Joint Center for Housing Studies of Harvard University

THE STATE OF THE NATION'S HOUSING 2009

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1 Executive Summary

Despite unprecedented federal efforts to jumpstart the economy and help homeowners keep up with their mortgage payments, home prices continued to fall and foreclosures continued to mount in most areas through the first quarter of 2009. While new and existing home sales and single-family starts have shown some signs of stabilizing, ongoing job losses, house price deflation, and tighter mortgage credit are placing any recovery at risk.

In the worst housing construction cycle since the 1940s **(Figure 1),** depressed demand is making it difficult for the market to work off excess vacant units. Restoring demand to more normal levels will take time since so many owners are in financial distress or trapped in homes worth less than their mortgages. The recession has also dampened both immigration and new household formation. But once new home sales rebound and the economy begins to pick up, the aging of the echo boomers—the largest generation to reach adulthood in the nation's history—should reinvigorate the housing market.

From Boom to Bust

The seeds of the housing bust were sown during the preceding boom. Following the 2001 recession, a combination of tight housing markets and the lowest mortgage interest rates in nearly 40 years sparked rapid house price appreciation. Afraid of missing their chance to get in on rising prices, homebuyers flocked to the market. Speculators looking to earn a quick return also jumped in.

Despite rising mortgage interest rates, buyers were able to chase home prices higher from 2004 to 2006 largely because of changes in lending practices. Lenders were willing to relax downpayment and debt-to-income requirements. They also offered products that lowered initial monthly payments but carried the risk of later resetting to sharply higher levels. In many cases, lenders did not verify applicants' incomes and assets. At the same time, borrowers who would have previously been denied credit because of past repayment problems were able to secure subprime loans, albeit at higher interest rates.

Although risks were mounting, loan performance held up as long as rising home prices allowed borrowers to refinance or sell their way out of a squeeze. But prices began to flatten at the end of 2006 in some of the formerly hottest markets and then dropped in an ever-growing number of locations in 2007 and 2008. As a result, the share of subprime loans entering foreclosure soared

to 4.1 percent in 2008—shattering the 2.3 percent record set in 2001 when the subprime market share was much smaller. Problems eventually spread to the prime market, where the share of loans entering foreclosure more than tripled from 2006 to 2008 but still held under 1.0 percent. Investors quickly lost their appetite for mortgages and the securities they backed, sending the values of these investments down sharply.

After helping to fuel unsustainable house price appreciation, credit markets did an about-face in 2008. Many borrowers with excellent credit were suddenly compelled to make large downpayments, keep their payments well in line with their incomes, and back up every piece of information on their loan applications. But as the financial crisis worsened, even stricter underwriting was unable to guarantee the flow of mortgage credit. The federal government therefore intervened, taking mortgage giants Fannie Mae and Freddie Mac into conservatorship, purchasing their securities, and expanding FHA lending. What happens to mortgage credit now rests in the hands of the federal government.

Multiple Meltdowns

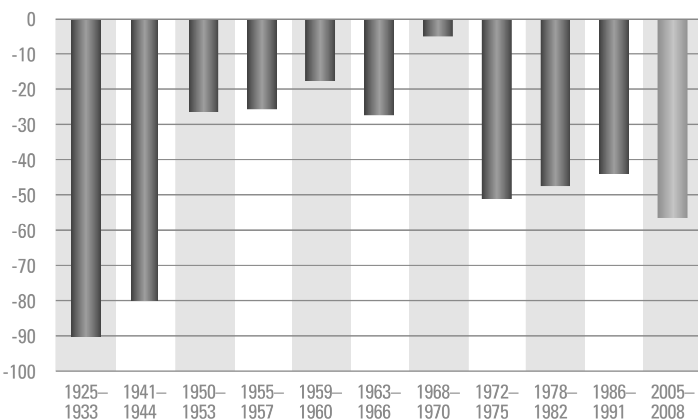
Problems emanating from the housing market forced financial institutions to take massive write-downs on their mortgage portfolios, igniting a broader banking crisis. Amid fears about the strength of banks and severe losses of both housing and stock wealth, consumer confidence plunged 41 percent below its lowest previous trough posted in the 1970s. Households slashed their spending and—for the first time on record—cut their net borrowing in 2008.

With that, the broader economy lurched into a severe recession that accelerated with stunning speed. From their quarterly peaks during the housing boom to the last quarter of 2008, real home equity was down 41 percent, existing median home prices 27 percent (and at least 40 percent in 26 metropolitan areas), new home sales 70 percent, and existing home sales 33 percent. Homeowners also pulled back on home improvement projects, with spending off 13 percent in real terms in 2008 and even larger declines expected in 2009. The cutbacks in home building and remodeling shaved a full percentage point off economic growth in 2007 and nearly another point in 2008. The collapse of home prices placed another drag on the economy by dramatically reducing household wealth, which further discouraged consumers from spending **(Figure 2).**

Figure 1

The Downturn in Home Building Is the Worst Since World War II

Percent Change in Housing Starts



Source: US Census Bureau, New Residential Construction data and *Historical Statistics of the United States, Colonial Times to 1970.*

Struggling Through the Downturn

Millions of Americans entered the recession with severe housing cost burdens and deep in debt. The number of households paying more than half their incomes for housing jumped from 13.8 million in 2001 to 17.9 million in 2007. While homeowners led this growth, the share of renters with severe burdens remained much larger.

Affordability pressures have continued to increase as employment losses have mounted. Fully 5.7 million jobs were lost from the December 2007 peak through April 2009, and another 11.0 million Americans were either working part-time involuntarily or had stopped looking for work altogether.

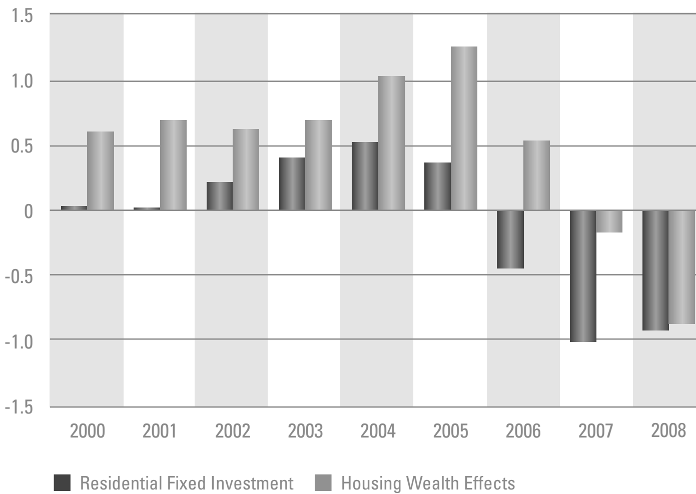
Being able to afford housing at the 30-percent-of-income standard depends critically on having full-time, well-paying work. Earnings from full-time minimum wage jobs are simply not enough. Indeed, no American household earning the equivalent of the full-time minimum wage ($11,500) can afford a modest two-bedroom apartment at the federal fair market rent. Making matters worse, a shockingly high 8.1 million households with at least some income from work in 2007 earned less than the full-time minimum wage equivalent, and 4.1 million earned less than half. Unsurprisingly, lower earnings or relying solely on Social Security retirement income mean that households are more likely to spend more than half their incomes on housing **(Figure 3).**

To supplement their meager incomes, many households loaded up on debt during the housing boom and are now struggling to meet their obligations. Although the share of low-income renters

Figure 2

The Drop in Housing Construction and Wealth Added to the Drag on the Economy

Percentage Point Contributions to Change in GDP

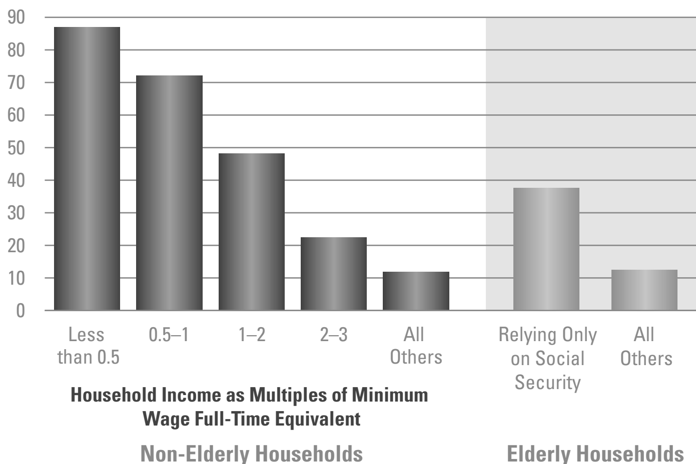


Note: Housing wealth effects measure the relationship between changes in housing wealth and consumer spending, as estimated by Moody's Economy.com.
Sources: Bureau of Economic Analysis; Moody's Economy.com.

Figure 3

Many Households with Low Incomes or Relying Only on Social Security Struggle to Pay for Housing

Share with Severe Housing Cost Burdens (Percent)



Notes: Elderly households are headed by persons age 65 and over. Minimum wage is $6.55 per hour. Full-time equivalent 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 the 2007 American Community Survey.

spending more than one-fifth of their incomes on debt payments fell from 15.2 percent in 2001 to 13.9 percent in 2007, the average amount owed increased 34.7 percent in real terms. At the same time, the share of low-income homeowners spending more than 40 percent of their incomes on debt payments fell from 26.1 percent to 22.7 percent, but the average amount of debt went up by 62.8 percent.

A recent Federal Reserve report estimates that of the trillions of dollars in real home equity cashed out between 2001 and 2007, homeowners used $874 billion to pay off non-mortgage debt—in effect rolling consumer debt into their home loans. Unlike consumer debt, mortgage debt cannot be discharged through personal bankruptcy. This is no small matter, given that personal bankruptcies nearly doubled from 600,000 in 2006 to 1.1 million in 2008. Furthermore, a total of about 3.2 million homeowners entered foreclosure in 2007 and 2008.

The downturn is hitting minority households particularly hard. The incidence of high-cost loans and foreclosures is much higher in minority than in white neighborhoods, and highest in low-income minority neighborhoods. And with foreclosed properties selling at steep discounts, homeowners in these neighborhoods are seeing some of the largest drops in house prices. Making matters worse, minority unemployment rates started out higher in December 2007 (at 8.9 percent for blacks and 6.2 percent for Hispanics, compared with 4.4 percent for whites) and climbed more by April 2009 (to 15.0 percent and 11.3 percent, compared with 8.0 percent).

Government Responses

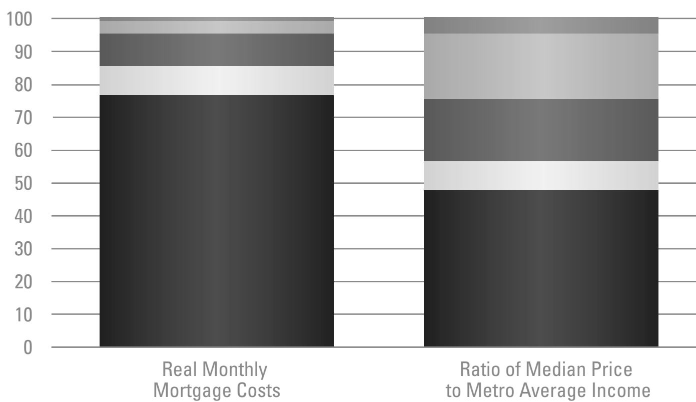
The federal government has taken extraordinary steps to stabilize the housing market and get the economy back on track. Early efforts in 2007 focused on encouraging lenders, counselors, and borrowers to voluntarily work out subprime loans heading for foreclosure. While helping millions of distressed homeowners, these programs failed to stem the rise of loan delinquencies and foreclosures. In consequence, the Obama Administration launched a far more ambitious plan to help as many as 3–4 million homeowners reduce their mortgage payments to 31 percent of their incomes, using a combination of carrots and sticks for lenders.

Recognizing that rising unemployment rates and other factors would mean increases in the number of distressed properties, the federal government provided additional funding in 2008 and 2009 to help state and local governments deal with foreclosed homes. With the help of the Neighborhood Stabilization Program and an additional $11 billion in housing bond authority, state and local entities are now developing strategies to acquire, renovate, and sell foreclosed one- to four-unit properties. While modest

Figure 4

Housing Affordability Has Rebounded in Many Metropolitan Areas

Share of Metros (Percent)



2009:1 Level Relative to 1989–2000 Average

- More than 20% Above
- 5% to 20% Above
- 5% Above to 5% Below
- 5% to 10% Below
- More than 10% Below

Notes: Monthly mortgage costs assume a 10% downpayment and Freddie Mac conventional 30-year fixed interest rates, and are adjusted for inflation by the CPI-U for All Items. Metro areas evaluated are the 80 metros in the National Association of Realtors® series with quarterly data for 1989–2000 and 2009:1.

Source: JCHS calculations using the National Association of Realtors®, Median Existing Single-Family House Price and Moody's Economy.com, Average Household Income.

in relation to the size of the problem, these resources could be instrumental in helping to stabilize neighborhoods where foreclosures are concentrated.

The federal government has also provided funds to redevelop public housing, a tax credit of up to $8,000 for first-time homebuyers, and an opportunity for homeowners who are up to 5 percent underwater on their mortgages to refinance at lower interest rates. Other efforts to keep mortgage credit flowing and reduce its cost include buying Freddie Mac and Fannie Mae mortgage-backed and debt securities, providing equity injections to financial institutions, and developing a plan to buy troubled loan assets from banks. While current initiatives to bolster financial institutions and prevent foreclosures eclipse any previous attempts to stabilize housing markets, the federal tax credit (in real terms) and interest-rate reduction are still less generous than the stimulus used to jolt the housing market back to life in 1974.

