THE JOINT CENTER FOR HOUSING STUDIES OF HARVARD UNIVERSITY

THE STATE OF THE NATION'S HOUSING

2010

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1 EXECUTIVE SUMMARY

Even as the worst housing market correction in more than 60 years appeared to turn a corner in 2009, the fallout from sharply lower home prices and high unemployment continued. By year's end, about one in seven homeowners owed more on their mortgages than their homes were worth, seriously delinquent loans were at record highs, and foreclosures exceeded two million. Meanwhile, the share of households spending more than half their incomes on housing was poised to reach new heights as incomes slid. The strength of job growth is now key to how quickly loan distress subsides and how fully housing markets recover.

THE FLEDGLING RECOVERY

With the economy finally adding jobs and house prices down dramatically, two essential conditions for a sustained recovery in single-family starts and sales had fallen into place by spring 2010. But even in mid-2009—well before employment growth turned positive—existing home sales had revived as bargain hunters snapped up distressed properties in some of the hardest-hit areas **(Figure 1).** According to the National Association of Realtors®, more than a third of existing home sales last year—about 1.8 million units—were short sales or foreclosures.

Improved affordability for first-time homebuyers and a federal first-time buyer tax credit were vital to this early rebound. Indeed, even though tighter lending standards sapped some strength from the market, the increase in sales to first-time buyers drove all the gains in existing home sales in 2009. As a result of lower home prices and interest rates, mortgage payments on a median-priced home (assuming a 90 percent loan-to-value ratio) dropped below 20 percent of median household income—the lowest level on records dating back to 1971.

By the second quarter of 2009, new home sales began to pick up as well. While large in percentage-point terms, the gain through the third quarter was a modest 68,000 units (on a seasonally adjusted annual basis) from a base of just 338,000. Both new and existing home sales stalled again in the final quarter of the year and did not turn up until March 2010, sparked by another round of tax credit-supported homebuying and signs that labor markets were on the mend.

Home prices also showed signs of stabilizing in the spring of last year, only to slide again in late 2009 and the first two months of 2010. In the nation as a whole, however, median home prices followed sales higher in March and April. But two major indices provide conflicting news about the direction of home prices. After sliding sharply for several months, the FHFA purchase price index turned higher in February and March, while the S&P/Case-Shiller index showed steady declines from September 2008 through the

end of March 2010. Clear evidence of a home price recovery therefore had yet to emerge.

A number of other conditions are still weighing on the housing market. One of the biggest drags on the housing market is the high joblessness rate. With more than 7.8 million fewer establishment jobs than in December 2007, unemployment held at 9.9 percent in April 2010. If the past is any guide, the strength and sustainability of the housing recovery will depend most on the bounceback in employment growth **(Figure 2)**. Unfortunately, most economists predict that the unemployment rate will remain elevated as discouraged workers reenter the labor force amid slow gains in jobs.

The overhang of vacant units for rent, for sale, or held off the market (including foreclosed homes) is another serious concern. Despite production cuts of more than 70 percent since 2005, the overall vacancy rate hit a record in 2009. In addition, many current owners are effectively trapped in homes that are worth less than the amount owed on their mortgages. If these distressed owners want or need to sell, their only choices are to walk away from their homes or write a check at the closing table. This will inhibit a recovery in repeat home sales.

Finally, although picking up steam in the spring 2010 buying season, home sales will have to weather the expiration of the federal homebuyer tax credit. When the first round of credits expired in fall 2009, there was a noticeable falloff in sales. This time, though, the improving labor market may be enough to avoid a similar dip.

Barring an unexpected shock, mortgage interest rates should not be a major factor in either invigorating or undermining the recovery. Nonetheless, a one percentage point increase in mortgage rates would trim some of the recent affordability gains, while a comparable decrease would stimulate demand.

FIGURE 1

The Housing Market Struggled to Regain Ground Last Year

	Percent Change		
	2005–9	2008–9	Lowest Quarter in 2009 to 2010:1
New Single-Family Sales	-70.8	-22.7	5.7
Existing Single-Family Sales	-26.1	5.0	8.6
Housing Starts	-73.2	-38.8	16.6
Housing Completions	-58.9	-29.1	0.0
Median New Single-Family Price	-18.1	-6.3	2.0
Median Existing Single-Family Price	-28.5	-12.1	0.0
Home Equity	-56.6	-4.2	17.6
Mortgage Debt	5.6	-1.2	0.0
Residential Investment	-57.6	-24.1	0.7
Owner Residential Improvements	-19.6	-3.3	11.5

Notes: Percent change is calculated with unrounded numbers, with dollar values adjusted for inflation using the CPI-U for All Items. Starts and completions include single-family and multifamily units. Changes in home equity and mortgage debt are only through 2009:4.

Sources: US Census Bureau; National Association of Realtors® (NAR); Freddie Mac; Federal Reserve Board; Bureau of Economic Analysis.

HOMEOWNER STRESSES

Even as home sales and homebuilding improved last year, the foreclosure crisis intensified as the lagged impacts of huge job losses spread to the broader prime market. According to First American CoreLogic, falling home prices left 11.2 million homeowners underwater on their loans—with no home equity and unable to tap traditional markets—as of the end of the first quarter of 2010. Indeed, Freddie Mac reports that total real home equity cashed out at refinancing dropped 25 percent in 2009 and stood below $80 billion for the first time since 2000.

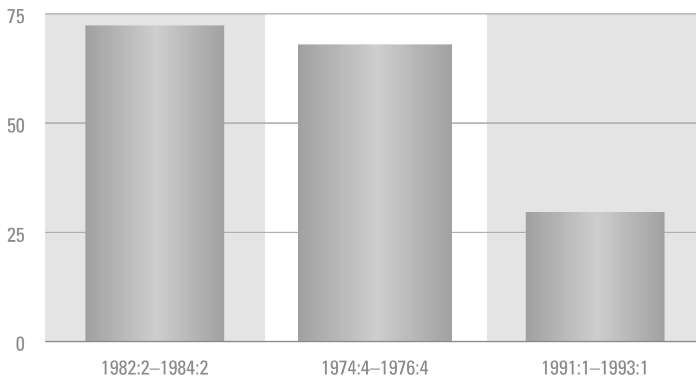
For its part, the government has focused on trying to prevent foreclosures. Under the Home Affordable Modification Program (HAMP), the federal government initially allocated $75 billion for sustainable mortgage modifications in an effort to reach 3–4 million homeowners by 2012. As of April 2010, HAMP had made 1.5 million offers that resulted in 637,000 currently active trial modifications and about 295,000 permanent ones. But even among those households able to qualify for this reduction in payments, the Treasury Department estimates that 40 percent will re-default.

The federal government also allocated about $6 billion to the Neighborhood Stabilization Program to deal with foreclosed properties, plus another $2.1 billion to housing finance agencies in states hardest hit by unemployment and house price declines. Preventing the millions of foreclosed properties from sitting empty, rehabilitating units in need, and placing them in the hands of responsible new owners—either as occupants or landlords—will be costly and difficult. With tighter underwriting standards limiting the ability of low-income borrowers

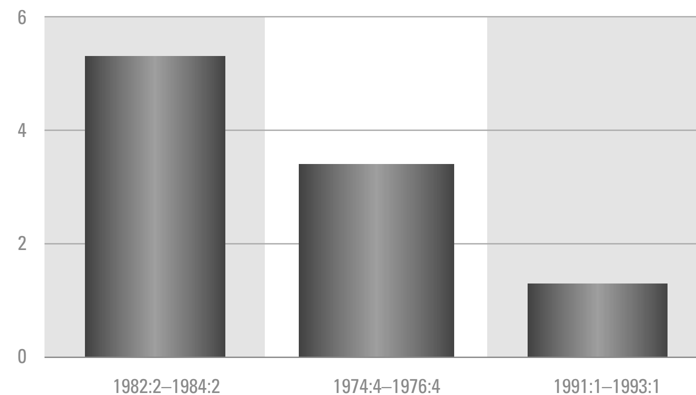
FIGURE 2

Strong Employment Growth, More than Falling Interest Rates, Has Been Critical to Sustained Housing Recoveries

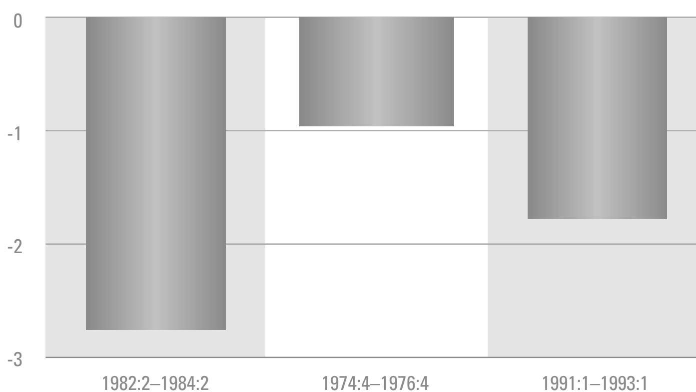
Change in New Home Sales (Percent)



Change in Employment (Percent)



Change in Mortgage Rates (Percentage points)



Note: Changes are from a trough in new home sales through the first eight quarters of a sustained recovery.

Source: JCHS tabulations of US Census Bureau, New Residential Construction Survey; Bureau of Labor Statistics, Current Employment Statistics; and Freddie Mac, Primary Mortgage Market Survey.

to qualify for loans, only a significant expansion of funding will prevent many communities—particularly many low-income minority neighborhoods where subprime loans were concentrated—from facing an uphill battle to restore housing markets to health over the next several years.

THE LOST DECADE

After at least three decades of progress, real median household incomes will almost certainly end the 2000s lower than they started. At last measure, the median for all households was $49,800 in 2008, down from $52,400 in 2000. Even at their last cyclical peak in 2007, real median incomes were 1.2 percent below 2000 levels.

Meanwhile, household wealth ballooned through the middle of the decade but ended about where it had started at around $54 trillion. On a per household basis, however, real household wealth slid from $503,500 to $486,600 over the decade. While growth in stock wealth has already started to pick up, housing wealth will take a slower path to recovery. Indeed, despite some painful foreclosure-driven deleveraging, mortgage debt has never been higher relative to home equity. After an $8.2 trillion plunge in housing wealth since the end of 2005, mortgage debt entered 2010 at 163 percent of home equity.

HOUSEHOLD GROWTH UNKNOWNS

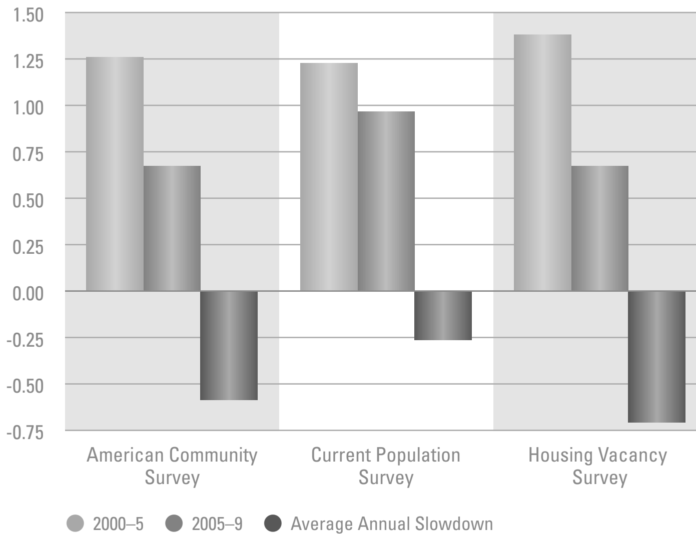
Despite all the attention paid to the recession's impacts on household growth, it is difficult to judge how big those effects have actually been. All three major federal surveys indicate that household growth slowed substantially in the second half of the decade, but the estimates range widely **(Figure 3).** The low estimate puts the cumulative slowdown in household growth over the last four years at 1.0 million while the high estimate indicates a drop of 2.8 million. The reality could, however, be even worse because household growth estimates depend heavily on net immigration, which is particularly difficult to assess in and around an economic recession.

It is also challenging to sort out how much of the slowdown is due to reduced immigration and how much to lower household headship rates caused by doubling up. On the one hand, the Current Population Survey shows a much sharper decline in the number of foreign-born households under the age of 35 from March 2007 to March 2009 (338,400) than in same-age native-born households (2,100). On the other, the survey also indicates that headship rates among young adults as a whole declined in the late 2000s, consistent with the expected effects of soaring unemployment within that age group. At the same time, the survey also shows some dropoff in headship rates in older age groups.

FIGURE 3

Household Growth Has Clearly Slowed, But Estimates of the Degree Vary Widely

Average Annual Household Growth (Millions)



Notes: ACS estimates are from 2005 to 2008 only. To adjust for rebenchmarking, CPS and HVS estimates for 2002–3 are assumed to equal the average in 2000–5.

Sources: US Census Bureau, American Housing Survey; Current Population Survey; and Housing Vacancy Survey.

In any case, headship rates may not remain depressed for long given dramatic improvements in affordability for first-time buyers who have jobs, softening rents due to high rental vacancies, and the expectation that household growth will return to long-term trend levels when employment growth quickens. But assuming headship rates remain at their slightly lower 2008 levels and that net immigration recovers to its 2000–5 pace, household growth will average about 1.48 million annually in 2010–20. Even if immigration falls to half the Census Bureau's currently projected rate, household growth will still average about 1.25 million annually **(Table A-7).** This low-end estimate puts household growth in the next 10 years on par with the pace in 1995–2005, and should support average annual housing completions and manufactured home placements of well over 1.7 million units. The higher-end estimate would likely support production exceeding 1.9 million units per year on average over the coming decade.

DIVERSITY AND HOUSING DEMAND

At last measure in 2007, minorities accounted for fully 35 percent of first-time homebuyers and 20 percent of repeat buyers even in the middle of the housing bust. The immigrant share of first-time buyers was 19 percent and of repeat buyers 12 percent. The increasing presence of minorities and the foreign born in the rental market is even more striking. From 2000 to 2009, rapid growth of Hispanic households helped to lift the total minority share from 39.3 percent to 45.1 percent.

Even if immigration ground to a halt today, past inflows and higher fertility rates ensure that minorities and the foreign born will increasingly drive growth in housing demand. Both the echo-boom generation (born 1986–2005) and the so-called baby-bust generation (born 1966–85) already have much larger minority shares than the baby-boom generation **(Figure 4).** The sheer size of these generations—with the baby bust heavily augmented by the foreign born, and the even larger echo boom just now reaching the ages when immigrants will bolster its ranks—points to strong household growth in the years ahead.

In 2009, minorities accounted for 37 percent of householders aged 25–44 and 39 percent of those under age 25. Even under the Census Bureau's zero-immigration scenario, the minority share of the working-age population aged 25–64 would thus rise from 29 percent in 2000 to just under 35 percent in 2020.

Importantly, minority households have lower median incomes than white households. For example, the median income for 35–44 year-old minority-headed households was $45,000 in 2008, compared with $72,900 for whites. The gaps in personal income are even wider. If these disparities persist and overall income growth among younger generations remains weak, the social security system will come under increasing pressure as the baby boomers enter retirement.

The oldest baby boomers are just turning 64, with millions soon to follow. Indeed, the number of persons aged 55–64 rose by 10.4 million over the past decade—a 42.8 percent increase compared with total population growth of just 9.4 percent. Despite their losses in wealth caused by the correction in home and stock prices, the baby boomers will drive demand for senior housing suited to active lifestyles as well as for assisted living facilities.

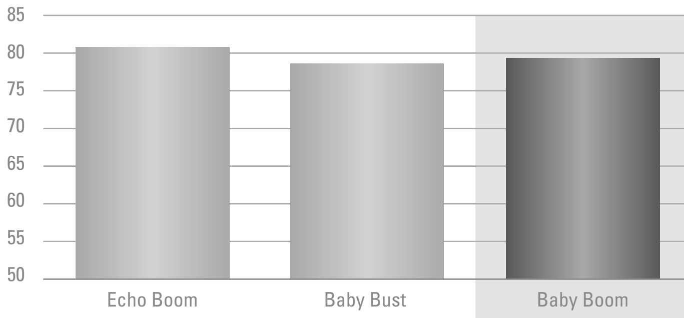
POLICY PRIORITIES

As the nation looks forward to a housing recovery, homeowners and renters alike are under duress. When home prices move consistently higher, some of the equity that owners lost over the last decade will be restored. But rising prices will also put additional strain on the already large number of households with daunting affordability challenges. Tackling these issues while leveraging the potential of housing to anchor neighborhood revitalization and achieve energy savings will be national priorities in the decade ahead.

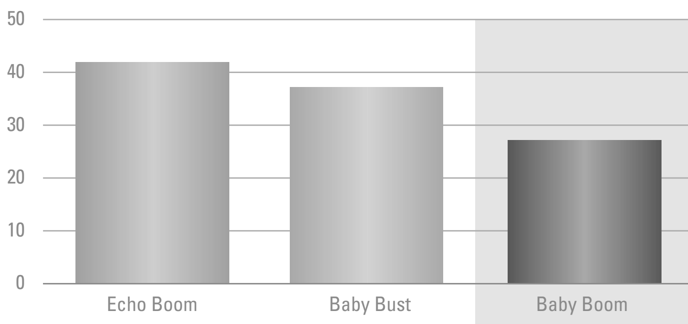
FIGURE 4

The Generations Following the Baby Boomers Are Large and More Diverse

Number of People in 2009 (Millions)



Minority Share of Generation in 2009 (Percent)

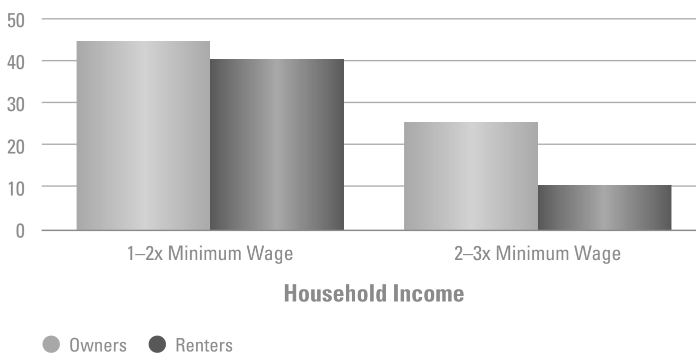


Note: Members of the echo-boom generation are aged 5–24 in 2010; the baby-bust generation are aged 25–44; and the baby-boom generation are aged 45–64.
Source: JCHS tabulations of US Census Bureau, Current Population Survey.

FIGURE 5

Even Households Earning Multiples of the Minimum Wage Cannot Afford Housing

Share of Working-Age Households with Severe Cost Burdens, 2008 (Percent)



Notes: Working-age households are aged 18-64. Minimum wage is $7.25 per hour. Full-time minimum wage job equivalent income is based on working 35 hours per week for 50 weeks. Households with severe cost burdens spend more than 50% of pre-tax income on housing.
Source: JCHS tabulations of US Census Bureau, 2008 American Community Survey.

All told, 40.3 million households spent more than 30 percent of their incomes on housing in 2008, while 18.6 million of these households spent more than half—up from 13.8 million in 2001. Of those with such severe housing cost burdens, fully 45.1 percent are renters in the bottom income quartile. Indeed, many householders with incomes that are one to three times the full-time minimum wage equivalent still have to devote at least half their incomes to housing **(Figure 5).**

Meanwhile, the acute housing affordability problems of very low-income renter households (with incomes half or less of area medians) has long been a focus of national housing policy. Yet despite federal support for rental assistance of about $45 billion per year, only about one-quarter of eligible renter households report receiving housing assistance.

