of less than 250,000; the 116 medium metros had populations between 250,000 and 1 million; and the 61 large metros had populations above 1 million as of 2000.  
Source: US Census Bureau, Construction Statistics.

of 250,000 to 1 million) accounted for 22 percent of construction growth, small metro areas (with populations under 250,000) for 8 percent, and non-metro areas for 16 percent, for a combined 46 percent of production gains. In fact, new construction has been so feverish in many locations that local ballot initiatives to limit growth have surged.

Topping the list of the fastest-growing metro areas is Las Vegas, where the number of permits issued between 1990 and 2002 nearly equaled the number of housing units that existed in 1990. Permits issued in Atlanta, Austin, Charlotte, Phoenix, Orlando, and Raleigh represent about half the 1990 count of housing units. Building activity was equally intense in the medium-size metros of Naples and Fort Myers on Florida's Gulf Coast, the Texas border town of McAllen, Fort Collins on the outskirts of Denver, Boise City, and Provo. Small metros with strong building activity included Greeley near Denver, Laredo on the US-Mexico border, and Wilmington and Myrtle Beach on the Carolina coasts.

Indeed, the pace of new construction has been brisk in a wide range of places (*Figure 10*). Work done by the Joint Center and Economy.com suggests that both the level and volatility of housing construction are influenced by metro size and economic structure. Activity in smaller places tends to be more volatile overall, although much of this volatility reflects the lack of diversification in their economic bases rather than size

per se. Over the past decade or so, housing construction has generally grown less and been more volatile in locations with economies based on manufacturing than in places with economies based on the healthcare industry.

### Looking Ahead

While the short- and medium-term outlook depends on interest rates and the course of the economy, the longer-term prospects for housing rely far more on demographic trends. Several forces bode well for housing investment over the next 10 years, including higher-than-expected household growth, the aging of the baby boomers into their peak income and wealth years, and the backfilling of the baby bust generation through immigration.

As strong as production was during the 1990s, the level of new construction should thus be even higher in 2005–15. Assuming the 1990s ratio of projected household growth to total housing completions holds over the coming decade, completions should reach at least 18.5 million housing units—and could easily top 19.5 million if immigration continues at current levels. In any case, new construction will exceed the growth of households because a significant fraction of building activity offsets losses from the existing housing stock, adds to the supply of second homes, and accommodates the greater turnover of units that accompanies a larger household base. ■

## Demographic Drivers of Demand

Despite a brief cyclical slowdown following the 2001 recession, 1.3 million net new households have formed each year on average since the start of the decade. Bolstered by strong immigration during the 1990s, household growth has been set upon a higher path that is likely to continue over the next 10 years.

The growing presence of the foreign-born is in turn redefining the age distribution and racial and ethnic composition of the US population. These shifts have important implications

for housing markets in that a larger share of households will be younger, foreign-born, and minority than recently predicted. With their relatively low average incomes, these overlapping groups will add to the demand for modest starter homes and affordable rental housing.

In the meantime, women continue to expand their presence in housing markets as the numbers of dual-earner married couples and unmarried female-headed households remain on the rise. But because women still earn less on average than men do, they are more likely to face housing problems than either married-couple households or households headed by unmarried men.

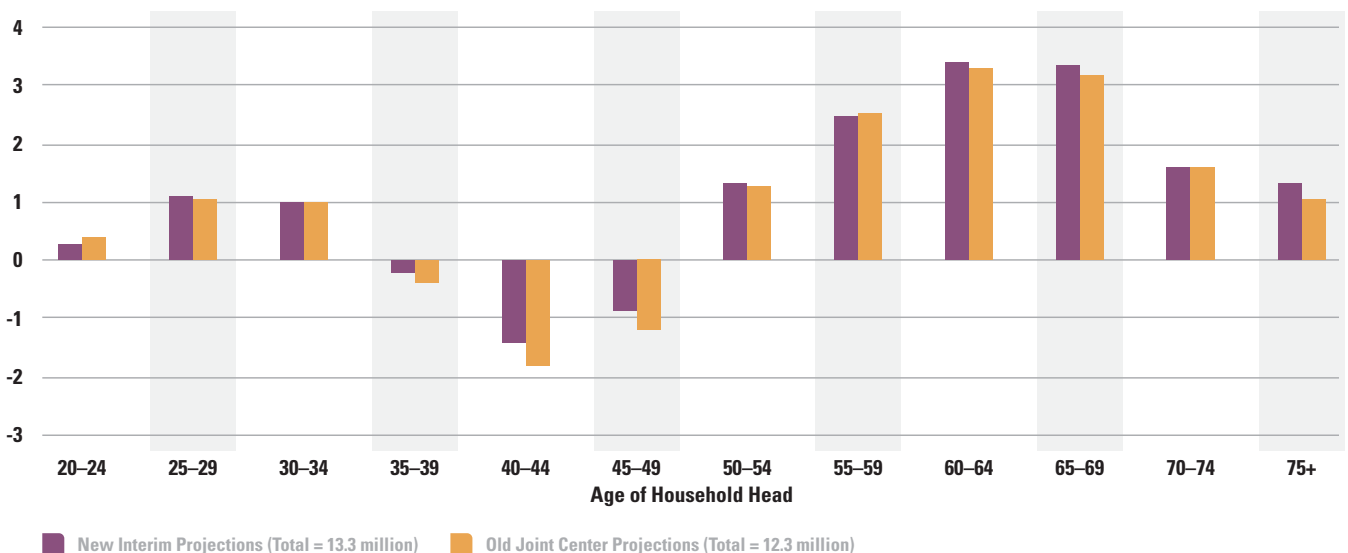
### Household Projections

Future household growth depends primarily on adult population growth. Given the unexpectedly high levels of immi-

Figure 11

### Household Growth Is Now Projected to Reach 13.3 Million Over the Next Decade

Projected household growth 2005–15 (millions)



Source: JCHS Interim Household Projections.

gration in the 1990s, together with other evidence supporting a higher 2000 population count, the Census Bureau has recently revised its population projections. Based on these new estimates, the Joint Center has prepared an interim set of household projections that point to consistently stronger growth ahead (*Figure 11*).

The new household projections assume that the rates at which the population of different ages, races, and ethnicities head their own households remain at the levels reported in the 2003 Current Population Survey. Under this assumption, household growth between 2005 and 2015 will be about 10 percent higher than previously projected—bringing the total increase to 13.3 million households.

The net gain in households largely reflects a smaller-than-anticipated drop in the number of households who will be in their 40s in 2015. Because the vast majority of immigrants are young adults, those who arrived in the 1980s and 1990s have helped to supplement the native baby-bust generation (born

1965 to 1974) and offset larger losses that would have occurred in this age group over the next 10 years. Immigrants have also added to the numbers of the youngest baby boomers (born between 1955 and 1964), thereby lifting the number of households who will be in their 50s in 2015. Finally, longer life expectancies favor stronger growth among the population over 75 years of age than previously predicted.

The impact of future immigration on projected household growth remains somewhat of a wild card. The Census Bureau’s revised population projections assume immigration of only about 8.5 million persons between 2005 and 2015. Current government estimates, however, indicate that immigration has in fact been running at more than 1.2 million per year since 2000 (even faster than the pace of the 1990s). If the influx continues at this higher level, household formations could be as much as 1.0–1.5 million higher over the next 10 years than the Joint Center currently projects.

### The Foreign-Born in Housing Markets

Overall, more than one in ten households is now headed by a person born outside the United States. The shares among younger households are even higher. Furthermore, of the 12 million foreign-born householders in the US in 2000, 3.4 million (28 percent) arrived in this country during the 1990s alone. As a result, the foreign-born contributed more than a third of household growth over the decade and will likely account for an even larger share of growth in the years ahead.

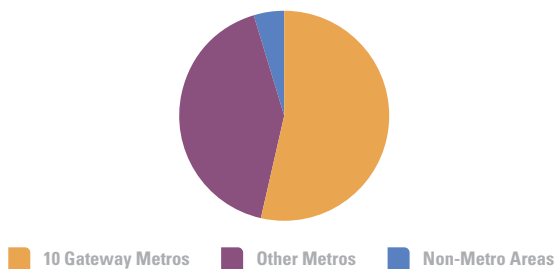
Rapid growth in foreign-born households has added significantly to housing demand. Between 1998 and 2001, foreign-born households purchased about 8 percent of new homes and 11 percent of existing homes sold. The foreign-born also made up 12 percent of first-time homebuyers in 2001, boosting the demand for starter homes. With their relatively low homeownership rates, immigrants played an even more vital role in rental markets—accounting for fully 17 percent of all renters in 2000.

While their homeownership rates lag those of the native-born, many foreign-born citizens eventually become owners. Generally in the country longer than non-citizens, naturalized Americans soon begin to close the homeownership gap. Indeed, among households headed by a person aged 25 to 34, the homeownership rate of foreign-born citizens is on par

Figure 12

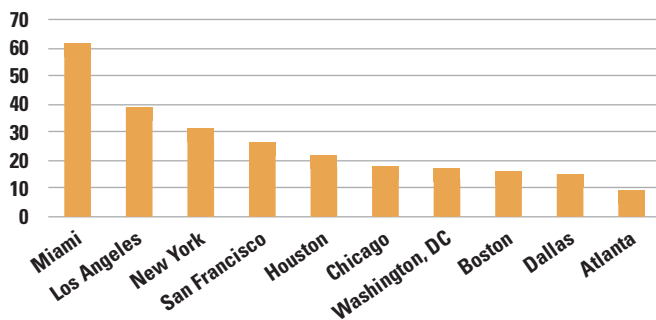
### While Over Half of Immigrant Households Live in Just 10 Gateway Metros...

Distribution of foreign-born households



### ...The Foreign-Born Are a Majority in Only One

Percent of households that are foreign-born



Note: Excludes households where the metro status cannot be identified.  
Source: Table A-12.

with that of the native-born. Among older households, their homeownership rates lag by less than 10 percentage points.

Homeownership rates among non-citizens aged 25 and older, in contrast, are more than 30 percent lower than those of native-born Americans of comparable ages. Much of this gap reflects the fact that most non-citizens have been in the United States only a short time and have yet to establish themselves economically. Many are also unfamiliar with the mortgage application process and may even be unaware that they could qualify to finance a home. Stronger outreach to these newer arrivals could thus increase their homeownership rates.

While important to overall housing demand, the foreign-born are highly concentrated in just 10 metropolitan markets (*Figure 12*). Indeed, these so-called gateway areas are home to over half of all immigrant households. Nevertheless, foreign-born households are increasingly choosing to live in a wider range and expanding number of locations, with 15 states now reporting a foreign-born share of 10 percent or more (*Table A-3*). Immigrants are also making gains in non-metropolitan areas, particularly rural communities of the Southeast,

Southwest, and Pacific Northwest. Although some areas have experienced declines in foreign-born share, they are far outnumbered by places where the share has increased—in some cases dramatically (*Figure 13*).

The foreign-born are highly diverse. While fully one-fifth are of Mexican origin, the next largest immigrant groups are Chinese (with only a 4.7 percent share) and Indian (with a 3.7 percent share). Indeed, only 21 of the more than 900 nationalities represented in this country each make up more than one percent of total foreign-born households.

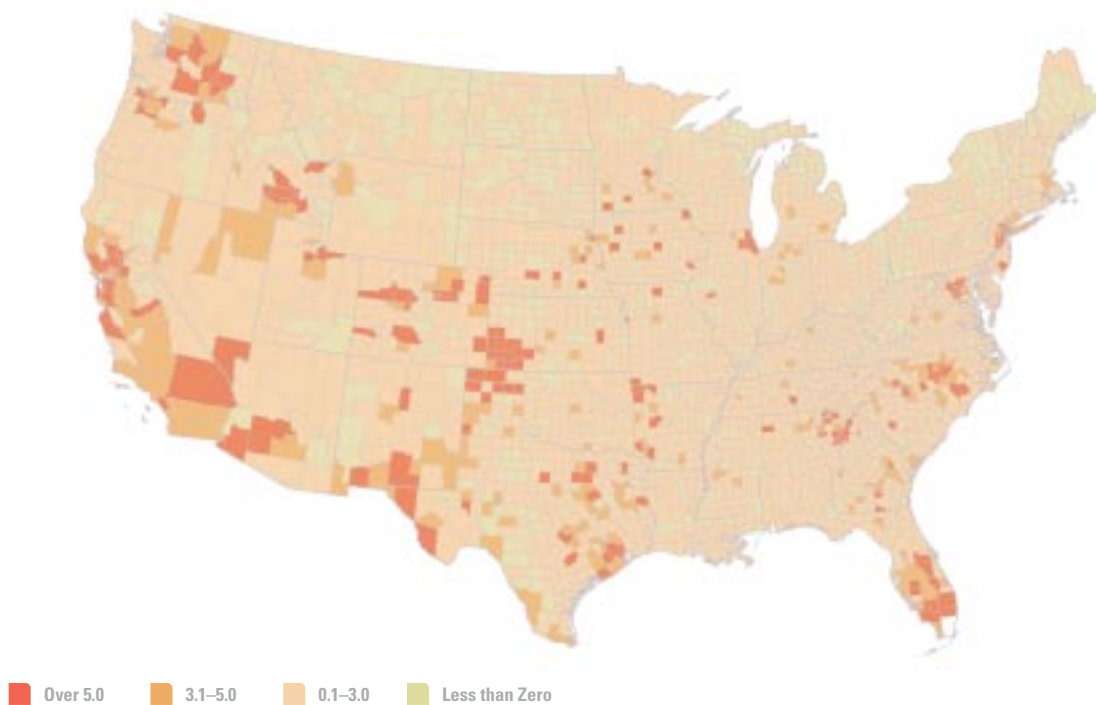
The foreign-born are especially adding to Hispanic and Asian household counts. Two-thirds of Asian and just over half of Hispanic householders now living in the US were born elsewhere, compared with just seven percent of black and five percent of white householders.

But given their numerous countries of origin as well as their settlement patterns, average lengths of stay, education levels, incomes, and reasons for emigrating, immigrants have markedly different homeownership rates. Even within major

## Figure 13

### Despite Their Geographic Concentration, Immigrants Are Gaining in a Variety of Locations

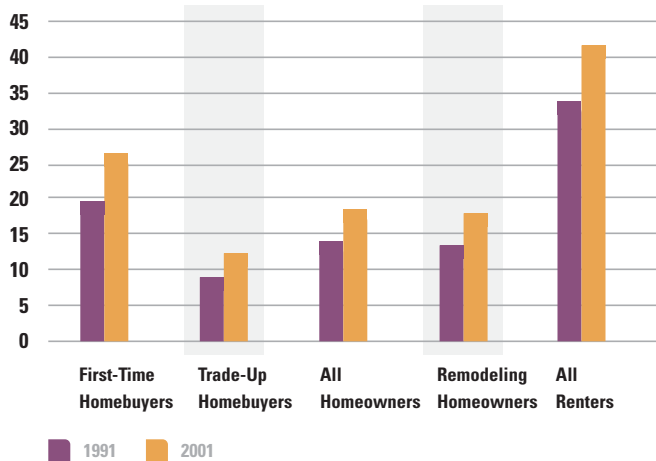
Increase/decrease in foreign-born share of population, 1990–2000 (Percentage points)



Source: 1990 and 2000 Decennial Census.