Finally, the federal government took a number of steps to address the falling prices for Low Income Housing Tax Credits (LIHTCs). These measures are important because LIHTC is the principal program for preserving and building low-income rental housing. At a time when millions of households are being forced out of homeownership, when many others are choosing to rent, and when demographic forces are set to drive up rental demand, expanding the supply of such housing is critical.

Housing and Energy

Renewed concerns over carbon emissions and dependency on foreign oil are likely to prompt increased government-led efforts to reduce residential energy use, which accounts for 21 percent of the nation's consumption. The federal government has already increased funding for weatherization of existing properties and tax credits for energy-efficient improvements. Indeed, upgrading the existing stock to the efficiency levels of new housing would provide significant energy savings.

Reducing the number of vehicle miles that households travel every day—by encouraging more compact forms of residential development—could also have a substantial impact. But along with the population, employment has become much more dispersed over the last century. In fact, from 2000 to 2006, job growth was faster in suburbs than central cities in 68 of 75 of the nation's largest metropolitan areas. Reducing auto use thus means providing transit-oriented and mixed-use development so that workers can live closer to their jobs as well as to non-work destinations. In a metropolitan area where workers must criss-cross back and forth and around central cities and suburbs to get to their jobs, savings on high-frequency non-work trips may be easier to achieve than on work commutes.

The Way Forward

While it is too soon to tell whether housing markets will stabilize in 2009, conditions that could support a recovery are taking shape. Based on today's median prices, conservative lending standards, and a conventional 30-year fixed-rate mortgage, affordability for homebuyers has returned at the national level and in many metro areas **(Figure 4).**

Meanwhile, housing production has dropped so dramatically that long-run supply and demand are now approaching balance. In the short run, however, demand is also remarkably low. Indeed, the numbers of vacant housing units for rent, sale, or being held off the market are at record highs despite the improvement in some underlying conditions.

The massive shock to housing markets has raised questions about the future strength of demand. Although demographic trends provide a solid underpinning for the long run, market condi-

tions over the next 5–10 years will surely have an impact. A deep, prolonged recession would likely suppress immigration to levels that are never fully made up. Moreover, such conditions might even lead to enduring changes in household formation behavior.

To reflect these uncertainties, the Joint Center for Housing Studies has released two new household projections based on the Census Bureau's latest population projections. The high series assumes that net immigration rises from 1.1 million in 2005 to 1.5 million in 2020. The low series assumes only half that pace of immigration, as well as a small decline in headship rates among the native-born population. Under these assumptions, household growth in 2010–20 could total as much as 14.8 million or remain closer to 12.5 million (nearly the same as in 1995–2005).

Even lower immigration is unlikely to drive down household growth further than that because the echo-boom generation is replacing the far smaller baby-bust generation in the young adult age group. Indeed, the echo boomers are entering their peak household formation years of 25–44 with more than five million more members than the baby boomers had in the 1970s. The echo boomers will help keep demand strong for the next 10 years and beyond, bolstering the markets for rentals and starter homes **(Figure 5).** Still, while boosting the quantity of homes demanded, the echo boomers will likely enter the housing market with lower real incomes than people the same age did a decade ago.

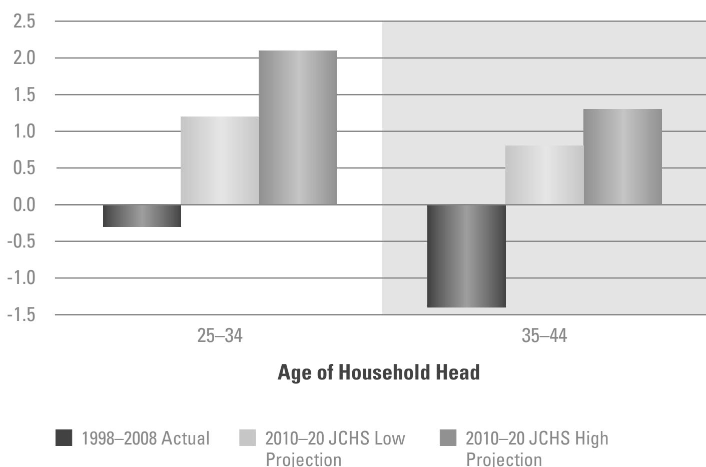
Meanwhile, as the leading edge of the baby-boom generation reaches age 65, demand for retirement housing will rise. Increased longevity among those born before World War II will also lift demand for assisted living facilities. How this demand is expressed will depend importantly on how much, and how quickly, these households can rebuild their recently decimated wealth.

The aging of the large and diverse echo-boom generation will increase the minority share of households. In fact, even under the low immigration assumptions, minorities will fuel 73 percent of household growth in 2010–20, with Hispanics leading the way at 36 percent. As a result, the minority share of households is projected to increase from 29 percent in 2005 to 35 percent in 2020. Unlike white household growth, which will occur primarily among single-person households, minorities will add to households across the full spectrum of family types. Given their lower average incomes and wealth, however, the increase in minority households could add significantly to the nation's already widespread housing affordability challenges.

Figure 5

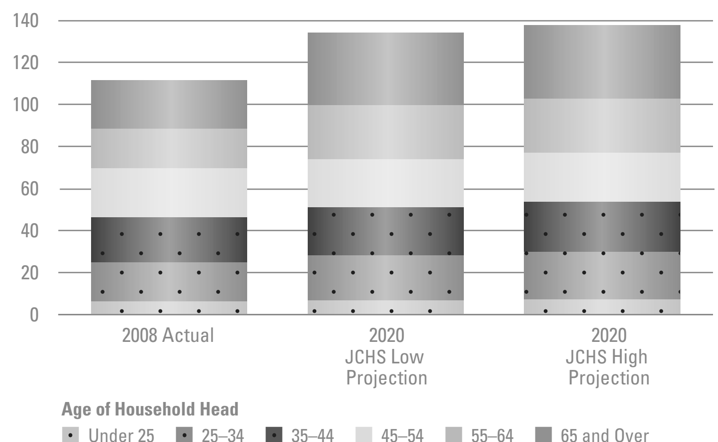
Over the Next 10 Years, Echo Boomers Will Reverse the Declines in Younger Households …

Change in Households (Millions)



… While the Baby Boomers Drive Growth in Older Households

Households (Millions)



Notes: JCHS high projection assumes annual immigration rising from 1.1 million in 2005 to 1.5 million in 2020, as estimated by the Census Bureau's 2008 population projections. JCHS low projection assumes annual immigration is half the Census Bureau's estimates.
Sources: US Census Bureau, Housing Vacancy Survey; Table A-7.

2 Housing Markets

The housing downturn intensified in 2008. By early 2009, home building and house prices had fallen more sharply than at any time since World War II. Although the cost of buying a typical home has dropped dramatically in many markets, staggering job losses and the ongoing credit crunch are dampening demand. In addition, record foreclosures continue to drive down prices, preventing current homeowners from selling at a profit and keeping many first-time homebuyers on hold to see whether prices fall further.

Plumbing New Depths

By all measures but homebuyer affordability, housing market conditions deteriorated further in 2008 **(Figure 6).** Housing starts were down by more than 30 percent for the year and more than 50 percent from the 2005 level. Manufactured housing shipments slid for the third consecutive year, falling to 81,900 units—their lowest level since recordkeeping began in 1959. Reported new home sales also showed a record-breaking plunge of more than 60 percent from the 2005 level **(Table A-2).** Actual declines were even larger because cancellations, which are not backed out of reported sales, rose over the period.

Although the number of new homes for sale (including those not yet completed) fell by 41 percent between July 2006 and January 2009, demand dropped even faster. As a result, the seasonally adjusted supply hit a record 12.4 months in January 2009.

Just as in each of the four previous downturns, new home inventories have declined much earlier than the months' supply of new homes for sale **(Table W-1).** In past recoveries, housing starts began to rise about three months after new home sales revived and months' supply peaked. It is too soon to know whether February's uptick in new home sales signals a turning point, especially since sales softened again in March. Furthermore, median new home prices fell sharply in the first quarter, suggesting that any sales gains were hard-won.

Existing home sales did pick up in a few states in 2008 and appeared to stabilize on a national level near the middle of that year. As the credit crunch deepened and job losses accelerated, however, existing home sales nationwide slipped again in the last quarter of 2008. All told, sales of existing single-family homes were down 30 percent last year from the 2005 level to 4.35 million, their lowest level since 1997. And whatever improvements have been seen largely reflect purchases of foreclosed properties at fire-sale prices. Indeed, the National Association of Realtors® (NAR) estimated that sales of foreclosed homes accounted for 30 percent of existing home sales

Figure 6

The Housing Downturn Accelerated in 2008

	2007	2008	Percent Change 2007–8	Percent Change 2005–8
New Single-Family Sales (Thousands)	776	485	-37.5	-62.2
Existing Single-Family Sales (Millions)	4.9	4.4	-11.9	-29.6
Existing Condo/Co-op Sales (Thousands)	713	563	-21.0	-37.2
Single-Family Starts (Thousands)	1,046	622	-40.5	-63.7
Multifamily Starts (Thousands)	309	284	-8.3	-19.6
Median Existing Single-Family Price ($)	226,266	196,600	-13.1	-18.6
Median Existing Condo/Co-op Price ($)	234,989	209,800	-10.7	-15.0
Home Equity ($ Trillions)	10.4	7.9	-24.1	-42.8
Mortgage Debt ($ Trillions)	10.9	10.5	-4.1	6.8
Mortgage Refinancing ($ Trillions)	1.2	0.9	-28.6	-48.7
Residential Investment ($ Billions)	654.4	487.7	-25.5	-42.5
Owner Residential Improvements ($ Billions)	144.4	125.7	-13.0	-13.0

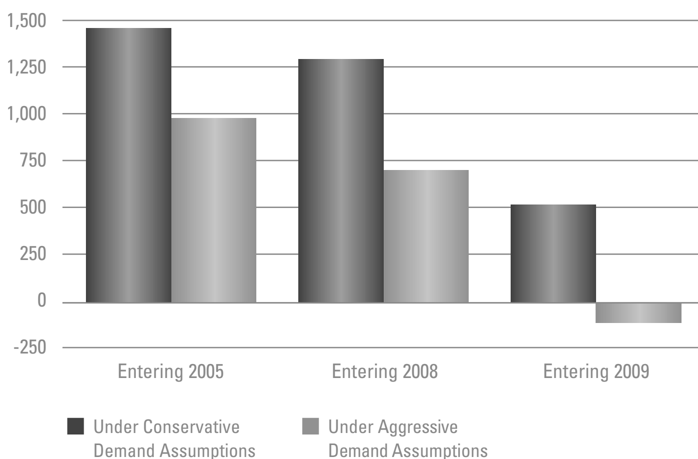
Notes: All dollar values are adjusted to 2008 dollars using the CPI-U for All Items. Percent change is calculated with unrounded numbers.

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

Figure 7

Production Cuts Have Moved Markets Closer to Balance

Finished Units in Excess of Long-Run Demand (Thousands)



Note: Finished units are the sum of housing completions and manufactured home placements.

Source: Daniel McCue, "Addendum to W07-7: Using Long-Term Demand Projections to Determine Short-Term Market Imbalances," JCHS Research Note N09-1.

in the fourth quarter of 2008, and short sales (homes sold for less than the outstanding mortgage) for an additional 15 percent.

Market Imbalances

In combination, depressed demand and the lingering effects of overbuilding have driven vacancy rates well above normal. Indeed, the number of excess vacant units—measured as the increase in vacancies since 1999–2001 when markets were closer to equilibrium—climbed in both 2007 and 2008 despite big production cuts. The largest increases in owner vacancy rates occurred in a mix of states that had especially severe overbuilding, especially weak economies, or both **(Table W-2).** These excess vacant units are holding down prices and must be absorbed before production will pick up significantly.

But just as inflated demand can temporarily mask overbuilding, depressed demand can temporarily mask a return to long-run market balance. During housing downturns, job losses, weak consumer confidence, elevated foreclosures, and expectations of further price declines all serve to dampen short-run demand. In the current cycle, these forces have had an especially large impact on housing markets.