Efforts to impose fiscal austerity may take a toll on programs to cope with these challenges. President Obama's FY2011 budget trimmed US Department of Housing and Urban Development funding by 5 percent, although an additional $2.2 billion was shifted into core rental assistance programs, yielding a net increase in the number of needy households served **(Table W-5).** Attention has also begun to focus on making the rental housing system more efficient and to placing the public housing stock on more secure footing by tying rents and rent increases to the market. In addition, HUD is extending revitalization efforts beyond distressed public housing by incorporating non-housing investments and by coordinating with other programs and services to achieve better employment, health, and safety outcomes for residents.

Also underway are efforts to reduce the nation's energy consumption and carbon footprint through improvements to the housing stock. In 2009, the American Recovery and Reinvestment Act extended energy efficiency tax credits for homeowners and funded low-income home weatherization programs. Longer-term federal commitments include HUD's new Sustainable Communities Initiative to encourage more energy-efficient and transit-friendly development patterns on a local level. Finally, homeowners and builders alike continue to make homes more energy efficient, led by regional certification programs as well as national green building standards. At stake are potentially large savings in the energy consumed to heat and cool homes, as well as in the number of vehicle miles traveled and related carbon emissions.

2 HOUSING MARKETS

Housing markets showed some signs of recovery in 2009. The question now is whether the large overhang of vacant units—combined with high unemployment and record foreclosures—will allow a robust and sustained upturn. As job growth resumes, however, household growth should pick up and help spur increased new construction and sales. With the economy, existing sales, and consumer confidence already turning around, home improvement spending should soon follow suit.

PLUMBING THE DEPTHS

With demand for new homes reaching record lows, production slowed to a crawl last year. In fact, fewer homes were started in 2009 than in any year since World War II. Even with a weak rebound in the second half of the year, starts of single-family homes were down 28 percent from 2008 and stood below 500,000 units for the first time since recordkeeping began in 1959. Manufactured home placements fell by an even greater 34 percent, while multifamily starts plummeted by a whopping 62 percent from an already low level.

Permitting for new housing was also off sharply, suggesting that starts will remain below normal levels for some time. Census Bureau estimates show that permits totaled just 583,000 in 2009, compared with 2.16 million at the 2005 peak and an annual average of 1.32 million in the 1990s **(Table A-2).** Again, this is the first time in recorded history that annual permits have numbered less than 900,000. Even after a sizable 31 percent jump from the March 2009 trough to March 2010, the pace of permitting remained in the low 600,000s through April of this year.

The sharp cutback in permits extended across the nation, with 57 of the 100 largest metropolitan areas posting record lows last year. In fully 89 percent of these metros, permitting activity in 2009 was at less than half the average annual pace in the 1990s **(Figure 6).**

PROMISING SIGNS

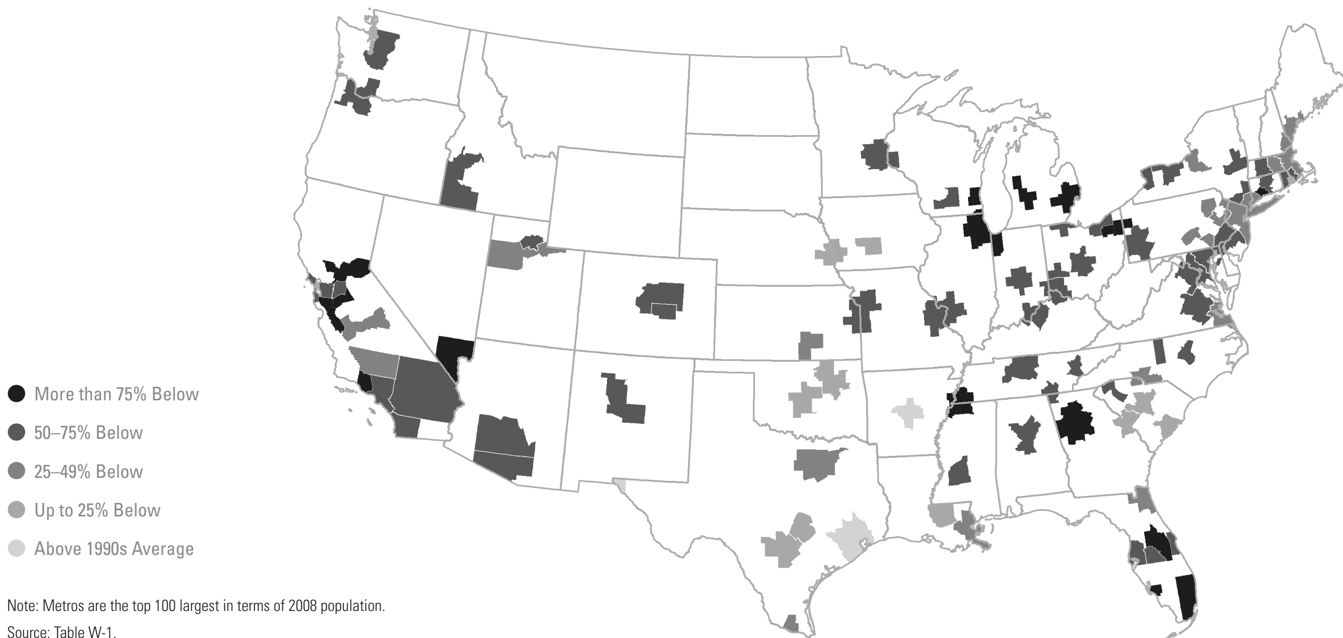
Even in the midst of crushing job losses and a severe recession, both new and existing home sales managed to stage comebacks in the middle of 2009. Although home sales lost some ground late in 2009 and early 2010, housing markets may have turned a corner.

The rebound in demand was aided by falling home prices, the federal tax credit for first-time homebuyers, and Federal Reserve purchases of mortgage-backed securities to keep interest rates

FIGURE 6

Permitting Activity Last Year Was Just a Fraction of 1990s Levels

Housing Permits in 2009 Relative to 1990s Annual Average



Note: Metros are the top 100 largest in terms of 2008 population.
Source: Table W-1.

low. Depending on the measure used, the peak-to-trough drop in monthly home prices was anywhere from 13 percent to 32 percent. In many markets, prices fell by half or more—erasing the record runups earlier in the decade. Meanwhile, the federal tax credit for first-time buyers, initially set to expire in fall 2009, was renewed, expanded to include repeat homebuyers, and extended to contracts signed by the end of April 2010. Finally, interest rates on 30-year fixed mortgages averaged only 5.04 percent in 2009 and 5.00 percent in the first quarter of 2010.

As a result, the first-time homebuyer share of sales soared to 45 percent in 2009 as households previously boxed out of the market jumped at the dramatically lower prices. Bargain hunters buying up troubled properties largely drove the gains in existing home sales last year. The National Association of Realtors® estimated that the share of existing home sales that were distressed in 2009 averaged 36 percent per month, topping out at fully 49 percent in March.

RISKS TO THE RECOVERY

After following a classic pattern of improving exactly two quarters before growth in real gross domestic product (GDP) turns up—and within two to three quarters of renewed employment growth—new home sales sputtered in the final quarter of 2009 and the first quarter of 2010.

Despite strong new home sales gains in March and April 2010, the durability of the housing recovery is still at risk. In addition to the expiration of the homebuyer tax credit program, which may have temporarily jacked up home sales, the market faces threats from the severe overhang of vacant units, still high unemployment, and record numbers of owners with homes worth less than the amount owed on their mortgages.

Demand has been so weak that vacancies hit record levels despite draconian production cuts. The number of vacancies exploded from 2006 through 2008 before growth slowed in 2009. For-sale vacancies finally eased last year, perhaps aided by the first-time homebuyer tax credit. But increases in for-rent vacancies more than offset the reduction, suggesting that some owners may have shifted their empty for-sale units to the rental market. Worse, the surge in foreclosures pushed the number of excess vacant homes in the "held off market" category some 745,000 units above normal levels, rivaling the total number of excess vacant units that are for sale and for rent **(Figure 7).**

On the for-sale side, vacancy rates for single-family homes edged down 0.2 percentage point in 2009 while those for multifamily units slipped 0.3 percentage point. This improvement may be only temporary, however, as banks continue to put foreclosed homes back on the market. On the for-rent side,

vacancy rates increased slightly for single-family homes but climbed sharply for buildings with 10 or more apartments.

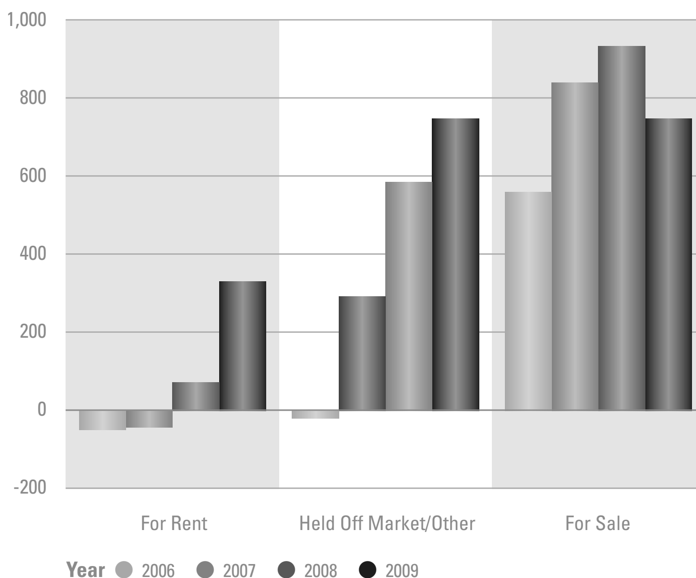
The stubbornly high and rising overall vacancy rate—even with production near 60-year lows—reflects the fact that household growth has been running well below what would be expected in normal economic times. While there is some evidence that doubling up in shared quarters has been on the increase, the main explanation for the weakness of demand appears to be lower net immigration.

High unemployment is not helping either. The limited historical data available suggest that employment growth is critical to new home sales in the first two years of housing market recoveries. But the sheer numbers of job losses and of discouraged workers who have exited the labor force make this cycle much worse in depth and duration than the last several. When employment was hammered in previous downturns, job growth rebounded strongly. Most economists, however, consider a large bounceback unlikely in 2010. If job growth does surprise on the upside, home sales and construction could see a more robust recovery.

FIGURE 7

Excess Rental Vacancies and Units Held Off Market Increased Again in 2009, Offsetting the Drop in For-Sale Vacancies

Estimated Excess Vacant Units (Thousands)



Notes: Excess vacancies for for-sale units and units held off the market are estimated against 1999–2001 levels; those for rental units are measured against 2003–7 levels. Held off market/other comprises occasional use, usual residence elsewhere, and other units. Estimates do not include units rented or sold and not yet occupied.

Source: JCHS tabulations of the US Census Bureau, Housing Vacancy Survey.

SAGGING HOME PRICES

The overhang of vacant units pushed home prices down again in 2009. While all major price measures showed declines, the most inclusive indices—such as the NAR, S&P/Case-Shiller, and First American CoreLogic—registered the largest drops. Indeed, the declines in these indices (which include subprime mortgages and very high-balance mortgages) are more than double those in the narrower Federal Housing Finance Agency (FHFA) or Conventional Mortgage Home Price Index (CMHPI). That the fall in the FHFA index accelerated in December 2009 suggests that rising delinquencies among prime mortgages are increasing the number of distressed sales and putting added pressure on home values.

Nominal price declines are especially noteworthy. Between October 2005 and March 2010, the NAR median house price plunged 26 percent. The only other time in the past 40 years that this measure has fallen was from November 1989 to December 1990, when the dip was just 2 percent. In the past year alone, nominal house prices in the narrower CMHPI index were off by more than 5 percent in 42 of the 81 metropolitan areas and divisions (52 percent) with consistent price histories back to 1975. Until 2009, only five metros (6 percent) had ever posted nominal declines greater than 5 percent in single year.

According to the broad S&P/Case-Shiller index, prices for low-end homes in most metropolitan areas registered the largest drops **(Figure 8).** On average, the declines at the low end of the market were more than 50 percent greater than those at the high end. This disproportionate loss of housing wealth has added to the pressures on low-income homeowners faced with job losses and heavy debt loads.

When nominal prices are rising, owners who get into trouble making payments or need to move can simply sell their homes for a nominal gain and pay off their mortgages. But when nominal prices fall, owners whose homes are worth less than their mortgages cannot sell at a gain. This impedes repeat sales and increases the likelihood of defaults. According to First American CoreLogic, roughly one-quarter of American homeowners with mortgages were underwater in the first quarter of 2010. Some 40 percent of these 11.2 million distressed owners are located in California and Florida. Nevada has the highest incidence of the problem, affecting 70 percent of homeowners with mortgages.

At the same time, though, steep price declines also bring critical improvements in first-time homebuyer affordability

that will help to fuel recovery. Nationwide, the median sales price dropped from 4.7 times the median household income in 2005 to 3.4 times in 2009. When combined with low interest rates, this puts mortgage payments on the median priced home closer to median gross rents than at anytime since 1980 **(Table A-1).** Among the 92 metropolitan areas consistently covered by NAR since 1989, price-to-income ratios in 21 are now below their long-run averages—some significantly so. For example, the ratios in Lansing, Cleveland, and Cape Coral are some 18–23 percent lower than long-run levels.

During the start of the spring buying season in March, median house prices as well as prices on homes with prime mortgages were headed higher. The closely watched (unadjusted) S&P/Case-Shiller index, however, showed another month of declines in most of the 20 metropolitan areas tracked. If prices soften after expiration of the homebuyer tax credit, some urgency to buy will be lost. But if prices firm, they could encourage would-be buyers on the sidelines to jump in before a stronger upturn.

Median prices for existing single-family homes in most areas with widespread foreclosures—particularly Florida, the Midwest, and the Southeast—were still falling in the first quarter of 2010. Prices in some of California's largest metros, however, did post measurable rebounds. Albeit an imperfect guide, history suggests that home prices move up only gradually after severe declines, even when foreclosures are less of a problem than they are today.

REMODELING MARKETS

While the drop in new construction spending has been off the charts, the cutback in remodeling activity is in line with previous downturns **(Figure 9).** Real homeowner improvement spending in 2009 fell 25 percent from its 2006 peak—about a third as large as the drop in new residential construction.

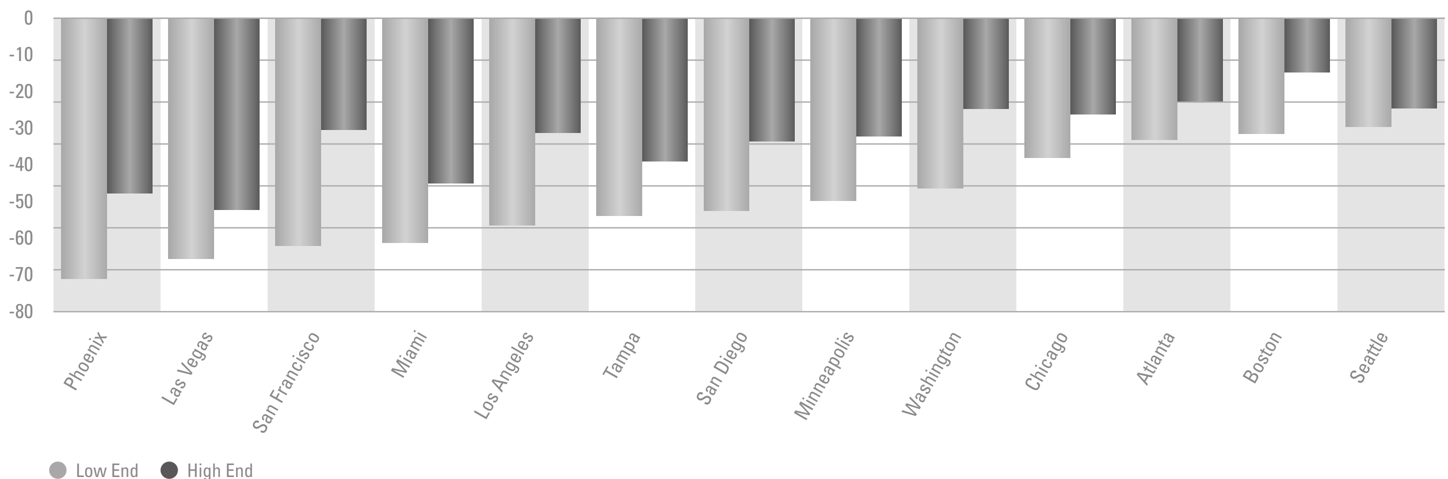
Remodeling generally holds up better during recessions than new construction because owners have little choice but to replace certain worn-out systems in their homes. The continuing dominance of higher-income owners in the market may have also served to limit the cutback in remodeling expenditures. In 2007, the top 5 percent of spenders accounted for fully 47 percent of all home improvement spending, up from 45 percent in 2001. This may have prevented a larger slide in the remodeling market both because higher-income households have been less affected by unemployment and house price declines, and because they have readier access to credit.

Federal stimulus spending and tax incentives have supported improvement spending as well. The federal government dis-

FIGURE 8

House Prices Have Tumbled Much More at the Low than at the High End of the Market

Peak-to-Trough House Price Decline (Percent)

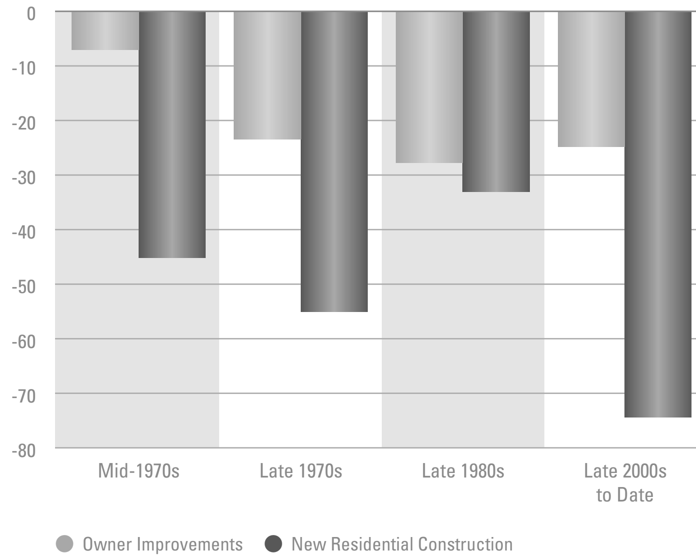


Notes: Values shown are monthly through March 2010. Low (high) end represents the bottom (top) third of the market based on previous purchase price.
Source: S&P/Case-Shiller Tiered House Price Indices.