## Minority Shares in Housing Markets Are Up Across the Board

Percent of households that are minority



Source: JCHS tabulations of the 1991 and 2001 American Housing Surveys.

immigrant groups, substantial differences are apparent. Among Hispanics, for example, Cuban immigrants have a homeownership rate of 58 percent, reflecting in part their relatively long residency in the US and relatively high shares of college graduates. The ownership rate among Mexican immigrants, with their shorter average residency and smaller share of college graduates, is a much lower 44 percent.

Among Asian immigrants, homeownership patterns are equally uneven. In addition, ownership rates do not seem to bear a relationship to education levels and length of stay. Vietnamese immigrants, for example, have a higher ownership rate (54 percent) than Korean immigrants (41 percent), even though they have a smaller share of college graduates and a shorter average residency in the United States.

### The Growing Contribution of Minorities

Largely as a result of immigration, minorities make up an increasingly large share of households. From about 17 percent in 1980, the minority share climbed to 20 percent in 1990 and to 26 percent in 2000, and is expected to reach 30 percent by 2010 and 34 percent by 2020. As a result of this rapid increase, minorities will likely contribute at least two-thirds of household growth over the coming decades.

Minorities are clearly redefining housing markets as they increase as a share of renters, homebuyers, homeowners, and

remodelers (*Figure 14*). After accounting for only 14 percent of homeowners in 1991, minorities were responsible for some 40 percent of the growth in owners over the ensuing decade.

Not surprisingly, minority homeownership gains have bolstered remodeling markets. Of the additional \$64 billion spent on home remodeling in 2000–1 compared with 1994–5, over \$13 billion (21 percent) was due to growth in minority spending. Overall, the remodeling outlays of minority households totaled \$37.8 billion in 2000–1.

Accompanying this trend is the turnover of older housing to minorities as their white owners die or move to newer homes. In fact, between 1991 and 2001, about 2 million homes built before 1985 switched to minority ownership. This older stock tends to require more maintenance and repair than newer homes, suggesting that minority remodeling expenditures are set to increase as they expand their ownership of homes in central cities and inner-ring suburbs.

Minority households—many headed by recent immigrants—have also kept rental demand going during the homeownership boom. Indeed, had it not been for growth in minority renters, the overall number of renter households would have declined rather than increased modestly. Between 1990 and 2000, the number of renter households headed by minorities in the central cities and inner-ring suburbs jumped by more than 2.6 million.

### Persistent Income Gaps

Despite some progress, minority workers still earn much less than whites of similar age and education. For example, the median earnings of college-educated minorities aged 35 to 44 and employed full-time stood at \$46,000 in 2002 while those of their white counterparts were \$11,000 higher. Within the same age group, minorities with some college education working full time earned \$7,000 less than whites, while those with a high school education earned \$5,000 less.

With minorities representing a growing share of all households, the number of middle-income minorities increased by 4.6 million between 1990 and 2000, while the number of upper-income minorities rose by 1.5 million. Among blacks, the share in the bottom income quartile (less than \$21,521 in 2000) declined from 44.2 percent in 1980 to 37.6 percent

## As the number of immigrant, minority, and female-headed households continues to grow over the next 10 years, demand for starter homes and for affordable rentals will increase.

in 2000, while the share in the top quartile (over \$73,000 in 2000) moved up from 11.7 percent to 13.4 percent. Furthermore, even though half of all adult Hispanics are immigrants and many have little education, they too have eked out modest gains in share in the middle and upper income quartiles. Meanwhile, a larger share of Asians than even whites is in the top income quartile (*Table A-9*).

### Women's Expanding Role

Women play a larger role in housing markets today than ever before, thanks to delayed marriage, higher divorce rates, lower remarriage rates, greater longevity, and increasing labor force participation. The shares of two-worker, married-couple households and of households headed by unmarried women have both swelled over the past 20 years.

As the male-female earnings gap has decreased, the contribution of wives' incomes to married-couple households has increased. In fact, the median contribution of wives' earnings rose from 30 percent in 1980, to 34 percent in 1990, and to 37 percent in 2000.

At the same time, unmarried women accounted for 30 percent of the growth in homeowners from 1994 to 2002. Over this period, the number of unmarried females owning homes climbed from 13.9 million to 17.5 million, including increases in divorced owners from 4.2 million to 5.7 million and in widowed owners from 6.7 million to 7.1 million.

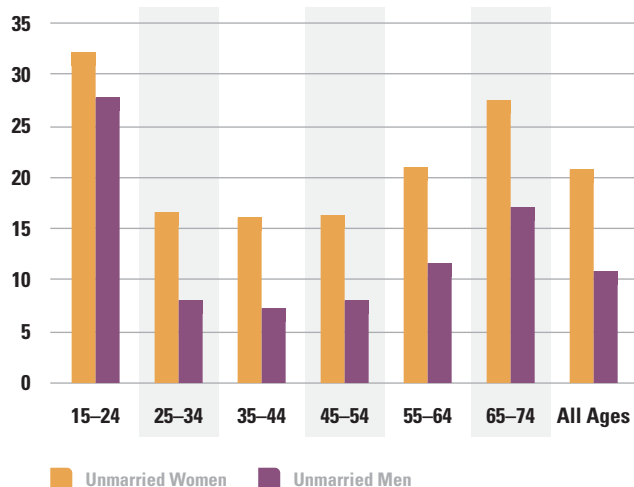
Even so, unmarried women struggle more than unmarried men of comparable ages to pay for housing because their earnings still lag (*Figure 15*). The male-female earnings gap among college-educated, middle-aged workers is especially wide. In 2002, for example, the gap between the median earnings of college-educated men and women aged 35 to 44 employed full-time was \$24,500, for those aged 45 to 54 it was \$25,600, and for those aged 55 to 64 it was \$22,000. By comparison, the gap among 25 to 34 year-olds was only \$10,200.

At the greatest disadvantage are the nation's nearly eight million single mothers. About one-quarter (two million) of these women spend more than half of their incomes on housing, compared with about one-tenth (200,000) of households headed by single fathers. Even relative to other unmarried women, single mothers spend the largest share of their incomes on housing.

Figure 15

### More Unmarried Women than Unmarried Men Struggle to Afford Housing

Percent of household heads with severe cost burdens



Note: Severe cost burdens are defined as spending 50% or more of monthly income on housing.

Source: JCHS tabulations of the 2001 American Housing Survey.

### Looking Ahead

The pace of household growth over the next 10 years is expected to surpass that over the last 10. Together with the wealth gains achieved by each age group in the 1990s, strong household growth should propel residential fixed investment, mortgage debt, and home sales to unprecedented heights.

Immigration will continue to shape housing demand and lift both the minority and young adult shares of households. Meanwhile, as women continue to make economic progress, they will expand their participation in housing markets. In response to the rapid growth of these groups, the housing industry and housing finance system will continue to develop additional products and marketing strategies to better serve lower-income households in general, and minority, foreign-born, and female-headed households in particular. ■



## Homeownership

With interest rates near 45-year lows, home sales and mortgage refinances reached new heights in 2003. Existing single-family home sales climbed 9.6 percent and new single-family home sales rose 11.5 percent, while mortgage refinances shot up by an astounding 71 percent.

In combination, low rates, mortgage innovations, and home price appreciation helped push the national homeownership rate up to 68.3 percent. Home price appreciation and new housing construction lifted aggregate real home equity 6 per-

cent to a record \$8.4 trillion in the last quarter of 2003. Unlike stock wealth, aggregate home equity has moved up steadily for the past 40 years with only brief, shallow dips (*Figure 16*). Housing wealth is also more broadly based than stock wealth. Indeed, with the strong growth of home equity, homeownership has now reasserted itself as the cornerstone of household wealth.

### Affordability Conditions

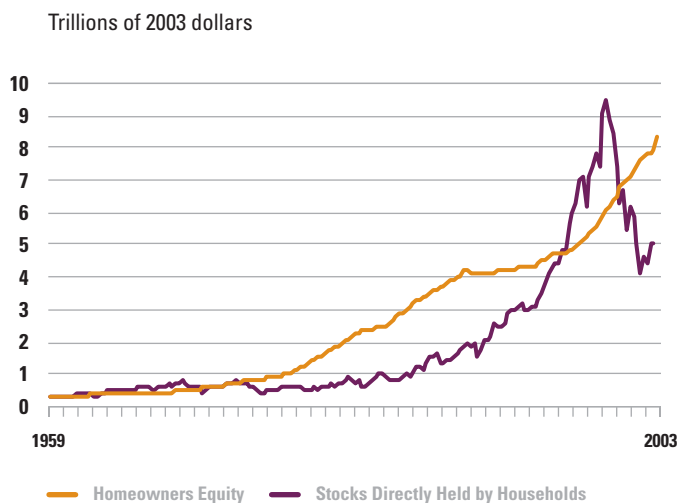
Thanks to lower interest rates, after-tax mortgage payments in 2003 fell for buyers of a median-priced home—assuming they could come up with the additional downpayment demanded by higher home prices. But even with real home price appreciation at 5.9 percent, after-tax payments for buyers putting 10 percent down on a 30-year fixed-rate mortgage were still marginally lower than in 2002 (*Table A-1*). As a result, the share of income typical homebuyers put toward monthly housing costs changed little last year.

Home prices were up in nominal terms in all 163 metropolitan areas tracked by Freddie Mac's Conventional Mortgage Home Price Index. Even after adjusting for inflation, only four metro areas posted home price declines last year. Some 34 metros—15 of which are in California—saw double-digit increases. In markets with these outsized gains, housing affordability is a growing concern.

Higher house prices force prospective buyers to come up with larger downpayments, choose less expensive homes, or increase the amount that they borrow. Over the short run, strong home price inflation has not seriously eroded affordability because lower interest rates enabled homebuyers to borrow more with little impact on their monthly payments. From 2002 to 2003, for example, a 10 percent downpayment on a typical home increased by \$1,190. Buyers who could not

Figure 16

### Aggregate Home Equity Is More Stable than Aggregate Stock Wealth



Source: Federal Reserve Board, Flow of Funds Accounts, Quarterly Data.

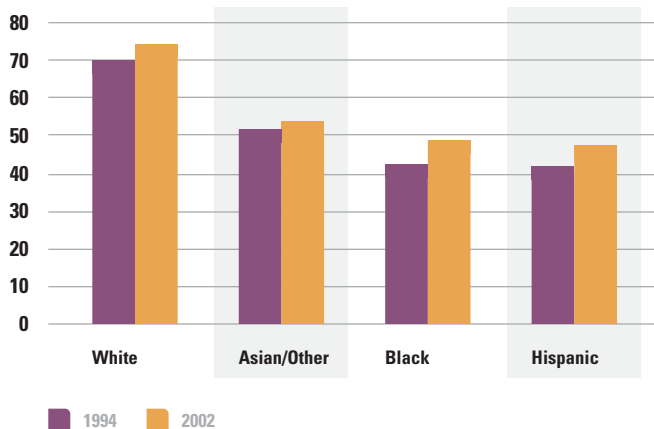
save that much and instead rolled the additional amount into the mortgage paid only \$4.54 more per month than they would have in 2002.

Over the long run, though, the erosion in affordability is much greater for homebuyers unable to keep up with escalating downpayment requirements. For example, the difference between a 10-percent downpayment on the median-priced home in 1995 and in 2003 is substantially more at \$6,350. If the buyer rolled this larger amount into the mortgage, the payments (including mortgage insurance) would be about \$54 more each month.

**Figure 17**

### Despite Recent Gains, Minority Homeownership Rates Still Lag

Homeownership rate (Percent)



Notes: Due to changes in the racial definitions in 2003, 2002 data are used. 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-6.

Despite the obstacles imposed by higher home prices, the homeownership boom has been remarkably broad-based. Homeownership rates are up across all ages, household types, races, and ethnicities. Even so, the wide and persistent gap between white and minority homeownership rates has improved little since 1994 (*Figure 17*).

### Finance Fueling the Boom

The ability to tap into broader capital markets both here and abroad has helped to meet the skyrocketing demand for mortgage credit. Indeed, the nation's housing finance system attracted enough capital to originate an astounding one-half of the \$6.8 trillion in home mortgage debt outstanding at the

end of 2003. Meanwhile, total mortgage debt expanded by \$620 billion last year.

The housing finance system has also boosted homeownership rates by extending credit to buyers who would have previously been denied a mortgage. Credit-impaired borrowers or those willing to devote larger shares of their income to housing payments now qualify for subprime mortgages. As a result, the subprime share of loans surged from under one percent in the early 1990s to six percent of home purchase loans and ten percent of refinance loans by 2001 (*Table A-7*). All in all, subprime lending mushroomed from a roughly \$43 billion market in 1994 to a \$385 billion market in 2003.

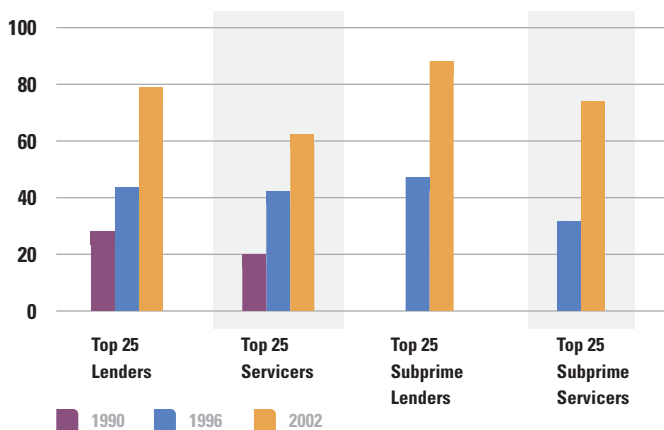
But mortgage interest rates and fees are substantially higher in the subprime than in the prime market. Even a two percentage-point premium on an \$85,000 loan (typical of low-income homebuyers) entails additional interest payments of about \$18,000 just halfway into a 30-year fixed-rate loan. A loan that is five percentage points above prime rates imposes nearly \$47,000 in additional interest after 15 years. Subprime loans may also carry prepayment penalties, limiting borrowers' ability to refinance if rates fall or if their financial circumstances improve. Furthermore, while 90 percent or more of subprime borrowers manage to repay their mortgage loans, large numbers also lose their homes to foreclosure.

Fortunately, the introduction of automated underwriting and credit-scoring tools in the 1990s also coincided with growth in the share of applicants able to qualify for lower-cost prime loans. For example, Freddie Mac's minority share of loan purchases increased from 8.5 percent in 1995 (when it first started using automated underwriting) to 14.9 percent in 2000. Over the same period, the share of loans to borrowers with incomes below the area median increased from 32 percent to 41 percent. As a result, prime credit is now more accessible to low-income and minority mortgage applicants.

Automation has also helped to speed approvals and lower origination costs. Indeed, initial mortgage fees and charges as a percent of loan value dropped from a high of 2.6 percent in 1982 to a low of about 0.4 percent in 2003. As a result, rather than a full percentage point or more, it now takes only a 50 basis-point dip in mortgage interest rates to trigger a wave of refinancing activity.

## Mortgage Origination and Servicing Have Become Highly Consolidated

Percentage of originations or servicing contracts



Notes: In 1990, subprime loans were less than 1% of the market. The lender is the bank or mortgage company that makes the home loan. The servicer administers the loan.  
Source: Inside Mortgage Finance, The 2003 Mortgage Market Statistical Annual.

### Efficiencies from Industry Consolidation

Consolidation in the mortgage industry has led to greater efficiencies. In 1990, the largest 25 mortgage companies originated fewer than 3 in 10 prime loans (*Figure 18*). Today, the top 25 issue almost 8 in 10. On the subprime side, the top 25 share of originations is even higher, nearly doubling from 47 percent in 1996 to 88 percent in 2002.