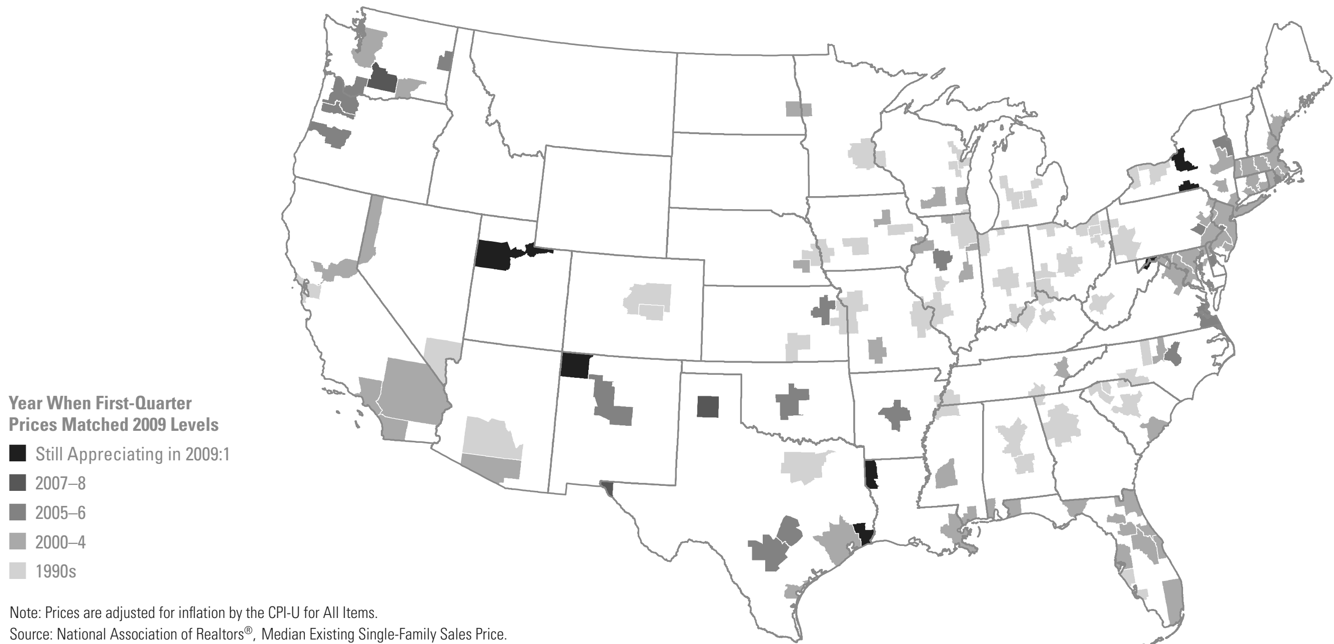
There are two ways to roughly gauge the extent of overbuilding relative to long-run demand for new homes. The first approach is to compare housing completions with an estimate of long-run demand built up from its components (household growth, normal vacancies including second homes, and replacement of units lost to disaster and disinvestment). By this calculation, deep production cuts through 2008 brought the oversupply of new housing down from 1.0–1.5 million units entering 2005 to near parity with long-run demand entering 2009 **(Figure 7).** The second approach uses an econometric model to estimate metropolitan area overbuilding in terms of starts. Based on long-run demand drivers (such as growth in population and real incomes) in the 100 metro areas with the highest number of housing starts during the boom, overbuilding began by 2001 and continued through 2005. This approach also suggests that markets are moving back into balance in 2009.

While neither calculation provides a reliable point estimate, both sets of results indicate that overbuilding was already occurring before vacancies spiked. It also appears that household growth has been running well below trend since 2005. Unless the downturn has a lasting impact on rates of immigration or doubling up, this factor points to pent-up demand for new homes.

While a turnaround in demand can sometimes surprise on the upside, the headwinds are stronger than in past cycles because credit is so tight and the economy is in such rough shape. Moreover, the recovery will not occur evenly across the country.

Figure 8

Real House Prices in Several Metros Have Fallen Back to 1990s Levels

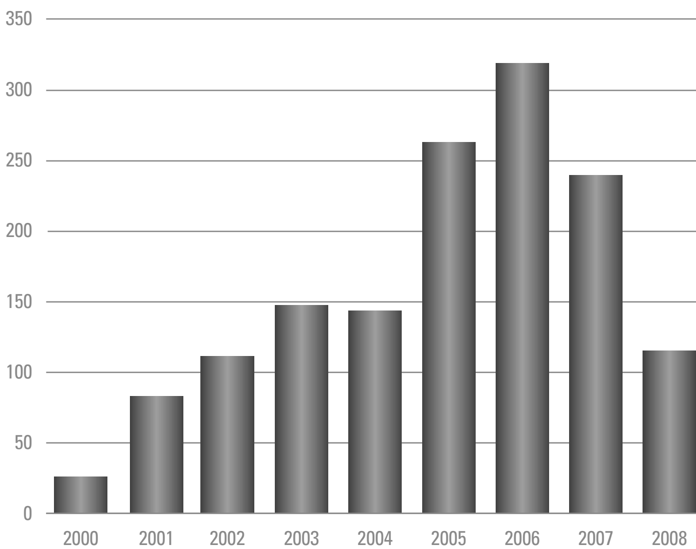


Note: Prices are adjusted for inflation by the CPI-U for All Items.
Source: National Association of Realtors®, Median Existing Single-Family Sales Price.

Figure 9

The Collapse of Cash-Out Refinancing Has Left Homeowners with Less to Spend

Home Equity Cashed Out at Refinancing (Billions of 2008 dollars)



Note: All values are adjusted for inflation by the CPI-U for All Items.
Source: Freddie Mac, Cash-Out Refinance Report.

Indeed, demand and even production are likely to increase in some parts of the country while vacancies continue to rise in others.

Falling House Prices

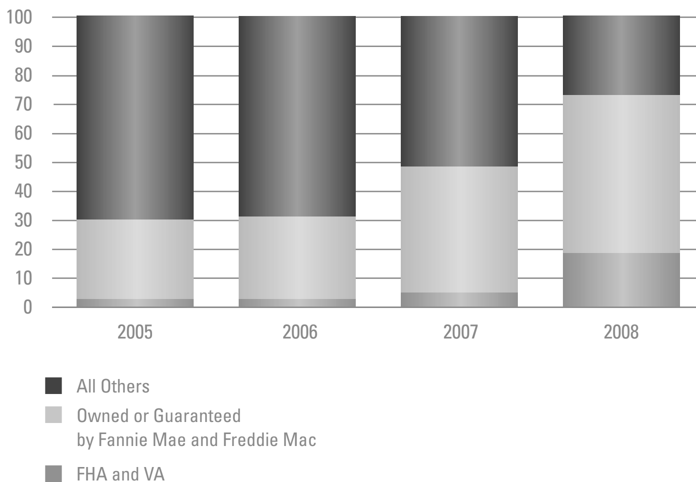
With the enormous overhang of vacant units and record foreclosures, house price declines accelerated last year. According to the National Association of Realtors®, the median price of existing single-family homes slipped 1.8 percent in 2007—the first annual nominal decline since the data series began in 1968. Another 9.8 percent drop followed in 2008. Measured on a monthly basis and adjusted for inflation, the median home price fell by an even greater 29.8 percent from October 2005 to January 2009. While showing some improvement from January's extremely low level, the median price has continued to decline on a year-over-year basis.

Marketwide measures such as the NAR and the S&P/Case-Shiller® Home Price Index report dramatically large price drops in part because they include more foreclosure sales. For example, the S&P/Case-Shiller index indicates that home prices in Cleveland plummeted more than 28 percent from the peak to the first quarter of 2008. But excluding sales of foreclosed homes,

Figure 10

Federal Intervention and Control Propped Up the Mortgage Markets in 2008

Share of Newly Originated Single-Family Loans (Percent)



Notes: Single-family properties may have 1–4 units. All other loans includes prime jumbo, subprime, Alt-A, home equity, and conventional conforming loans not bought or guaranteed by Fannie Mae and Freddie Mac. Fannie Mae and Freddie Mac entered federal conservatorship in September 2008.
Source: Freddie Mac, Office of the Chief Economist.

the drop was only 6 percent. Smaller but still sizable differences in price declines also exist in the handful of other metropolitan areas where the index was recalculated net of foreclosures.

Homeowners who are not under pressure to sell are usually unwilling to cut their prices drastically. This is especially true if the price they can get is not enough to pay off the mortgage. Many would-be sellers therefore prefer to stay put unless compelled to move. Still, the longer that foreclosures remain a problem, the greater the pressure on sellers to drop their prices.

Lower-income households have so far borne the brunt of falling prices because they are more apt to live in areas with widespread foreclosures. In Cleveland, Boston, and Washington, DC, price declines at the low end of the market through December 2008 were more than twice those at the high end in percentage terms, and in San Francisco nearly three times greater. Among the 17 metropolitan areas covered by the S&P/Case-Shiller index with price-tier information, only Portland, Oregon, saw prices fall more in the top third of the market than in the bottom third.

With these declines, home prices in many markets have retreated to pre-boom levels **(Figure 8).** In the Midwest, where house price appreciation was only modest during the boom, the setbacks have been especially large. Through the first quarter of 2009, real median sales prices in Cleveland, Akron, Youngstown, and Lansing stood at levels not posted in more than a decade. Meanwhile, home prices in the high-flying metros of California, Florida, and New England—including San Diego, Sacramento, Miami, and Boston—were all back to pre-2005 levels. The downturn has left few areas without significant declines in real median home prices **(Table W-3).**

The massive house price drops have brought standard affordability ratios closer to historical levels **(Table W-4).** Among the 122 metros consistently covered by NAR, the number where the median home price is less than three times the median household income is now back to what it was in 2003. Even so, only renters and first-time buyers can take full advantage of these lower prices, and to do so, must qualify for a conforming mortgage under relatively strict underwriting standards.

Housing and the Economy

The ongoing drop in residential construction spending shaved nearly a whole percentage point off economic growth in 2008 for the second consecutive year. Although accounting for just 2 percent of employment, residential construction contributed 13.5 percent (about 415,000) of last year's job losses. Including such housing-related positions as real estate agents, brokers, and lenders, employment declines in the industry approached 1 million—or about a third of the nearly 3 million total.

Meanwhile, home equity fell by $2.5 trillion in real terms in 2008 and nearly $5.9 trillion (or 43 percent) from the 2005 level. The loss of housing wealth caused consumers to curtail cash-out refinances and pull back on spending **(Figure 9),** knocking an additional 0.9 percentage point off economic growth last year, according to Moody's Economy.com.

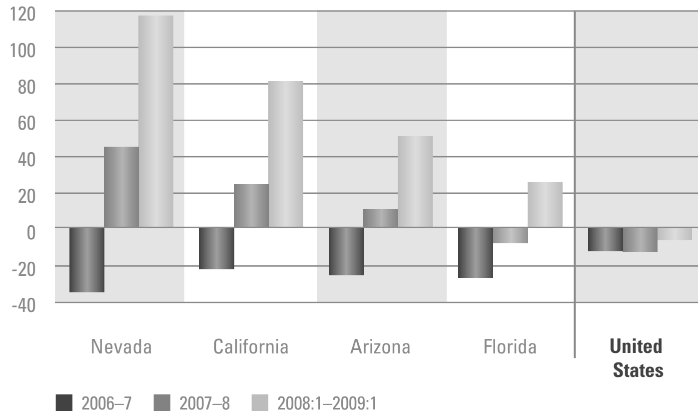
The impacts of the subprime market debacle continued to spread in 2008. Losses on subprime loans and other financial products pushed several large financial institutions to the brink of failure, and a few over it. Indeed, without unprecedented federal intervention, more banks surely would have gone under. So complete was the shutdown of private mortgage lending that 73 percent of loans originated in 2008—and more than 85 percent of loans originated in just the second half of the year—were bought, insured, or guaranteed by a federal agency or by Fannie Mae and Freddie Mac **(Figure 10).**

Since the fall of 2008, the US Treasury Department and Federal Reserve have moved aggressively to stabilize financial markets. Federal Reserve programs initiated or expanded to improve credit

Figure 11

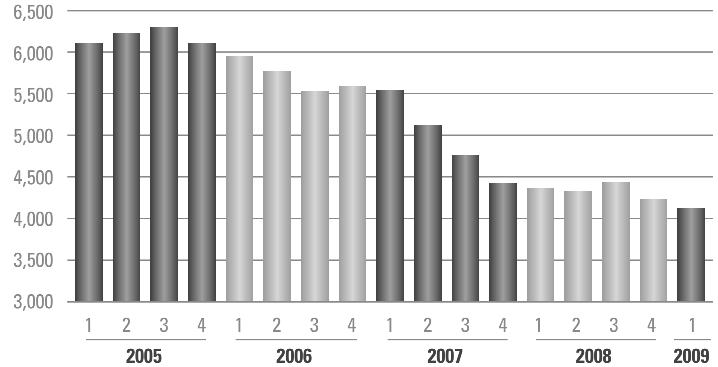
Existing Homes Sales Are Improving in Some of the Hardest Hit States …

Change in Existing Single-Family Home Sales (Percent)



… Although Sales Nationwide Continue to Ratchet Downward

Existing Single-Family Home Sales (Thousands)



Source: National Association of Realtors®, Existing Single-Family Home Sales.

markets since September 2008 nearly doubled the nominal monetary base from $890 billion to $1.74 trillion in a little over three months, with hundreds of billions of additional authorizations yet to be exercised.

Federal housing policy has so far focused on keeping credit flowing to housing and preventing foreclosures. Actions aimed at extending mortgage credit included taking Fannie Mae and Freddie Mac into conservatorship and expanding FHA lending. Foreclosure prevention efforts started with voluntary programs organized by the Treasury Department but expanded in 2009 to include loan restructurings to bring at-risk homeowners' monthly payments down to 31 percent of income, and instructing Fannie Mae and Freddie Mac to refinance loans with balances up to 5 percent greater than house values. Tax credits for first-time homebuyers have also been introduced. Despite these steps, the weak state of housing markets has prompted many to call for bolder, more directed initiatives to spur demand, such as larger tax credits and more aggressive efforts to buy down mortgage interest rates.

The Outlook

With prices down by double digits, interest rates moderating, and reasons to believe that pent-up demand is building, the prospects for a recovery have improved. Indeed, deeply discounted prices on foreclosed properties already helped to lift existing home sales in several states in 2008 **(Figure 11).** Markets got an additional boost in the first quarter of 2009 when rates on 30-year fixed mortgages dipped below 5 percent and the first-time buyer tax credit kicked in.