FIGURE 9

Remodeling Cycles Are Less Severe than Homebuilding Cycles

Peak-to-Trough Change in Real Annual Value Put in Place (Percent)



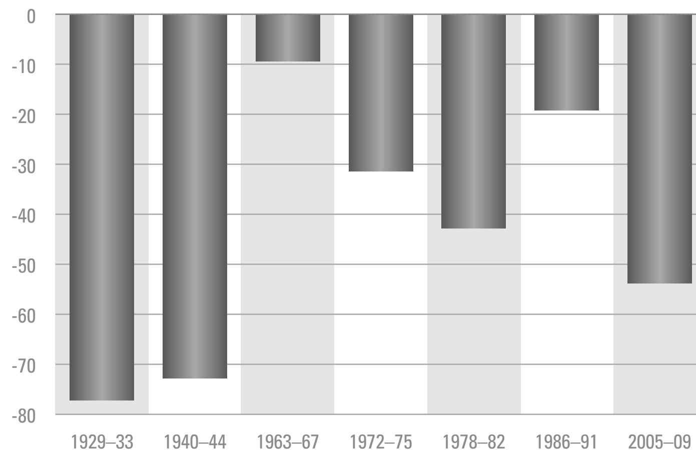
Notes: Values are adjusted for inflation by the CPI-U for All Items. New residential construction includes private production of both single-family and multifamily structures. Declines in owner improvements and construction occur over slightly different periods.

Source: US Census Bureau, Construction Spending Statistics.

FIGURE 10

Residential Fixed Investment Has Posted Its Largest Drop Since the 1940s

Change in Real Spending (Percent)



Note: Changes in 1929–33 and 1940–44 are in chained 1937 dollars; 1963–67, 1972–75 and 1978–82 in chained 1972 dollars; 1986–91 in chained 1987 dollars: and 2005–9 in chained 2005 dollars.

Source: US Bureau of Economic Analysis, National Income and Product Accounts.

tributed $5 billion to states to provide low-income owners with free weatherization of their homes. While small in comparison with the more than $100 billion spent by homeowners on improvements, these programs were still a plus for remodeling last year. Perhaps more important, federal tax incentives encouraged owners to upgrade the energy efficiency of their homes. The share of professional remodelers reporting they had worked on projects linked to the energy-efficiency tax credits thus increased from 39 percent in 2009 to 53 percent in early 2010.

HOUSING AND THE ECONOMY

With the exception of the 2001 recession, housing construction typically leads the nation both into and out of recessions. In that year, unusually sharp and rapid interest rate reductions engineered by the Federal Reserve kept housing relatively strong both before and after the downturn.

After dragging down the economy for 14 straight quarters, residential fixed investment finally supported growth in the second half of 2009. As a share of GDP, residential investment bottomed out at 2.4 percent in the second quarter of 2009 and averaged 2.5 percent for the year—its lowest level since 1945. In total, real residential fixed investment dropped 53.7 percent from 2005 to 2009 **(Figure 10).**

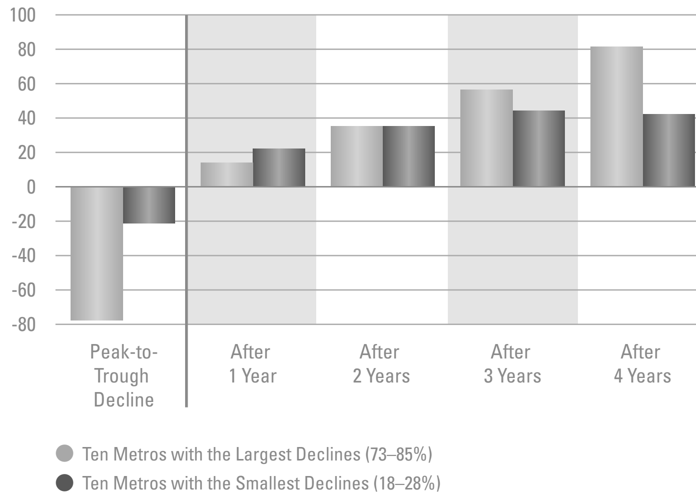
Falling home prices also helped to dampen economic growth. Moody's Economy.com estimates that spending cutbacks by homeowners reeling from both the loss of housing wealth and reduced capacity to tap into home equity shaved 0.8 of a percentage point from GDP growth in 2009. Indeed, Freddie Mac reports that even though overall refinancing activity increased 75 percent last year, cash-out refinances were increasingly rare. The annual volume of home equity cashed out at refinancing of prime, first-lien conventional mortgages declined by another 25 percent to $70.8 billion in 2009—about one-fifth of the 2006 peak level. This pushed cash-out refinance volumes below 2001 levels in nominal terms. Meanwhile, the share of cash-in refinances (borrowers paying down debt when they refinanced) climbed from about 10 percent in 2006 to 36 percent by the fourth quarter of 2009.

Further gains in manufacturing, a continuing strong rebound in consumer spending, or a more robust recovery in housing markets and home prices will likely be necessary to keep the economy growing. During this cycle, employment nationwide declined by 8.4 million while the residential construction sector alone lost 1.3 million jobs. In areas that had relied heavily on homebuilding to fuel growth—such as Florida, Arizona, and Nevada—a bounceback in construction may be necessary for a job recovery to take hold.

FIGURE 11

In the Previous Cycle, Markets with Sharper Construction Cuts Did Not Recover More Strongly Until Year Three

Median Annual Change in Single-Family Permits, Late 1980s to Early 1990s (Percent)

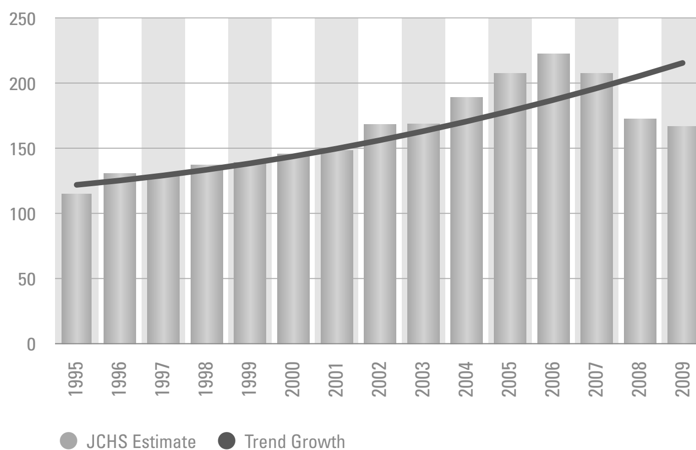


Note: Data include the 50 largest homebuilding markets, as ranked by permits issued in 1986, posting greater than 10% declines in permits.
Source: JCHS tabulations of US Census Bureau, New Residential Construction.

FIGURE 12

After Several Years of Strong Growth, Remodeling Spending Has Now Fallen Well Below Trend

Owner Improvement Expenditures (Billions of 2008 dollars)



Notes: The JCHS estimate is the 2005 American Housing Survey total owner improvements indexed by the annual level of owner improvements as reported by the US Census C-30 series. Trend growth for 2005–9 is calculated by applying the 1995–2000 growth in owner improvements by age, household type, and minority status in the AHS to JCHS household projections. Values are adjusted for inflation by the CPI-U for All Items.
Sources: JCHS tabulations of US Census Bureau, American Housing Survey; JCHS 2009 household projections.

THE OUTLOOK

Entering 2010, it appears that unusually low demand for new homes—rather than a large oversupply of housing—is holding back residential construction. In fact, the deep cuts in homebuilding have likely brought long-run supply and demand closer to balance. But the depressed state of demand is keeping vacancy rates for for-rent and for-sale homes on the market stubbornly high. Meanwhile, vacancy rates for units held off market coming off foreclosures are still climbing.

After previous recessions, robust employment growth has been necessary for housing starts to stage a comeback. Interest rate changes can help or hurt, but generally have to be large to make a substantial difference. Moreover, the amount by which homebuilding falls at the local level has little to do with how quickly it revives. As the experience of 1986–92 shows, the rising tide lifted all metropolitan markets at about the same pace until several years out **(Figure 11).**

Unusually weak demand has also undercut home improvement spending. While average homeowner remodeling expenditures did show a sharp uptick in 2000–6, it now appears that the amount by which remodeling demand is currently below trend has made up for the amount by which it was above trend earlier in the decade **(Figure 12).** Owners tend to spend more on remodeling right after purchasing homes, and their expenditures are sensitive to interest rates if the improvement projects require financing. The Leading Indicator of Remodeling Activity for the first quarter of 2010 thus points to a rebound that should extend throughout the year, largely as a result of the pickup in existing home sales and the decline in interest rates.

In the longer term, both homebuilding and remodeling activity should increase dramatically. Demographic forces will lift household growth over the coming decade regardless of whether immigration is suppressed or the echo boomers delay forming independent households **(Table A-5).** Thus, even under a low-immigration scenario and assuming headship rates hold constant at 2008 levels, overall housing demand—including for second homes and replacement of older housing lost from the stock—should support more than 17 million new home completions and manufactured home placements between 2010 and 2020.

3 DEMOGRAPHIC DRIVERS

With the nation hammered by a fierce housing downturn and a severe recession, household growth slowed in the second half of the 2000s—led primarily by a retreat in immigration. But even if immigration falls far short of its 2000–5 pace in the coming decade, household growth should match the 12.5 million in 1995–2005. Moreover, immigrants and their native-born children have swelled the ranks of the baby-bust and echo-boom generations so that each now rivals the baby-boom generation in size.

SLOWDOWN IN HOUSEHOLD GROWTH

Household growth from 2005 to 2009 fell well below what would be expected in less challenging economic times, slowing from about 1.2–1.4 million annually in the first half of the decade to less than 1.0 million per year. The main explanation appears to be a marked drop in immigration, though doubling up among economically stressed families has also played a part.

Immigration, especially of undocumented entrants, slowed sharply in response to broad job losses. The Office of Immigration Statistics at the Department of Homeland Security estimates that the number of unauthorized immigrants living in the United States declined by 1.0 million between January 2007 and 2009, compared with a net gain of 1.3 million from 2005 to 2007.

Household headship rates for all age groups have also fallen since 2005, especially among those under age 35, although the timing of declines reported by some federal sources predates the recession. The future direction of headship rates is uncertain. On the one hand, rates may continue to slide over the next year or two if the impacts of job losses and home foreclosures hit with a lag. On the other, the recent softness in rents and sharp drop in home prices may lead more employed workers to form households, offsetting the departure of the unemployed from the housing market. In addition, doubling up is usually a temporary solution. On balance, then, it would likely take a second economic dip or a long, drawn-out recovery to keep headship rates—and therefore the pace of household growth—from meeting expectations over the coming decade.

But the hole left by the loss of over 8 million jobs could cut the flow of immigrants into the US. If immigration slows to about half the pace in the Census Bureau's current projections, and if headship rates by age and race/ethnicity hold at their 2008 levels, household growth in 2010–20 will come in at about 12.5 million. If immigration reaches the Census Bureau's estimate, however, household growth could climb closer to 14.8 million over the next 10 years.

REDUCED MOBILITY

The housing bust and economic recession not only took a bite out of household growth but also led to lower mobility. The number and share of householders who reported having changed primary residences within the previous year declined in 2005–8 even after controlling for age (which strongly influences mobility). Overall mobility rates fell by about 12.6 percent over that period before stabilizing in 2009. The steepest declines were among homeowners, likely because the housing crash left so many underwater (or nearly so) on their mortgages. This makes it difficult for households to move. The overwhelming majority of stressed homeowners will therefore remain in place rather than suffer a loss.

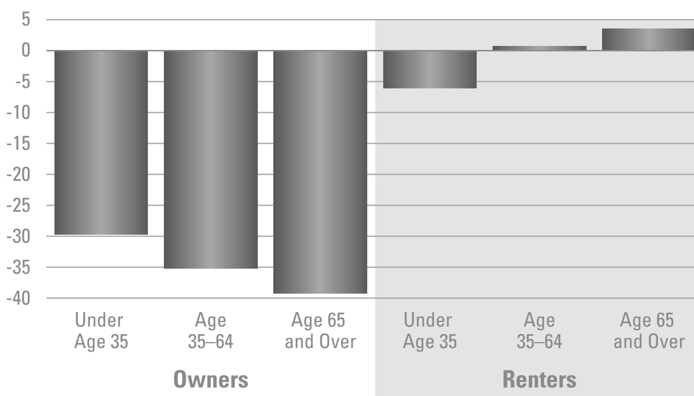
Mobility rates among older owners posted the sharpest drop **(Figure 13).** Many seniors who planned to retire and move to different homes deferred that decision after the financial crisis depressed their home equity and reduced their retirement accounts. Unless housing and financial markets rebound sharply in the near future, some owners may never be able to retire elsewhere. Still, fewer seniors than younger owners had their home equity completely wiped out because most had owned their homes for several years and had paid down significant amounts of debt. Thus, many older owners still stand to gain if they sell their homes.

Meanwhile, house price declines in traditional retirement destinations such as Arizona, Nevada, and Florida now make these markets look relatively affordable again. But most Sunbelt retirement communities will be slow to recover not only because of the drop in domestic migration, but also because so much of the recent boom in these locations was construction-driven and reliant on strong job growth. This is also the case in several previously fast-growing communities in the Rocky Mountain West, where many aging baby boomers had either moved or purchased second homes in anticipation of retirement.

FIGURE 13

The Housing Crash Reduced Mobility Rates, Especially for Older Homeowners

Change in Householder Mobility Rate, 2005–9 (Percent)



Note: Mobility rate is defined as the share of householders who reported having moved in the previous 12 months.

Source: JCHS tabulations of US Census Bureau, 2005 and 2009 Current Population Surveys.

A LOST DECADE FOR HOUSEHOLD INCOME

For the first time since at least 1970, median household incomes for all age groups in each income quartile are likely to end the decade lower than they began. At last measure in March 2009, no group was spared from income declines. Households under age 25 in the lowest income quartile were hardest hit, with median incomes down more than 16 percent between 2000 and 2008 in inflation-adjusted terms **(Table W-4).** Middle-aged households in the lower half of the income distribution saw declines in the 7–12 percent range—significantly greater than the losses among those in the upper half of the distribution. For the oldest and youngest age groups, however, income losses among even the top quartile exceeded 6 percent. These dismal figures predate the heavy employment losses in 2009.

This income trend stands in sharp contrast to the upward momentum gained over the previous 30 years. Making up for these losses may take time. Housing demand must therefore build upon a lower real income base than a decade ago. Falling home prices, lower interest rates, and slower increases in rents may, however, blunt some of the impact of income losses over the next year or two. But if interest rates move up and housing prices come off their floors, incomes will have to rise proportionately to enable households to maintain recent levels of housing consumption without increasing their cost burdens. If their incomes do not bounce back quickly, Americans will have to choose whether to cut back on the size and features of their homes or allocate larger shares of their incomes to housing.

HOUSEHOLD WEALTH REVERSALS

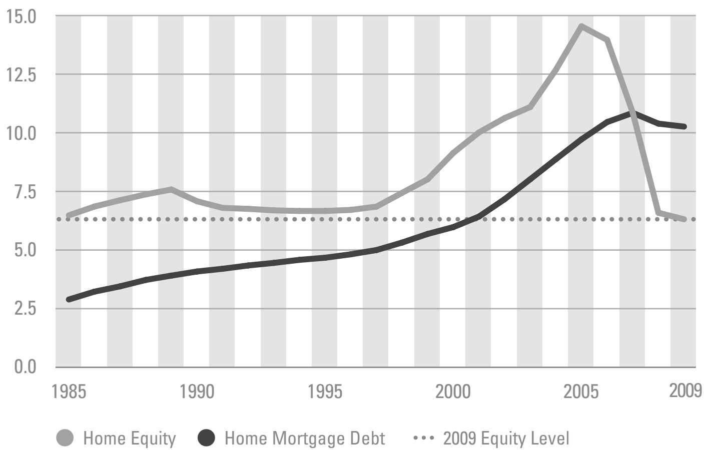
Household wealth went through a sharp boom-and-bust cycle over the last decade. After sliding from $55 trillion in 1999 to $49 trillion in 2002 in the wake of the dot-com bubble, real aggregate household wealth soared to nearly $69 trillion in 2006. Then in 2008, household wealth plummeted to $51 trillion—a drop of more than $17 trillion in just two years. Although recovering to $54 trillion in 2009, household wealth ended the decade showing little gain. On a per household basis, real household wealth actually fell from $526,000 in 1999 to $486,600 in 2009.

Meanwhile, household mortgage debt exploded from less than $6 trillion to more than $10 trillion in inflation-adjusted

FIGURE 14

Real Home Equity Has Returned to Its 1985 Level And Stands Below Mortgage Debt for the First Time on Record

Trillions of 2009 Dollars



Note: Values are adjusted for inflation by the CPI-U for All Items.
Source: Federal Reserve Board, Flow of Funds.

dollars. The aggregate value of homes owned by households, in contrast, increased $2.9 trillion from the end of 1999 to the end of 2009 as additions to the housing stock offset relatively modest losses in home values when totaled over the full 10-year period. The combination drove home equity down from its $14.5 trillion peak in 2005 to $6.3 trillion in 2009, wiping out more than half of all housing wealth.

The drop in home equity is startling when placed in historical context **(Figure 14).** Aggregate real home equity has not been this low since 1985 when there were far fewer homeowners than today. In addition, the amount of home equity and the amount of mortgage debt outstanding essentially flipped in just one decade. As a result, mortgage debt climbed from 65 percent of home equity in 2000 to 163 percent in 2009.

Until the recent freefall, US household wealth had shown strong long-term growth. Indeed, each generation made substantial progress in both 1989–98 and 1998–2007. This is especially true for those aged 44–70 in 2007. Although households quickly regained wealth after the dot-com bust in the 1990s, the damage is likely to last longer this time around because home prices do not usually recover as quickly as stock prices. Still, the rapid increase in household wealth of $3 trillion in 2009 alone is a reminder that fortunes can shift sharply.

GROWING DIVERSITY OF DEMAND

Regardless of what happens in the future, immigration since 1980 has already reshaped the nation's demographic profile, particularly in terms of racial and ethnic diversity. Immigrants and their children have so amplified the baby-bust generation (born in 1966–85) that it nearly outnumbers the baby-boom generation, which peaked in size at 83 million around 2000.

The baby-bust generation is also more diverse than the baby-boom generation. The percentage of people between the ages of 25 and 44 in the US who are black, Asian, or Hispanic stood at 37 percent in 2009. The echo-boom generation (born 1986–2005) is already 42 percent minority. As the echo boomers age into their late 20 and 30s, new immigrants will add to their numbers and shift the composition of this generation even closer to majority-minority.

Several large metropolitan areas have already reached that mark, particularly among the echo-boom generation **(Figure 15).** On a state level in 2008, the minority share among echo boomers exceeded 50 percent in Hawaii, New Mexico, California, Texas, Arizona, and Nevada, as well as in Washington, DC. The minority population in the 5–24 age group in two other large states—Florida and New York—was also fast approaching majority **(Table W-3).**

Throughout this housing cycle, the numbers of immigrant and minority households have continued to grow at a faster pace than those of native-born white households, accounting for 74 percent of net household growth between 2003 and 2009. As their numbers have climbed, their presence in homebuying, remodeling, and rental markets has also increased. As a result, the future expansion of housing investment and the growth in the broader economy will depend on reducing the significant income and wealth disparities between whites and minorities. For example, the median income of households headed by 35–44 year-old minorities in 2008 was $45,000—less than two-thirds of the $72,900 for same-age whites. What is worse, the median wealth of these minority households in 2007 was just $29,600, or about one-quarter of white household wealth of $109,000.

Narrowing these disparities will depend on the ability of the nation to improve the educational achievement of minorities, and of the economy to create better paying jobs that rely on skilled workers. As it is, however, younger native-born minorities are much less likely to have received higher education than native-born whites. Among native-born householders aged 25–34, for example, just 23 percent of minorities have college degrees, compared with 40 percent of their white counterparts.