**As recently as 1990, only 40 percent of single-family mortgage loans were securitized and sold into the secondary market. Today, that figure is approaching 60 percent.**

These mortgage giants compete fiercely and harvest massive amounts of information to find new ways to improve their operations. Using low-cost marketing and outreach techniques, mortgage lenders battle to attract customers during refinance booms. While homeowners once had to figure out for themselves when it was advantageous to refinance, some lenders now alert them to the opportunity and encourage them to do so—at lower cost—with lender affiliates. This competition has spurred additional refinance activity.

Automated systems and scoring techniques have also helped servicers separate borrowers in default who are likely to get back on track from those who are likely headed toward fore-

closure. These systems have reduced servicing costs and increased loan reinstatements. Avoiding foreclosures benefits everyone from investors, credit risk insurers, and servicers to homeowners and communities.

Mortgage industry consolidation has, however, altered the relationships between community-based organizations and lenders at the local level. Under regulatory pressure throughout the 1980s and 1990s, banks worked with community groups to create innovative products for hard-to-serve borrowers. Indeed, bank-lending consortia pioneered products and underwriting techniques later adopted by the secondary market. Now community organizations must forge relationships with larger bank and non-bank institutions to accomplish their missions.

### Foreclosure Risks

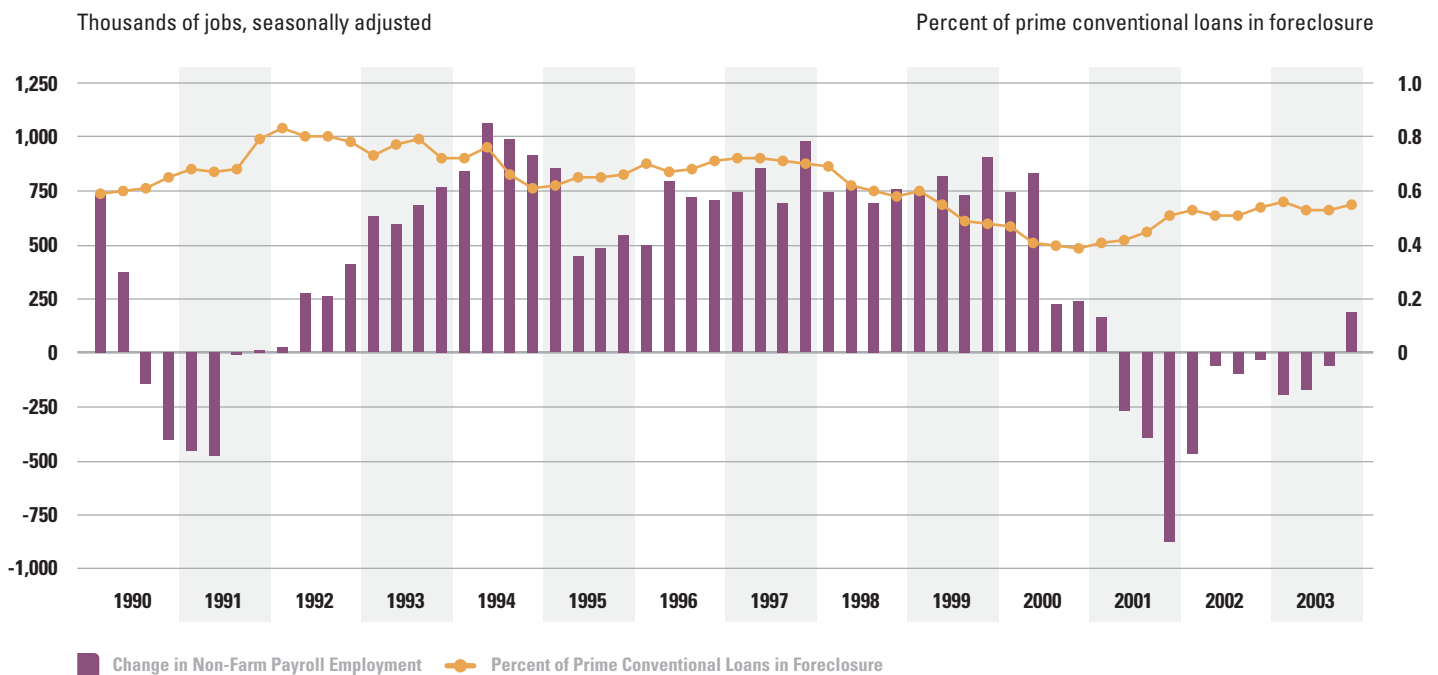
Strong home price appreciation has provided most homeowners with healthy equity cushions. When last measured in 2001, almost 9 in 10 owners had equity equal to 20 percent or more of their homes' value, while only 1 in 25 had equity of less than 5 percent. This has surely helped to avert higher rates of foreclosures since many owners can sell their homes for more than the purchase price if they have serious loan repayment problems. In addition, lower interest rates give lenders

more room to negotiate loan modifications to reduce monthly payments, providing a viable alternative to foreclosure for distressed borrowers.

Foreclosure rates on conventional prime loans, although up in the wake of the recession and subsequent layoffs, were nevertheless lower at the end of 2003 than when employment was expanding in 1998-9 (*Figure 19*). Payments on just 0.3 percent of such loans were more than 90 days late, while 0.55 percent of prime loans were in foreclosure. The comparable shares of subprime loans were significantly higher, at 2.55 percent and 5.63 percent. And the share of FHA loans in foreclosure at the end of 2003 reached a record 2.93 percent.

Figure 19

### Despite Recent Job Losses, Foreclosures on Prime Conventional Loans Remain Relatively Low



Note: Loans in foreclosure represent the inventory at the end of the quarter.  
Source: Bureau of Labor Statistics and Mortgage Bankers Association.

Subprime borrowers are clearly more vulnerable than prime borrowers to default even when home prices are rising. Complicating matters, subprime lending is heavily concentrated in low-income, predominantly minority communities (*Figure 20*). Reminiscent of the late 1960s when FHA loan insurance became available in previously redlined communities, the rapid expansion of subprime lending has led to rising defaults in many of these locations. When foreclosures are geographically concentrated, they can threaten revitalization efforts as homes that lenders want to unload quickly flood the market.

Homeowners with adjustable-rate mortgages are also vulnerable in a rising interest-rate environment. In fact, during and after the 2001 recession, overall credit losses remained relatively modest in part because interest rates were so low. Favorable interest rates persuaded more borrowers to take out fixed-rate mortgages and reduced the monthly payments on adjustable-rate loans. If interest rates rise, the share of bor-

rowers choosing one-year adjustable mortgages will likely rise as well. New and existing adjustable-rate mortgage borrowers will then be subject to higher monthly payments if interest rates continue to increase.

At present, the states with the highest exposure to payment shocks from rising rates are California, Colorado, the District of Columbia, Illinois, Massachusetts, Michigan, and Minnesota. According to the Federal Housing Finance Board, the adjustable-rate share of mortgages originated in 2003 in each of these locations is 25 percent or more, compared with just 9 percent for the rest of the nation. At the metropolitan level, the adjustable-rate shares of originations in Denver, Detroit, San Diego, and San Francisco were one-third or more in 2003.

Homeowners with severe cost burdens are also at risk. As of 2001, 2 million borrowers in the middle two income quartiles spent half or more of their incomes on housing (including

## The subprime share of refinances in low-income, predominantly minority communities is fully 20 percentage points higher than that in high-income, predominantly white communities.

property taxes and utilities). That number is likely even higher today following three years of sustained job losses and the expansion of subprime lending at high debt-to-income ratios.

Many low-income borrowers have inadequate savings and are unprepared to handle a job loss or unanticipated expenses. This has led financial institutions and others to create programs that allow borrowers to miss a certain number of payments, for pre-specified reasons, in return for a higher interest rate or a monthly fee. These products resemble the debt cancellation programs that have long been a staple of the credit card industry.

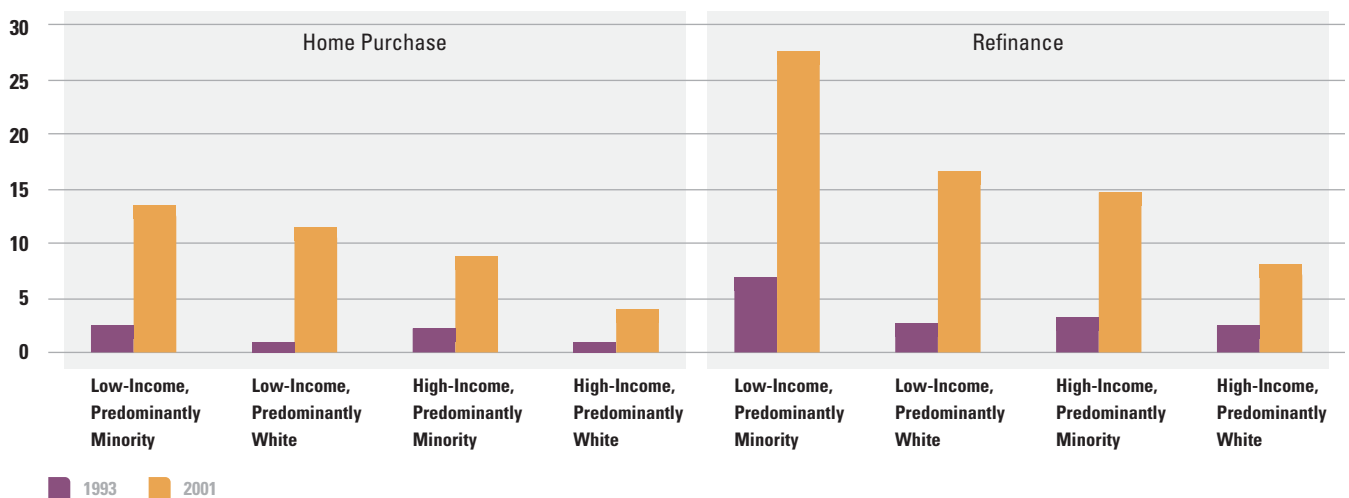
### Looking Ahead

The combination of rapid home price appreciation and low interest rates has produced unusually favorable conditions for homeownership. The scope of future gains and losses will depend on whether these conditions persist and what direction job and income growth takes. In the meantime, risks in the system remain relatively contained. Most worrisome are the many homeowners with scant savings who are spending half or more of their incomes on housing, along with the growing share of subprime borrowers who are by definition more likely to default. If the recovery stalls, these owners will be at substantially higher risk of losing their homes. ■

Figure 20

### Subprime Lending Is Much More Prevalent in Low-Income and Minority Communities

Subprime share of loans (Percent)



Notes: Includes only loans made in metropolitan areas as defined by the Office of Management and Budget for 1993 Home Mortgage Disclosure Act (HMDA) reporting. Predominantly white neighborhoods were less than 10% minority in 1990. Predominantly minority neighborhoods were 50% or more minority as of 1990. Low-income neighborhoods had incomes of less than 80% of metro area median in 1990, while high-income neighborhoods had incomes of 120% or greater.  
Source: JCHS tabulations of enhanced HMDA database.

## Rental Housing

Rental markets softened in many parts of the country in 2003 as the combination of weak labor markets and rising homeownership took its toll. While house prices climbed nearly everywhere, rents fell in 9 of the 27 metros tracked by the federal government. Nationally, real contract and gross rents barely increased last year.

Still, the upward creep in rents along with recent income losses pushed the median share of income renters spend on housing back up to 29 percent—about where it stood in 1994

(*Figure 21*). The recession was especially hard on renters in the bottom two income quintiles, whose median incomes dropped four percent in 2001–2.

Broad rental market measures mask the fact that average real effective rents (contract rents less concessions offered by landlords to attract tenants) for larger properties actually fell in 2003. At least in this segment of the market, rents have declined modestly since 2001 after several years of strong growth—particularly in areas where the technology bubble formed and then burst.

In response to the drop-off in demand, producers of multifamily (2+ unit) rental properties cut back on construction last year. Starts of multifamily rentals edged down from 275,000 units in 2002 to 262,000 units in 2003. This reduction was not enough, however, to stop the multifamily rental vacancy rate from climbing to a record-setting 10.7 percent.

Despite the softness in rents, property owners increased their spending on improvements and repairs last year. Expenditures were up 7.5 percent in 2003, on top of a 6 percent gain in 2002. However, this spurt of investment follows a prolonged period of cutbacks and sub-par gains in rental improvement and repair spending.

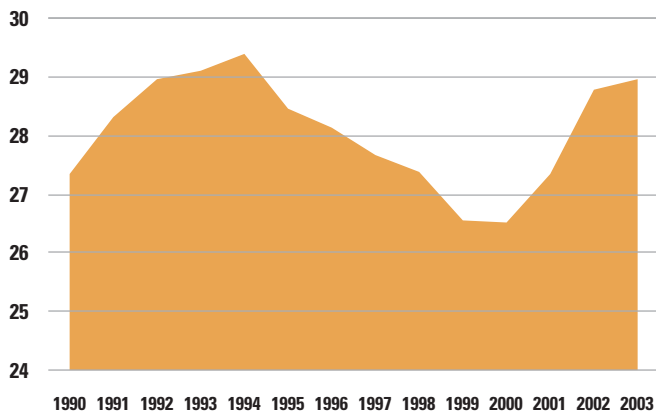
### The Uneven Recovery

In general, the rental markets that held up the best in 2003 were in areas experiencing the strongest economic growth, including those in Florida and Southern California, and especially in metros with strong ties to the defense industry, such as Baltimore, Jacksonville, and Los Angeles (*Figure 22*). The hardest-hit markets include places with large technology sectors, such as Austin, San Jose, and Seattle—all of which saw real effective rents drop by more than six percent.

Figure 21

### Renter Affordability Problems Are Back on the Rise

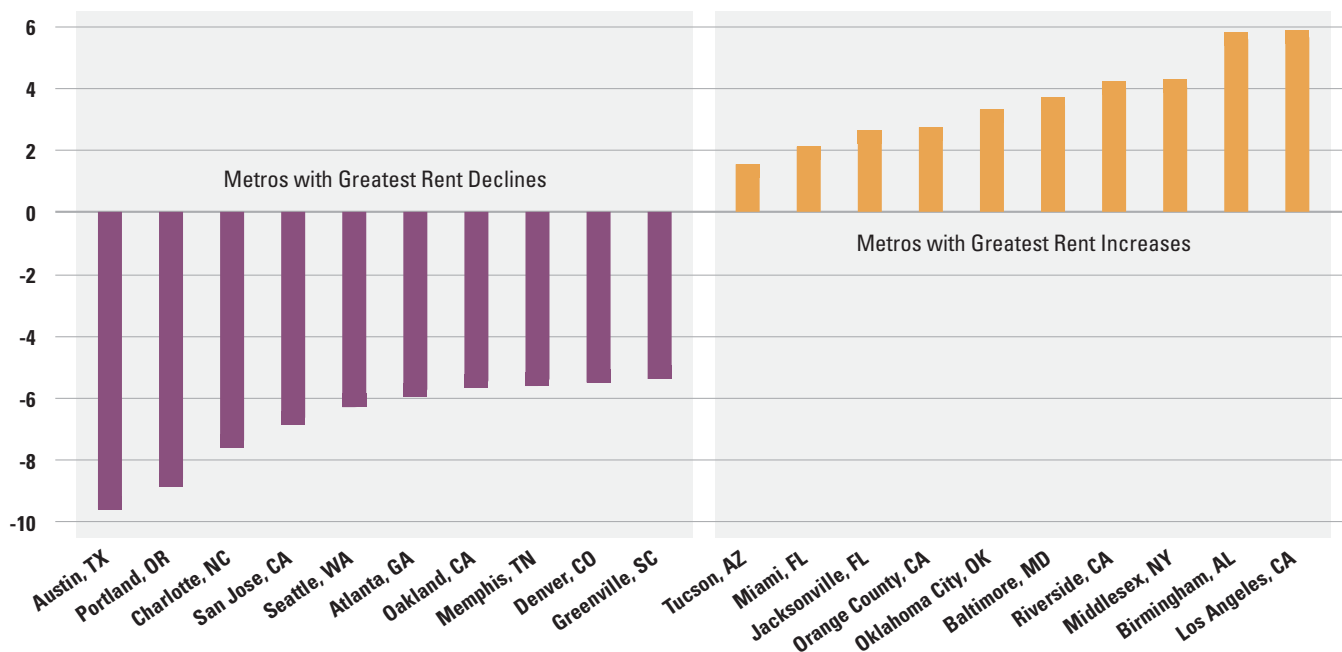
Median share of income spent on gross rent (Percent)



Source: Table A-1.