Still, clear signs of a recovery have yet to emerge, and job losses and the steady stream of foreclosures are keeping many markets under pressure. Sales of both new and existing homes continued to struggle to find a bottom through April. At the same time, however, the strong rebound in consumer confidence in March and April augers well for housing.

The longer-term outlook is also promising. The record size of the echo-boom generation now reaching young adulthood should help keep household growth at least on par with 1995–2005 levels even if immigration slows dramatically from its peak pace in the first half of this decade. Over time, the combination of pent-up demand from deferred household formation and low levels of home building will reduce the excess vacant inventory, bring markets back into balance, and send housing starts up sharply from early 2009 levels. If history is any guide, housing markets will rebound in advance of labor markets and help to spark the economic recovery.

3 Demographic Drivers

Household formations were already on the decline when the recession started to hit in December 2007. Annual net additions fell from 1.37 million in the first half of the decade to only 1.06 million in 2005–8. While a prolonged downturn could curtail immigration, preventing rather than delaying some households from forming, household growth should remain solid. Indeed, the aging of the echo boomers will underpin housing demand over the next 20 years.

Housing Demand Drivers

Household incomes and wealth, headship rates, and homeownership rates are among the primary determinants of housing demand. All of these drivers exhibit a predictable pattern, starting out low in young adulthood and peaking sometime in middle age or the early retirement years. In combination with changes in the size and age distribution of the adult population, these age-specific drivers determine the quantity and quality of homes demanded. For example, when the baby boomers first started to form households in the 1970s, they increased the demand for rentals and small starter homes. And when they entered middle age in the 1990s, their higher average incomes and wealth boosted demand for larger, more amenity-filled primary homes, as well as for second homes.

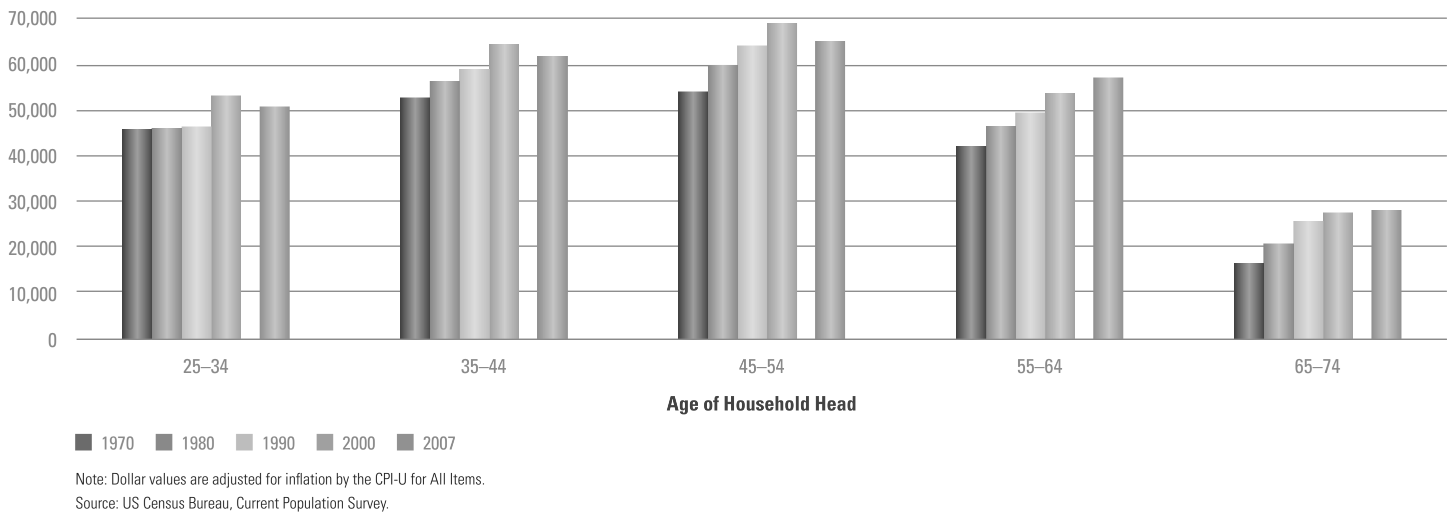
These demand drivers are, in turn, influenced by three factors. First, economic and market conditions—including unemployment rates, interest rates, availability of credit, and the relative costs of owning and renting—govern whether the incomes, headship rates, and homeownership rates of adults match those of the preceding generation over time. Second, longer-term social trends such as rising female labor force participation rates, divorce rates, and age at first marriage can place each generation on a different trajectory that persists well into middle age. And third, immigrant and minority shares have an impact because both groups have lower average incomes and wealth, as well as lower headship and homeownership rates, than native-born whites.

In today's severe recession, all age groups will see at least a temporary drop in income, wealth, and homeownership rates—and perhaps in household headship rates as well. The echo-boom generation now reaching adulthood faces a scarcity of entry-level jobs (especially well-paying ones) and will therefore start off on a lower trajectory than the baby-bust generation before them. In addition, with the tight grip on credit, even sharply lower home prices may not be enough to help the echo

Figure 12

For the First Time in Generations, Households Under Age 55 Are on a Path to End the Decade with Lower Real Incomes than Their Predecessors

Median Household Income (2007 dollars)



Note: Dollar values are adjusted for inflation by the CPI-U for All Items.
Source: US Census Bureau, Current Population Survey.

boomers match the headship and homeownership rates of their predecessors by the time they reach their 30s and 40s.

Income Gains at Risk

As each generation has come to maturity since 1970, business cycles have had far less impact on household income than longer-term changes in labor productivity, educational attainment, and female labor force participation rates. From 1970 to 2000, each 10-year birth cohort had a higher real median income than the preceding cohort despite temporary setbacks during recessions. Although household income generally peaks around age 50, the early lead achieved by each succeeding cohort has persisted well into older ages. These advances are all the more remarkable given the growing shares of minorities and immigrants among more recent cohorts.

The current recession threatens this long-term progress. Real median household incomes in all age groups under 55 have not increased since 2000 **(Figure 12).** In fact, for the first time in at least 40 years, there is a chance that the real median household income for these age groups will be lower at the end of the decade than at the start. Moreover, the severity of today's economic contraction could hold down incomes and wealth for years to come.

Headship Rates under Pressure

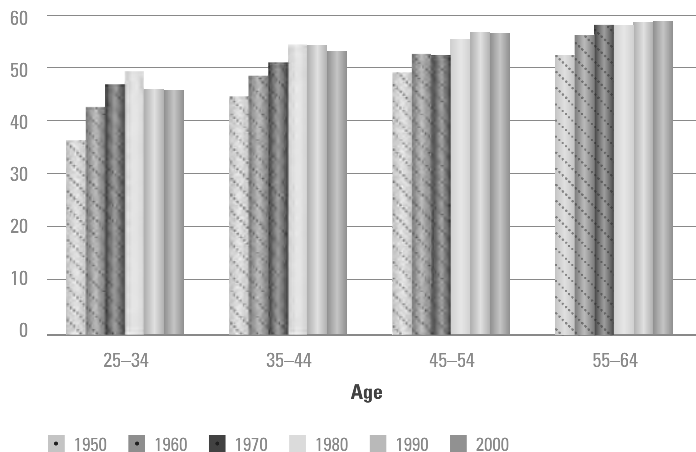
Each 10-year cohort born between 1916 and 1945 started out with higher household headship rates than its predecessor and maintained that lead well into middle age, when rates converged. From the postwar years through 1980, long-term social trends gave headship rates an especially large boost. Higher female labor force participation rates, later age at first marriage, higher divorce rates, and lower remarriage rates all contributed to growth in the number of single-person households and therefore to higher age-specific headship rates **(Figure 13).** The mere three percentage point rise in headship rates among 25–34 year-olds (from 47 percent in 1970 to 50 percent in 1980) alone raised the number of household heads in this age group by fully 1.1 million.

Once these social trends stabilized after 1980, however, they provided less of a lift to household headship rates. The increased pace of immigration also added downward pressure, especially among younger age groups, because the foreign-born are more likely to double up with others when they arrive in this country. The net effect is that headship rates for those over age 35 have been relatively flat since 1980. If the current economic downturn substantially dampens immigration in the short term, however, headship rates could increase slightly because a larger share of the population age 15–44 would be native born. But a prolonged

Figure 13

Household Headship Rates Increased Steadily Across All Age Groups Until the 1980s

Share of Population Heading Independent Households (Percent)

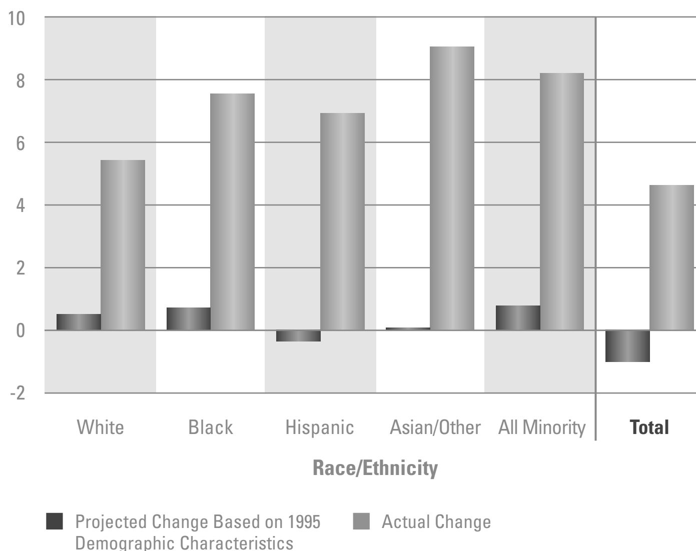


Source: US Census Bureau, 1950–2000 Decennial Censuses.

Figure 14

Market Conditions Rather than Demographic Forces Lifted Homeownership Rates During the Boom

Change in Homeownership Rates, 1995–2005 (Percentage points)



Notes: Whites, blacks, and Asians/others are non-Hispanic. Hispanics may be of any race. Projected 2005 homeownership rates are calculated by applying 1995 rates by age, household type, and race/ethnicity to 2005 household counts.
Source: JCHS tabulations of the 1995 and 2005 Current Population Surveys.

recession could drag headship rates down even if immigration were to slow because more native-born adults would double up.

Homeownership Reversals

The national homeownership rate fell during the 1980s and early 1990s among households under age 55, primarily because of predictable demographic forces. Rising prices for existing homes and high interest rates were also factors. But household income growth and low interest rates, together with mortgage industry changes, then helped to drive homeownership up 4.6 percentage points between 1995 and 2005 **(Figure 14).** Demographic forces—especially the shift toward minorities, who have much lower ownership rates than whites—in fact worked against homeownership gains. Indeed, if homeownership rates by age, race/ethnicity, and household type had remained at 1995 levels, demographic trends alone would have reduced the homeownership rate by a full percentage point over this period.

But with the help of a strong economy, easy access to mortgage credit, and the lure of appreciating home prices, the lagging homeownership rates among those who were born in the 1960s caught up with and then exceeded those of people born in the 1950s. Thus, while a birth cohort may start out on a lower homeownership trajectory, its members can later catapult ahead of their predecessors.

The low downpayment requirements prevailing for most of the 2000s allowed buyers to risk little money to acquire homes with price appreciation potential. Many marginal borrowers took advantage of this opportunity, although (starting in 2003–4) often with loans with payment reset risks and high debt-to-income ratios. When prices began to fall, payments to climb, and job losses to mount, much of the homeownership gain proved unsustainable. While expected to rebound as the economy improves and credit markets thaw, the national homeownership rate is unlikely to return to its recent peak anytime soon.

Housing and Net Household Wealth

Plummeting home and stock prices have decimated household balance sheets. The Federal Reserve estimates that real home equity fell by a dizzying $2.5 trillion in both 2007 and 2008. Still, these declines combined are less than last year's $5.3 trillion plunge in the real value of stocks and mutual funds held by households.

But because home equity is more evenly distributed than stock wealth, the drop in home values has taken a toll on far more households **(Figure 15).** Some 43 percent of bottom income quartile households, for example, had equity in their homes in 2007 while just 17 percent held stocks. Indeed, the median value of home

equity for homeowners was nearly 10 times the median value of stock wealth for stockholders.

Home equity has fallen both because of sagging house prices and because owners have tapped their housing wealth as never before. According to Freddie Mac, households with conventional prime loans extracted $1.8 trillion in real home equity through refinances in 2001–7, up from less than $440 billion in 1994–2000 after adjusting for inflation. Given the combination of lower home values and higher loan balances from cashing out equity, Moody's Economy.com estimates that more than 14 million households owned homes that were worth less than their outstanding mortgages in March 2009.

Home price declines have hit minority households especially hard. Even before the recession began, the share of minority homeowners with equity cushions of less than 5 percent of the home's value was twice as high as that of whites (6.9 percent versus 3.4 percent). Because minorities are more likely to live in neighborhoods with heavy foreclosures (where prices have dropped the most), a larger share of these households has seen the value of their homes fall below the amount they owe on their mortgages.