RESIDENTIAL DEVELOPMENT AND THE ENVIRONMENT

With so much attention now focused on reducing US carbon emissions and energy consumption, a growing chorus is calling for more compact forms of residential development to reduce vehicle miles traveled (VMT). Proponents argue that appropriately planned higher-density development would allow for growth as well as for preservation of more open space, better transit options, less auto dependency, and more efficient use of public infrastructure.

In most communities, however, achieving compact development would require changes to local zoning laws, which today often discourage higher densities along with mixed commercial and residential land uses. While many localities have deliberately taken steps to allow for areas of concentrated development, others still resist higher residential densities because of voter concerns about congestion, environmental degradation, and fiscal impacts.

Studies by the Urban Land Institute and the National Research Council have estimated the potential reductions in VMT from actively pursuing more compact development. These analyses make different assumptions about the residential densities that could be achieved politically, the amount of new housing stock necessary to meet demand, and the savings in travel associated with different density thresholds. They conclude that compact development would, at best, reduce VMT and related carbon emissions relative to a 2000 baseline between 11 percent (NRC) and 18 percent (ULI) by 2050.

More compact development patterns would, however, help to make public transportation more economical. So far, expansion of the nation's public transit system—primarily through investment in light and heavy rail—has been modest compared with expansion of the highway system, both in funding and in track miles versus road miles. Partly as a result, public transit use is low.

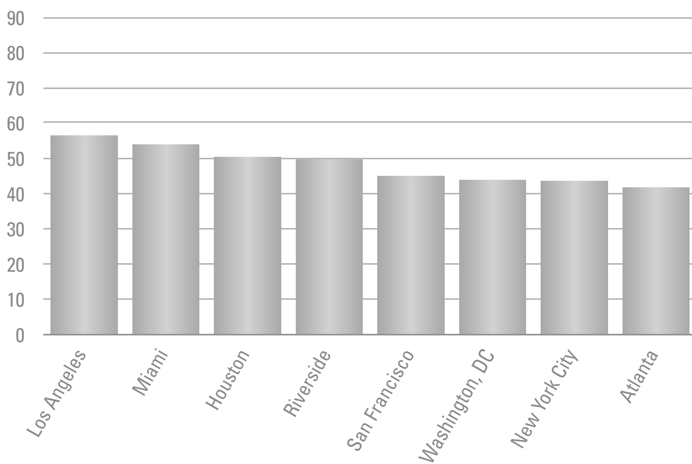
The tide has started to turn, however. According to the National Transit Database, after declining from 2003 to 2005, real annual capital expenditures on public transit—which have been only about a quarter of those on highways—began to creep up in 2006 and reached $16.1 billion in 2008. The share of riders using public transit for commuting, which fell from 12.1 percent in 1960 to 6.4 percent in 1980 and bottomed out at 4.7 percent in 2004, recovered modestly to 5.2 percent in 2007. Commuting is the single most reported reason for public transit use (46 percent), distantly followed by social use (30 percent) and shopping (10 percent).

While having public transit in the area increases the share of commuters that use it, access does not necessarily mean high ridership. In fact, less than 25 percent of households with at least one commuter report using public transport regularly,

FIGURE 15

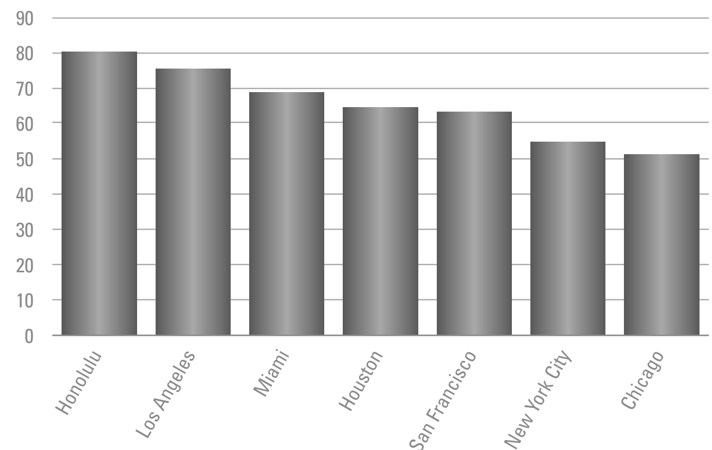
Minorities Already Make Up the Majority of Households in Several Large Metros ...

Minority Share of Households, 2008 (Percent)



... And Still Larger Shares of the Echo-Boom Population

Minority Share of 5–24 Year-Olds (Percent)

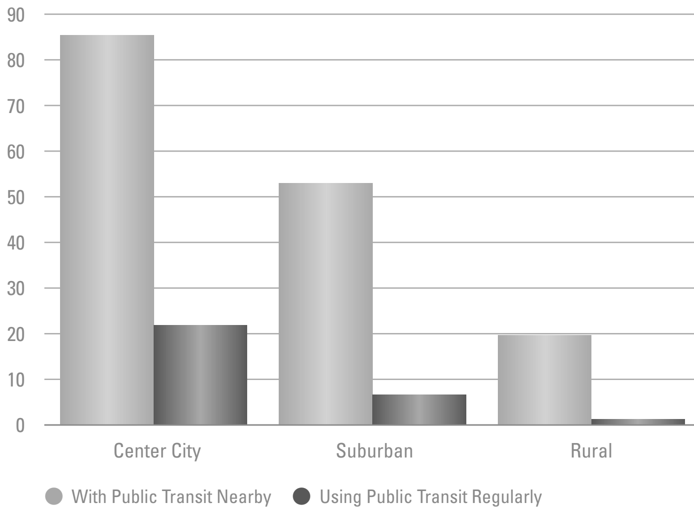


Note: Minorities include all households except non-Hispanic whites.
Source: US Census Bureau, 2008 American Community Survey.

FIGURE 16

Despite Greater Access in Center Cities, Only About One-Fifth of Urban Commuters Use Public Transit

Share of Commuter Households (Percent)



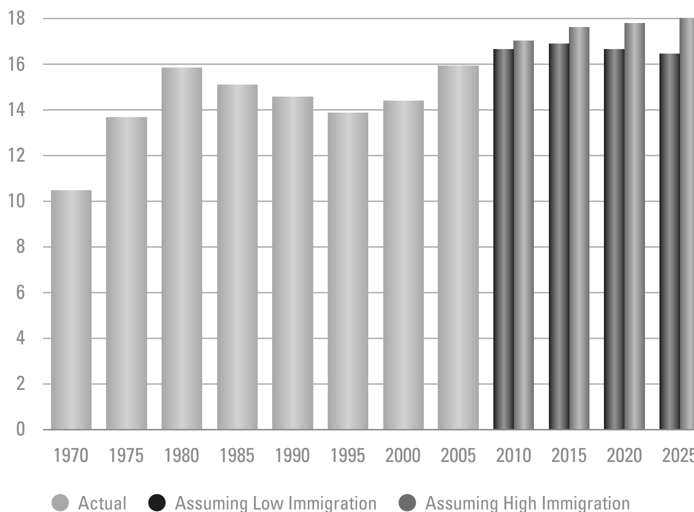
Note: Data include only households with at least one commuter.

Source: JCHS tabulations of the US Census Bureau, 2007 American Housing Survey.

FIGURE 17

Even If Immigration Is Low, the Number of Young Householders Will Set Records by 2025

Number of Householders Under Age 30 (Millions)



Notes: High immigration projection assumes immigration rises from 1.1 million in 2005 to 1.5 million in 2020, as estimated by the Census Bureau's 2008 population projections. Low immigration projection assumes immigration is half the Census Bureau's projected totals.

Sources: US Census Bureau, Current Population Survey; JCHS 2009 household projections.

even in center cities where transit is most widely available **(Figure 16).** Thus, it will likely take a combination of expanded access and ridership incentives to get commuters out of their cars and onto public transportation.

THE OUTLOOK

The aging of the echo-boom generation into young adulthood, augmented by immigration, will increasingly drive household growth over the next 15 years. The sheer size of the echo-boom generation will produce record numbers of households headed by young adults **(Figure 17).** At 80.8 million strong, this generation is even larger than the baby-boom generation is now.

Under the Census Bureau's current estimate about immigration, the number of echo boomers will swell to 92.9 million by 2025. Even with immigration at half that pace, their numbers will grow to 86.5 million. This highly diverse generation will give demand for apartments and smaller starter homes a lift over the next 15 years.

The large share of second-generation Americans (children born in the US to immigrant parents) among the echo boomers—more than twice the share in the baby-bust generation and more than three times that in the baby-boom generation—will be important in shaping the characteristics of future households. This is good news in that US-born children of immigrants have incomes and education levels more like those of other native-born Americans than of their parents. In fact, among householders aged 25–64, second-generation Americans typically have higher household incomes than both foreign-born and other native-born households of all races and ethnicities.

Meanwhile, the baby boomers will boost demand for senior housing. The units built over the next 10–20 years that intentionally cater to older Americans will be the housing available for generations to come, given that growth of the over-65 population will slow dramatically as the now similarly sized baby-bust generation moves into retirement. So far, however, federal support for senior housing is limited to minimal new construction of subsidized units. Moreover, the current funding system encourages expensive trips to skilled nursing facilities to the detriment of lower-cost, less institutional assisted living options and programs that allow elders to remain in their homes. Senior housing issues will therefore gain much greater urgency over the coming decade.

4 HOMEOWNERSHIP

The national homeownership rate slipped again in 2009 as foreclosures set new records and tighter underwriting standards restricted the pool of potential buyers able to qualify for loans. While house price declines and a federal tax credit drew first-time homebuyers into the market, those same price declines also left millions of current owners unable to sell their homes without incurring losses. Meanwhile, loan performance continued to erode and foreclosures mounted as unemployment soared.

FALLING HOMEOWNERSHIP RATES

After sliding in 2007 and 2008, the number of homeowners held about steady in 2009 as gains in first-time buyers offset losses caused by foreclosures. But more rapid growth in the number of renters than owners drove the national homeownership rate down to 67.4 percent last year—fully 1.6 percentage points below the 2004 peak **(Figure 18).**

Homeownership rates slipped in all four regions of the country and in more than three-fifths of the states. The largest drop occurred in the Midwest, where the homeownership rate stood 2.8 percentage points below its 2004 peak, at 71.0 percent. The Northeast posted the smallest decline—1.2 percentage points—from its high, holding at 64.0 percent **(Table A-4).** Homeownership rates in three-quarters of the states are below 2004 levels, and rates in nearly half of the states are below 1999 levels.

The dip in homeownership has affected households of all incomes, although low-income families were hit particularly hard. This group had previously achieved gains that far exceeded what demographic trends alone might have produced. From 1995 to 2005, homeownership rates among households in the bottom income quartile rose 6 percentage points (albeit from a low base), while rates for higher-income households were up only 4 percentage points. From 2005 to 2009, however, homeownership rates for low-income households fell almost twice as much as those for higher-income households on a percentage-point basis. As a result, the overall gain in homeownership for low-income households over the full 14-year period barely exceeded that for higher-income households.

AFFORDABILITY GAINS

The bright spots on the homeownership front last year were the dramatic increase in affordability and the growth in first-time buyers it produced. For households able to avoid unemployment, meet tighter underwriting standards, and put more money down, payments for a newly purchased median-priced home were more affordable in 2009 than they had been in years.

Near the height of the housing boom, mortgage payments on a median-priced home peaked at 32.7 percent of median household income. By the first quarter of 2009, the share had retreated to just 19.6 percent of median income. After edging higher in mid-2009, payment-to-income ratios hit a new low of 18.9 percent in the first quarter of 2010 as interest rates eased and the median home price fell back from modest summertime gains.

The median home price dropped from $227,100 in the second quarter of 2006 to $166,100 in the first quarter of 2009, while rates on 30-year fixed-rate mortgages slipped from 6.6 percent to 5.0 percent. As a result, monthly payments for a median-priced home with a 90-percent mortgage fell by more than a third, from $1,300 to $800. The improvement in affordability was widespread. By 2010, more than 80 percent of metropolitan areas reported payment-to-income ratios below 1990s levels **(Table W-2).** If mortgage interest rates were to increase 100 basis points, however, the share of metros that would still be more affordable would fall to 70 percent **(Figure 19).** Home prices in more than 85 percent of metro areas were also down last year, with more than one-quarter posting new lows in the first quarter of 2010.

FIRST-TIME HOMEBUYER SURGE

The first-time buyer share of home sales typically decreases during expansions and increases during recessions. In hot housing markets, the share declines as first-time buyers are priced out and current homeowners take advantage of rising prices to trade up. When markets are weak, overall sales activity is depressed and current owners tend to stay in place.

According to the National Association of Realtors®, the first-time homebuyer share climbed in both 2007 and 2008, and then surged in 2009. First-time purchasers rose from 36 percent of all homebuyers in 2006 to about 45 percent in 2009. The increase in share added roughly 306,000 sales in 2008–9. Without this gain, existing home sales for the year would have fallen by 63,000.

An important catalyst for the jump in first-time homebuyers in 2009, however, was the first-time homebuyer tax credit program. Various estimates place the impact of the tax credit on either pulling demand forward or releasing pent-up demand at 200,000–400,000 additional buyers—similar to last year's increase in first-time sales.

DISMAL LOAN PERFORMANCE

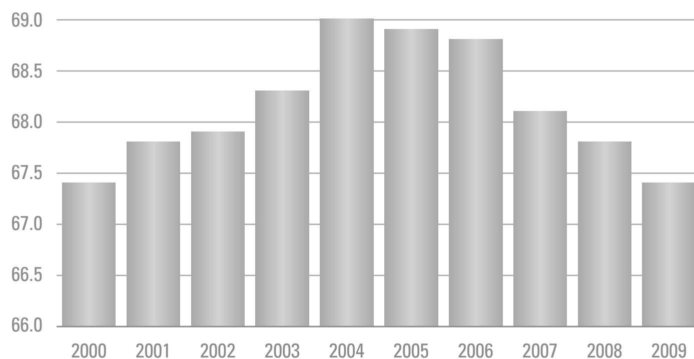
When combined with heavy job losses, the same lower home prices that drew first-time homebuyers into the market contributed to stunningly poor mortgage loan performance. The number of loans more than 90 days delinquent or in foreclosure was high and climbing in early 2010. According to the Mortgage Bankers Association, the shares of severely delinquent loans in the first quarter of 2010 ranged from 5.1 percent of prime fixed-rate mortgages to a whopping 42.5 percent of subprime adjustable-rate mortgages **(Figure 20).**

With such high delinquency rates, foreclosures have continued to rise. Rates for subprime mortgages remain especially high not only because of a 370,000 increase in the current inventory of loans in foreclosure, but also because of the 1.5

FIGURE 18

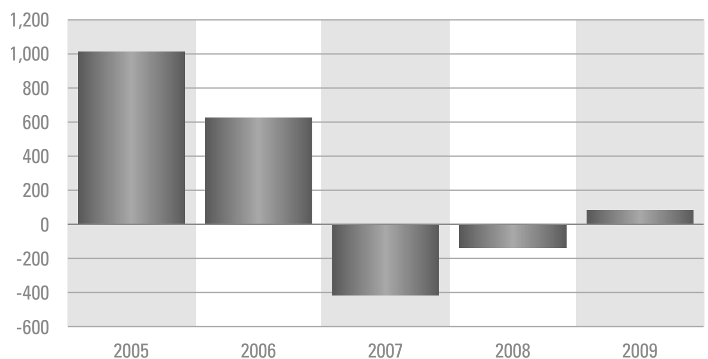
Although Homeownership Rates Peaked in 2004 …

Homeownership Rate (Percent)



… The Number of Homeowners Continued to Rise through 2006

Annual Change in Homeowner Households (Thousands)

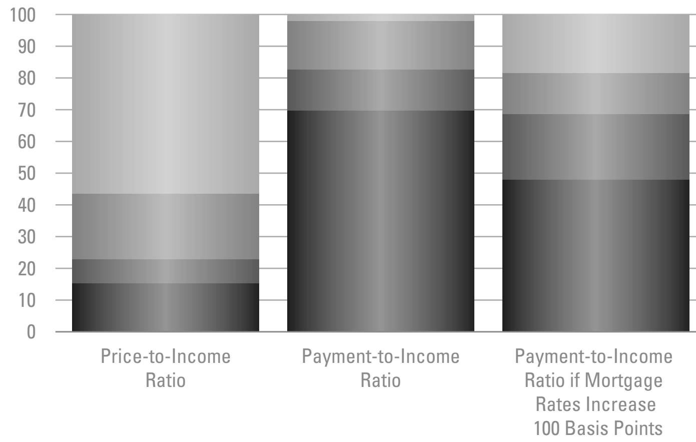


Source: US Census Bureau, Housing Vacancy Survey.

FIGURE 19

While Many Areas Have Become More Affordable for First-Time Homebuyers, Higher Interest Rates Could Cut into Gains

Share of Metropolitan Areas (Percent)



Metro Level in 2010:1 Relative to 1990s Average

- More than 10% Below
- 0–10% Below
- 0–10% Above
- More than 10% Above

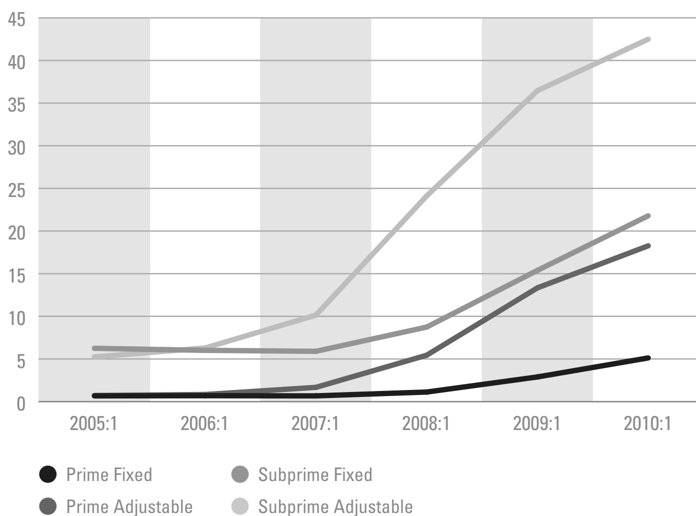
Notes: Areas are the 87 metros with quarterly data available for 1989–99 and 2009. Payments are based on a 10% downpayment and a 30-year fixed-rate mortgage (5.0% in 2010:1). Ratios use median household income.

Source: JCHS calculations based on data from Freddie Mac, the National Association of Realtors®, and Moody's Economy.com.

FIGURE 20

Serious Delinquencies Have Climbed to New Heights

Share of Loans at Least 90 Days Past Due or in Foreclosure (Percent)



- Prime Fixed
- Prime Adjustable
- Subprime Fixed
- Subprime Adjustable

Source: Mortgage Bankers Association, National Delinquency Survey.

million drop in the number of subprime loans being serviced between the first quarter of 2007 and the first quarter of 2010. This huge decline reflects the fact that so many subprime loans have already been extinguished through foreclosures and short sales (sold for less than the amount owed on the mortgage), and that no new loans are being originated.

Despite a much higher incidence of serious delinquencies and foreclosures among subprime loans, most problem mortgages are now prime loans. During this cycle, record home price declines and heavy job losses have left prime loan performance orders of magnitude worse than in previous cycles. Indeed, serious delinquency rates for prime conventional loans typically remain well below 2 percent even during downturns, but were 7.1 percent in the first quarter of 2010. Among prime loans that Freddie Mac owns, a recent survey found that 58 percent of delinquent borrowers cited unemployment or curtailment of income as the reason for their payment problems. Running a distant second is excessive financial obligations (16 percent), and third is illness or death (11 percent).