### Rental Market Performance Has Been Mixed

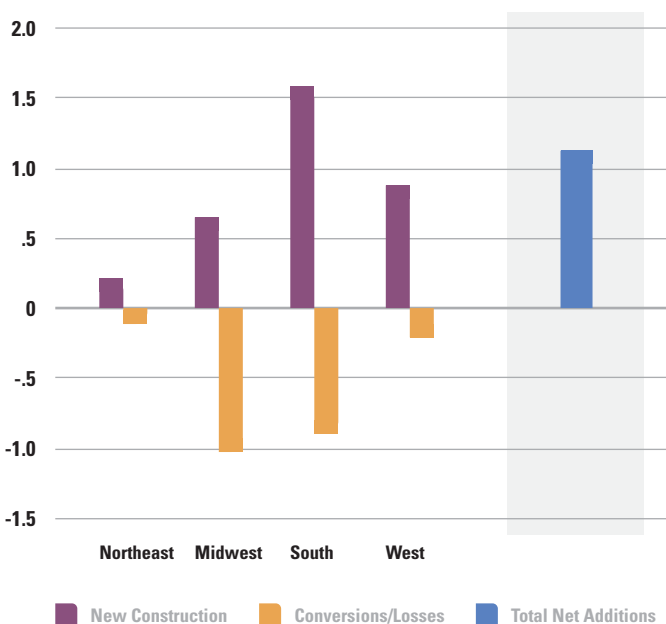
Percent change in real effective rents on large properties, Q4 2002–3



Notes: Metros shown are the top and bottom 10 by change in real rents among the 58 metro areas surveyed by M|PF Research. All rent changes are shown net of inflation using the CPI-U. Effective rents are net of concessions. Large properties have 40 or more units except in California metros, which have 15 or more units. Rent increases/decreases are measured fourth quarter to fourth quarter. Source: M|PF Research, Inc.

### New Construction Has Offset Losses from the Stock

Change in rental stock 1991–2001 (Millions of units)



Source: JCHS tabulations of the 1991 and 2001 American Housing Surveys.

Although rents for units in larger properties declined on average last year, they did so at a slower pace than in 2002. Rents for newer and especially higher-end units were under the most pressure. In 2002, only 59 percent of newly completed units were leased up within 3 months. While the absorption rate began to improve in 2003, it fell off again in the second half of the year. Vacancy rates on rental units built since 1990 continued their ascent, edging up from 15.3 percent in 2002 to 16.5 percent in 2003.

To fill units, many landlords resorted to rent concessions. A survey by M|PF Research conducted in the fourth quarter of 2003 reveals that 41 percent of the properties surveyed were offering some kind of concession, typically a discount of 11.5 percent off market rents. Concessions were most common in markets with high vacancies and falling effective rents, with more than half of the surveyed properties in Atlanta, Houston and the San Francisco Bay Area (including Oakland and San Jose) reporting rent breaks.

With the economy improving, however, some soft rental markets have begun to revive. In particular, the decline in average

inflation-adjusted effective rents slowed to near-zero in 2003. Indeed, it appears average rents nationally will eke out some gain this year even with concessions.

Furthermore, 32 percent of developers surveyed by the National Multi Housing Council in April 2004 reported that rental markets were tightening, while only 14 percent reported loosening conditions—the best showing in four years. While welcome news to property owners, stronger rental markets will likely erode affordability in a growing number of locations in the coming years.

### Changes in the Rental Stock

Despite the slow growth in rental demand since homeownership demand took off, nearly 3.3 million new rentals were built between 1992 and 2001 (*Table A-11*). However, most of these units were built to offset losses from the existing stock. Indeed, for every three rental units added during this interval, two were removed. In the Midwest, new construction did not even fully cover the loss of one million rentals, while in the Northeast, additions only exceeded losses by 100,000 units (*Figure 23*). Rental demand grew more strongly in the South

and West, where new construction added substantially to rental stocks in many metro areas (*Figure 24*). As a result, the shares of rental housing and renter households in these two regions have increased.

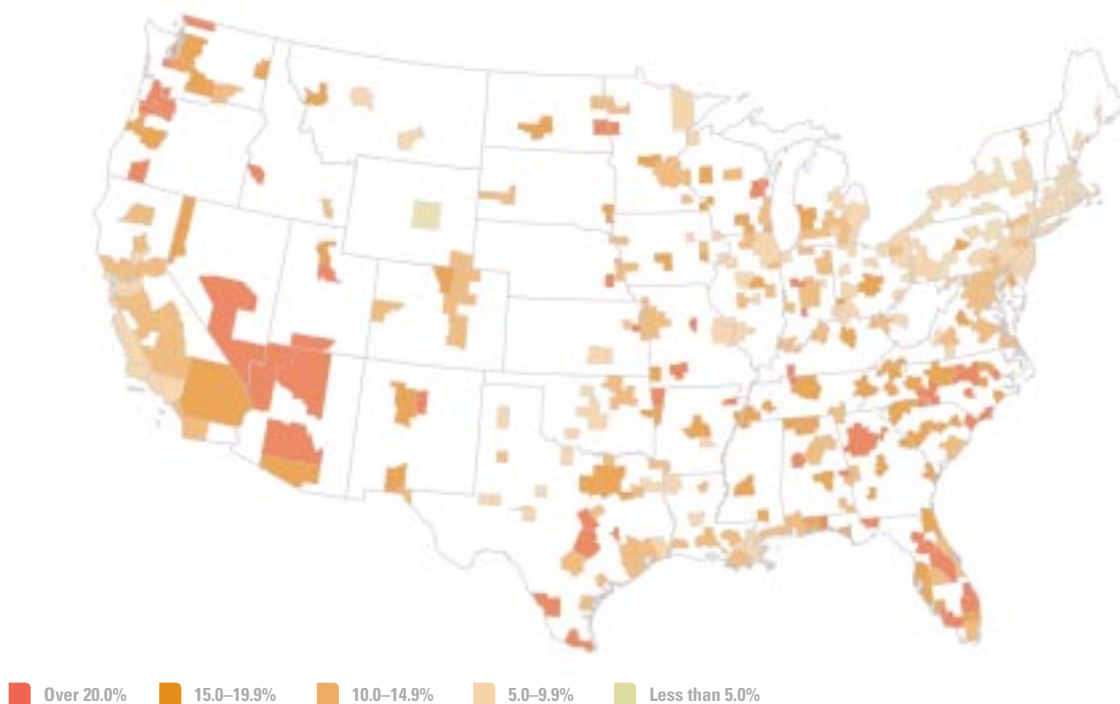
These changes have altered not only the geographical distribution of the rental housing stock, but also the distribution of units by structure type. Over the decade, more than 1.3 million apartments in two- to four-unit buildings were lost nationwide while only 450,000 were added. Net losses were concentrated in the Northeast and Midwest, where the stock of rentals in these small structures shrank by more than 15 percent. Along with these losses went many opportunities for resident landlords to own homes while also generating income from their properties.

In contrast, nearly 750,000 single-family rentals and 1.3 million units in buildings with five or more apartments were gained on net in the 1990s. Construction of larger properties added 1.7 million apartments, while both new construction and conversion of owner-occupied homes fed the growth in single-family rentals. Indeed, despite the strength of home-

## Figure 24

### Despite Only Modest Net Growth Nationally, Rental Construction Has Been Intense in Some Metros

Share of 2000 metro area rental stock built in the 1990s

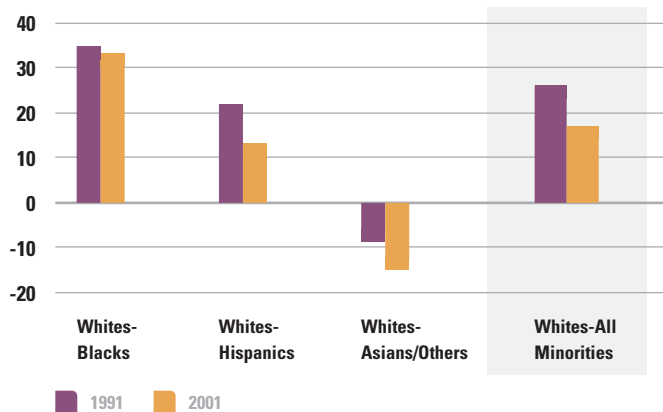


Note: Metro areas are based on 1999 boundaries as defined by the Office of Management and Budget.  
Source: 2000 Decennial Census.



## The Income Gap Between White and Minority Renters Has Narrowed

Percent difference in median incomes, 1991–2001



Note: Blacks, Whites and Asians/others are non-Hispanic. Hispanic householders may be of any race. Asians/others includes Pacific Islanders, Aleuts and Native Americans.  
Source: JCHS tabulations of the 1991 and 2001 American Housing Surveys.

ownership demand over the decade, conversions of single-family homes to renter occupancy outnumbered conversions of single-family rentals to owner occupancy by 270,000.

The recent pattern of rental additions and losses has also served to shift the stock toward the higher end of the rent distribution, since newer units tend to provide more amenities than older ones. In 2001, nearly half of the units built since 1990 were renting for at least \$750, compared with only 29 percent of those built earlier.

While depreciation of the stock clearly accounts for some of the lower rents on older units, the difference in the features that older and newer units offer is also a key factor. In 2001, for example, only 15 percent of rental units built before 1990 had two or more bathrooms, while almost half of the units built since then had multiple bathrooms. Similarly, the share of older units with central air conditioning was 40 percent, while that of newer units was three-quarters.

Although new construction over the past 10 years has been disproportionately concentrated in the top fifth of the rent distribution in individual metropolitan areas, building for the “middle market” (units with rents between the 40th and 80th percentile) has also been robust. Indeed, when summed across metropolitan and non-metropolitan areas, the middle-market share of new construction nationally is in line with its 40 percent share of the overall rental market.

Middle market rentals provide a vital source of new housing for those seeking relatively modest rents—primarily low- and moderate-wage working families. But in the lower market (the bottom 40 percent of the rent distribution), new construction is highly constrained by the amount of government subsidies available to make this production economic. As a result, only about one-fifth of all new rental construction over the past decade has been targeted to the bottom tier of the market.

### Demographic and Income Changes

While the number of renter households has grown only slowly since 1990, the composition of the renter population has changed dramatically. Over the course of the decade, the minority share of renters jumped from 31 percent to 39 percent, while the foreign-born share grew from 12 percent to 17 percent. With incomes of minority and foreign-born renters generally lower than those of white and native-born renters, this shift has lowered the median income of renters overall.

Indeed, the growth in minority and foreign-born renters increased the number of low-income renters by 400,000 over the decade. Meanwhile, the homeownership boom encouraged millions of higher-income renters to buy, reducing the number of upper-income renters by 10 percent. As a result, the already large income gap between owners and renters widened from \$18,700 in 1991 to \$22,100 in 2001.

Within the renter population, though, the income gap between whites and minorities narrowed significantly. Given the decrease in the number of white renter households of all incomes, the median income of white renters remained essentially unchanged from 1991 to 2001. In the meantime, minority renter incomes increased by a strong 13 percent as the booming economy drove up the share of minority renters in the middle income quintile. In combination, these shifts reduced the difference between white and minority renter incomes from 26 percent in 1991 to 17 percent in 2001 (*Figure 25*).

### Rental Property Finance

As with financing for homeownership, rental property finance has changed dramatically over the past 10 years. Most notably, the share of multifamily mortgages (defined in the industry as loans to properties with five or more apartments) bought and sold in the secondary market has increased. Nonetheless, the multifamily share of loans sold as mortgage-

backed securities and traded in capital markets still stands well below the so-called single-family (defined as one- to four-unit properties) share (*Figure 26*). The growth of the secondary market for multifamily mortgages brings many advantages, including greater liquidity, better diversification of risk for investors, and a larger and more stable supply of capital.

While investment banks and others have led the way, Fannie Mae and Freddie Mac are becoming increasingly important players in the multifamily market. The two companies now account for nearly 25 percent of total multifamily mortgage debt outstanding, up from just 13 percent in 1997. The participation of Fannie Mae and Freddie Mac has also transformed multifamily finance by standardizing underwriting practices and loan documents. Greater uniformity in turn reduces costs and further enhances liquidity. In addition, because of their public charters, the two companies often provide capital when others might not.

Within the multifamily mortgage market, though, smaller loans mostly bypass the secondary market. Instead, bank and thrift portfolio lenders remain the principal providers of loans for properties with 5 to 49 units. In 1999, for example, more than half of all multifamily loans financed by banks and thrifts had balances of \$1 million or less, compared with about 15 percent of the multifamily loans financed by Fannie Mae and Freddie Mac.

In contrast, financing for rental properties with fewer than five apartments is much better integrated into secondary markets. Loans to resident landlords of two- to four-unit properties are treated much like those for owner-occupied, single-family properties. Although Fannie Mae and Freddie Mac's reserve and downpayment requirements may be higher for these loans, the interest rates are no different and credit scores remain an important element in underwriting. For investors in single-family rentals and non-resident landlords of two- to four-unit properties, however, Fannie Mae and Freddie Mac impose larger downpayment requirements and a 1.5 percent age-point delivery fee (sometimes rolled into a slightly higher interest rate).

Despite these advances, after-tax rental property financing in most cases is still more expensive than after-tax financing for owner-occupied properties. In particular, the depreciation allowances and losses extended to investors in rental housing are less generous than the mortgage interest and property tax deductions extended to investors in owner-occupied housing.

### Looking Ahead

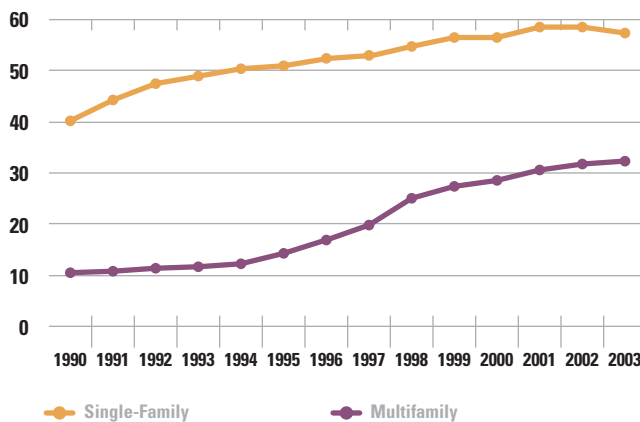
Buffeted by the recession, sagging labor markets, and strong demand for homeownership, growth in rental demand has been weak for the past 10 years. Rents in many markets have been under pressure, with newer properties especially hard-hit. Nevertheless, more markets saw rents climb than fall in 2003, with a few reporting hefty increases. Any imbalances between supply and demand may, however, prove temporary if the economy continues to expand and generate new jobs. In fact, rental demand could even surge if interest rates and/or house prices rise, making homeownership less affordable.