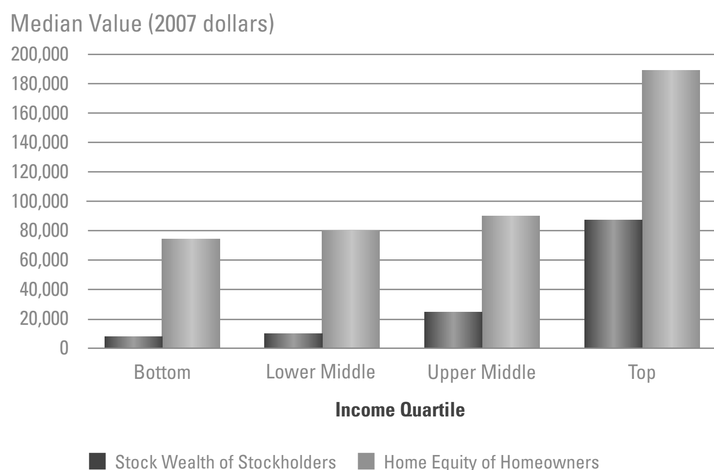
Among seniors, home equity makes up a large portion of portfolios, accounting for 26 percent of household wealth among all elderly and 59 percent among the low-income elderly in 2007. Since 80 percent of senior homeowners had either no mortgage debt or an equity cushion of at least 75 percent, most have managed to retain substantial (albeit diminished) equity stakes despite the large drop in home values.

Younger homeowners, in contrast, had less capital at risk but likely saw most if not all their equity erased. Even before the recession, 2 percent of homeowners under age 35 reported negative net equity in 2007 while 24 percent reported net equity of 10 percent or less. These shares have no doubt risen significantly since then.

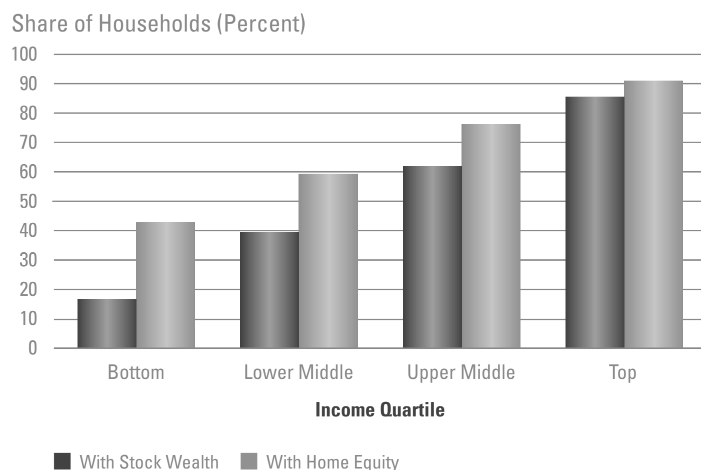
Homeowners who have defaulted on their loans—or worse, gone into foreclosure—have impaired credit records that will prevent them from buying once the market turns around. To the extent that minorities are overrepresented in this group, the already wide white–minority wealth gap will increase **(Table W-5).** Regardless of the recession, this gap is already set to expand for purely demographic reasons. Some 13 percent of white householders were age 75 and older in 2007, and will soon pass their wealth on to younger generations. Fewer minority families are likely to receive such bequests, not only because such seniors make up only 4 percent of minority households, but also because they have much less wealth to pass on. In 2007, white households age 75 and older had net wealth of more than $688,000 on average, while their minority counterparts had less than $167,000.

Figure 15

Home Equity Is Much More Important to Household Wealth than Stocks …



… And More Evenly Distributed Across Households

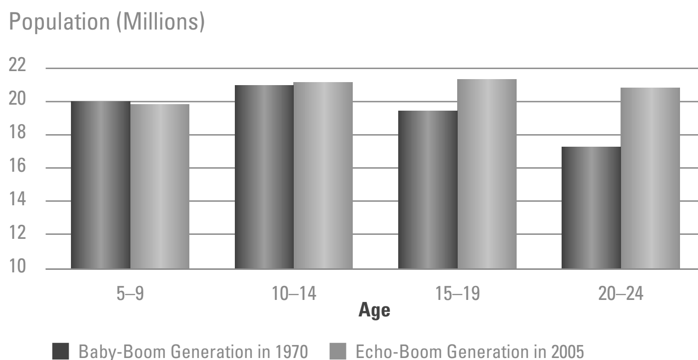


Note: Income quartiles are equal fourths of all households sorted by pre-tax income.
Source: JCHS tabulations of the 2007 Survey of Consumer Finances.

Figure 16

The Echo-Boom Generation Is Even Larger than the Baby-Boom Generation

Population (Millions)



Notes: Members of the baby-boom generation were born 1946–64. Members of the echo-boom generation were born 1981–2000.
Source: US Census Bureau, 1970 Decennial Census and 2005 population estimates.

Household Growth Projections

Because of the uncertainty around the length and depth of the recession, the Joint Center has prepared two household growth projections: one assuming a relatively swift recovery and a return to strong immigration, and the other assuming a prolonged recession and weaker immigration **(Table A-7).** The high projection is based on the latest Census Bureau population projection, which assumes that annual net immigration will increase from 1.1 million in 2005 to 1.5 million in 2020, and exceed 2.0 million by 2050. The low projection cuts these immigration assumptions by half.

In the two scenarios, the difference in household formations in 2010–20 is 2.3 million. Even in the low series, however, household growth would average more than 1.25 million annually over the next decade, thanks to the aging of the echo boomers. This is comparable to average annual household growth in 1995–2005, and reflects the expectation that the number of echo boomers aged 25–44 will eclipse the number of baby boomers when they were those same ages by more than 5.9 million.

These impending population shifts have important implications for housing demand over the next decade. First, as members of the echo-boom generation enter the prime household formation and homebuying ages, they will reverse declines in the 25–44 age group created by the much smaller baby-bust generation. With the number of households in this age group projected to increase by between 2.0 million and 3.4 million, the demand for rentals and starter homes will surge. Meanwhile, with their longer life spans and sheer numbers relative to the preceding generation, the baby boomers will add dramatically to the number of households over age 65. This will lift demand for retirement communities as well as services and home improvements that help seniors age in place.

As the more diverse echo-boom generation reaches adulthood and immigration continues to augment other generations, household growth among Hispanics and Asians will accelerate. Even under low immigration assumptions, Hispanic household growth will increase from 3.5 million in 1998–2008 to 4.5 million in 2010–20, while Asian household growth will increase from 1.5 million to 2.5 million. White household growth, in contrast, will slow sharply from 4.3 million to 3.3 million, and black household growth will slip from 2.4 million to about 2.2 million.

Married couples without children (including empty-nesters) will be the fastest-growing household type, followed closely by single-person households. While the number of married couples with children will fall by nearly a million among whites, it will increase by more than a million among Asians and Hispanics.

The housing now occupied by many older white baby boomers will be well suited to the needs of younger and generally larger minority households. With their lower incomes, however, minority households may be unable to afford these homes when they come onto the market. Indeed, the ongoing adjustment in house prices across the country may help improve affordability in the short term, but it is unlikely to bridge the gap completely.

The Outlook

While the economic crisis has dampened household growth, the sheer size of the echo-boom generation will give a powerful boost to long-run housing demand **(Figure 16).** A severe and prolonged recession may, however, reduce immigration—a key driver of household growth—or lead to an extended period of lower headship rates. And the depth of the downturn may, for the first time in at least 40 years, reduce the real median household incomes of each 10-year cohort relative to its predecessor by 2010.

Rapid growth in the population under age 45 and over age 65, as well as the rising minority share, will shift the composition of housing demand over the next 20 years. These changes in the age distribution will mean greater demand for both starter homes and rentals, and for seniors housing. In addition, as the baby boomers and older generations begin to turn over their homes to younger households, adjustments to the existing stock are likely, both through remodeling and pricing. The first wave of change will occur in the inner suburbs of large metropolitan areas where people now in their 70s and 80s are concentrated, then fan out to the outer suburbs as the baby boomers start to downsize.

Homeownership

Entering 2009, foreclosures were at a record high, price declines were keeping many would-be buyers on the sidelines, and tighter underwriting standards were preventing many of those ready to buy from qualifying for mortgages. Ongoing job losses and sagging prices threatened to push foreclosures higher even as federal interventions began to take effect. While the long-term fallout from dramatically lower house prices remains to be seen, restoring normalcy to the for-sale housing and mortgage markets will clearly take time.

Changing Supply–Demand Balance

The national homeownership rate slid from its peak in 2004 to 67.3 percent in the first quarter of 2009, erasing all of the gains since 2000 **(Table A-4).** Although the total number of households rose by 3.2 million between 2005 and 2008, only 1.0 million homeowners were added on net. The declining ownership rate thus signifies that a smaller share of people were choosing to own homes while many others were being forced from the market, either through foreclosures or tighter lending standards.

With the number of owners leveling off and the supply of for-sale homes soaring, the homeowner vacancy rate hit a recordbreaking 2.8 percent last year. Rates in small condominium buildings were especially high. Indeed, owner vacancy rates in two- to four-unit buildings were more than three times—and in five- to nine-unit buildings more than five times—the single-family vacancy rate **(Figure 17).** Many owners of these vacant condominiums are low-income and minority households living in center cities.

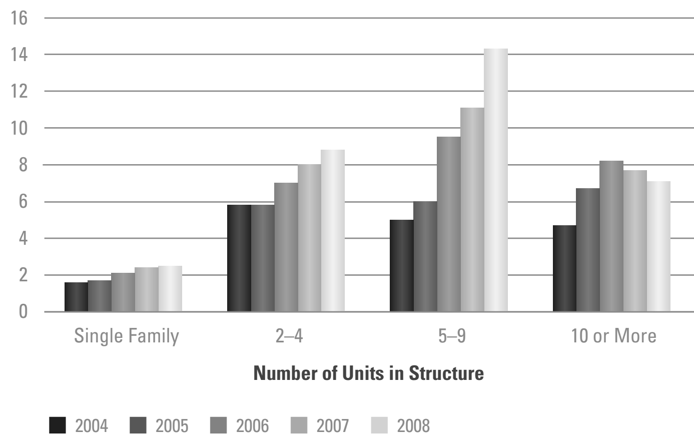
Owner vacancy rates for newer homes have also surged. Even in the best of times, newer homes tend to have higher vacancy rates than older homes because some are completed and ready for occupancy before owners move in. But it is nonetheless striking that the vacancy rate for homes built since 2000 jumped by almost four percentage points to 9.7 percent in just two years. Rates on newer homes have soared for at least two reasons. First, overbuilding occurred primarily in areas where new construction was most intense. Second, speculators likely focused on buying new homes because they could lock in low prices and wait several months before closing on the sale and then flipping the property.

Meanwhile, owner vacancy rates for older homes have remained at a lower level and have not risen nearly as much. Among units built before 1990, vacancy rates have remained in the 1.5–2.3 percent range since 2000.

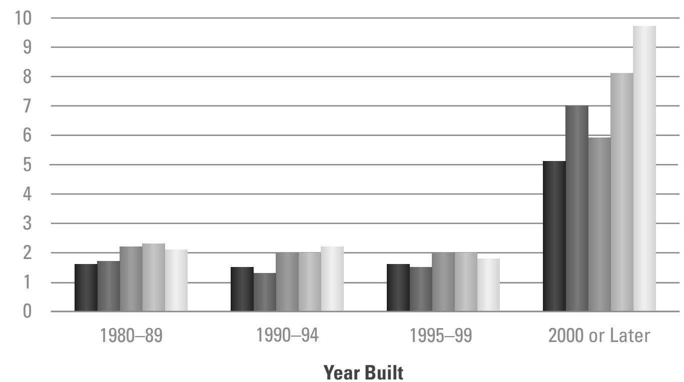
Figure 17

Owner Vacancy Rates Have Risen Dramatically In Small Multifamily Buildings …

Homeowner Vacancy Rate (Percent)



… And in Newer Units



Source: US Census Bureau, Housing Vacancy Survey.

Mortgage Market Reversals

After years of record-setting originations, proliferation of new products, and tolerance of lax underwriting, mortgage lending did an about-face in 2007 and 2008. According to Freddie Mac estimates, originations fell by 33 percent in real terms in 2008 alone and by 62 percent from the 2003 level **(Figure 18).** Non-prime lending (including subprime and near-prime loans) went from a flood to a trickle before the spigot was effectively shut off in mid-year. Originations of non-prime loans with so-called affordability features—such as interest-only or payment-option loans—also plunged, falling from almost 20 percent of originations in 2005 to less than 2 percent in 2008.

The drop-off was particularly sharp in states and metropolitan areas where these loans were especially popular. For example, the share of loans with affordability features originated in San Francisco, San Jose, and San Diego exceeded 50 percent during the peak of the housing boom but sank to less than 5 percent by mid-2008.

Similarly, "piggyback" loans went from more than a third of all home purchase loans in 2006 to just a few percent by the end of 2008. These second mortgages, taken out at the time of purchase to cover all or part of a 20 percent downpayment, allow borrowers to avoid paying mortgage insurance and to qualify for a better conforming interest rate on their first mortgages. While of potential benefit to homebuyers, these loans increase the risks to investors because the combined loan-to-value ratios are higher than the 80 percent of the first loan.