Delinquencies and foreclosures have been highly concentrated by state. California and Florida alone account for more than a quarter of loans at least 90 days delinquent, plus more than a third of loans in foreclosure **(Table A-6).** Serious delinquency rates are highest in Florida (20.6 percent), Nevada (19.6 percent), Arizona (12.8 percent), and California (12.1 percent), and lowest in North Dakota (2.3 percent), Alaska (3.0 percent), and South Dakota (3.5 percent). In the states with the highest incidence of delinquencies, foreclosures will likely weigh on home price gains.

Delinquencies are also highly concentrated in pockets within metros. Among loans originated to homeowners in 2006 and more than 90 days delinquent, some 10 percent are located within just 1 percent of zip codes. Fully two-thirds of seriously delinquent loans are found in only 25 percent of zip codes. Delinquencies have been especially high in low-income minority neighborhoods, where high-cost lending was concentrated during the housing boom **(Figure 21).** While many distressed areas are in inner cities, some of the hardest-hit communities are found in the rural areas and outlying suburbs of California and Florida.

THE FORECLOSURE CRISIS

Since the first signs of a spike in defaults in early 2007 through the first quarter of 2010, servicers covering 85 percent of mortgage loans report that 6.1 million foreclosure notices have been issued on first-lien loans. Furthermore, the number of loans in the foreclosure process stood at 2.1 million in the first quarter—nearly quadruple the number just three years earlier.

FIGURE 21

Even Controlling for Income, Minority Neighborhoods Have Been Especially Hard Hit by Troubled Loans

Average Share of 2006 Loan Originations Ever More than 90 Days Delinquent through 2009 (Percent)

Notes: Data include all zip codes with at least 100 mortgage originations for owner occupants in 2006. Incomes in low/moderate/high zip codes are less than 80%/80–120%/more than 120% of the median household income for each state. Minority/mixed/white zip codes were more than 50%/10–50%/less than 10% minority in 2000.

Sources: First American CoreLogic; US Census Bureau, 2000 Decennial Census.

Once a loan enters foreclosure, it is rarely cured. While some homes are sold short, the vast majority is auctioned off. In the two states where auction sales are not required, title is conveyed to the lender. Either way, a flood of homes is coming on to the market at depressed prices as lenders try to shed properties they have had to take back.

With so many millions of families facing the loss of their homes, the federal government has stepped in with two major foreclosure prevention programs: the Home Affordable Refinancing Program (HARP) and the Home Affordable Modification Program (HAMP). Both initiatives provide significant mortgage payment relief. HARP allows qualified borrowers (loans purchased or guaranteed by Fannie Mae or Freddie Mac) to refinance into lower interest-rate or fixed-rate loans for up to 125 percent of the home value. The average reduction in borrowers' monthly payments is $150. Through March 2010, however, HARP had completed only 291,600 refinancings.

Under HAMP, in contrast, loan modifications can push interest rates as low as 2 percent—or more recently, reduce the total amount owed—to reduce the borrower's mortgage payments to 31 percent of monthly income for five years. HAMP modifications have cut participants' monthly mortgage payments by $500 on average, lowering median payments for participants from $1,419 to $849. Through April 2010, HAMP has made 1.2 million trial modifications that typically last 90 days. Of these, 299,092 have been successfully converted to "permanent" modifications, which after five years gradually convert to fixed payments at a capped interest rate for the remaining term of the loan. With a 2012 goal of 3–4 million modifications, the program has so far provided relief to more than 1 million homeowners and helped to slow the pace of loans entering foreclosure.

While the jury is still out on how many foreclosures HAMP will permanently avert, there is reason to believe that many loan modifications will fail. Indeed, government data on mortgages modified by banks and thrifts since January 1, 2008 indicate that even borrowers with substantially lower payments re-default at high rates. After just six months, fully one-quarter of those with payment reductions of at least 20 percent were again 60 or more days delinquent. The re-default rate for HAMP-modified loans is likely to be high as well.

OPPOSING MARKET FORCES

Homeownership markets are being tugged in different directions. On the one hand, lower prices have made homes more affordable. On the other, tighter underwriting standards have made qualifying for a mortgage much more difficult. Lenders have reduced maximum debt-payment-to-income ratios and are now demanding larger downpayments and higher credit scores.

Stricter underwriting can limit the pool of potential homebuyers. For example, using the 38-percent-of-income standard commonly allowed during the housing boom, about 17.8 million renters had incomes in 2008 that would have qualified them for a 30-year fixed-rate mortgage on the median-priced home. At a more stringent 28-percent standard, however, only 12.5 million renters would have qualified. Such a large swing in the payment-to-income requirement for loans means that home prices would have to drop more than 26 percent for households qualifying at 38 percent to still be able to purchase homes at the 28-percent-of-income standard.

While lower prices imply smaller downpayments, lenders now require a higher fixed percentage of the purchase price **(Table A-3).** This has brought back the wealth constraints that were largely eliminated in the early half of the 2000s when very low- and no-downpayment loans were widely available for the first time. From 2003 to 2007, the share of recent homebuyers making no downpayments rose from 9 percent to 15 percent, with the first-time buyer share putting no money down nearly doubling from 13.5 percent to 26.0 percent.

Higher credit score cutoffs shrink the pool of eligible buyers regardless of how affordable housing becomes. According to a recent study by Barclays Capital, 87 percent of the home purchase loans owned or guaranteed by Fannie Mae and Freddie Mac were made to borrowers with FICO scores above 750 and

original loan-to-value ratios below 75 percent **(Figure 22).** Only 2 percent of their mortgages that were originated in 2006 met such standards.

With Fannie and Freddie looking for higher-quality loans and subprime lending virtually eliminated in 2008–9, borrowers with lower credit scores flocked to alternative nonprime products such as USDA-guaranteed rural loans and FHA-insured loans. Indeed, according to First American CoreLogic, the FHA share of the home purchase market ballooned from just 6.6 percent in 2007 to 30.1 percent in 2008 and then climbed to 56.4 percent in 2009. But as loan losses mounted, FHA also reduced the flow of credit to lower-scoring borrowers, doubling the share of originations to applicants with scores above 680 between 2007 and 2009.

Meanwhile, the federal stimulus package increased funds for a USDA-guaranteed mortgage program from $6 billion to $12 billion, but the strength of demand is likely to exhaust these resources well before the end of the fiscal year. Until damaged credit histories have time to heal or businesses find more sustainable ways to lend to people with lower credit scores, the shortage of loans available to these buyers will hinder the housing market recovery.

THE OUTLOOK

Plunging home prices have left millions of owners underwater on their mortgages. For about 4.9 million of these households, home prices would have to rebound by more than 25 percent before their homes are worth as much as the amount they owe. Many owners will therefore be unable to change residences without facing losses. This is likely to be a drag on the repeat sales market in 2010 and perhaps beyond.

For the millions of owners who have already lost their homes to foreclosure, their lives have been uprooted and their credit scores will take years to fully recover. Even if they want to get back into the ownership market, they will have a difficult time doing so because credit for subprime borrowers is currently unavailable. When subprime credit markets unfreeze, these individuals will have to pay a premium on their mortgage interest rates to be able to buy other homes.

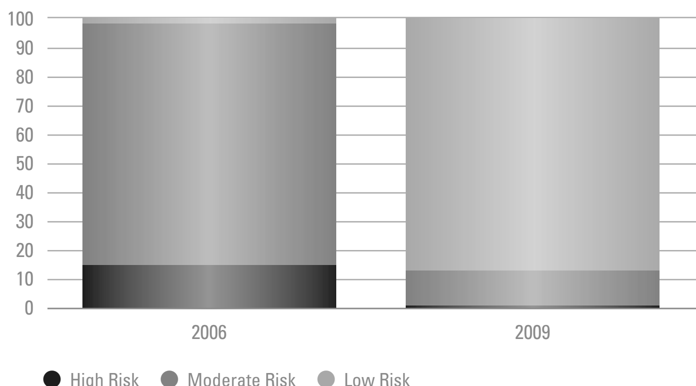
At the same time, falling home prices and low interest rates have been an unambiguous boon for first-time homebuyers. After the surge in home prices in 2004–6, followed by the severe recession and credit crisis in 2007–9, there is pent-up demand in the market. The return of meaningful income, wealth, and credit constraints may, however, limit the ability of some potential first-time buyers to qualify for loans.

In the longer term, it is unclear how much the sharp house price cycle will influence household decisions to own or rent. Yet it remains true that buyers who purchase homes at or near price bottoms with leverage stand to gain if real house price appreciation returns to its long-term pace slightly above real income growth.

FIGURE 22

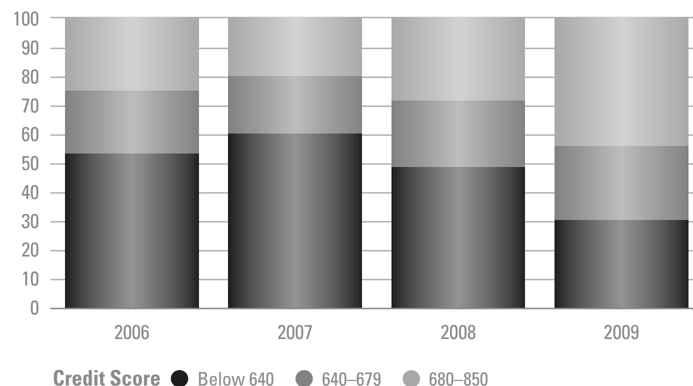
Fannie Mae and Freddie Mac Have Tightened Their Underwriting Standards ...

Share of Originations Guaranteed by Freddie and Fannie (Percent)



... And FHA Has Restricted Access to Borrowers with Poor Credit Scores

Share of FHA-Insured Mortgages by Dollar Volume (Percent)



Notes: High (low) risk loans are to borrowers with credit scores under 690 (above 750) and have loan-to-value ratios above 85% (below 75%). FHA data exclude records with no credit score information.

Sources: Barclays Capital, *GSEs: Back to the Future, US Interest Rates Strategy, 2009*; US Department of Housing and Urban Development.

Although renter household growth increased last year, rental vacancy rates climbed to a new high. Early in 2010, however, occupancies in some areas appeared to be stabilizing. With multifamily construction near record lows, property prices still falling, and sales still depressed, the national rental market has yet to make a convincing recovery. Nevertheless, such low levels of construction could set the stage for a strong rebound to keep up with demand once household growth returns to its long-run pace.

MARKET TURMOIL

While the number of renter households was up by 800,000 in 2009, a combination of new multifamily completions and an increase in the number of existing for-rent homes on the market outstripped this gain. The national rental vacancy rate thus rose to 10.6 percent last year **(Figure 23).** Five metropolitan areas—Memphis, Orlando, Dayton, Richmond, and Phoenix—posted rates above 18 percent. Memphis and Tucson saw the sharpest increases in vacancies, exceeding 6 percentage points.

With vacancies rising and landlords trying to retain tenants in the midst of the severe recession, nominal rents stalled and inflation-adjusted rents edged downward. After decades of steady increases, the Consumer Price Index registered a flattening in nominal rents and a 2.9 percent decline in real rents between the December 2008 peak and April 2010.

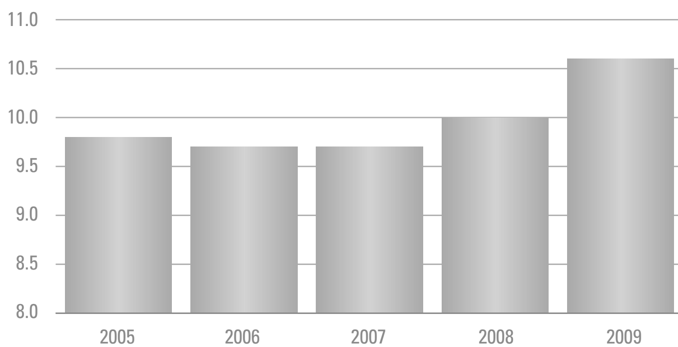
Although nominal rents did not turn negative nationally in 2009, asking rents for new units and effective rents for higher-end units dropped. The median asking rent for vacant new apartments fell 3.2 percent in nominal terms over the course of the year, in part because of the challenges of leasing up in a difficult economic environment and in part because of the geographic concentration of new units in some of the markets with the largest inventory overhangs.

At the same time, MPF Research—which picks up changes in effective rents caused by landlord concessions, such as a month of free rent—reported a 3.1 percent nominal decline in rents for better-quality apartments owned by large institutional investors. By this measure, nominal rents were down in 54 of 64 metropolitan markets last year, and real rents in 53 of the 64. The trend in 2007–9 was clearly negative **(Figure 24).** The weakest markets were in the West, with San Jose posting the largest rent drop of 9.5 percent, and Seattle, Salt Lake City, Oakland, and Las Vegas all registering declines of 7 percent or more. Rising vacancy rates in more expensive units were likely behind the softer rents for institutionally owned properties. Indeed, the number of vacant rental units offered

FIGURE 23

Rental Vacancies Have Soared …

Rental Vacancy Rate (Percent)



Source: US Census Bureau, Housing Vacancy Survey.

… Despite an Increase in Renter Households

Annual Change (Thousands)

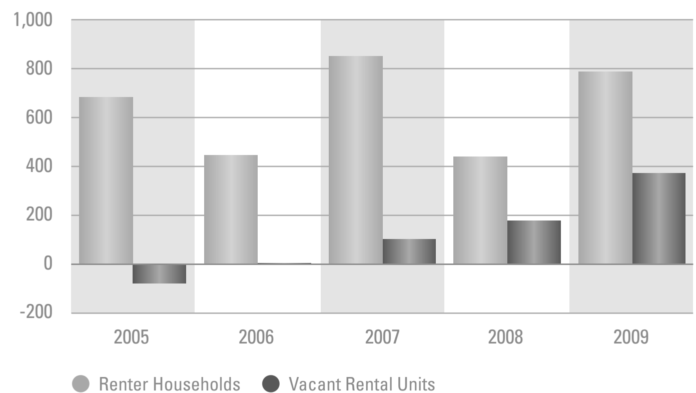
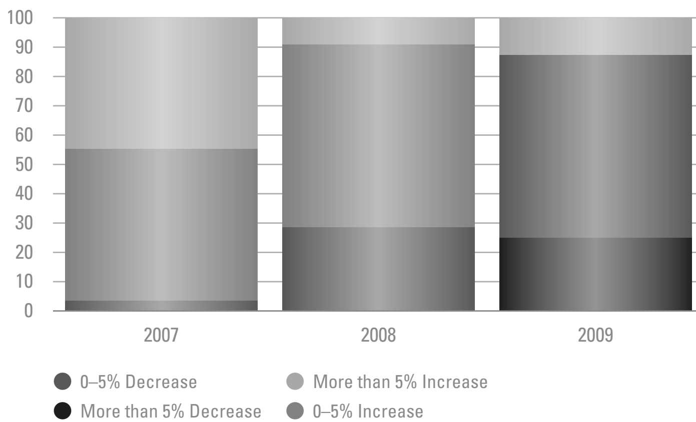


FIGURE 24

After Only Two Years, Softening Rents Spread to Nearly All Major Metropolitan Areas

Share of Metros in Each Rent Change Category (Percent)



Notes: Data include only the 56 (out of 64) metros that reported rents in all three years. Changes are in average effective rents for investment-grade properties, measured fourth quarter to fourth quarter.
Source: JCHS tabulations of MPF Research data.

for $1,500 or more per month shot up 23 percent while the number offered for less than $600 was virtually unchanged from a year earlier.

The increase in vacancies was concentrated primarily in larger properties. Units in buildings with 10 or more apartments, which make up slightly less than a third of the rental stock, contributed nearly two-thirds of the 379,000 jump in overall vacancies from the fourth quarter of 2008 to the fourth quarter of 2009. Vacancies among single-family rentals, which make up 35 percent of the stock, dropped by 46,000 units over this period.

INVESTOR PULLBACK

Both sales and starts of multifamily properties came close to a standstill in 2009. Real Capital Analytics reports that just 180,000 units in properties worth at least $5 million were sold last year, compared with 941,000 at the 2006 peak. Multifamily starts dropped from 284,000 units in 2008 to 109,000 in 2009—their lowest level on record. But because completions lagged starts, falling only from 301,000 to 274,000, the rental market has yet to register the full effects of the near-cessation of production.

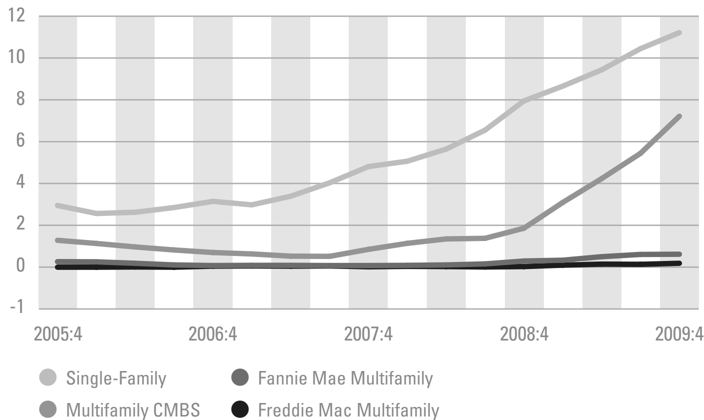
Limited investor interest helped to drive down new construction. This was especially pronounced in the affordable rental market, where there was a sharp pullback in investor demand for federal low income housing tax credits. When several large financial institutions that had dominated the tax credit market swung from profit to loss in 2007, they no longer had taxable income to offset. As a result, affordable housing developments were stalled until two federal stopgap programs went into effect in the second half of 2009.

Prices of apartment properties fell again last year, although the pace of decline slowed. According to the NCREIF price index, rental property prices dropped 29.4 percent from their first-quarter 2008 peak through the fourth quarter of 2009. Over the course of the year, however, quarterly price declines eased from 9.6 percent to 2.9 percent. After sliding for most of the decade, the capitalization rate was up by roughly 1 percentage point in 2009, to 6 percent. These trends largely reflect investor demand for higher expected returns. Falling net operating incomes also contributed to the price declines, although they did recover slightly in the fourth quarter—suggesting that rental markets may have started to stabilize.

FIGURE 25

While Still Better than Single-Family Loans, Performance of Multifamily Mortgages Has Continued to Deteriorate

Share 60 or More Days Delinquent or in Foreclosure (Percent)



Notes: Single-family loans include loans for 1- to 4-unit properties. Single-family delinquency rate is based on number of loans, while other rates are based on volume of loans. CMBS delinquencies include foreclosed properties owned by banks.

Sources: Mortgage Bankers Association, National Delinquency Survey and Commercial/Multifamily Delinquency Rates; Moody's Economy.com, CMBS Delinquency Tracker.

ERODING LOAN PERFORMANCE

Multifamily property prices topped out in 2008, two years after the peak in single-family prices. In addition, vacancies in the for-rent market did not jump until three years after the surge in the for-sale market. As a result, poor loan performance in the multifamily sector did not become apparent until 2009.