Independent of the economy, the age distribution of the US population will soon start to favor rental markets. The foreign-born population continues to swell the ranks of young adults, and the echo baby-boom generation will soon be old enough to form their own households. Because both young adults and the foreign-born are more likely, at least initially, to rent than own their housing, these demographic trends point to strengthening rental markets over the coming decade. ■

Figure 26

### Securitized Mortgages Represent a Growing Share of Multifamily Lending

Percent of mortgage debt outstanding held in mortgage-backed securities



Note: Single-family properties have 1-4 units, multifamily properties have 5+ units. Share of debt is as of the fourth quarter from 1990 to 2002, and as of the third quarter in 2003.

Source: Federal Reserve Board.

## Housing Challenges

Despite unusually strong income growth in the 1990s, an astonishing 95 million Americans had housing cost burdens or lived in crowded or inadequate conditions in 2001. In fact, more than twice as many people in this country face housing problems as lack health insurance.

Affordability is by far the most prevalent challenge, although crowding made a comeback in the 1990s. In addition, 1 in 50 households live in housing that is seriously substandard. And, on any given night, at least 850,000 people are homeless. Over the course of a year, the number of Americans experi-

encing some period of homelessness—many of them children—is in the range of 2.5–3.5 million.

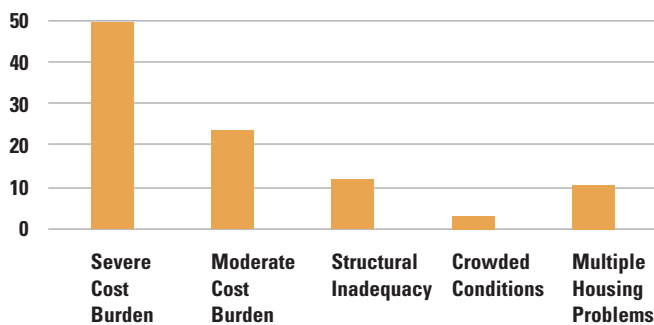
The worst housing problems are overwhelmingly concentrated among those at the bottom of the income distribution (*Figure 27*). Nevertheless, the number of middle quintile households (earning \$32,000 to \$50,000) who spent 30 percent or more of their incomes on housing jumped from 3.2 million in 1997 to 4.5 million in 2001.

Even full-time workers earning the minimum wage cannot cover the costs of a basic one-bedroom apartment at local fair market rents without topping 30 percent of income. Households depending on the earnings from a single low-wage job, especially if it is part-time, must therefore sacrifice other basic needs to remain in their homes. Many low-income seniors also face this struggle, including many on fixed incomes who have paid off their mortgages but are confronting rising property taxes.

Figure 27

### Large Shares of Low-Income Americans Have Housing Problems

Percent of bottom income quintile households



Notes: Severely cost-burdened households are those spending 50% or more of monthly income on housing. Moderately cost burdened households are those spending 30–49% of monthly income on housing. Structural inadequacy is defined by HUD. Crowded households are those with more than one person per room. The cut-off for the bottom income quintile in 2001 was \$17,500.

Source: JCHS tabulations of the 2001 American Housing Survey.

### Low-Wage Worker Woes

Many of the nation's most urgent housing challenges arise from what might be called an income problem. The millions of low-wage jobs that the economy creates do not provide enough income to enable workers to afford even the most modest housing.

The 2000 Census reported that about 128 million workers earned at least the equivalent of the federal minimum wage of \$5.15 an hour. Of these, about 32 percent earned merely \$5.15 to \$10.30 an hour (one to two times the minimum wage), while another 26 percent earned \$10.30 to \$15.45 an hour (two to three times the minimum wage). Many of this group work part-time because their employers do not want to provide the same level of benefits they offer full-time employ-

## In 1991, a typical low-income family devoted 38 percent of household income to housing. In 2001, that share had jumped to 45 percent.

ees. Largely as a result, about one in four workers receiving \$5.15 to \$10.30 per hour, and one in eight receiving \$10.30 to \$15.45 per hour, are employed only part-time.

Despite the difficulty of making ends meet on such meager wages, a significant fraction of American households rely on the income of a sole low-paid earner (Table A-5). Almost 7 million households in 2000 depended on the earnings of one full-time worker being paid the equivalent of one to two times the minimum wage (\$9,012 to \$18,024 annually). Of these, 22 percent reported spending half or more of their incomes on housing. Another 2.1 million households depended on the earnings of one part-time worker with equally low wages. Within this group, 36 percent spent half or more of their incomes on housing (Figure 28).

### Managing With Less

Even after including all forms of household income (such as social security, investment income, and earnings from other household members), acute housing affordability problems are unsettlingly common (Figure 29). This is especially true

for the 2.5 million elderly households and 4.8 million non-elderly households with incomes of less than \$9,012.

When impoverished households must spend disproportionately on housing, little remains to meet other basic needs. Among households in the bottom expenditure quintile (whose average monthly non-housing expenditures were \$601), those with housing costs topping 50 percent of total expenditures spent a meager \$161 a month on food and \$34 on healthcare (Table A-10). By contrast, those able to hold their housing expenses to less than 20 percent spent \$241 on food and \$83 on healthcare. While still modest, this second group spent 50 percent more on food and 144 percent more on healthcare than the group with severe housing cost burdens. Among seniors in the bottom expenditure quintile, those with housing expenditures of less than 20 percent managed to spend \$91 more on food and \$131 more on healthcare than those devoting 50 percent or more to housing.

If middle-class households stretch their incomes to pay for housing, they do not necessarily compromise their ability to meet other basic needs. High housing cost burdens do, however, limit these households' ability to save and make investments. Those in the middle expenditure quintile devoting more than half their total outlays to housing put about \$134 less per month toward insurance and pensions than those with housing costs under 20 percent. They also had \$1,096 less per month to put toward food, clothing, transportation, healthcare, entertainment and other items.

### Seniors Facing Special Challenges

The nation's 35.6 million seniors aged 65 and older face a quadruple threat. First, many have inadequate incomes to pay for housing costs. Second, mounting healthcare needs compete with other basic expenditures. Third, most live in single-family homes that require maintenance and that are expensive for caregivers to reach because they are geographically dispersed. And fourth, many have physical limitations or cognitive impairments that must be addressed by in-home

Figure 28

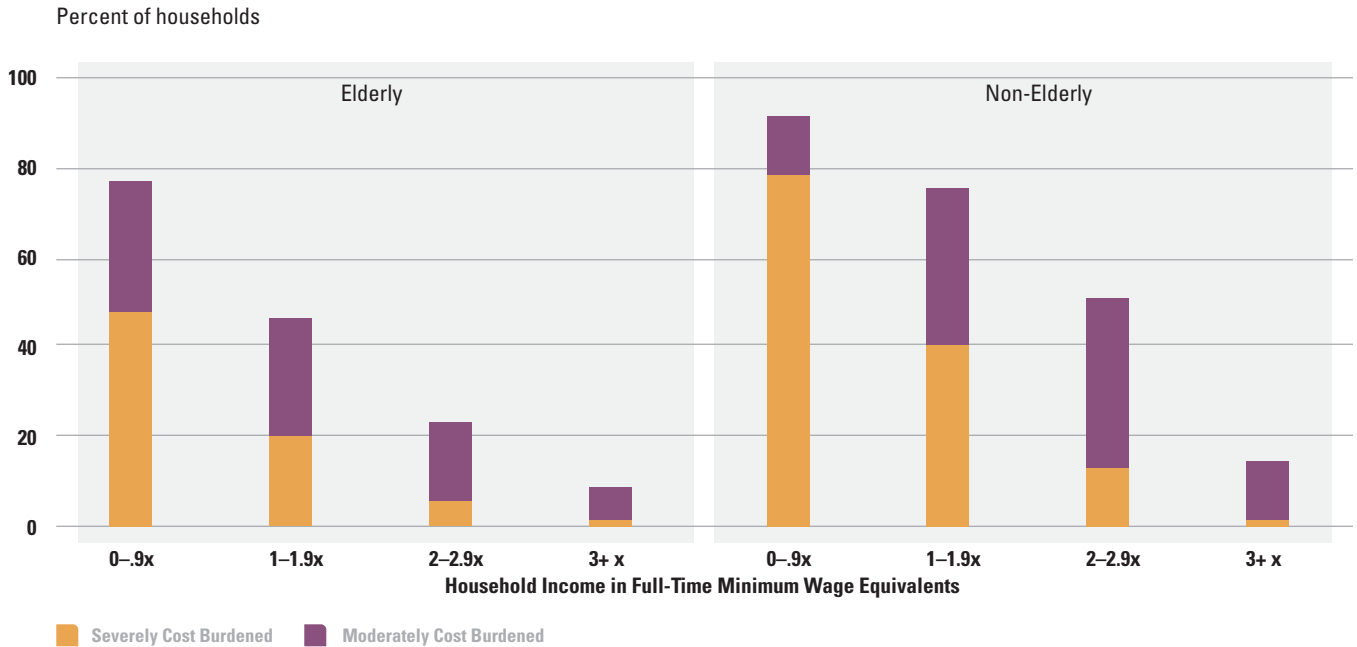
### Households With a Single Low-Wage Earner Face Heavy Housing Cost Burdens

Percent of households



Notes: All households with one earner reporting earnings equivalent to multiples of the federal minimum wage of \$5.15 per hour. Full-time is the Bureau of Labor Statistics definition (35 hours per week for at least 50 weeks per year). Severely cost burdened is defined as paying 50% or more of income for housing. Moderately cost burdened is defined as paying 30-49% of income for housing.  
Source: Table A-5.

### Even Households With Full-Time Equivalent Minimum Wage Incomes Have Affordability Problems



Notes: Elderly is defined as age 65 and older. For other definitions, see note in Figure 28. Source: JCHS tabulations of the 2000 Census Supplemental Survey.

care or structural modifications. In the 2000 Census, for example, 9.5 million seniors reported a physical disability and 3.6 million reported a mental disability.

More than a third of the 21.8 million households with heads aged 65 or older are in the bottom income quintile (incomes at or below \$17,500 as measured by the 2001 American Housing Survey). Of these, about 70 percent are homeowners. In 2001, 18 percent of elderly homeowners spent half or more of their incomes on housing. The share of severely cost-burdened elderly renters was even higher at 38 percent. Elderly renters are of particular concern because they typically do not have any home equity to tap into to meet basic needs. According to the 2001 Survey of Consumer Finances, 46 percent of elderly renters in the bottom income quintile (defined in that survey as \$16,000 or less) had net wealth of less than \$1,000 and 35 percent had less than \$250.

Most low-income seniors moved into their homes before they reached their 60s. Since many of these homes are not centrally located, it can be expensive for care providers to reach them (Figure 30). In addition, because of their low fixed incomes, many seniors find it difficult to make important repairs to

their homes. Although their units are older and in poorer condition on average than those of younger homeowners, bottom quintile seniors (with incomes at or below \$17,500) spent \$2,465 less on major replacements, such as a roof or heating system, in 2000–1 than other homeowners.

Many seniors also lack the home modifications that would ensure their comfort and safety. These structural modifications range from minor improvements, such as satisfactory lighting and low-slip surfaces, to more significant changes, such as grab bars, stair lifts, and widened passageways. In 1995 (the last time seniors were surveyed about home modifications), only about half of those with limited mobility had at least one of the home modifications they needed and a much smaller share had all the features they needed.

Still, many seniors are reluctant to move, preferring instead to age in place close to family and friends while relying on home healthcare, transportation and meal delivery services. In fact, only a small percentage of seniors live in assisted-living facilities. Although such settings can provide special services more efficiently than in-home care, they are too expensive for low- and moderate-income seniors to afford.

### Crowding Creeps Back Up

After decreasing steadily since the 1960s, the problem of crowding is once again on the rise. According to the Fannie Mae Foundation, the number of crowded households (with more than one person per room) climbed by 900,000 during the 1980s and another 1.5 million during the 1990s. By 2000, 6.1 million households (5.8 percent) lived in crowded conditions—the largest number since 1960.

Immigrants are far more likely to live in crowded housing than the native-born (*Figure 31*). Overall, the share of foreign-born households experiencing such conditions is 26 percent, compared with only 3 percent of the native-born (*Table A-8*). Moreover, the problem of crowding is not restricted only to the higher-cost metropolitan areas where many immigrants settle. Even in non-metro areas, 22 percent of foreign-born households live in crowded conditions.

The return of crowding as a housing problem is almost entirely due to strong growth in foreign-born households. The rates of crowding among native-born whites, blacks, Hispanics and Asians/others have been flat since 1980. And even among foreign-born whites, blacks and Hispanics, the incidence of crowding has been nearly unchanged since 1990—and has in

fact declined among foreign-born Asians. But because the share of foreign-born households is growing and immigrant households are more likely than the native-born to cope with high housing costs by doubling up, the overall incidence of crowding has increased.

### The Dwindling Low-Cost Stock

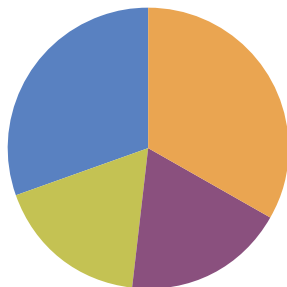
The already-scarce supply of low-cost housing continues to shrink because of physical deterioration on the one hand and gentrification on the other. Government programs such as Low Income Housing Tax Credits (LIHTC), Housing Bonds, the HOME Investment Partnerships Program, Community Development Block Grants and the USDA Rural Housing Service are crucial to stave off further net losses. Administered largely by state housing finance agencies, the LIHTC program, for example, financed approximately 1.4 million affordable units between 1987 and 2000. The HOME program has also helped to produce or rehabilitate hundreds of thousands of rental units since the early 1990s, and is a vital tool for providing assistance to extremely low-income households.

But long-term contracts for subsidized rental units continue to expire, placing huge demands on the limited supply. As a result, resources are increasingly put toward retaining rather

Figure 30

### Most Seniors in the Bottom Income Quintile Age in Place...

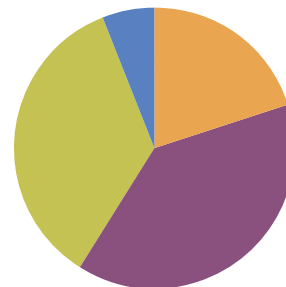
Age at move-in (Percent)



■ Before Age 40    ■ Age 40-49  
■ Age 50-60    ■ Age 60 and Later

### ...And Live in Single-Family Homes Outside Central Cities

Location of low-income seniors (Percent)

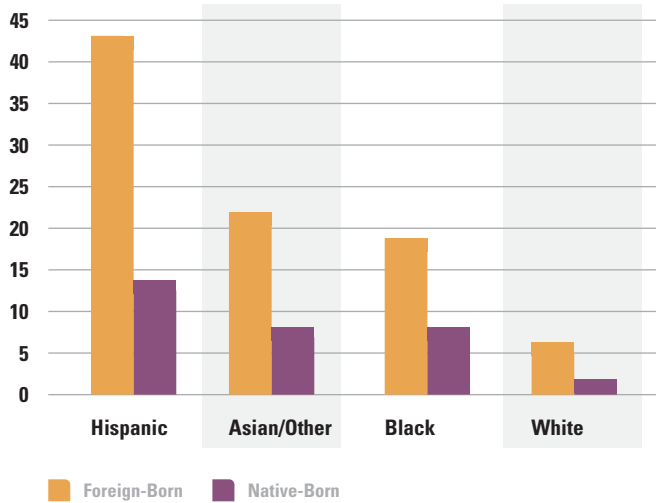


■ Single-Family Home in Central City    ■ Single-Family Home in Suburb  
■ Single-Family Home in Non-Metro    ■ Not in Single-Family Home

Notes: Seniors in the bottom income quintile had incomes of \$17,500 or less in 2001. Seniors are householders 65 years of age and older. Source: JCHS tabulations of the 2001 American Housing Survey.