Stung by the horrible performance of subprime mortgage pools, investors have essentially stopped buying any mortgage-backed securities that are not guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae. While buyers might be willing to purchase these privately issued securities at low enough prices, most sellers have yet to offer deep discounts. Meanwhile, buyers remain concerned about the disproportionate share of seriously delinquent loans in these private label securities **(Figure 19).**

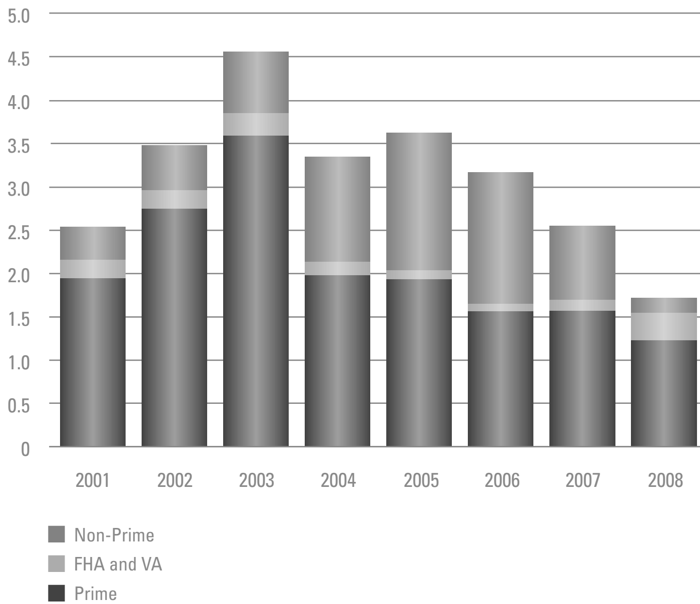
Apart from FHA-insured loans, low downpayment loans have been shelved along with loans requiring only limited income verification. First American LoanPerformance reports that the share of non-prime loans with more than 100 percent financing fell from 15 percent in 2006 to 1 percent in mid-2008, while the share requiring little or no income documentation shrank from 45 percent in 2006 to 19 percent at the end of last year.

Fannie Mae and Freddie Mac, operating under federal conservatorship, now dominate the market along with government-owned FHA and Ginnie Mae. Between 2006 and 2008, the Fannie and Freddie share of new mortgage-backed security issuances soared from 40 percent to 74 percent, while the Ginnie Mae share jumped from 4 percent to 22 percent. Meanwhile, FHA and VA

Figure 18

Non-Prime Lending Has Collapsed, Shrinking the Pool of Potential Homebuyers

Volume of Single-Family Loans Originated (Trillions of 2008 dollars)



Notes: Single-family properties may have 1–4 units. Dollar values are adjusted for inflation by the CPI-U for All Items. Non-prime loans include subprime, Alt-A, and home equity loans/lines.
Source: Freddie Mac, Office of the Chief Economist.

more than quadrupled their real volume of loan originations last year, lifting their market share from 7 percent in the fourth quarter of 2007 to 34 percent in the fourth quarter of 2008.

Lower interest rates and relaxed loan-to-value standards at Fannie Mae and Freddie Mac sparked a wave of refinancing in the first quarter of 2009, indicating that private primary market activity can ramp up quickly. But before the market for loans lacking implicit or explicit federal guarantees can revive, investors must be willing to purchase these loans—or the securities they back—without such large risk premia. By the time these private label markets do come back, it is likely that the federal government will have taken actions to prevent another collapse.

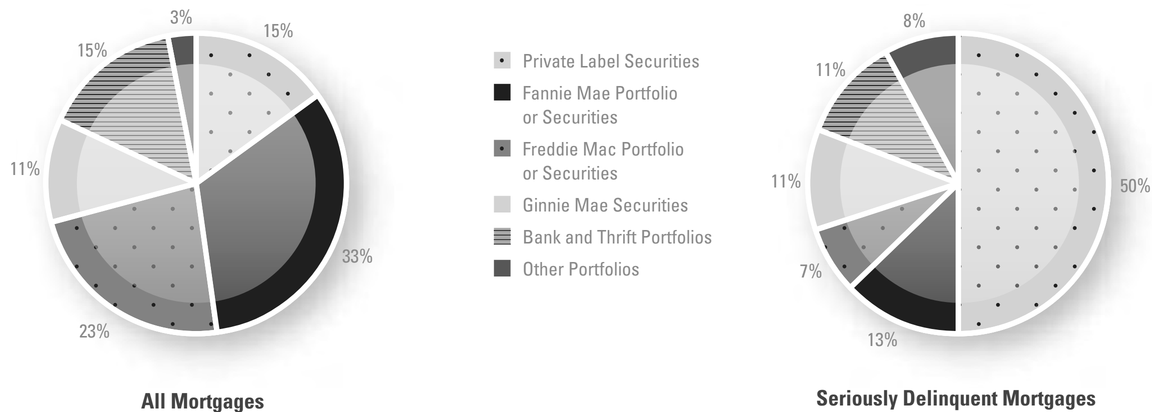
Affordability and Mortgage Underwriting

Affordability measures typically use the prevailing 30-year fixed mortgage interest rate and assume a 10 percent downpayment to translate home prices into monthly payments **(Table A-1).** Under these assumptions, real monthly payments on a median priced house in 2008 were 20 percent below the 2006 peak **(Table W-6).** As a share of median owner income, monthly payments fell five percentage points to 20.1 percent. With interest rates still sliding, affordability improved even more in the first quarter of 2009.

But these standard measures exaggerate the change in affordability. From 2004 through 2007, homebuyers were able to chase

Figure 19

Seriously Delinquent Mortgages Are So Far Concentrated Among Private Label Securities

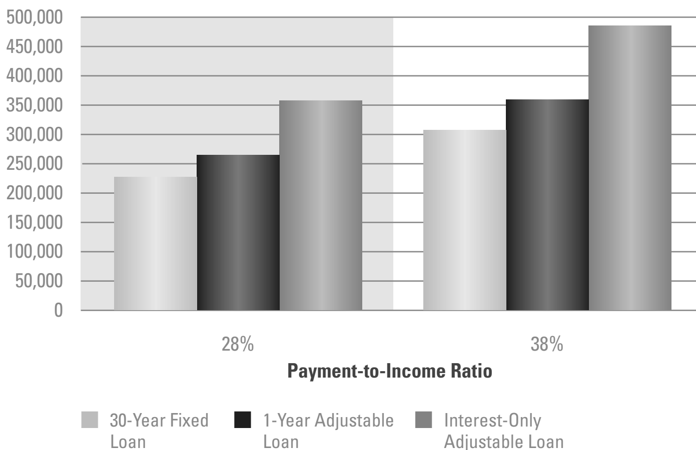


Notes: Data are as of December 2008. Seriously delinquent loans are at least 90 days delinquent or in foreclosure. Private label securities are mortgage securities not securitized by Freddie Mac, Fannie Mae, or Ginnie Mae.
Source: Freddie Mac, Office of the Chief Economist.

Figure 20

Innovative Mortgage Products and Relaxed Underwriting Vastly Increased Purchasing Power During the Boom

Maximum Qualifying Mortgage in 2005 (Current dollars)



Note: Maximum qualifying mortgage is the amount of financing available to a hypothetical homebuyer with the median 2005 homeowner income of $57,000.
Source: JCHS calculations based on 2005 Freddie Mac Primary Mortgage Market Survey and US Census Bureau, Current Population Survey.

prices higher without adding to their initial monthly payments by taking advantage of various affordability products. In fact, more than one-third of borrowers took out adjustable-rate (ARM) loans in 2004 **(Table A-3),** while nearly one-fifth took out interest-only or payment-option loans in 2005. Instead of reducing their payments as a share of income, though, most borrowers used the loans to keep up with rising prices—especially in markets with rapid appreciation and heavy speculation. In California and Nevada, for example, more than 40 percent of loans originated in 2005–6 had payment-option or interest-only features.

The impact on purchasing power was profound. In 2005, a household with the median owner income of about $57,000 and spending 28 percent of income on mortgage principal and interest could qualify for a 30-year, fixed-rate loan of $225,000. But if the same household took out an adjustable-rate loan with a discounted interest rate, the maximum loan amount increased to $263,000 **(Figure 20).** Adding an interest-only feature to that ARM and qualifying the household based on the initial interest-only payments raised the potential loan to $356,000. And under the common practice at the time of allowing the borrower to spend 38 percent of income on mortgage costs, the amount the household could borrow with an interest-only ARM jumped to some $482,000.

After regulatory guidance issued in 2006 pushed the industry back towards tighter, more uniform standards, interest-only and even some adjustable-rate loans became hard to get. By mid-2007, teaser discounts on adjustable-rate mortgages began to shrink and the spread between fully indexed fixed- and adjustable-rate loans hit zero and then turned negative. As a result, households can no longer use these loan features to leverage their incomes to buy ever more expensive homes. With a 2008 median owner income of about $64,000 and prevailing interest rates through April 2009, a household spending 28 percent of income could qualify for a 30-year, fixed rate loan of just $277,000.

This means that only a limited pool of households can take advantage of today's soft home prices. Current homeowners do not benefit from lower prices if their own homes are also worth less, and first-time buyers must overcome higher hurdles to qualify for mortgages. Indeed, the renewal of strict underwriting standards has turned back the clock on credit access for first-time homebuyers by about 15 years, restoring the income and wealth constraints that were so much a focus of national housing policy in the 1990s.

For many potential buyers, amassing the downpayment is the main obstacle. In 2004, the Census Bureau estimated that of all renters who could not afford to buy a modestly priced home, 97 percent reported a cash problem such as excessive debt or insufficient funds for a downpayment, while 78 percent reported insufficient income to qualify for a mortgage. Some 75 percent had both cash and income-related constraints. And with the drastic erosion of household wealth, fewer first-time buyers will be able to turn to family members for assistance. Creating incentives to save for the downpayment will therefore be critical to enable first-time buyers to purchase homes even at today's lower prices.

Soaring Foreclosures

At the end of 2008, first-lien loans in foreclosure stood at 3.3 percent of all loans—an increase of 62 percent in one year. The share of loans at least 60 days past due rose by almost two percentage points, to 4.8 percent, in just the last half of 2008. Unless new federal initiatives result in many more loan workouts, foreclosure filings will likely continue to rise through the first half of 2009.

With foreclosure filings up and home sales down, more and more homes are being sold for less than the purchase price or for less than the outstanding mortgage balance. Zillow.com estimates that the share of homes sold for a loss—many of which were foreclosed properties—climbed from 10 percent of existing home sales at the end of 2006 to 22 percent at the end of 2007, and to 42 percent at the end of 2008.

For much of this decade, the highest foreclosure rates were concentrated in the economically distressed states of Ohio, Michigan, Indiana, and Illinois. But last year, that distinction passed to four other states that had seen severe overbuilding, intense housing speculation, and heavy reliance on risky loan products. Indeed, foreclosure rates in California, Arizona, Nevada, and Florida surged from less than 0.9 percent at the start of 2007 to 5.9 percent by the end of 2008 **(Figure 21).** During that quarter, the number of foreclosed loans topped 660,000 in these four states alone, accounting for a stunning 61 percent of the growth in foreclosures nationwide.

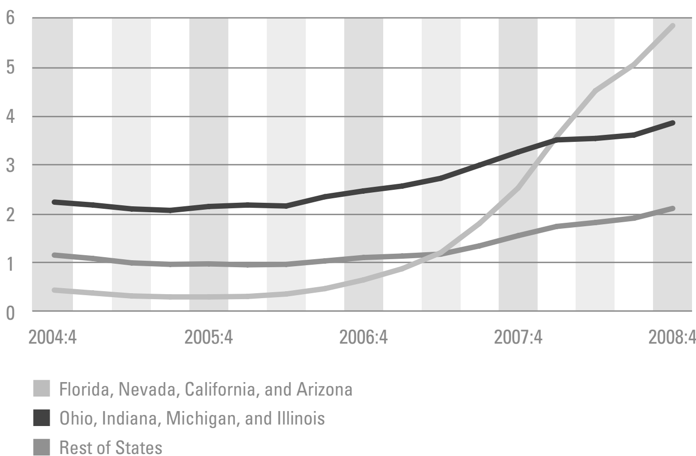
Managing the Crisis

With the notable exception of the first-time homebuyer tax credit and efforts to keep low-cost credit flowing, federal attempts to stabilize housing markets have focused on preventing foreclosures. Early programs hinging on voluntary efforts, however, failed to stem the surge in foreclosed properties. In early 2009, the new administration introduced a new program requiring that all lenders receiving federal Financial Stability Plan assistance write down the mortgage payments of borrowers to 31 percent of their incomes, with the federal government picking up part of the cost. To encourage support, the plan provides such generous incentives as $1,000 per year to servicers on still-performing loans and up to $1,000 per year to homeowners who make their payments on time. The program hopes to reach 3–4 million distressed homeowners.

Figure 21

Foreclosures Are Highest in States with Once-Booming Housing Markets

Foreclosure Rates (Percent)



Note: Foreclosure rates are calculated as the sum of loans in foreclosure by state groups divided by total loans serviced in those groups.
Source: Mortgage Bankers Association, National Delinquency Survey.

Unfortunately, borrowers that benefit from meaningful loan modifications may well default again. The Office of Thrift Supervision's fourth-quarter 2008 report indicates that, of the loan modifications made by national banks and federal thrifts that lowered payments by 10 percent or more, one-fifth were at least 60 days delinquent within six months of modification.

Meanwhile, several states and municipalities have come up with their own programs. According to the Pew Center on the States, 34 states had adopted foreclosure prevention laws by the end of 2008. Nine had either instituted a moratorium or increased the number of days before a notice of default must be issued, allowing borrowers and lenders more time to find alternatives. Although the moratoria were intended to forestall the problem in anticipation of federal initiatives, evidence suggests that they may have also driven up mortgage costs and driven down credit availability.