About 12.1 percent of multifamily loans are held in trusts for commercial mortgage-backed securities (CMBS). According to Moody's Economy.com, the share of multifamily loans in CMBS that were at least 60 days delinquent, in foreclosure, or post-foreclosure and owned by the issuing trusts (REO) jumped from 1 percent of balances outstanding in December 2007 to 12.9 percent in April 2010. As in the single-family market, performance of these private market loans was substantially worse than on the nearly 40.4 percent of multifamily debt owned or guaranteed by Fannie Mae and Freddie Mac. Indeed, with severe delinquency rates of less than 1 percent, Fannie and Freddie multifamily loans outperformed CMBS as well as single-family mortgages **(Figure 25).**

Unless net operating income plus reserves is insufficient to cover debt and there is little hope values will bounce back, property owners generally continue to make loan payments even when their mortgage balances exceed the value of the properties. For lenders, however, a critical decision point arrives when loans come due. In these circumstances, they have an incentive to extend maturing loans because forcing repayment would likely result in default, impairing the lender's capital. Maturing mortgages may also have built-in extension options, and most investor groups have considerable discretion over how to deal with borrowers that are unable to immediately refinance. As a result, lenders typically extend or modify multifamily mortgages that are underwater when they come due, thus limiting foreclosures in this market segment.

Lenders who do pick up small rental properties through foreclosures may push to remove tenants to avoid any liability and to make the buildings easier to sell. This eviction risk prompted passage of the Protecting Tenants at Foreclosure Act of May 2009, requiring new owners of foreclosed properties to honor existing leases and provide at least 90 days notice prior to eviction. Lenders who take back larger multifamily buildings, however, are much more likely to hand the properties over to management companies in an effort to retain tenants and preserve as much of the cash flow as possible. Thus, tenants in larger bank-foreclosed buildings are at less risk of eviction, although they—like any renters in buildings whose owners are struggling financially—may still face problems from deferred maintenance.

Falling property values, high vacancy rates, and deteriorating loan performance have dampened the demand for credit and made it more difficult to get, especially for development. While debt is more available for existing properties, underwriting terms have tightened. Multifamily loan originations by private CMBS conduits have dropped to essentially zero. Meanwhile, HUD announced increases in the minimum required net worth for FHA-approved lenders. Other underwriting changes proposed for FHA-insured multifamily loans would raise debt service coverage ratios, reduce loan-to-cost ratios, and double construction contingencies and working capital escrows.

Fannie Mae and Freddie Mac stepped up their multifamily activity in 2007 to help ease the credit crisis. Although volumes fell in 2008 and 2009, their combined share of multifamily loans outstanding rose to 40 percent in 2009, up from 30 percent in 2006, as others left the market. But their share of the small-balance multifamily loan market remains modest. In 2006, Fannie and Freddie purchased a mere 5 percent of multifamily loans of $1.0–1.9 million but fully 27 percent of loans of $10 million or more.

Originations of multifamily loans stabilized, albeit at very low levels, after sizable drops in the fourth quarter of 2008 and first quarter of 2009. The Mortgage Bankers Association reports that multifamily originations were down 62 percent in 2008 and another 8 percent in 2009.

As originations slid last year, nominal multifamily mortgage debt outstanding fell $5.9 billion to $897.5 billion. Meanwhile, multifamily debt outstanding owned or guaranteed by Ginnie Mae, Freddie Mac, Fannie Mae, and the Federal Home Loan Banks rose by roughly $20 billion, with nearly half of this increase in mortgage pools. This brought the total share of multifamily debt owned or guaranteed by these entities up to 49 percent.

PRESERVATION CHALLENGES

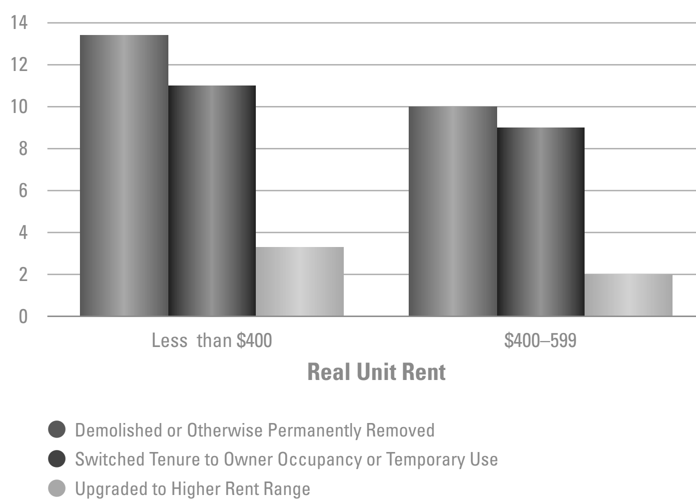
The loss of low-cost rental housing continues unabated. Between 1997 and the most recent measure in 2007, the number of units with real rents under $400 including utilities—about what a household earning the full-time minimum wage could afford at 30 percent of income—fell by 244,000 to 6.6 million.

The biggest contributor to the dwindling supply of low-cost rental housing is demolition and removal from the stock **(Figure 26).** Of the units renting for under $400 in 1997, 13.4 percent were lost to demolition, disaster, or other reasons by 2007. Another 2.2 percent were lost to abandonment or conversion to nonresidential uses. By comparison, permanent loss rates were only 10.0 percent for units with rents of $400–600, 5.6 percent for units with rents of $600–800, and 4.2 percent for units with rents above $800.

FIGURE 26

Many of the Losses of Low-Cost Rentals Are Permanent Rather than the Result of Tenure Switching or Rent Increases

Share of 1997 Units by Status in 2007 (Percent)



Notes: Changes for the $400–599 category are the net effect of units moving in and out of that rent range. Rents are adjusted to 2007 dollars using the CPI-U for All Items.

Source: JCHS tabulations of the US Census Bureau, 1997 and 2007 American Housing Surveys.

Most apartments renting for under $400 in 2007 were located outside of center cities, and in the South and Midwest. Fully 45 percent of these rentals were government subsidized. Tenants of low-cost units had a median income of just $12,000, and more than half were single persons living alone.

CHANGING COMPOSITION OF RENTAL DEMAND

With homeowner markets stressed, the number of renter households rose by 3.4 million—or nearly 10 percent—between 2004 and 2009. The upturn was most dramatic in the Midwest, where renter household growth surged from a 2 percent drop in 2000–4 to a 13.4 percent gain in 2004–9. The South added the largest number of renter households, posting a 1.2 million increase in 2004–9. This growth occurred despite a large falloff in both domestic migration (which has favored the South and West) and international immigration.

Minority households have contributed most of the growth in renters. Hispanics and blacks each accounted for a quarter of the net increase in renter households in 2004–9, while Asians contributed 9 percent **(Figure 27).** The minority share of renters thus reached 45.1 percent last year, with Hispanics accounting for 18.3 percent, blacks 19.6 percent, and Asians and all other minorities 7.2 percent.

Immigration is driving the changing composition of rental demand. Continuing the strong growth posted in the 1990s, the foreign-born share of renter households increased from 17.4 percent in 2000 to 19.6 percent in 2009. Indeed, the number of Hispanic renters has more than tripled from just 1.9 million in 1980 to 7.0 million.

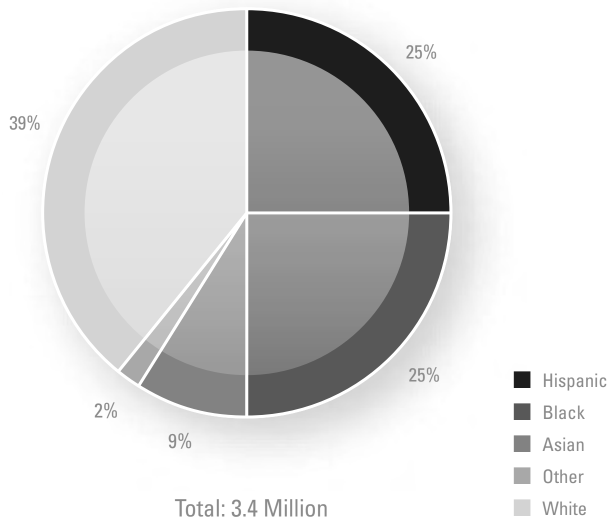
With the share of minority renters rising, demand for larger and more child-friendly units is likely to increase. On average, minority renter households include 2.8 persons and white renter households include 2.1. Even controlling for age, minority renter households are larger. For example, among renters aged 35–44, minority households have an average of 3.2 people, compared with just 2.6 for whites. A major difference is in the number of children present. Among all renters under age 55, the average number of children is 1.1 per minority household but only 0.6 per white household.

Despite the growing presence of younger minority households, the share of all renter households headed by young adults declined 4.5 percent between 2000 and 2009. Nearly two-thirds of renter growth was instead among households aged 45–64, reflecting the impact of the baby-boom generation. Large increases in older renters in 2008 suggest that many

FIGURE 27

Minorities Contributed More than Half of the Increase in Renter Households Since 2004

Renter Household Growth, 2004–9 (Percent)

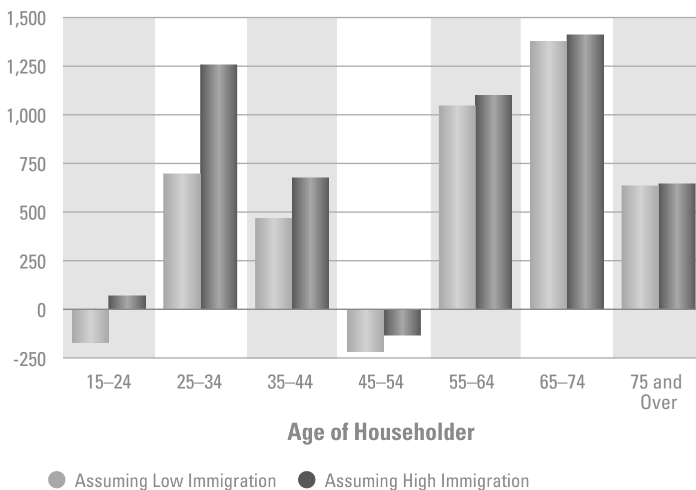


Notes: White, black, Asian, and other householders are non-Hispanic. Hispanics may be of any race. Other includes multiracial householders.
Source: JCHS tabulations of the 2004 and 2009 IPUMS Current Population Surveys.

FIGURE 28

Changes in the Age Distribution of Households Will Likely Lift Demand for Rental Housing Over the Next Decade

Projected Renter Household Growth, 2010–20 (Thousands)



Notes: High immigration projection assumes immigration rises from 1.1 million in 2005 to 1.5 million in 2020, as estimated by the Census Bureau's 2008 population projections. Low immigration projection assumes immigration is half the Census Bureau's projected totals.
Source: JCHS household projections.

households may have switched from owning to renting as the housing crisis took hold. Since older renters tend to prefer larger multi-unit buildings, particularly those with elevators, demand for this type of housing may well increase over the coming decade as the baby boomers enter retirement.

THE OUTLOOK

As in the homeowner market, several opposing forces are at work in the rental market. On the downside, high unemployment—especially among minorities and the young—is a drag on demand. In addition, the narrowing cost differential between owning and renting could keep first-time homebuying strong even after the federal tax credit expires. On the upside, however, the echo boomers are starting to form independent households, many owners that have lost their homes to foreclosure will turn to renting, and some would-be homebuyers will be unable to qualify for loans. Moreover, improving labor markets typically benefit rental markets more immediately than home sales.

The supply side is also being pulled in different directions. The drop in multifamily production will slow the growth of rental units, although with a lag. Within a year, new completions will start to fall sharply. At the same time, though, many frustrated owners of vacant, for-sale condos and single-family homes may attempt to rent their units rather than accept low sales prices.

The combined effects of these forces will determine how fast rental property values rebound, loan performance improves, and credit flows more readily to multifamily developers. Like housing and household growth more generally, the strength of the rental recovery will depend heavily on how quickly and strongly job growth comes back.

Assuming that headship rates by age and race/ethnicity remain at 2008 levels and homeownership rates hold at 2009 levels, renter household growth in 2010–20 should easily top the 3.1 million mark reached in 1999–2009. Indeed, the total number of renters is expected to rise by about 3.8 million even under a low-immigration scenario and by about 5.0 million under a high-immigration scenario. In either case, minority households will make up the majority of renters by 2020.

Regardless of what happens to immigration, the number of renter households over age 55 will likely rise by more than 3 million in the coming decade as the baby-boom generation ages **(Figure 28).** Meanwhile, renter household growth among 25–44 year olds is projected to reach 1.2 million if immigration is low and as much as 1.9 million if immigration rebounds.

6 HOUSING CHALLENGES

The nation has not faced housing problems of this magnitude since the Great Depression. Heavy job losses and lingering high unemployment rates have increased housing insecurity for millions of families. The share of US households with severe housing cost burdens reached a record high in 2008 and may have climbed again in 2009. Although households have switched from net spenders to savers, their balance sheets have still not recovered from the debt binge of the boom years.

WIDESPREAD COST BURDENS

After holding steady at 12 percent in both 1980 and 2000, the share of severely burdened households (spending more than half their incomes on housing) jumped by a third, to 16 percent, in 2008 **(Figure 29).** A record 18.6 million households faced these high cost burdens that year, an increase of 640,000 since 2007 and 4.7 million since 2001. Living within these households were 44.2 million Americans, including 13.7 million children.

Although the shares with cost burdens grew faster for homeowners during the 2000s, the incidence of cost burdens remained far higher for renters. Nearly one in four renter households had severe cost burdens in 2008, compared with roughly one in eight owner households. And nearly half of renters, but a third of owners, had at least moderate cost burdens (spending 30–50 percent of income for housing). The primary reason for this disparity is that renters typically have much lower incomes than owners.

The nation's 4.5 million single parents in the lowest income quartile, along with their 9.1 million children, face the worst affordability challenges. They have greater space needs and must worry more about safety and school quality when choosing homes than households without children. Half of low-income single-parent households spent 63 percent or more of their incomes on housing in 2008. Low-income minority single-parent households had even harsher cost burdens.

INCOME-HOUSING COST MISMATCH

Roughly three-fourths of households with severe housing cost burdens fall within the bottom income quartile, and a sobering half of all households in this quartile have severe burdens. This stems from a mismatch between their low incomes and the cost to supply the most basic of homes. The median income of households in the bottom quartile was $14,868 in 2008. At that level, their monthly housing costs (including utilities) would have to be no more than $372 to meet

the 30-percent-of-income affordability standard. But finding even modest housing at such a low cost is next to impossible. Nowhere in the country is the HUD fair market rent for even a one-bedroom apartment at or below $372. Without government subsidies, property owners find it difficult to operate and maintain housing at such rents, let alone service debt and earn a risk-adjusted rate of return.

The long-term spread of affordability problems results from both rising housing costs and stagnating real incomes among those in the bottom quartile. A study published by the Lincoln Institute of Land Policy estimates that the real value of developed land for a single-family home nearly doubled from 1985 to 2008 in 46 studied metropolitan areas. Over the same period, the real construction cost per square foot for a single-family home was up 30 percent.

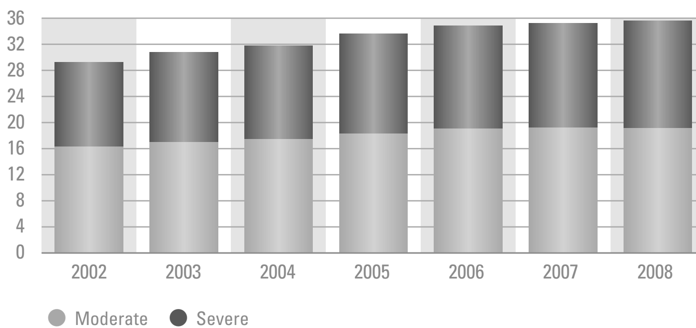
Land use and environmental regulations that restrict the supply of developable land add to housing development costs. Impact and permitting fees imposed by local governments to cover infrastructure extensions also raise development costs. At the same time, stricter building codes that dictate materials, standards, and minimum home sizes have helped to push up both the quality and the cost of housing construction.

The erosion of affordability over the last 50 years is striking **(Figure 30).** In 1960, only 12 percent of renter households spent half or more of their incomes on housing. By 2008, that share had doubled. In 1960, half of renters in the bottom income quartile spent 39 percent or less of their incomes on housing. In 2008, half spent 54 percent or more. In 1960, the median house price-to-income ratio was 1.86. In 2008, even with mortgage interest rates close to those in 1960, it was 3.34.

FIGURE 29

Affordability Problems Became Even More Pervasive After the Housing Boom Ended in 2005

Share of Households with Housing Cost Burdens (Percent)



Note: Severe (moderate) housing cost burdens are more than 50% (30–50%) of pre-tax household income.
Source: JCHS tabulations of the US Census Bureau, 2002–8 American Community Surveys.

Of course, single-family homes are now much larger on average (2,215 sq. ft. for homes completed in 2008, compared with 1,525 sq. ft. for those completed in 1973). And the share of the housing stock with moderate to severe structural inadequacies has declined sharply (from 8.1 percent in 1989 to 5.2 percent in 2007). But in combination with slow income growth and rising land and development costs, these improvements in quality have also added to the affordability challenges of low-income households.

HOUSING COST TRADEOFFS

With long-run housing costs outpacing income growth, many Americans must make increasingly difficult tradeoffs. Those who seek to limit their expenditures can either choose lower housing and neighborhood quality in closer-in locations, or move greater distances from urban cores to take advantage of more affordable housing. They may also choose to spend less on other necessities such as food, healthcare, and savings in exchange for better housing.

In 2008, households with children in the bottom expenditure quartile that dedicated more than half their outlays to housing had less than $600 per month left for all other necessities—less than half the amount available to households with affordable housing. Similarly burdened elderly and single-person households had even less (under $500) left over after housing expenses.

But lower housing costs often mean higher travel costs and times. On average, low-income households with children that spent less than 30 percent of monthly outlays for housing devoted 4.4 times as much to transportation as those with high housing outlays. Indeed, even those households with affordable housing still had to dedicate over 37 percent of their total outlays to housing and transportation combined **(Figure 31).**

UNEMPLOYMENT AND HOUSING INSECURITY

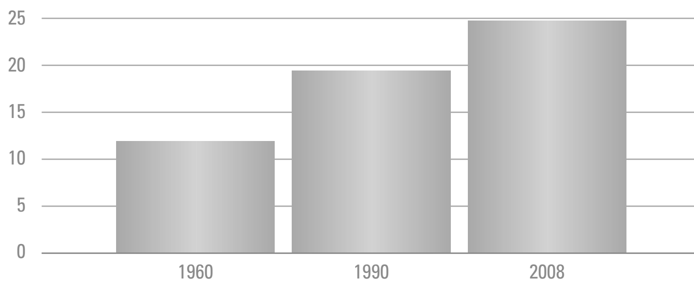
The nation lost approximately 8.4 million jobs from the beginning of the recession in December 2007 through December 2009. Under normal circumstances, the economy has to produce well over a million jobs per year to keep up with growth in the labor force. As of April 2010, the employment deficit was about 11 million. Although job growth has revived, most economists predict that it will take years to catch up and that unemployment will remain relatively high for an extended period.