## The Problem of Crowding Primarily Affects the Foreign-Born

Share of households that are crowded (Percent)



Notes: Crowded is defined as more than one person per room. 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.

Source: JCHS tabulations of the 2000 Census 1% PUMS.

than expanding the stock of dedicated, subsidized rentals. Furthermore, many affordable housing units are in the hands of owners who would incur a significant tax upon sale of the property. Unless relieved of this “exit tax,” these owners will remain reluctant to sell their properties at a price that would allow community organizations to purchase and preserve the affordable units. Although preserving low-cost housing can be expensive (especially if lead paint abatement is involved), replacement is typically even more costly.

Meanwhile, state and local government regulations add to the costs of building new affordable units by restricting development, dictating the minimum size and maximum densities of homes, and imposing other fees and costs. So far, limited attempts to ease burdensome housing development regulations have come up short.

### Looking Ahead

Even at current levels, housing assistance programs reach only a small fraction of the lowest-income households who are in desperate need. According to the National Low Income Housing Coalition, three-fourths of eligible households receive no assistance.

Nonetheless, the pressures to cut rental assistance for extremely low-income families and eliminate the HOPE VI public housing revitalization program are mounting. A proposal is now on the table to cap tenant rental assistance funds at a level that does not keep pace with changes in housing costs and distributes the funds solely through block grants to public housing authorities. With rents rising ahead of inflation in many major metropolitan areas, this move would put many tenants at risk of losing assistance. In addition, this plan would reduce property income and thus owners’ ability to support debt, which in turn would threaten both new development and investment in existing rental housing. In the end, even fewer low-income households would be served.

In the meantime, the economy continues to generate strong and growing demand for low-wage workers. According to the Bureau of Labor Statistics (BLS), the median wages in the industries adding the most jobs since the recession are fully 21 percent lower than those in the industries losing the most jobs. Over the next 10 years, the BLS expects 11 of the 20 fastest-growing occupations to be service jobs paying a median wage of less than \$20,000 per year.

Even households with better-paying jobs, though, cannot or do not adequately invest to fund a comfortable retirement. And within the non-working population, millions of seniors, the disabled, and others continue to live in poverty despite government transfer payments.

Unfortunately, there is little hope of relief on any of these fronts. Attempts to raise the minimum wage have met with stiff resistance, and the talk in Washington has shifted from strengthening the safety net to curbing benefits. Along with the looming shortfall in the Social Security fund, Medicare and Medicaid expenses are set to soar when the baby boomers start to retire at the end of this decade.

Even at the peak of the full-employment economy in the late 1990s, housing problems in the nation failed to improve and some even worsened. Without fundamental changes, these challenges will continue to escalate, further dividing the two-thirds of Americans who are well-housed and the remaining third who are not—including a substantial minority who must struggle simply to keep a roof over their heads and meet other basic needs. ■

## Appendix Tables

Table A-1	Income and Housing Costs: 1975–2003
Table A-2	Housing Market Indicators: 1975–2003
Table A-3	Numbers and Shares of Foreign-Born Households by State: 2000
Table A-4	Terms on Conventional Single-Family Mortgages: 1980–2003
Table A-5	Housing Cost Burdens of Single-Earner Households by Earnings and Employment Status: 2000
Table A-6	Homeownership Rates by Age and Race/Ethnicity: 1993–2003
Table A-7	Home Purchase and Refinance Lending: 1993–2001
Table A-8	Crowded Households by Nativity, Race/Ethnicity and Location: 1970–2000
Table A-9	Distribution of Households by Income Quartiles and Race/Ethnicity: 1980–2000
Table A-10	Average Monthly Non-Housing Spending by Expenditure Quintiles: 2001
Table A-11	Change in Rental Stock by Structure Type and Region: 1991–2001
Table A-12	Foreign-Born Households by Location and Year of Arrival: 2000

The following information can be downloaded in Microsoft Excel format from the Joint Center’s website at [www.jchs.harvard.edu](http://www.jchs.harvard.edu).

Table W-1	Interim Joint Center Household Projections: 2005–2015
Table W-2	Home Prices by Region and Metropolitan Area: 1990–2003
Table W-3	Median Net Wealth of Owner and Renter Households: 1989–2001
Table W-4	Absorption Rates and Asking Rents for Newly Constructed Apartments: 1970–2003
Table W-5	Turnover of Occupied Housing Units: 1990 and 2000
Table W-6	Numbers and Shares of Foreign-Born Households by State and Tenure: 2000
Table W-7	Characteristics of Foreign-Born Households by Region of Origin: 2000
Table W-8	Permit Growth as a Share of 1990 Housing Stock by Metro Size: 1990–2002
Table W-9	Effective Rents by Metropolitan Area: 2002–2003
Table W-10	Earning Gaps among Full-Time Workers by Gender: 1980–2000



## Income and Housing Costs: 1975–2003

2003 dollars

Year	Monthly Income		Homebuyer 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	Homebuyers		Renters	
									Before-Tax Mortgage Payment	After-Tax Mortgage Payment	Contract Rent	Gross Rent
1975	4,161	2,466	117,385	8.9	844	655	573	645	20.3	15.7	23.2	26.2
1976	4,137	2,394	119,716	8.9	857	671	572	649	20.7	16.2	23.9	27.1
1977	4,151	2,409	124,459	8.8	887	748	571	654	21.4	18.0	23.7	27.1
1978	4,195	2,441	132,194	9.4	989	814	570	653	23.6	19.4	23.3	26.8
1979	4,201	2,388	133,342	10.6	1,106	904	550	633	26.3	21.5	23.0	26.5
1980	3,944	2,264	127,508	12.5	1,221	976	529	614	31.0	24.8	23.4	27.1
1981	3,831	2,234	121,893	14.4	1,334	1,052	523	611	34.8	27.5	23.4	27.4
1982	3,837	2,256	118,301	14.7	1,323	1,063	532	627	34.5	27.7	23.6	27.8
1983	3,923	2,251	118,408	12.3	1,118	895	547	647	28.5	22.8	24.3	28.8
1984	4,026	2,320	118,072	12.0	1,092	882	553	653	27.1	21.9	23.8	28.2
1985	4,133	2,354	119,689	11.2	1,040	839	569	667	25.2	20.3	24.2	28.3
1986	4,279	2,382	125,776	9.8	976	790	593	688	22.8	18.5	24.9	28.9
1987	4,306	2,359	129,946	9.0	937	793	595	686	21.8	18.4	25.2	29.1
1988	4,330	2,429	132,638	9.0	959	833	593	681	22.1	19.2	24.4	28.0
1989	4,387	2,510	134,561	9.8	1,046	904	588	674	23.8	20.6	23.4	26.8
1990	4,258	2,431	131,962	9.7	1,020	882	582	664	23.9	20.7	23.9	27.3
1991	4,195	2,330	129,126	9.1	941	817	578	660	22.4	19.5	24.8	28.3
1992	4,163	2,266	128,840	7.8	837	734	575	656	20.1	17.6	25.4	29.0
1993	4,128	2,242	127,850	6.9	760	671	571	653	18.4	16.3	25.5	29.1
1994	4,169	2,213	127,977	7.3	790	700	571	650	19.0	16.8	25.8	29.4
1995	4,209	2,270	128,584	7.7	824	728	569	646	19.6	17.3	25.1	28.5
1996	4,280	2,290	130,044	7.6	825	728	567	644	19.3	17.0	24.8	28.1
1997	4,377	2,342	132,287	7.5	834	737	570	648	19.1	16.8	24.4	27.7
1998	4,508	2,389	137,300	7.0	820	727	580	654	18.2	16.1	24.3	27.4
1999	4,607	2,475	141,552	7.1	860	760	585	657	18.7	16.5	23.6	26.6
2000	4,560	2,490	146,821	7.9	957	840	587	660	21.0	18.4	23.6	26.5
2001	4,467	2,469	154,289	6.9	918	812	596	675	20.6	18.2	24.1	27.3
2002	4,442	2,376	162,569	6.4	919	817	610	684	20.7	18.4	25.7	28.8
2003	4,385	2,388	170,000	5.7	891	816	613	691	20.3	18.6	25.7	29.0

Notes: All dollar amounts are expressed in 2003 constant dollars using the Bureau of Labor Statistics' Consumer Price Index for All Urban Consumers (CPI-U). Owner and renter median incomes through 2002 from Current Population Survey P60 published reports. Renters exclude those paying no cash rent. 2003 incomes estimated from annual percent change in HUD median family income applied to 2002 CPS income for all households and adjusted by 3-year average ratio of owner and renter incomes to all household income. Home price is the 2003 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 mortgage with 10% down. After-tax mortgage payment equals mortgage payment less tax savings of homeownership. Tax savings are based on the excess of housing (mortgage interest and real-estate taxes) plus non-housing deductions over the standard deduction. Non-housing deductions are set at 5% of income through 1986, 4.25% in 1987, and 3.5% from 1988 on. Contract rent equals median 2001 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.

## Housing Market Indicators: 1975-2003

Year	Permits <sup>1</sup>		Starts <sup>2</sup>			Size <sup>3</sup>		Sales Price		Residential Upkeep and Improvements <sup>6</sup>		Vacancy Rates <sup>7</sup>	
	Thousands		Thousands			Median Square Feet		Single-Family Homes		Millions of 2003 Dollars		Percent	
	Single-family	Multi-family	Single-family	Multi-family	Manufactured	Single-family	Multi-family	New <sup>4</sup>	Existing <sup>5</sup>	Owner-occupied	Rental	For Sale	For Rent
1975	676	263	892	268	229	1,535	942	161,634	117,385	65,170	27,911	1.2	6.0
1976	894	402	1,162	375	250	1,590	894	166,029	119,716	74,634	27,261	1.2	5.6
1977	1,126	564	1,451	536	258	1,610	881	175,926	124,459	79,574	24,252	1.2	5.2
1978	1,183	618	1,433	587	280	1,655	863	189,005	132,194	85,360	30,440	1.0	5.0
1979	982	570	1,194	551	280	1,645	893	198,408	133,342	89,343	29,987	1.2	5.4
1980	710	481	852	440	234	1,595	915	196,585	127,508	90,836	27,325	1.4	5.4
1981	564	421	705	379	229	1,550	930	193,805	121,893	78,400	28,825	1.4	5.0
1982	546	454	663	400	234	1,520	925	186,880	118,301	72,847	26,003	1.5	5.3
1983	902	703	1,068	636	278	1,565	893	183,191	118,408	75,591	27,594	1.5	5.7
1984	922	757	1,084	665	288	1,605	871	182,698	118,072	82,839	42,184	1.7	5.9
1985	957	777	1,072	670	283	1,605	882	178,623	119,689	87,785	52,655	1.7	6.5
1986	1,078	692	1,179	626	256	1,660	876	182,300	125,776	98,663	59,699	1.6	7.3
1987	1,024	510	1,146	474	239	1,755	920	185,292	129,946	95,160	62,622	1.7	7.7
1988	994	462	1,081	407	224	1,810	940	184,558	132,638	105,538	60,675	1.6	7.7
1989	932	407	1,003	373	203	1,850	940	183,163	134,561	97,928	62,410	1.8	7.4
1990	794	317	895	298	195	1,905	955	177,046	131,962	94,706	67,800	1.7	7.2
1991	754	195	840	174	174	1,890	980	172,164	129,126	90,157	55,330	1.7	7.4
1992	911	184	1,030	170	212	1,920	985	169,334	128,840	99,259	52,307	1.5	7.4
1993	987	212	1,126	162	243	1,945	1,005	171,482	127,850	101,614	53,607	1.4	7.3
1994	1,068	303	1,198	256	291	1,940	1,015	175,216	127,977	112,554	49,627	1.5	7.4
1995	997	335	1,076	278	319	1,920	1,040	175,220	128,584	101,309	49,575	1.6	7.6
1996	1,070	356	1,161	316	338	1,950	1,030	173,374	130,044	103,822	50,228	1.6	7.9
1997	1,062	379	1,134	340	336	1,975	1,050	174,401	132,287	107,720	45,415	1.6	7.8
1998	1,188	425	1,271	346	374	2,000	1,020	176,065	137,300	112,206	38,709	1.7	7.9
1999	1,247	417	1,302	338	338	2,025	1,054	180,751	141,552	109,650	48,176	1.7	8.1
2000	1,198	394	1,231	338	281	2,079	1,091	182,297	146,821	111,751	51,707	1.6	8.0
2001	1,236	390	1,273	329	196	2,102	1,094	183,551	154,289	113,914	49,999	1.8	8.4
2002	1,333	415	1,359	346	172	2,115	1,092	188,708	162,569	124,277	52,998	1.7	9.0
2003	1,461	428	1,499	349	135	2,126	1,107	195,000	170,000	119,919	56,980	1.8	9.8

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

Sources: 1. US Census Bureau, Construction Statistics, New Residential Construction, "New Privately Owned Housing Units Authorized by Building Permits," <http://www.census.gov/pub/const/bpenn.pdf> (as of May 2004).  
 2. US Census Bureau: Construction Statistics, New Residential Construction, "New Privately Owned Housing Units Started," <http://www.census.gov/const/startsan.pdf> (as of May 2004); and Manufactured Housing Statistics "Placements of New Manufactured Homes," <http://www.census.gov/pub/const/mhs/mhstabplcmnt.pdf> (as of May 2004). Manufactured housing starts defined as placements of new manufactured homes.  
 3. US 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/startsusintenta.pdf> (as of May 2004).  
 4. New home price is the 2003 national median new home price from the US Census Bureau, indexed by the US Census Bureau, Construction Statistics, "New Residential Sales, Price Indexes of New One-Family Houses Sold Including Value of the Lot," [http://www.census.gov/const/price\\_indexes.pdf](http://www.census.gov/const/price_indexes.pdf) (as of May 2004).

5. Existing home price is the 2003 median sales price of existing single-family homes determined by the National Association of Realtors, indexed by the Conventional Mortgage Home Price Index from Freddie Mac.  
 6. US Census Bureau, Construction Statistics, Residential Improvements, "Expenditures by Region and Property Type," [http://www.census.gov/const/C50/table\\_s2.pdf](http://www.census.gov/const/C50/table_s2.pdf) (as of May 2004).  
 7. US Census Bureau, Housing Vacancy Survey.  
 8. US Census Bureau, Construction Statistics, Value of Construction Put in Place, "Annual Value of Private Construction Put in Place," <http://www.census.gov/const/C30/private.pdf> (as of May 2004). Note that figures on residential fixed investment in the text are from the Bureau of Economic Analysis, National Income and Product Accounts, because they are discussed in the context of Gross Domestic Product.  
 9. US Census Bureau, Construction Statistics, New Residential Sales, "Houses Sold by Region," <http://www.census.gov/const/soldann.pdf> (as of May 2004).  
 10. National Association of Realtors, Existing Single-Family Home Sales.