The Outlook

The homebuying market will continue to struggle until the foreclosure crisis comes to an end. Although new federal efforts may prevent millions of families from losing their homes, mounting job losses will likely keep foreclosures at elevated levels. At the same time, falling prices are keeping potential buyers on hold while locking millions of potential sellers in their current homes.

Tighter underwriting standards also present higher credit, income, and wealth hurdles to homeownership. While downpayment requirements may ease when lenders sense that home prices have reached bottom, stricter caps on mortgage payment-to-income ratios and thorough verification of income will likely remain in place for some time. Credit standards will probably be the last to loosen, given the abysmal performance of subprime loans. When borrowers with tarnished credit histories are able to get loans again, they will likely face careful underwriting and only be offered standard products.

How households respond when home prices stop falling and the economy improves will determine whether and when the home-ownership rate turns up again. In the near term, demographic forces favor the rental over the for-sale market. Bargain pricing could, however, lure many to buy homes even if credit remains relatively tight. Among the other difficult challenges that lie ahead are jumpstarting mortgage lending that lacks federal guarantees, moving Fannie Mae and Freddie Mac out of conservatorship, and modifying regulations to avoid a repeat of the market meltdown.

5 Rental Housing

Rental markets came under increasing stress last year as the recession took hold. Inflation-adjusted rents inched lower nationally and an unprecedented wave of foreclosures of small, investor-owned properties threatened many renters current on their payments with eviction. Meanwhile, Fannie Mae and Freddie Mac stepped in after many private issuers of multifamily mortgage-backed securities exited the market. Even so, falling property valuations made it more difficult for owners to tap their equity.

Markets in Transition

Despite the fourth consecutive annual increase in renter households, the national rental vacancy rate notched up to 10.0 percent in 2008—just shy of the 10.2 percent record set in 2004. Multifamily buildings with 10 or more apartments posted the largest increase, rising almost a full percentage point to 11.1 percent **(Figure 22).** Despite turmoil in the single-family home markets, vacancy rates for single-family rentals edged up only 0.2 of a percentage point to 9.8 percent.

With rental demand on the rise, the upward drift in vacancy rates in larger buildings suggests excess supply. Given that new construction has held near 200,000 units per year since 2005, conversion of condominium units to rentals is the likely culprit. Indeed, several new developments slated for sale as condos were converted to rental properties even before completion, including more than 18,500 units in 27 metros evaluated by M|PF Yieldstar. In some locations, the additions were significant, reaching 4,000 units in Washington, DC, 1,700 units in Las Vegas, and 1,600 units in Atlanta.

While nominal rents rose 3.7 percent last year, real rents fell by 0.2 percent. As measured by M|PF Yieldstar, rents on investor-grade apartments took a bigger hit, down 2.5 percent in real terms between the fourth quarters of 2007 and 2008. Declines spread to fully 50 of the 57 metropolitan areas that M|PF Yieldstar covers, up from just 17 in 2007. Even in formerly strong markets in California, real rents were off 2–7 percent. The few metros with still-healthy rental markets were primarily in Texas and other Gulf Coast and oil patch states that had benefited from higher energy prices for most of the year.

Rent declines and higher vacancies slowed the growth in 2008 net operating incomes, which looked to turn negative in 2009. The real price of multifamily properties dropped in 2008 for the first time in years as investors demanded a higher return for taking on greater risk **(Figure 23).** Falling valuations reduced the real

volume of multifamily transactions from $103 billion in 2007 to $37 billion in 2008 with fewer buyers and sellers able to settle on prices. Lower valuations also made it more difficult for rental property owners to tap their equity or to refinance loans to make necessary repairs and improvements.

Going forward, rising unemployment will almost certainly take a further toll on demand. Rental markets are usually more sensitive to economic downturns than owner markets because most new households rent rather than buy their homes. These younger households are especially vulnerable to job losses during recessions. Indeed, the National Multi Housing Council reported that job-related vacancies were on the rise in 2008 as more renters were forced to double up or relocate in search of better opportunities.

Configuration of the Rental Stock

While the phrase "rental housing" may conjure up images of apartments in huge structures, less than 10 percent of rentals are in buildings with at least 50 units. Instead, more than a third of rental units are single-family homes, and more than half are in buildings with fewer than five apartments **(Table W-7).** Size is important because small (1–4 units), midsize (5–49 units), and large (50 or more units) rental buildings differ systematically in location, year of construction, and types of households they attract. For example, single-family rentals are much more likely to be occupied by white, middle-aged, married couples with higher incomes than are units in large multifamily structures. They are also more apt to be located in the suburbs.

In addition to building size, property size also matters because financing options depend on the number of units in the property, not the structure. Individually owned condos even in large multifamily buildings are considered single-family properties, as are rental properties with two to four units. In contrast, properties comprising several single-family or small multifamily buildings are treated as large multifamily properties for financing purposes.

Ownership and management practices also vary for different-sized rental properties. For example, most small properties are held by families and individuals owning only one or a few properties, and are unlikely to have professional managers. Larger properties are more often owned by institutional investors and partnerships, and are usually operated by professional managers **(Table W-8).**

Small Rental Property Problems

The stock of small rental properties is made up of single-family detached homes, townhouses, condos in multi-unit buildings, and two- to four-unit properties with or without resident landlords. In 2001, there were 13.2 million single-family rentals (including 1.6 million condos) and 6.3 million two- to four-unit rental properties (including 1.3 million with resident landlords).

Individuals and couples owned 85 percent of these small properties. Many of these owners have relatively low incomes and operate on thin margins **(Figure 24).** In 2001, about one-quarter of single-family rental owners, two-fifths of resident owners of two- to four-unit properties, and one-fifth of nonresident owners of such properties had gross incomes under $30,000. A 1995 survey revealed that more than half of all resident owners, and nearly half of nonresident owners of properties with one to nine units, reported barely breaking even or losing money. As a result, many of these owners lack the resources to maintain, let alone improve, their properties.

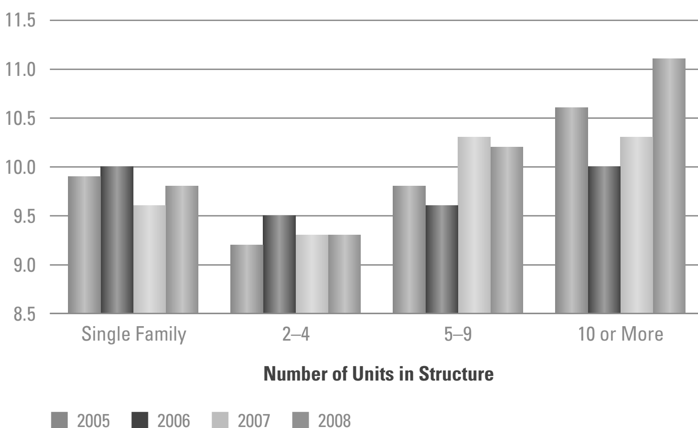
The financing of one- to four-unit rental properties is similar to that of owner-occupied single-family units, with most loans made through the same channels and on similar terms. Before the housing boom, small rental properties purchased as investments usually faced somewhat higher interest rates, higher downpayment requirements, and more stringent underwriting. Lenders also included rental income from the property when qualifying some buyers.

When the housing boom took off, however, lenders relaxed many of these standards. Downpayment requirements were sharply

Figure 22

Larger Rental Buildings Have Seen the Sharpest Rise in Vacancy Rates

Rental Vacancy Rate (Percent)

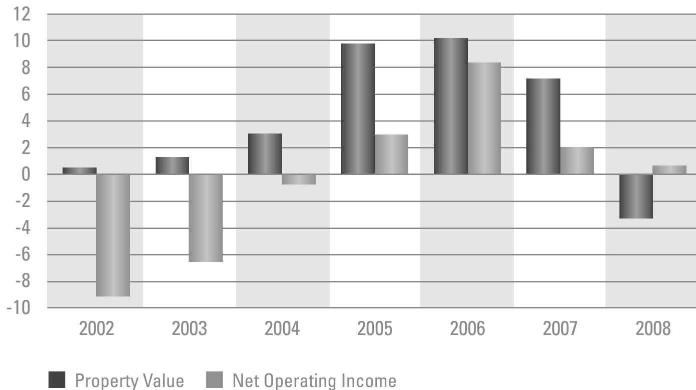


Source: US Census Bureau, Housing Vacancy Survey.

Figure 23

After Growing Much Faster than Operating Income, Rental Property Values Fell in 2008

Change (Percent)

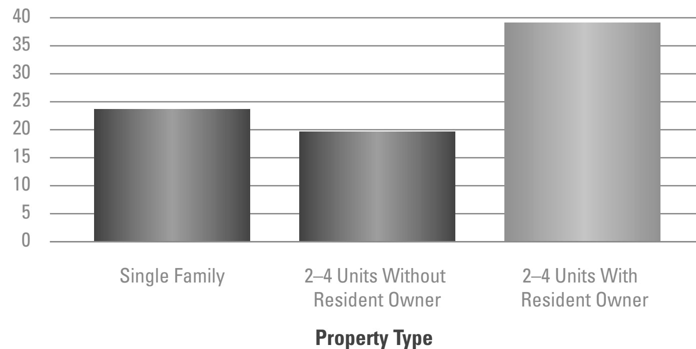


Note: Changes are based on index values adjusted for inflation by the CPI-U for All Items.
Source: National Council of Real Estate Investment Fiduciaries.

Figure 24

Resident Owners Are Nearly Twice as Likely to Have Low Incomes as Other Owners of Small Rental Properties

Share of Owners with Incomes Under $30,000 (Percent)



Notes: Includes individual and married-couple owners only. Owner incomes are pre-tax revenues from all sources.
Source: JCHS tabulations of the 2001 Residential Finance Survey.

reduced, even to zero in some cases. Lenders also offered investors many of the same types of risky loans as they did to owner-occupants, including subprime and Alt-A mortgages as well as loans with affordability features. Even with the interest-rate markup for investors, financing for these properties became relatively cheap and easy to get. LoanPerformance reports that the number of originations classified as investor loans more than doubled from 2000 to 2005, and the share of such originations rose four percentage points. Meanwhile, the Survey of Consumer Finances indicates that the number of households reporting at least some rental income from one- to four-unit properties jumped from 2.0 million in 2001 to 2.9 million in 2007.

Many inexperienced investors made bets they could not cover when declining prices put them underwater on their mortgages. Indeed, tenant evictions from small rental properties in the foreclosure process are now a major concern, and all the more so because some landlords reportedly continued to collect rent even as they fell behind on their mortgages and left tenants unaware of the pending foreclosure. According to the most recent study by the Mortgage Bankers Association, absentee owners accounted for almost one in five loans entering foreclosure in the third quarter of 2007.

While federal housing policy has largely ignored small rental properties, this may soon change as the nation grapples with record foreclosures in this key market segment. Recently passed legislation has provided some protections for tenants. But efforts to resell foreclosed small properties have so far paid scant attention to whether the new owners rent them out, live in them, or keep them vacant in the hopes of later profit. State and local governments receiving federal neighborhood stabilization funds may, however, find value in conveying some properties to mission-motivated entities that will own and operate the properties as affordable rental housing.

Midsize Multifamily Rental Challenges

Midsize multifamily properties have 5–49 units and make up about a fifth of the rental stock. This segment falls in between small and large properties on a range of indicators, including the shares that are individually owned, have mortgages, and are professionally managed. When last measured in 2001, median capital improvement costs per unit were higher for midsize properties than for large properties, although per-unit administrative, maintenance, and utility costs were lower. At the same time, rent receipts per unit were just three-quarters of those for large properties, but still higher than those for small multifamily properties. Finally, only one in four midsize properties benefited from government or nonprofit support, compared with four in ten large properties.

While mortgage finance for both small and large rental properties is closely integrated into capital markets, financing for midsize multifamily properties is less so. As a result, loans on these properties are not as standardized and lenders are less able to diversify their holdings or replenish their capital by selling off loans. Loan terms on midsize properties are therefore apt to be less favorable than those on other rental properties. For example,

owners of midsize rental properties were much less likely to have level-payment and longer-term mortgages than owners of large and small properties in 2001 **(Figure 25).**

In addition, Fannie Mae and Freddie Mac hold the mortgages on a smaller share of midsize rental properties than of larger properties with mortgages. While the two entities made inroads into this market during the boom—Fannie through direct purchases and Freddie through its support of small balance loans packaged into private commercial mortgage-backed securities (CMBS)—they pulled back when loan performance deteriorated in 2008 and their private partners slowed their activity. Without a recovery by banks (which are the primary providers of credit for these properties) or further expansion by Fannie Mae and Freddie Mac, credit for midsize properties will remain in short supply.

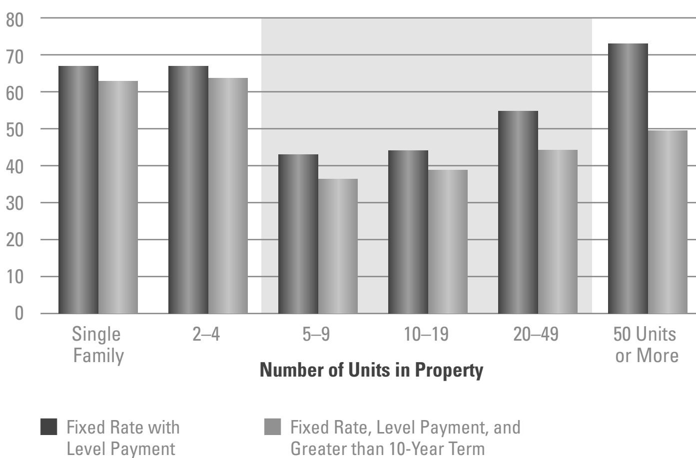
Large Multifamily Rental Fortunes

Because so many large properties are made up of several smaller buildings, fully 30 percent of all rentals are in properties with 50 or more units. Of these, roughly two-thirds are properties with at least two buildings. While mostly unsubsidized, large properties have a disproportionate share of subsidized units. In fact, the majority of all subsidized rental units were in properties with at least 50 units in 2001 **(Figure 26).**

Figure 25

Midsize Property Owners Have Less Access to Favorable Loan Terms

Share of Mortgaged Properties (Percent)



Note: Level payment mortgages require the same payment each month (or other period) for full amortization.
Source: JCHS tabulations of the 2001 Residential Finance Survey.