Job losses and reductions in work hours have left many households with much less income to cover their housing

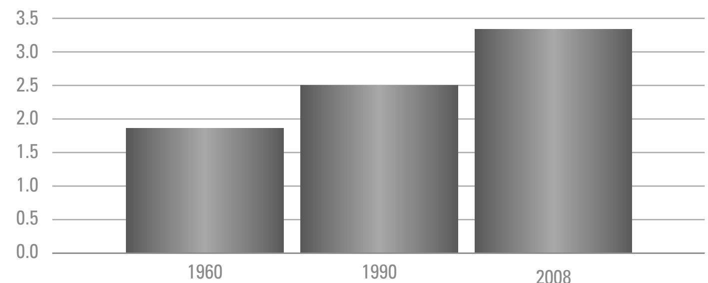
FIGURE 30

Housing Costs for Both Renters and Owners Have Risen Sharply Relative to Incomes Since 1960

Share of Renters with Severe Housing Cost Burdens (Percent)



Median Ratio of Home Value to Homeowner Income



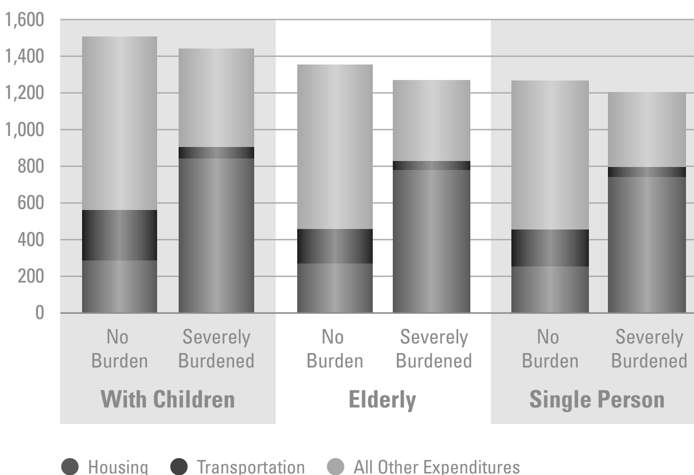
Note: Severe housing cost burdens are more than 50% of pre-tax household income.

Sources: JCHS tabulations of the IPUMS 1960 and 1990 Decennial Censuses and 2008 American Community Survey.

FIGURE 31

High Housing and Transportation Costs Limit Other Spending for Low-Income Households

Average Monthly Expenditures (Dollars)



Notes: Severely burdened (unburdened) households dedicate more than 50% (less than 30%) of monthly outlays to housing. Low-income households are in the bottom quartile of all households ranked by total monthly expenditures. Data exclude renters reporting no rental payments.

Source: JCHS tabulations of US Bureau of Labor Statistics, 2008 Consumer Expenditure Survey.

costs. Although overleveraging and overstretching income—combined with house price declines—were responsible for much of the increase in mortgage loan defaults in 2006 and 2007, joblessness is now an important driver of the foreclosure crisis. Moreover, high unemployment rates have discouraged some individuals from forming households of their own, thus slowing the absorption of vacant homes. Job losses have also kept the number of severely housing cost-burdened households high despite the improvement in affordability.

Nonetheless, the large number of multiple-earner households has helped to mitigate the effects of high unemployment. In 2009, the number of working-age households with multiple earners (39.4 million) nearly matched the number with only a single earner (39.6 million). Four-fifths of multiple-earner households fell within the upper half of the income distribution last year, providing them a larger cushion against job loss than single earners with lower average earnings have.

Despite an increase of well over a million households overall, the number of multiple-earner households dropped by 2.7 million between 2007 and 2009. At the same time, the number of households with no earners jumped by 2.2 million, or 20 percent. Some households facing short-term job losses are able to tide themselves over by collecting unemployment benefits, drawing on savings, borrowing against retirement accounts, or receiving support from family. But for others—especially households with only one worker—the impacts are immediate and disastrous. Even worse off in the current downturn are the record numbers of long-term unemployed. In April 2010, some 6.7 million workers had been out of work for more than half a year.

The groups hardest hit by unemployment are young and minority workers **(Figure 32).** Education is a key factor, with the jobless rate for workers without a high school diploma at 14.5 percent in April 2010—more than three times that of workers with college degrees. But even controlling for age and education, minorities have relatively higher unemployment rates. Moreover, there is some evidence that if a generation of young adults suffers high unemployment rates, these workers may have difficulty catching up with the incomes of preceding generations. A strong recovery could, however,

give younger and minority households the lift needed to get their incomes back on track.

HOUSEHOLD DELEVERAGING

The housing boom of the 2000s triggered massive mortgage borrowing as the number of homeowners increased, the share of loans with small downpayments soared, and owners tapped into their skyrocketing home equity. Indeed, inflation-adjusted mortgage debt climbed 88 percent between the beginning of 2000 and the fourth-quarter 2007 peak.

Homeowners cashed out an astounding $1.2 trillion when refinancing prime conventional first-lien mortgages between 2003 and 2007. Some of these funds went directly to retire credit card and other nonmortgage debt, and some substituted for auto loans and other forms of consumer borrowing that might have otherwise occurred. Mortgage debt thus increased three times faster than consumer debt between 2000 and the 2007 peak.

The debt binge not only fueled consumption but also helped to inflate home prices. All told, the aggregate value of household real estate jumped 76 percent in real terms from 2000 to 2006. After the boom went bust, the value of household real estate plunged 32.6 percent from the end of 2006 through the end of 2009, while mortgage debt declined only 5.0 percent from its fourth-quarter 2007 peak.

The only ways for underwater households to reduce debt are to pay it down, have a lender agree to reduce the principal balance, have a bankruptcy judge dictate a debt reduction (though only of consumer debt, since mortgage debt cannot be "crammed down"), or lose their homes in a short sale or to foreclosure. Between 2006 and 2009, the number of bankruptcies per year climbed from 600,000 to 1.4 million, while the number of homes entering foreclosure per year (based on reports from servicers of roughly 85 percent of all mortgage loans) tripled from 800,000 to 2.4 million **(Figure 33).**

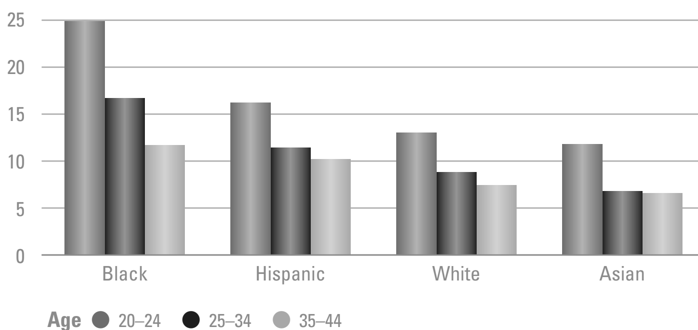
Bankruptcy has the larger negative impact on creditworthiness. VantageScore reports that individuals filing for bankruptcy with previously good ratings can lose 165–365 points from their credit scores, depending on the type of filing. Foreclosures and short sales, in contrast, reduce credit scores by a lesser but still disastrous 115–140 points. These consequences matter because credit scores govern not only the ease and cost of getting credit, but also affect renter screening and even employer hiring decisions.

Nonetheless, the overwhelming majority of borrowers who took on more mortgage and consumer debt during the boom will continue to make payments and attempt to refinance to lower interest rates. With asset values down so far, however, it may be some time before the balance sheets of these overleveraged households return to normal levels.

FIGURE 32

The Job Market Is Particularly Challenging for Young and Minority Workers

Unemployment Rate in 2009 (Percent)



Notes: Blacks, whites and Asians can be Hispanic. Hispanics can be of any race.
Source: US Bureau of Labor Statistics.

FEDERAL RESPONSES

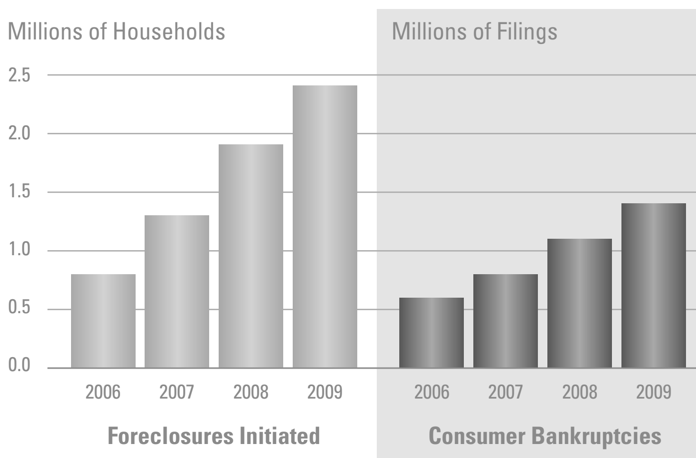
One of the most significant government programs to help forestall foreclosures and lessen housing cost burdens is unemployment insurance. States paid out $79.6 billion in unemployment benefits over the course of 2009, up from $32.4 billion in 2007. The average weekly unemployment benefit last year was $310, which for many was the only source of income. These payments enabled many families to keep their homes.

In a more direct attempt to ease the foreclosure crisis, the federal government launched the Home Affordable Modification Program (HAMP) in 2009 to reduce housing payments for eligible households to 31 percent of income for five years. While HAMP has been helpful in slowing foreclosures, it has not stopped the flood. Indeed, many of the borrowers served by the program have quickly gotten back into trouble. The US Department of Treasury expects that 40 percent of program participants will re-default.

Picking up the pieces after homes have been foreclosed thus remains a priority. The Neighborhood Stabilization Program was established in 2008 to deal with the aftermath of foreclosures. The $5.9 billion appropriated for the program is, however, small relative to the need for subsidies to acquire and rehabilitate vacant properties in poor condition in the hardest-hit communities. In many instances, governments are targeting these limited resources to a subset of the neediest neighborhoods in an effort to make a difference, even if in only a few areas.

FIGURE 33

As Households Cope with Debt and Job Losses, Foreclosures and Bankruptcies Are Soaring



Sources: Mortgage Bankers Association, National Delinquency Survey; and American Bankruptcy Institute.

Meanwhile, the financial crisis disrupted the pivotal support that state housing finance agencies (HFAs) provide to affordable rental housing and low-income homeownership programs. In late 2008, investor demand plummeted for the tax-exempt bonds that HFAs issue and the low income housing tax credits they allocate to fund these activities. The federal government countered with stopgap measures that eventually got capital flowing again, although not before a year's worth of affordable housing production was delayed and homeownership programs were interrupted. To help with local foreclosure prevention efforts, the federal government has also awarded $2.1 billion to HFAs in the five states with the steepest house price declines and an additional five states with high concentrations of unemployment.

Yet another casualty of the financial crisis is the newly created National Housing Trust Fund. Intended to support housing for extremely low-income households, this fund was to be capitalized from earnings of Fannie Mae and Freddie Mac. When the two mortgage giants went into federal conservatorship, this funding stream was suspended before it was realized. The trust now has to depend on discretionary appropriations that have yet to materialize, although the President's FY2011 budget request does include $1 billion in funding for this purpose.

Part of the federal response to the economic crisis has been to provide tax incentives for residential improvements that reduce energy consumption. This initiative not only triggered spending, but also drew attention to the tremendous savings that could be achieved through green remodeling. After adjusting for degree days, energy consumption per square foot of housing built before 1990 fell by 21.6 percent from 1993 to 2005. While in part the result of conservation, most of this decline likely reflects energy-efficient home improvements. Indeed, if all pre-2000 homes were brought up to the same efficiency level as post-2000 homes in their regions, overall residential energy consumption would fall by an additional 22.5 percent.

THE OUTLOOK

It will likely take years for the fallout from the Great Recession to abate. The 2000s ended on a sour note, with real household incomes lower than where they had started the decade and the shares of housing cost-burdened households at record highs.

With federal budget deficits looming, the resources necessary to make a noticeable dent in the nation's widespread housing affordability problems are unlikely to appear anytime soon. The share of cost-burdened homeowners may, however, ease as some stressed households default on their loans and become renters, or as others qualify for federal loan modification programs. Tighter underwriting standards and lower home prices will also keep more homebuyers from taking on excessive cost burdens right from the start.

On the rental side, the share of American households with severe cost burdens has not fallen in a meaningful way in decades, and has in fact increased. In plain terms, the cost of supplying modest units even in less desirable neighborhoods exceeds the rents that large fractions of renter households are able to pay.

In the face of these harsh realities, the Obama Administration has focused on streamlining federal housing programs and moving toward a unified scheme to peg subsidies to the fair market rent system. The government is also leveraging housing by providing some limited but path-breaking support for regional planning in coordination with the Department of Transportation and the Environmental Protection Agency. The administration has also launched the Choice Neighborhoods Initiative, designed to make transformative investments in neighborhoods where public and assisted housing is concentrated. The fate of these new programs will depend on their effectiveness and on continued funding in what will almost certainly be a difficult fiscal environment for the coming decade.

APPENDIX TABLES

Table A-1 .... Income and Housing Costs, US Totals: 1980–2009

Table A-2 .... Housing Market Indicators: 1980–2009

Table A-3 .... Terms on Conventional Single-Family Home Purchase Mortgage Originations: 1980–2009

Table A-4 .... Homeownership Rates by Age, Race/Ethnicity, and Region: 1995–2009

Table A-5 .... Housing Cost-Burdened Households by Tenure and Income: 2001 and 2008

Table A-6 .... State Foreclosure Rates, Shares of Loans in Foreclosure, and Shares of Households with Mortgages: 2010:1

Table A-7 .... JCHS Household Growth Projections by Age and Race/Ethnicity Assuming Low and High Immigration Rates: 2010–20

The following tables can be downloaded in Microsoft Excel format from the Joint Center's website at www.jchs.harvard.edu.

Table W-1 .... Residential Building Permits by Metropolitan Area: 1990–2009

Table W-2 .... Changes in Home Affordability by Metropolitan Area: 1990–2010:1

Table W-3 .... Minority Share of Population by Age and State: 2008

Table W-4 .... Real Median Household Income by Quartile and Age of Household Head: 2000 and 2008

Table W-5 .... Households Receiving Direct Federal Housing Assistance: 2000–9

TABLE A-1

Income and Housing Costs, US Totals: 1980–2009

Year	Monthly Income		Owner Costs				Renter Costs		Cost as Percent of Income			
									Owners		Renters	
	Owner	Renter	Home Price	Mortgage Rate (%)	Before-Tax Mortgage Payment	After-Tax Mortgage Payment	Contract Rent	Gross Rent	Before-Tax Mortgage Payment	After-Tax Mortgage Payment	Contract Rent	Gross Rent
1980	4,599	2,640	131,891	13.7	1,382	1,173	602	678	30.1	25.5	22.8	25.7
1981	4,467	2,605	122,558	16.6	1,539	1,284	595	673	34.5	28.7	22.8	25.8
1982	4,474	2,631	116,819	16.0	1,417	1,203	605	689	31.7	26.9	23.0	26.2
1983	4,575	2,624	121,270	13.2	1,228	1,047	622	710	26.8	22.9	23.7	27.1
1984	4,694	2,705	119,805	13.9	1,267	1,083	629	717	27.0	23.1	23.3	26.5
1985	4,819	2,745	121,077	12.4	1,157	993	647	734	24.0	20.6	23.6	26.7
1986	4,989	2,777	127,855	10.2	1,026	888	674	759	20.6	17.8	24.3	27.3
1987	5,021	2,750	132,809	10.2	1,068	950	677	758	21.3	18.9	24.6	27.6
1988	5,048	2,832	134,887	10.3	1,096	998	675	754	21.7	19.8	23.8	26.6
1989	5,116	2,927	136,228	10.3	1,105	1,005	669	746	21.6	19.6	22.9	25.5
1990	4,965	2,835	133,057	10.1	1,062	969	662	736	21.4	19.5	23.3	26.0
1991	4,891	2,717	129,705	9.3	960	885	657	731	19.6	18.1	24.2	26.9
1992	4,853	2,642	128,980	8.4	884	825	654	727	18.2	17.0	24.8	27.5
1993	4,813	2,614	128,482	7.3	794	751	650	723	16.5	15.6	24.9	27.7
1994	4,861	2,580	129,826	8.4	889	834	649	721	18.3	17.2	25.2	28.0
1995	4,907	2,647	129,959	7.9	853	805	647	717	17.4	16.4	24.4	27.1
1996	4,990	2,670	130,991	7.8	849	801	645	715	17.0	16.1	24.2	26.8
1997	5,104	2,731	132,542	7.6	842	796	649	719	16.5	15.6	23.8	26.3
1998	5,256	2,785	137,335	6.9	817	777	660	727	15.6	14.8	23.7	26.1
1999	5,372	2,885	142,903	7.4	894	839	666	732	16.6	15.6	23.1	25.4
2000	5,317	2,903	148,213	8.1	983	912	667	735	18.5	17.1	23.0	25.3
2001	5,209	2,878	154,659	7.0	923	865	678	750	17.7	16.6	23.5	26.0
2002	5,179	2,771	163,955	6.5	937	879	693	762	18.1	17.0	25.0	27.5
2003	5,206	2,678	173,551	5.8	919	889	698	769	17.7	17.1	26.1	28.7
2004	5,169	2,640	185,141	5.8	982	941	698	770	19.0	18.2	26.4	29.2
2005	5,217	2,658	197,763	5.9	1,052	999	695	772	20.2	19.2	26.2	29.0
2006	5,293	2,731	204,156	6.4	1,151	1,079	698	778	21.7	20.4	25.5	28.5
2007	5,310	2,743	201,318	6.3	1,126	1,060	707	788	21.2	20.0	25.8	28.7
2008	5,155	2,643	180,467	6.0	977	934	706	790	19.0	18.1	26.7	29.9
2009	5,172	2,664	172,100	5.0	835	825	725	807	16.2	16.0	27.2	30.3

Notes and Sources: All dollar amounts are expressed in 2009 constant dollars using the CPI-U for All Items. Owner and renter median incomes through 2008 are from Current Population Survey published reports. Renters exclude those paying no cash rent. 2009 income is based on Moody's Economy.com estimate for all households, adjusted by the three-year average ratio of CPS owner and renter incomes to all household incomes. Home price is the 2009 median sales price of existing single-family homes determined by the National Association of Realtors®, indexed by the Freddie Mac Conventional Mortgage Home Price Index. Mortgage rates are contract rates from the Freddie Mac Primary Mortgage Market 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 2007 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 equals median 2007 gross rent from the American Housing Survey, indexed by a weighted combination of the CPI residential rent index, the CPI gas and electricity index, and the CPI water and sewer index.