Table A-3

## Numbers and Shares of Foreign-Born Households by State: 2000

Value Put in Place <sup>a</sup> Billions of 2003 Dollars			Home Sales Thousands	
Single-family	Multi-family	Additions & Alterations	New <sup>a</sup>	Existing <sup>10</sup>
101,368	22,843	52,204	549	2,476
141,832	22,345	56,597	646	3,064
188,901	30,415	60,037	819	3,650
205,360	36,213	68,399	817	3,986
183,131	43,123	68,866	709	3,827
118,173	37,309	68,670	545	2,973
105,188	35,343	60,356	436	2,419
79,057	29,627	52,769	412	1,990
133,962	41,468	57,033	623	2,719
153,000	49,978	71,544	639	2,868
149,372	48,803	76,322	688	3,214
174,818	52,108	93,189	750	3,565
189,857	41,225	92,298	671	3,526
186,789	34,682	96,596	676	3,594
179,443	33,096	90,550	650	3,346
158,921	27,100	83,013	534	3,211
134,321	20,464	69,812	509	3,220
159,969	17,172	84,358	610	3,520
178,427	13,737	94,427	666	3,802
201,517	17,482	102,022	670	3,967
185,346	21,598	91,695	667	3,812
200,289	23,834	105,547	757	4,196
200,828	26,233	104,268	804	4,382
225,100	27,740	102,299	886	4,970
247,215	30,299	109,660	880	5,205
253,014	30,195	116,907	877	5,152
258,791	31,486	113,177	908	5,296
271,949	33,303	125,876	973	5,566
306,553	34,086	125,179	1,086	6,100

	2000		
	Number Foreign-Born	Total Households	Percent Foreign-Born
Total	12,035,540	105,480,101	11
California	3,228,687	11,505,634	28
New York	1,593,868	7,056,758	23
New Jersey	592,549	3,064,957	19
Hawaii	72,830	403,242	18
Florida	1,120,426	6,338,698	18
Nevada	111,432	750,824	15
Texas	1,092,095	7,391,682	15
Massachusetts	334,356	2,444,526	14
Rhode Island	53,445	408,502	13
Illinois	596,029	4,591,752	13
DC	31,870	248,464	13
Connecticut	162,310	1,301,734	12
Arizona	235,203	1,901,419	12
Maryland	207,589	1,981,797	10
Washington	236,044	2,272,632	10
New Mexico	63,058	677,722	9
Colorado	136,541	1,658,531	8
Oregon	108,184	1,333,258	8
Virginia	215,791	2,698,832	8
Utah	52,985	701,254	8
Georgia	194,669	3,006,962	6
Michigan	232,492	3,785,089	6
Delaware	17,412	298,787	6
Alaska	11,662	222,011	5
Minnesota	96,980	1,894,646	5
New Hampshire	22,923	474,799	5
Kansas	49,948	1,037,782	5
Idaho	22,546	469,733	5
North Carolina	145,717	3,132,527	5
Vermont	11,010	240,916	5
Pennsylvania	216,162	4,776,397	5
Nebraska	26,948	665,777	4
Oklahoma	48,458	1,341,625	4
Wisconsin	73,897	2,084,087	4
Ohio	153,302	4,444,389	3
Indiana	77,528	2,335,676	3
Maine	15,208	518,051	3
Louisiana	47,617	1,656,249	3
Tennessee	62,350	2,232,590	3
Missouri	60,403	2,194,033	3
South Carolina	41,882	1,533,597	3
Iowa	31,232	1,148,701	3
Arkansas	26,636	1,043,258	3
Wyoming	4,098	193,856	2
Alabama	32,899	1,736,817	2
Kentucky	29,791	1,590,664	2
Montana	6,368	358,928	2
South Dakota	4,758	290,098	2
North Dakota	4,083	257,210	2
Mississippi	15,154	1,046,509	1
West Virginia	6,115	736,119	1

Note: See Table W-6 on the JCHS website for the breakdown by owners and renters.  
Source: JCHS tabulations of the 2000 Census 1% PUMS.

Table A-4

## Terms on Conventional Single-Family Mortgages: 1980–2003

Annual averages, all homes

Year	Effective Interest Rate (%)	Term to Maturity (Years)	Mortgage Loan Amount (Thousands of 2003 dollars)	Purchase Price (Thousands of 2003 dollars)	Loan-to-Price Ratio (%)	Percent of Loans With	
						Loan-to-Price Ratio More than 90%	Adjustable Rates
1980	12.8	27.2	115.6	164.1	72.9	10	na
1981	14.9	26.4	109.7	155.8	73.1	15	na
1982	15.3	25.6	105.9	150.9	72.9	21	41
1983	12.7	26.0	110.7	153.5	74.5	21	40
1984	12.5	26.8	114.2	153.4	77.0	27	62
1985	11.6	25.9	120.0	164.3	75.8	21	51
1986	10.2	25.6	133.1	185.7	74.1	11	30
1987	9.3	26.8	144.3	197.3	75.2	8	43
1988	9.3	27.7	151.5	204.7	76.0	8	58
1989	10.1	27.7	155.1	211.9	74.8	7	38
1990	10.1	27.0	146.4	200.8	74.7	8	28
1991	9.3	26.5	143.6	198.2	74.4	9	23
1992	8.1	25.4	142.6	192.0	76.6	14	20
1993	7.1	25.5	136.2	182.2	77.2	17	20
1994	7.5	27.1	136.4	176.3	79.9	25	39
1995	7.9	27.4	133.3	172.4	79.9	27	32
1996	7.7	26.9	139.2	181.9	79.0	25	27
1997	7.7	27.5	145.1	188.6	79.4	25	22
1998	7.1	27.8	148.8	195.7	78.9	25	12
1999	7.3	28.2	153.8	203.4	78.5	23	21
2000	8.0	28.7	158.5	212.5	77.8	22	24
2001	7.0	27.6	161.8	223.9	76.2	21	12
2002	6.5	27.3	167.1	236.5	75.1	21	17
2003	5.7	26.8	167.9	243.4	73.5	20	18

Notes: The effective interest rate includes the amortization of initial fees and charges. "na" indicates data not available. Loans with adjustable rates do not include hybrid products.

Source: Federal Housing Finance Board, Monthly Interest Rate Survey.

Table A-5

## Housing Cost Burdens of Single-Earner Households by Earnings and Employment Status: 2000

Multiples of Minimum Wage	Work Status	Single-Earner Households (Thousands)	Not Cost Burdened (%)	Moderately Cost Burdened (%)	Severely Cost Burdened (%)
0–.9x	Total	5,035	42	18	39
	Full Time	3,318	42	18	40
1–1.9x	Part Time	1,717	44	18	39
	Total	9,019	44	30	25
2–2.9x	Full Time	6,941	45	33	22
	Part Time	2,079	43	21	36
3+ x	Total	7,731	66	25	9
	Full Time	6,855	68	25	7
All	Part Time	876	52	23	24
	Total	14,578	81	14	5
All	Full Time	12,744	83	14	3
	Part Time	1,834	66	18	16
All	Total	36,363	63	21	16
	Full Time	29,858	66	21	13
All	Part Time	6,505	51	19	30

Notes: Single-earner households are those in which only one household member, and not necessarily the householder, reported working for a wage in 1999. Per hour wage of earners estimated from annual earnings divided by weeks worked and usual hours worked per week. Minimum wage is \$5.15 per hour. Full-time year-round workers are defined by the Bureau of Labor Statistics as working at least 35 hours in a usual work week and at least 50 weeks a year. The equivalent annual income for a full-time earner at the minimum wage was \$9,012.

Moderately (severely) cost-burdened households spend 30–49% (50% or more) of income on monthly housing expenses. Cost burden calculated from share of total income (earnings, interest and transfer payments) spent on monthly housing costs.

Source: JCHS tabulations of the 2000 Census Supplemental Survey.

## Homeownership Rates by Age and Race/Ethnicity: 1993–2003

Percent

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Total US</b>	63.7	64.0	64.7	65.4	65.7	66.3	66.8	67.4	67.8	67.9	68.3
<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	49.6
Age 35–44	72.3	71.3	71.9	71.6	72.6	73.1	74.0	73.7	75.2	76.1	76.0
Age 45–54	80.1	80.2	80.4	80.8	80.1	80.4	81.2	82.0	81.9	81.9	82.4
Age 55–64	83.5	83.5	84.1	85.2	84.5	84.7	85.0	84.6	85.8	85.0	85.8
Age 65–74	83.5	83.0	84.0	85.5	85.5	85.5	86.3	86.9	86.0	86.3	85.3
Age 75 and Over	75.8	75.6	75.8	76.4	76.8	77.1	78.4	78.6	79.2	79.7	79.9
Total	70.4	70.0	70.7	71.6	71.7	72.2	73.0	73.5	74.2	74.7	75.1
<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	25.2
Age 35–44	41.4	41.5	40.5	41.4	44.9	45.3	44.8	45.7	49.1	47.4	46.8
Age 45–54	56.0	57.0	54.7	54.5	58.1	58.0	58.6	56.0	55.6	56.4	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	64.0
Age 65–74	61.5	67.3	63.2	66.5	68.0	68.9	67.1	69.8	72.0	69.7	66.6
Age 75 and Over	63.2	67.7	64.1	68.3	69.9	67.1	68.6	70.9	75.9	73.5	69.3
Total	42.6	42.7	42.2	44.3	46.0	46.6	46.1	47.5	48.4	48.9	48.4
<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	30.5
Age 35–44	43.3	45.8	46.1	42.9	45.9	47.3	46.7	51.2	49.0	51.1	48.7
Age 45–54	52.6	53.2	56.2	55.2	54.5	56.6	59.4	53.5	60.1	58.0	57.0
Age 55–64	62.8	60.5	62.4	56.4	58.6	64.7	68.4	61.4	61.8	65.0	68.8
Age 65–74	58.6	58.4	58.5	61.4	58.8	62.3	67.0	65.8	65.3	69.3	67.6
Age 75 and Over	52.0	58.8	63.2	58.2	54.4	59.9	59.0	56.3	64.2	65.0	65.9
Total	40.0	41.5	42.4	41.2	43.1	44.8	45.1	45.5	46.4	47.4	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	33.0
Age 35–44	56.1	58.4	54.1	51.4	55.2	57.3	58.7	56.2	57.5	57.1	60.9
Age 45–54	66.0	64.7	62.8	65.8	69.9	66.8	69.1	69.6	71.4	67.7	70.5
Age 55–64	71.0	73.5	64.7	67.4	71.4	72.5	78.2	72.5	75.5	73.0	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	72.0
Age 75 and Over	64.3	54.1	53.8	67.8	65.1	63.6	61.8	64.7	54.4	58.9	66.4
Total	51.9	51.4	50.7	50.3	52.7	53.5	53.4	53.9	53.9	53.9	56.5
<b>All Races/Ethnicities</b>											
Under Age 35	38.0	37.3	38.0	39.1	39.0	39.6	38.8	40.4	40.7	41.3	42.0
Age 35–44	65.8	65.0	65.2	64.5	65.8	66.4	66.9	67.1	68.2	68.6	67.9
Age 45–54	75.2	75.2	75.1	75.5	75.4	75.5	76.5	76.3	76.6	76.2	76.5
Age 55–64	79.6	79.5	80.1	80.4	79.7	80.3	80.7	80.3	81.1	80.9	81.7
Age 65–74	79.9	80.2	80.5	82.2	82.3	82.3	83.0	83.6	83.0	83.1	81.9
Age 75 and Over	74.0	74.3	74.3	75.1	75.4	75.6	76.8	77.1	77.8	78.4	78.3

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. In 2003 a multi-race category was introduced. Only 1.12% of householders reported multi-race. Their homeownership rates are: 30.0% for those under age 35; 58.2% for age 35–44; 67.0% for age 45–54; 70.3% for age 55–64; 80.7% for age 65–74; 73.4% for age 75 and over; and 55.0% for the total. Data in this table are net of the 0.86% of homeowners who reported multi-race. In 2002, the data were rebenchmarked to the 2000 Census. Caution should be used in interpreting year-over-year changes since 2001 for certain age/race categories due to small sample sizes, rebenchmarking, and the introduction of the new multi-race category. Sources: Total US homeownership rate from the Census Bureau's Housing Vacancy Survey annual estimates; all other data from JCHS tabulations of the March Current Population Surveys.

## Home Purchase and Refinance Lending: 1993–2001

Thousands

	Conventional Prime			Subprime			Government			Manufactured Housing		
	1993	2000	2001	1993	2000	2001	1993	2000	2001	1993	2000	2001
All Home Purchase Loans	1,688.2	2,531.1	2,664.7	31.1	265.8	245.9	649.8	755.9	823.8	37.1	116.7	72.5
Borrower Characteristics												
White	1,400.1	1,811.2	1,853.2	21.4	133.2	128.0	481.6	430.8	476.5	32.4	68.4	34.6
Minority	238.0	464.5	485.9	8.3	84.4	82.3	156.9	269.0	276.3	4.1	21.7	11.4
Low-Income	330.6	549.9	592.2	7.6	89.1	70.4	244.9	341.6	382.6	21.4	73.4	46.3
Moderate-/High-Income	1,357.6	1,981.1	2,072.4	23.5	176.7	175.5	404.9	414.3	441.3	15.6	43.2	26.3
Neighborhood Characteristics												
Predominantly White	108.7	183.5	193.2	4.4	48.8	41.9	68.3	98.5	98.6	2.8	12.7	8.3
Predominantly Minority	982.1	1,331.2	1,395.2	10.8	92.0	85.6	270.4	297.7	338.0	19.6	55.0	32.2
Low-Income	150.9	257.9	267.3	4.5	57.8	47.9	95.7	129.8	134.3	6.4	24.1	15.5
High-Income	763.7	1,078.1	1,122.1	13.0	73.7	72.6	180.4	180.7	203.9	5.2	15.1	10.0
Low-Income/Predominantly White	36.1	51.9	53.3	.6	8.2	6.6	17.1	22.8	24.5	1.7	5.6	3.5
High-Income/Predominantly White	482.3	631.0	651.9	5.7	30.5	29.7	87.4	82.3	96.9	3.3	8.3	5.0
Low-Income/Predominantly Minority	52.0	95.4	99.4	2.2	29.2	24.2	34.6	51.5	51.3	1.5	7.7	5.0
High-Income/Predominantly Minority	16.3	23.4	26.4	.5	3.7	3.3	5.6	7.6	7.3	.1	.6	.4
All Refinance Loans	4,085.6	1,198.5	4,953.9	95.1	431.3	576.0	264.0	30.6	132.9	7.0	23.0	21.9
Borrower Characteristics												
White	3,418.3	814.1	3,422.7	64.3	176.2	236.3	208.5	18.5	77.5	6.6	1.8	3.1
Minority	496.2	186.9	715.0	22.0	110.1	133.5	46.7	9.4	38.0	.3	.1	.2
Low-Income	564.8	315.0	1,060.4	19.5	193.8	214.4	59.9	12.9	51.9	2.0	9.1	8.1
Moderate-/High-Income	3,520.8	883.5	3,893.5	75.6	237.5	361.6	204.1	17.6	81.0	5.0	13.9	13.8
Neighborhood Characteristics												
Predominantly White	1,512.8	429.6	1,833.2	43.5	157.3	230.5	142.8	12.5	59.0	1.4	8.8	8.5
Predominantly Minority	279.2	124.7	363.2	17.2	104.4	118.0	23.9	5.3	16.6	.2	4.0	3.4
Low-Income	288.5	167.8	470.4	13.9	119.1	129.9	32.7	5.9	20.0	.6	5.2	4.5
High-Income	1,932.9	408.9	2,013.6	40.1	88.6	145.1	83.9	6.6	33.3	2.1	4.5	4.5
Low-Income/Predominantly White	117.2	61.6	192.6	3.9	34.7	40.5	16.7	2.1	8.3	.3	1.8	1.6
High-Income/Predominantly White	713.1	150.3	746.5	19.2	36.8	66.3	44.3	2.9	15.5	.2	1.8	2.0
Low-Income/Predominantly Minority	109.4	71.1	176.7	8.8	68.1	71.0	11.3	2.9	8.1	.1	2.6	2.1
High-Income/Predominantly Minority	48.1	10.3	43.5	1.6	5.3	7.7	1.9	.3	1.3	.0	.2	.2

Notes: Includes only loans made in metropolitan areas as defined by the Office of Management and Budget for 1993 Home Mortgage Disclosure Act (HMDA) reporting. Low-income borrowers have incomes less than 80% of area median income. Moderate-/high-income borrowers have incomes of 80% or greater than area median. Predominantly white neighborhoods were less than 10% minority in 1990. Predominantly minority neighborhoods were 50% or more minority as of 1990. Low-income neighborhoods had tract median incomes less than 80% of metro area median in 1990. High-income neighborhoods had tract median incomes of 120% or greater than metro area median. Subprime lending is an estimate based on a HUD-maintained list of subprime lending specialists. Over the period 1993 to 2001, the number of loans with race missing increased by nearly 400,000 and 1.06 million for home purchase and refinance loans, respectively. In 2001 information on borrower race was missing for some 12.1% of home purchase loans and 18.6% of refinance loans.

Source: JCHS tabulations of enhanced HMDA database.

## Crowded Households by Nativity, Race/Ethnicity and Location: 1970–2000

Rates of crowding (Percent)

	Foreign-Born					Native-Born				
	White	Black	Hispanic	Asian/Other	Total	White	Black	Hispanic	Asian/Other	Total
<b>US</b>										
1970	4	16	27	21	8	6	20	25	22	8
1980	3	15	30	24	13	2	10	15	12	4
1990	4	19	41	27	22	2	9	14	11	3
2000	6	19	43	22	26	2	8	14	8	3
<b>1990</b>										
New York	5	20	30	27	17	1	11	17	10	5
Los Angeles	11	24	62	34	43	2	11	18	6	5
San Francisco	5	22	39	30	24	2	9	8	6	3
Chicago	3	14	35	17	16	1	9	11	4	3
Miami	5	32	26	18	25	2	23	19	13	9
<b>2000</b>										
New York	8	19	34	26	22	1	10	15	6	5
Los Angeles	13	28	62	29	44	3	12	21	9	7
San Francisco	7	22	50	24	28	2	9	13	7	4
Chicago	7	18	37	18	21	1	8	13	3	3
Miami	11	31	28	18	26	3	20	21	9	11

Notes: Crowded households have more than one person per room. White, black and Asian/other households are non-Hispanic. Hispanic householders may be of any race. Asian/other includes Pacific Islanders, Aleuts and Native Americans. Metro areas shown have the largest numbers of foreign-born households.

Source: JCHS tabulations of the 1970, 1980, 1990 and 2000 Census 1% PUMS.

## Distribution of Households by Income Quartiles and Race/Ethnicity: 1980–2000

	Number of Households (Thousands)			Share of Households (Percent)		
	1980	1990	2000	1980	1990	2000
<b>White</b>						
Quartile 1 (Low)	15,050	16,290	17,680	22.1	21.7	22.3
Quartile 2	16,750	18,600	19,190	24.6	24.8	24.2
Quartile 3	17,770	19,490	20,410	26.1	26.0	25.7
Quartile 4 (High)	18,530	20,650	22,170	27.2	27.5	27.9
All Quartiles	68,100	75,030	79,450	100.0	100.0	100.0
<b>Black</b>						
Quartile 1 (Low)	3,866	4,527	4,906	44.2	43.0	37.6
Quartile 2	2,290	2,674	3,596	26.2	25.4	27.6
Quartile 3	1,564	2,042	2,793	17.9	19.4	21.4
Quartile 4 (High)	1,024	1,286	1,743	11.7	12.2	13.4
All Quartiles	8,744	10,529	13,038	100.0	100.0	100.0
<b>Hispanic</b>						
Quartile 1 (Low)	1,293	2,187	3,063	33.1	35.2	31.7
Quartile 2	1,162	1,772	2,903	29.7	28.5	30.0
Quartile 3	857	1,413	2,349	21.9	22.7	24.3
Quartile 4 (High)	594	847	1,348	15.2	13.6	14.0
All Quartiles	3,906	6,219	9,663	100.0	100.0	100.0
<b>Asian/Other</b>						
Quartile 1 (Low)	386	572	978	23.9	22.6	22.4
Quartile 2	389	535	934	24.1	21.2	21.4
Quartile 3	394	629	1,097	24.4	24.9	25.2
Quartile 4 (High)	444	793	1,352	27.5	31.3	31.0
All Quartiles	1,612	2,529	4,361	100.0	100.0	100.0

Notes: White, black and Asian/other households are non-Hispanic. Hispanic householders may 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. The cut-offs for the income quartiles were \$9,101, \$17,700 and \$28,484 in 1980, \$15,161, \$29,900 and \$49,529 in 1990, and \$21,521, \$42,024 and \$73,000 in 2000. All figures in 2003 dollars.

Source: JCHS tabulations of the March 1981, 1991 and 2001 Current Population Surveys.

## Average Monthly Non-Housing Outlays by Household Expenditure Quintiles: 2001

2001 dollars

Average Monthly Expenditures	Quintile 1 (Low)					Quintile 2				
	Share of Expenditures on Housing					Share of Expenditures on Housing				
	<20%	20-29%	30-50%	>50%	All	<20%	20-29%	30-50%	>50%	All
<b>All</b>										
Total Non-Housing Expenditures	744	699	556	351	601	1,503	1,287	1,043	669	1,187
Food	241	241	215	161	218	375	360	335	269	345
Clothes	38	28	24	14	27	69	60	49	28	55
Transportation	138	115	76	34	94	322	276	205	100	243
Healthcare	83	95	68	34	72	194	134	89	58	125
Personal Insurance & Pensions	52	43	39	20	40	139	126	119	58	120
Entertainment	41	38	29	21	33	81	77	57	34	66
Other	151	138	104	67	117	323	254	188	122	234
<b>Elderly</b>										
Total Non-Housing Expenditures	797	679	531	341	596	1,479	1,264	1,020	601	1,209
Food	240	211	187	149	198	345	326	305	212	316
Clothes	21	18	12	8	15	53	49	35	16	43
Transportation	132	97	62	24	80	268	225	168	79	211
Healthcare	195	164	129	64	142	346	263	219	141	269
Personal Insurance & Pensions	26	20	12	10	17	70	52	41	14	52
Entertainment	31	34	26	20	28	64	66	50	25	57
Other	152	135	102	66	116	334	282	202	114	262
<b>Non-Elderly</b>										
Total Non-Housing Expenditures	719	714	572	356	605	1,514	1,295	1,048	688	1,179
Food	241	266	234	168	230	390	372	342	285	354
Clothes	45	36	32	17	34	76	64	52	31	58
Transportation	140	130	86	40	103	348	295	214	106	254
Healthcare	33	40	27	17	29	120	85	60	35	78
Personal Insurance & Pensions	64	62	56	25	54	172	154	137	70	142
Entertainment	46	41	31	21	36	89	81	59	37	69
Other	150	139	106	67	118	318	244	185	124	224

Notes: Quintiles are defined by total expenditures rather than income because one out of five households in the survey fail to report income. Housing costs include mortgage principal and interest, insurance, taxes, maintenance, rents, and utilities. Transportation expenditures were adjusted for those who paid cash to buy cars and calculated at 10% of the cash payment.

Source: JCHS tabulations of the Consumer Expenditure Survey, using the Quarterly Interview Survey data for calendar year 2001.



Quintile 3					Quintile 4					Quintile 5 (High)				
Share of Expenditures on Housing					Share of Expenditures on Housing					Share of Expenditures on Housing				
<20%	20-29%	30-50%	>50%	All	<20%	20-29%	30-50%	>50%	All	<20%	20-29%	30-50%	>50%	All
2,219	1,906	1,561	989	1,796	3,264	2,786	2,297	1,501	2,703	6,482	5,252	4,109	2,967	5,196
492	440	420	335	439	619	570	531	427	564	889	836	784	659	827
103	104	74	43	88	167	138	112	81	136	326	281	221	147	270
509	438	346	189	405	758	676	531	308	633	1,474	1,064	835	582	1,109
235	177	125	91	168	282	205	172	124	214	385	299	233	222	305
244	236	215	110	219	448	425	371	197	400	913	916	754	478	837
129	118	91	52	106	220	181	144	95	176	537	409	316	195	412
508	393	290	171	371	769	591	436	269	580	1,959	1,447	965	684	1,435
2,206	1,879	1,543	855	1,838	3,274	2,760	2,220	1,348	2,706	6,770	8,537	3,944	2,434	6,159
482	403	411	249	422	608	569	516	332	550	836	822	735	448	778
85	81	66	29	74	125	134	87	47	110	192	334	160	91	201
406	356	271	130	335	625	522	457	236	522	1,195	1,228	751	480	1,053
412	372	277	179	347	540	413	366	320	447	857	539	594	347	705
104	121	84	44	97	238	220	177	72	202	619	523	348	230	517
128	106	92	39	105	177	183	113	59	150	347	454	297	171	340
593	441	341	185	456	960	718	505	282	724	2,724	4,637	1,057	667	2,565
2,223	1,911	1,564	1,023	1,787	3,262	2,788	2,306	1,530	2,699	6,445	5,094	4,117	3,027	5,119
496	447	421	356	442	620	570	533	445	566	896	837	786	683	831
108	108	76	46	91	175	138	115	87	139	344	278	224	153	276
544	453	356	203	419	782	690	539	322	648	1,511	1,056	839	593	1,114
175	141	106	69	131	234	186	150	87	183	323	288	216	208	273
291	257	232	126	245	487	444	393	221	427	951	935	773	506	863
129	120	91	55	106	228	181	147	101	180	561	406	317	198	418
479	384	283	167	353	734	580	428	267	557	1,860	1,293	961	686	1,345

Table A-11

## Change in Rental Stock by Structure Type and Region: 1991–2001

Thousands of occupied and vacant for rent units

		1991	2001	Net Gain/Loss	Built 1992–2001	Total Units Lost (Gained)
All Rental Units	Total	36,243	37,360	1,117	3,333	2,216
	Northeast	7,653	7,762	109	214	105
	Midwest	7,979	7,610	-369	652	1,021
	South	12,019	12,723	705	1,587	882
	West	8,593	9,264	672	880	208
Single-Family Units	Total	13,005	13,748	743	1,193	450
	Northeast	1,430	1,802	371	81	(290)
	Midwest	2,788	2,599	-189	164	353
	South	5,494	5,758	264	653	389
	West	3,293	3,590	296	295	(1)
2- to 4-Unit Structures	Total	8,335	7,452	-883	458	1,341
	Northeast	2,479	2,113	-366	46	412
	Midwest	2,094	1,710	-384	122	507
	South	2,103	1,961	-143	161	304
	West	1,659	1,669	10	128	118
5+ Unit Structures	Total	14,903	16,160	1,257	1,682	425
	Northeast	3,744	3,848	103	87	(17)
	Midwest	3,097	3,301	204	365	161
	South	4,421	5,005	583	773	189
	West	3,640	4,006	366	457	91

Notes: Total units gained/lost is the net change in units minus those built 1992 to 2001, and includes conversions from owner-occupied to rental and vice versa. Total units gained, shown in parentheses, result when net conversions are greater than permanent losses from the stock. 1991 counts are weighted with 1991 weights, 2001 counts and count of units built 1992 to 2001 are weighted with 2001 weights.

Source: JCHS tabulations of the 1991 and 2001 American Housing Surveys.

Table A-12

## Foreign-Born Households by Location and Year of Arrival: 2000

Location	All Households (Thousands)	Foreign-Born Households (Thousands)			Foreign-Born Share of All Households (%)			As a Share of All Foreign-Born Nationally (%)
		Total	Arrived After 1990	Arrived Before 1990	Total	Arrived After 1990	Arrived Before 1990	
<b>Top Ten Gateway Metro Areas</b>								
New York	6,272	1,940	538	1,402	30.9	8.6	22.4	16.1
Los Angeles	4,073	1,578	339	1,239	38.8	8.3	30.4	13.1
Chicago	3,174	567	167	400	17.9	5.3	12.6	4.7
San Francisco	1,727	460	117	343	26.7	6.8	19.9	3.8
Miami	769	474	118	356	61.7	15.3	46.3	3.9
Houston	1,544	331	110	221	21.4	7.1	14.3	2.7
Washington DC	1,777	310	104	206	17.4	5.8	11.6	2.6
Dallas	1,836	278	108	170	15.1	5.9	9.2	2.3
Boston	1,518	246	80	166	16.2	5.3	11.0	2.0
Atlanta	1,461	143	64	79	9.8	4.4	5.4	1.2
<b>Other Metros by Region</b>								
Northeast	9,390	699	188	511	7.4	2.0	5.4	5.8
Midwest	14,245	700	256	444	4.9	1.8	3.1	5.8
South	19,314	1,496	462	1,034	7.7	2.4	5.4	12.4
West	13,125	2,038	547	1,491	15.5	4.2	11.4	16.9
<b>Non-Metro Areas by Region</b>								
Northeast	1,715	53	11	43	3.1	0.6	2.5	0.4
Midwest	5,609	103	33	69	1.8	0.6	1.2	0.9
South	7,780	226	75	151	2.9	1.0	1.9	1.9
West	2,618	177	41	136	6.8	1.6	5.2	1.5
Metro Status Unidentifiable	7,535	239	60	179	3.2	0.8	2.4	2.0
US Total	105,480	12,059	3,417	8,642	11.4	3.2	8.2	100.0

Source: JCHS tabulations of the 2000 Census 5% PUMS.

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  
Baoyan Cheng  
James DeNormandie  
Zhu Xiao Di  
Cushing Dolbeare  
Rachel Bogardus Drew  
Elizabeth England  
Gary Fauth  
Jack Goodman  
Ruby Henry  
Jackie Hernandez  
Sonya Lai  
Alvaro Martin-Guerrero  
George Masnick  
John Meyer  
Rachel Roth  
Nicolas Retsinas  
Rebecca Russell  
Laurel Trayes  
Alexander von Hoffman  
Margaret Wei

---

Design and Project Management

Oxygen  
[www.oxygenllc.com](http://www.oxygenllc.com)

---

For additional copies, please contact  
Joint Center for Housing Studies of Harvard University  
1033 Massachusetts Avenue, 5th Floor  
Cambridge, MA 02138  
[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)