TABLE A-2

Housing Market Indicators: 1980–2009

Year	Permits [1] (Thousands)		Starts [2] (Thousands)			Size [3] (Median sq. ft.)		Sales Price of Single-Family Homes (2009 dollars)	
	Single-Family	Multifamily	Single-Family	Multifamily	Manufactured	Single-Family	Multifamily	New [4]	Existing [5]
1980	710	480	852	440	234	1,595	915	230,783	131,891
1981	564	421	705	379	229	1,550	930	225,874	122,558
1982	546	454	663	400	234	1,520	925	217,832	116,819
1983	902	704	1,068	636	278	1,565	893	215,469	121,270
1984	922	759	1,084	665	288	1,605	871	215,021	119,805
1985	957	777	1,072	670	283	1,605	882	209,899	121,077
1986	1,078	692	1,179	626	256	1,660	876	214,097	127,855
1987	1,024	510	1,146	474	239	1,755	920	217,747	132,809
1988	994	462	1,081	407	224	1,810	940	216,948	134,887
1989	932	407	1,003	373	203	1,850	940	215,254	136,228
1990	794	317	895	298	195	1,905	955	208,334	133,057
1991	754	195	840	174	174	1,890	980	202,434	129,705
1992	911	184	1,030	170	212	1,920	985	199,305	128,980
1993	987	213	1,126	162	243	1,945	1,005	200,955	128,482
1994	1,069	303	1,198	259	291	1,940	1,015	207,483	129,826
1995	997	335	1,076	278	319	1,920	1,040	206,256	129,959
1996	1,070	356	1,161	316	338	1,950	1,030	205,637	130,991
1997	1,062	379	1,134	340	336	1,975	1,050	205,593	132,542
1998	1,188	425	1,271	346	374	2,000	1,020	207,539	137,335
1999	1,247	417	1,302	339	338	2,028	1,041	213,618	142,903
2000	1,198	394	1,231	338	281	2,057	1,039	214,620	148,213
2001	1,236	401	1,273	329	196	2,103	1,104	215,030	154,659
2002	1,333	415	1,359	346	174	2,114	1,070	221,194	163,955
2003	1,461	428	1,499	349	140	2,137	1,092	228,487	173,551
2004	1,613	457	1,611	345	124	2,140	1,105	240,158	185,141
2005	1,682	473	1,716	353	123	2,227	1,143	250,310	197,763
2006	1,378	461	1,465	336	112	2,248	1,172	254,127	204,156
2007	980	419	1,046	309	95	2,277	1,197	247,325	201,318
2008	576	330	622	284	79	2,215	1,122	225,919	180,467
2009	435	137	445	109	53	2,137	1,114	216,700	172,100

Notes: All value series are adjusted to 2009 dollars by the CPI-U for All Items. All links are as of May 2010. na indicates data not available.

Sources:

1. US Census Bureau, New Privately Owned Housing Units Authorized by Building Permits, www.census.gov/pub/const/bpann.pdf.
2. US Census Bureau, New Privately Owned Housing Units Started, www.census.gov/const/startsan.pdf; Placements of New Manufactured Homes, www.census.gov/pub/const/mhs/mhstabplcmnt.pdf. Manufactured housing starts are defined as placements of new manufactured homes.
3. US Census Bureau, Quarterly Starts and Completions by Purpose and Design, http://www.census.gov/const/www/newresconstindex.html.
4. New home price is the 2009 median price from US Census Bureau, Median and Average Sales Price of New One-Family Houses Sold, http://www.census.gov/const/uspriceann.pdf, indexed by the US Census Bureau, Price Indexes of New One-Family Houses Sold, www.census.gov/const/price_sold.pdf.
5. Existing home price is the 2009 median sales price of existing single-family homes determined by the National Association of Realtors®, http://www.realtor.org/research/research/ehsdata, indexed by annual averages of the quarterly Freddie Mac Purchase-Only Conventional Mortgage Home Price Index, http://www.freddiemac.com/finance/cmhpi.
6. US Census Bureau, Housing Vacancy Survey, http://www.census.gov/hhes/www/housing/hvs/annual09/ann09ind.html.
7. US Census Bureau, Annual Value of Private Construction Put in Place, http://www.census.gov/const/www/privpage.html. Single-family and multifamily are new construction. Owner improvements do not include expenditures on rental, seasonal, and vacant properties.
8. US Census Bureau, Houses Sold by Region, www.census.gov/const/soldann.pdf.
9. National Association of Realtors®, Existing Single-Family Home Sales, http://www.realtor.org/research/research/ehsdata.

Vacancy Rates [6] (Percent)		Value Put in Place [7] (Millions of 2009 dollars)			Home Sales (Thousands)	
For Sale	For Rent	Single-Family	Multifamily	Owner Improvements	New [8]	Existing [9]
1.4	5.4	137,785	43,501	na	545	2,973
1.4	5.0	122,645	41,208	na	436	2,419
1.5	5.3	92,178	34,544	na	412	1,990
1.5	5.7	156,194	48,351	na	623	2,697
1.7	5.9	178,392	58,272	na	639	2,829
1.7	6.5	174,162	56,902	na	688	3,134
1.6	7.3	203,832	60,755	na	750	3,474
1.7	7.7	221,366	48,067	na	671	3,436
1.6	7.7	217,789	40,437	na	676	3,513
1.8	7.4	209,224	38,589	na	650	3,010
1.7	7.2	185,296	31,598	na	534	2,914
1.7	7.4	156,614	23,861	na	509	2,886
1.5	7.4	186,517	20,022	na	610	3,151
1.4	7.3	208,039	16,017	85,026	666	3,427
1.5	7.4	234,961	20,384	93,578	670	3,544
1.5	7.6	216,107	25,183	79,842	667	3,519
1.6	7.8	233,529	27,790	90,766	757	3,797
1.6	7.7	234,158	30,587	89,068	804	3,964
1.7	7.9	262,458	32,344	95,239	886	4,495
1.7	8.1	288,243	35,328	96,620	880	4,649
1.6	8.0	295,005	35,207	101,028	877	4,603
1.8	8.4	301,740	36,711	102,996	908	4,735
1.7	8.9	317,082	39,296	116,695	973	4,974
1.8	9.8	362,119	40,944	116,997	1,086	5,446
1.7	10.2	428,798	45,365	131,061	1,203	5,958
1.9	9.8	476,211	51,956	144,005	1,283	6,180
2.4	9.7	442,692	56,191	154,231	1,051	5,677
2.7	9.7	315,774	50,658	143,930	776	4,939
2.8	10.0	185,115	44,001	119,717	485	4,350
2.6	10.6	106,288	29,264	115,813	375	4,566

TABLE A-3

Terms on Conventional Single-Family Home Purchase Mortgage Originations: 1980–2009

Annual Averages

Year	Effective Interest Rate (%)	Term to Maturity (Years)	Mortgage Loan Amount (Thousands of 2009 dollars)	Purchase Price (Thousands of 2009 dollars)	Loan-to-Price Ratio (%)	Percent of Loans with:	
						Loan-to-Price Ratio Above 90%	Adjustable Rates
1980	12.8	27.2	134.6	191.1	72.9	10	na
1981	14.9	26.4	126.7	180.1	73.1	15	na
1982	15.3	25.6	122.3	174.3	72.9	21	41
1983	12.7	26.0	129.0	179.0	74.5	21	40
1984	12.5	26.8	133.2	178.8	77.0	27	62
1985	11.6	25.9	140.0	191.6	75.8	21	51
1986	10.2	25.6	155.2	216.5	74.1	11	30
1987	9.3	26.8	168.3	230.0	75.2	8	43
1988	9.3	27.7	176.6	238.7	76.0	8	58
1989	10.1	27.7	180.8	247.1	74.8	7	38
1990	10.1	27.0	170.7	234.1	74.7	8	28
1991	9.3	26.5	167.4	231.1	74.4	9	23
1992	8.1	25.4	166.2	223.9	76.6	14	20
1993	7.1	25.5	158.9	212.5	77.2	17	20
1994	7.5	27.1	159.1	205.6	79.9	25	39
1995	7.9	27.4	155.4	201.0	79.9	27	32
1996	7.7	26.9	162.3	212.1	79.0	25	27
1997	7.7	27.5	169.2	219.9	79.4	25	22
1998	7.1	27.8	173.5	228.2	78.9	25	12
1999	7.3	28.2	179.4	237.2	78.5	23	21
2000	8.0	28.7	184.8	247.8	77.8	22	24
2001	7.0	27.6	188.6	261.1	76.2	21	12
2002	6.5	27.3	194.9	275.7	75.1	21	17
2003	5.7	26.8	195.8	283.8	73.5	20	18
2004	5.7	27.9	210.7	297.6	74.9	18	35
2005	5.9	28.5	232.8	329.3	74.7	15	30
2006	6.6	29.0	237.2	326.8	76.6	19	22
2007	6.5	29.3	232.5	310.9	79.4	29	11
2008	6.1	28.4	219.0	305.0	76.9	20	7
2009	5.1	28.1	216.9	306.0	74.5	8	na

Notes: The effective interest rate includes the amortization of initial fees and charges. Loans with adjustable rates do not include hybrid products. na indicates data not available. Estimates for 2009 are averages of monthly data. Dollar amounts are adjusted by the CPI-U for All Items.

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

TABLE A-4

Homeownership Rates by Age, Race/Ethnicity, and Region: 1995–2009

Percent

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All Households	64.7	65.4	65.7	66.3	66.8	67.4	67.8	67.9	68.3	69.0	68.9	68.8	68.1	67.8	67.4
Age of Householder															
Under 35	38.6	39.1	38.7	39.3	39.7	40.8	41.2	41.3	42.2	43.1	43.0	42.6	41.7	41.0	39.7
35 to 44	65.2	65.5	66.1	66.9	67.2	67.9	68.2	68.6	68.3	69.2	69.3	68.9	67.8	67.0	66.2
45 to 54	75.2	75.6	75.8	75.7	76.0	76.5	76.7	76.3	76.6	77.2	76.6	76.2	75.4	75.0	74.4
55 to 64	79.5	80.0	80.1	80.9	81.0	80.3	81.3	81.1	81.4	81.7	81.2	80.9	80.6	80.1	79.5
65 and Over	78.1	78.9	79.1	79.3	80.1	80.4	80.3	80.6	80.5	81.1	80.6	80.9	80.4	80.1	80.5
Race/Ethnicity of Householder															
White	70.9	71.7	72.0	72.6	73.2	74.0	74.3	74.7	75.4	76.0	75.8	75.8	75.2	75.0	74.8
Hispanic	42.0	42.8	43.3	44.7	45.5	46.0	47.3	47.0	46.7	48.1	49.5	49.7	49.7	49.1	48.4
Black	42.9	44.5	45.4	46.1	46.7	47.2	48.4	48.2	48.8	49.7	48.8	48.4	47.8	47.9	46.6
Asian/Other	51.5	51.5	53.3	53.7	54.1	54.3	54.7	55.0	56.9	59.7	60.3	60.8	60.1	59.5	59.0
All Minority	43.7	44.9	45.8	46.8	47.4	47.9	49.0	48.9	49.5	51.0	51.3	51.3	50.9	50.6	49.7
Region															
Northeast	62.0	62.2	62.4	62.6	63.1	63.5	63.7	64.3	64.4	65.0	65.2	65.2	65.0	64.6	64.0
Midwest	69.2	70.6	70.5	71.0	71.8	72.6	73.1	73.1	73.2	73.8	73.2	72.7	71.9	71.8	71.0
South	66.7	67.5	68.0	68.6	69.1	69.6	69.8	69.7	70.1	70.9	70.8	70.6	70.2	69.9	69.6
West	59.2	59.2	59.6	60.5	60.9	61.8	62.6	62.4	63.4	64.2	64.4	64.7	63.5	63.0	62.6

Notes: White, black and Asian/other are non-Hispanic. Hispanic householders may be of any race. After 2002, Asian/other also includes householders of more than one race. Caution should be used in interpreting changes before and after 2002 because of rebenchmarking.

Source: US Census Bureau, Housing Vacancy Survey.

TABLE A-5

Housing Cost-Burdened Households by Tenure and Income: 2001 and 2008

Thousands

Tenure and Income	2001				2008				Percent Change 2001–8			
	No Burden	Moderate Burden	Severe Burden	Total	No Burden	Moderate Burden	Severe Burden	Total	No Burden	Moderate Burden	Severe Burden	Total
Owners												
Bottom Decile	771	709	2,506	3,986	570	647	2,758	3,975	-26.1	-8.8	10.1	-0.3
Bottom Quintile	3,381	1,906	3,921	9,208	2,721	1,974	4,616	9,312	-19.5	3.6	17.7	1.1
Bottom Quartile	5,065	2,549	4,428	12,042	4,206	2,694	5,385	12,286	-16.9	5.7	21.6	2.0
Lower-Middle Quartile	10,695	3,630	1,456	15,781	10,202	4,345	2,550	17,097	-4.6	19.7	75.1	8.3
Upper-Middle Quartile	16,015	2,882	465	19,362	15,979	4,136	1,113	21,228	-0.2	43.5	139.5	9.6
Top Quartile	21,457	1,208	137	22,802	22,080	2,321	330	24,731	2.9	92.1	141.2	8.5
Total	53,231	10,270	6,485	69,986	52,467	13,496	9,378	75,342	-1.4	31.4	44.6	7.7
Renters												
Bottom Decile	1,309	789	4,559	6,657	1,293	812	5,229	7,335	-1.2	3.0	14.7	10.2
Bottom Quintile	2,731	2,798	6,550	12,079	2,618	2,873	7,817	13,308	-4.1	2.7	19.3	10.2
Bottom Quartile	3,705	3,962	6,901	14,567	3,514	4,087	8,389	15,989	-5.2	3.1	21.6	9.8
Lower-Middle Quartile	7,698	2,710	419	10,828	7,100	3,325	753	11,178	-7.8	22.7	79.6	3.2
Upper-Middle Quartile	6,771	437	39	7,247	6,299	681	68	7,048	-7.0	55.8	72.1	-2.7
Top Quartile	3,735	71	2	3,807	3,464	80	0	3,544	-7.3	12.4	-74.3	-6.9
Total	21,908	7,180	7,361	36,449	20,376	8,172	9,210	37,759	-7.0	13.8	25.1	3.6
All Households												
Bottom Decile	2,080	1,498	7,065	10,643	1,863	1,459	7,987	11,309	-10.5	-2.6	13.1	6.3
Bottom Quintile	6,112	4,704	10,472	21,287	5,340	4,847	12,433	22,619	-12.6	3.0	18.7	6.3
Bottom Quartile	8,769	6,511	11,328	26,609	7,720	6,780	13,774	28,275	-12.0	4.1	21.6	6.3
Lower-Middle Quartile	18,393	6,340	1,876	26,609	17,302	7,670	3,304	28,275	-5.9	21.0	76.1	6.3
Upper-Middle Quartile	22,786	3,319	504	26,609	22,278	4,817	1,180	28,275	-2.2	45.1	134.2	6.3
Top Quartile	25,191	1,280	138	26,609	25,544	2,401	330	28,275	1.4	87.6	138.7	6.3
Total	75,140	17,450	13,846	106,436	72,844	21,668	18,588	113,101	-3.1	24.2	34.2	6.3

Notes: Income deciles/quintiles/quartiles are equal tenths/fifths/fourths of all households sorted by pre-tax income. Moderate (severe) burdens are defined as housing costs of 30-50% (more than 50%) of household income.
Source: JCHS tabulations of the 2001 and 2008 American Community Surveys.

TABLE A-6

State Foreclosure Rates, Shares of Loans in Foreclosure, and Shares of Households with Mortgages: 2010:1

Percent

	Foreclosure Rate	Share of US Loans in Foreclosure	Share of US Households with Mortgages
United States	4.6	100.0	100.0
Alabama	2.2	0.6	1.5
Alaska	1.3	0.1	0.2
Arizona	5.9	3.4	2.1
Arkansas	2.1	0.3	0.9
California	5.2	14.8	10.2
Colorado	2.8	1.4	1.9
Connecticut	3.9	1.0	1.3
Delaware	3.7	0.3	0.3
District of Columbia	3.0	0.1	0.2
Florida	14.0	23.6	6.2
Georgia	3.9	3.2	3.3
Hawaii	4.8	0.4	0.3
Idaho	3.7	0.5	0.5
Illinois	5.8	5.0	4.5
Indiana	4.5	1.9	2.4
Iowa	2.8	0.5	1.1
Kansas	2.3	0.4	1.0
Kentucky	3.3	0.7	1.4
Louisiana	3.4	0.8	1.2
Maine	4.6	0.3	0.5
Maryland	4.0	2.1	2.2
Massachusetts	3.4	1.4	2.2
Michigan	4.4	3.0	3.7
Minnesota	3.3	1.5	2.2
Mississippi	3.1	0.4	0.8
Missouri	2.1	0.9	2.1
Montana	1.9	0.1	0.3
Nebraska	1.9	0.2	0.6
Nevada	10.4	2.8	0.9
New Hampshire	2.6	0.2	0.5
New Jersey	6.2	3.9	2.9
New Mexico	3.1	0.4	0.6
New York	4.3	4.3	5.0
North Carolina	2.3	1.6	3.2
North Dakota	1.2	0.0	0.2
Ohio	4.9	3.5	4.2
Oklahoma	3.0	0.6	1.1
Oregon	3.3	1.0	1.3
Pennsylvania	2.9	2.3	4.3
Rhode Island	3.6	0.2	0.3
South Carolina	3.4	1.1	1.5
South Dakota	1.8	0.1	0.3
Tennessee	2.4	1.0	2.1
Texas	2.1	3.2	6.8
Utah	3.4	0.7	0.9
Vermont	2.7	0.1	0.2
Virginia	2.1	1.5	2.9
Washington	2.3	1.3	2.4
West Virginia	2.2	0.1	0.6
Wisconsin	3.5	1.2	2.1
Wyoming	1.7	0.1	0.2

Note: Shares are of first-lien mortgages on 1- to 4-unit properties.
Sources: Mortgage Bankers Association, National Delinquency Survey; US Census Bureau, 2008 American Community Survey.

TABLE A-7

JCHS Household Growth Projections by Age and Race/Ethnicity Assuming Low and High Immigration Rates: 2010–20

Thousands

	Low Immigration Assumption					High Immigration Assumption				
	Race/Ethnicity					Race/Ethnicity				
	White	Black	Hispanic	Asian/Other	Total	White	Black	Hispanic	Asian/Other	Total
Total Household Growth										
Age of Householder										
Under 25	-471	-110	276	86	-219	-432	-86	452	154	88
25 to 34	347	362	422	65	1,195	516	431	775	369	2,091
35 to 44	-341	303	553	269	784	-227	350	704	459	1,286
45 to 54	-3,463	-184	999	497	-2,151	-3,414	-164	1,071	622	-1,885
55 to 64	1,477	750	1,100	488	3,815	1,506	763	1,157	574	4,000
65 and Over	5,798	1,078	1,122	1,126	9,125	5,807	1,089	1,171	1,190	9,258
Total	3,347	2,198	4,473	2,531	12,549	3,756	2,382	5,331	3,368	14,837
Growth Due to Aging of Population Resident in 2005										
Age of Householder										
Under 25	-509	-135	100	18	-526	-509	-135	100	18	-526
25 to 34	177	293	70	-240	300	177	293	70	-240	300
35 to 44	-455	255	402	80	283	-455	255	402	80	283
45 to 54	-3,513	-204	927	372	-2,418	-3,513	-204	927	372	-2,418
55 to 64	1,448	737	1,043	402	3,630	1,448	737	1,043	402	3,630
65 and Over	5,789	1,068	1,073	1,063	8,993	5,789	1,068	1,073	1,063	8,993
Total	2,938	2,014	3,615	1,695	10,262	2,938	2,014	3,615	1,695	10,262
Growth Due to Immigration After 2005										
Age of Householder										
Under 25	38	24	176	68	307	77	49	352	136	613
25 to 34	170	69	353	304	896	339	137	706	609	1,791
35 to 44	114	47	151	189	502	228	95	302	379	1,003
45 to 54	49	20	72	125	266	99	39	144	250	533
55 to 64	29	13	57	86	185	57	26	114	173	370
65 and Over	9	11	49	63	132	18	22	98	127	265
Total	409	184	858	837	2,288	818	368	1,716	1,673	4,575

Notes: White, black and Asian/other are non-Hispanic. Hispanic householders may be of any race. JCHS high-series projections assume immigration rises from 1.2 million in 2005 to 1.5 million in 2020, as estimated by the Census Bureau's 2008 population projections. JCHS low-series projections assume immigration is half the Census Bureau's projected levels.

Sources: US Census Bureau, 2008 Population Projections; JCHS 2009 household growth projections.

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