The corporations and private partnerships that own the vast majority of large rental properties are more likely to have the resources and economies of scale to provide professional management and to tap a broader set of financing sources. The size of the properties permits careful underwriting, making their loans more attractive to institutional investors and to the secondary mortgage market.

Multifamily Finance in Transition

After other investors reduced their purchases of multifamily debt during the downturn, Fannie Mae and Freddie Mac stepped in to play a bigger role in multifamily finance, especially of larger properties. The amount of multifamily debt owned by Fannie and Freddie jumped 23 percent in real terms from 2007 to 2008, while that owned by banks and savings institutions increased only 3 percent. Insurance companies, in contrast, pared back their holdings. Meanwhile, the share of multifamily debt backed by FHA edged down from 6.7 percent in December 2007 to 6.3 percent in December 2008.

Multifamily mortgage performance—even of loans securitized without Fannie Mae or Freddie Mac backing—has so far held up better than single-family mortgage performance. Default rates on multifamily loans in CMBS pools did, however, climb sharply in the last quarter of 2008 and the first quarter of 2009. By the end of March 2009, Deutsche Bank estimates that the share of loans in CMBS pools 90+ days delinquent or in foreclosure was about 1.8 percent. This was still well below the 3.7 percent rate that single-family (one- to four-unit) prime loans or the 23.1 percent rate that single-family subprime loans hit at the end of 2008. Meanwhile, the 60+ day delinquency rates on Fannie Mae and Freddie Mac multifamily loans stayed below 0.5 percent, suggesting that underwriting of these loans remained strict even during the housing boom **(Figure 27).**

All told, multifamily loan defaults have not approached the peaks reached in the late 1980s and early 1990s, and are about in line with the peak following the 2001 recession. But with the economy still contracting, multifamily loan performance is likely to deteriorate further. Indeed, early signs suggest a sharp uptick in defaults in the first quarter of 2009.

Attractive terms on multifamily loans have therefore become harder to get. In January 2009, 88 percent of the owners of large rental properties responding to a National Multi Housing Council survey said the market for mortgages was worse or unchanged from three months prior. In addition, respondents were unanimous in reporting that the credit environment was having some impact on current or planned business activities.

Figure 26

Larger Properties Anchor the Subsidized Housing Stock

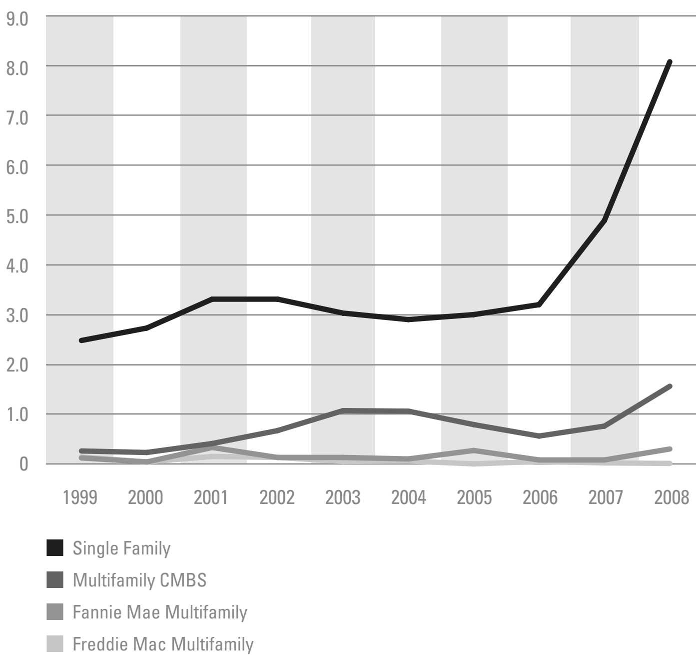
Distribution of Units by Property Size (Percent)

Notes: Numbers may not add to 100 because of rounding. Subsidies include all federal, state, and local government benefits—including low-income housing tax credits—as well as subsidies from nonprofit organizations as defined in the 2001 Residential Finance Survey.
Source: JCHS tabulations of the 2001 Residential Finance Survey.

Figure 27

While Still Well Below Single-Family Rates, Multifamily Delinquencies Have Turned Sharply Higher

Delinquency Rates (Percent)



Notes: Rates are for loans 60+ days delinquent or in foreclosure. Multifamily CMBS rates and single-family rates are based on numbers of loans, while Fannie Mae and Freddie Mac multifamily rates are based on values of loans. Single-family rates are for properties with 1–4 units.
Sources: Mortgage Bankers Association; Deutsche Bank.

The Outlook

With the recession taking its toll, vacancies increasing, and credit tight, the financial performance of rental properties is likely to slide further in the short term. While single-family rental vacancy rates have so far been stable, this may change as foreclosed properties come back on the market. Higher vacancy rates could in turn make it difficult for more property owners to pay their mortgages. With credit remaining scarce, owners will also find it challenging either to sell or to raise capital to make improvements.

The full impact of excess inventories, job losses, and federal interventions may not be known for another year. In the meantime, the public and private sectors have a unique opportunity not only to ease the current crisis but also to deal with some of the longer-standing issues related to rental housing. These include ongoing losses of affordable units to upgrading or removal, and the stubbornly high number of severely cost-burdened renters. This is also a good time to rethink federal affordable housing policy, which has until recently strongly favored homeownership programs. With new recognition of the risks that homeownership brings, policymakers now have a chance to develop better ways to place renters who want to buy homes on a secure path to that goal.

6 Housing Challenges

There is little evidence so far of broad improvement in housing affordability. The steep drop in house prices, potential for rent deflation, and opportunities for homeowners to refinance or modify their loans may, however, help to offset some of the large increase in the number of households paying more than half their incomes for housing. But even if there is an eventual return to long-term trend, the share of severely cost-burdened households will remain alarmingly high.

Affordability Concerns

After gradually rising between 1980 and 2000, the share of cost-burdened households shot up by almost six percentage points between 2001 and 2007 **(Figure 28).** This includes a three percentage point increase in households with severe burdens. As a result, the number of households spending more than half their incomes on housing jumped by an unprecedented 30 percent to 17.9 million in 2007. Another 21.6 million had moderate burdens, paying 30–50 percent of income for housing **(Table A-5).**

By 2007, fully 30 percent of all homeowners were at least moderately burdened and 12 percent were severely burdened. Even so, the share of renters with severe burdens remained nearly twice as high as that of owners, despite a modest 0.6 percentage point dip from 2005 to 2007.

Households in the bottom income quartile are most likely to face affordability problems **(Table A-6).** In 2007, nearly three-quarters of severely cost-burdened households had low incomes. Indeed, fully 51 percent of low-income renters and 43 percent of low-income owners paid more than half their incomes for housing.

High housing outlays cut deep into household budgets, leaving low-income families about $485 per month for everything else **(Figure 29).** Households in the bottom expenditure quartile devoting more than half their spending to housing on average spent $123 less each month on food, $86 less on healthcare, and $20 less on clothing than households that were paying less than 30 percent of outlays for housing. Even households with expenditures in the lower-middle quartile but with high housing outlays had less left over than bottom quartile households with low housing outlays.

It remains to be seen whether the incidence of cost burdens will increase as job losses continue to mount or retreat in the face of falling house prices. But even if age- and race-specific shares return to 2000 levels by 2015, a grim 16.2 million households would still be severely housing cost burdened in that year.

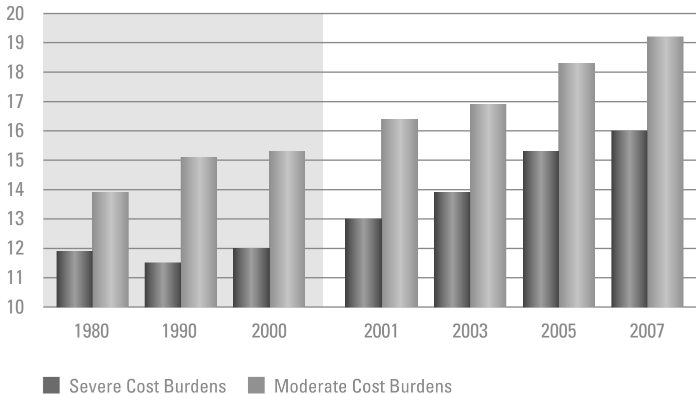
Housing Conditions

Unlike cost burdens, the incidence of poor-quality housing declined between 2001 and 2007. Nonetheless, about one in ten households in the bottom income quartile lived in inadequate housing in 2007. Moreover, poor quality is no guarantee of affordability. Nearly half of the low-income households living in inadequate units also paid more than 50 percent of their incomes for their housing.

Figure 28

Affordability Problems Surged During the Housing Boom

Share of Households with Cost Burdens (Percent)



Note: Severe (moderate) housing cost burdens are more than 50% (30–50%) of pre-tax household income.
Sources: JCHS tabulations of the US Census Bureau, 1980–2000 Decennial Censuses and 2001–7 American Community Surveys.

The problem of crowding also eased somewhat in 2001–7, with the number of households living in homes with more than one person per room dropping from 2.8 million to 2.6 million. Overall, only 2.3 percent of US households were crowded in 2007. In the near term, however, recession-induced job losses and foreclosures may force more families to double up temporarily with relatives or friends.

The recession may also erase recent progress in reducing homelessness. A January 2007 count put the number of homeless at 671,888—marking a 10 percent drop in total homelessness and a heartening 28 percent reduction in chronic homelessness since 2005. This turnaround reflects in part the addition of roughly 70,000 units of supportive housing from 2002 to 2007.

Still, deinstitutionalization in the 1980s created a more or less permanent shelter population that persists today. About 1.6 million people used emergency homeless shelters or transitional housing over the course of 2007. Two-fifths of the homeless were sleeping on the street or in other places unfit for human habitation. More than a third of the homeless were members of families with children. In the fall of 2008, some 16 of the 22 cities responding to a US Conference of Mayors survey reported increases in homelessness, indicating that the recession was already having a negative impact.

Employment Pressures

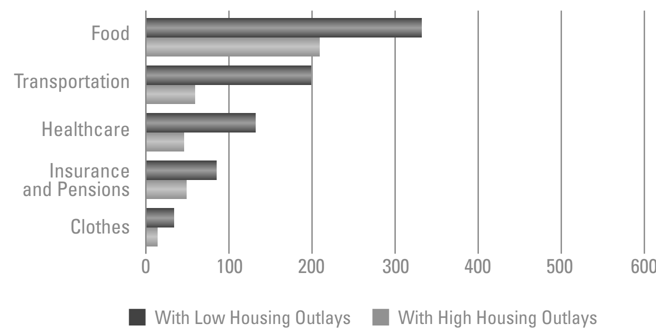
Job losses have risen at a stunning pace, and many workers who are still employed have seen cuts in hours and income. For those

Figure 29

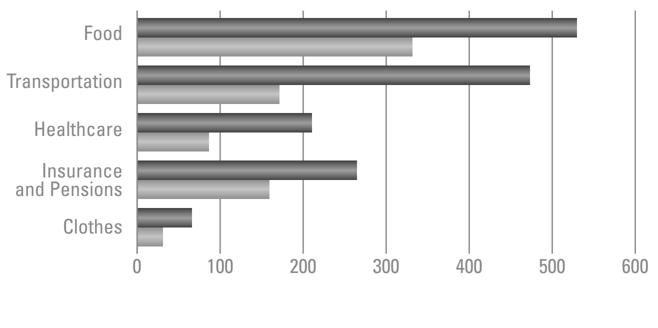
High Housing Outlays Sharply Reduce Household Spending on Other Necessities

Average Monthly Spending (Dollars)

Households in the Bottom Expenditure Quartile



Households in the Lower-Middle Expenditure Quartile



With Low Housing Outlays   With High Housing Outlays

Notes: Expenditure quartiles are equal fourths of all households based on total expenditures. Households with high (low) housing outlays devoted 50% or more (under 30%) of total expenditures to housing.
Source: JCHS tabulations of the 2007 Consumer Expenditure Survey.

who become unemployed, the loss of income far outweighs any improvement in housing affordability from falling house prices or rents. Until labor markets start to recover, more and more households will struggle to make ends meet.

Prospects for a near-term rebound in jobs are poor. Employment growth usually lags economic upturns, and job recovery has progressively slowed in recent decades. Following the recessions that occurred between 1948 and 1980, employment regained previous peaks in less than two years. In contrast, job recovery took 28 months in the early 1980s, 32 months in the early 1990s, and a full 48 months in the early 2000s.

As of the end of April 2009, unemployment had hit 8.9 percent—an increase of four percentage points from the beginning of the recession—and sidelined 5.7 million workers. Nearly half of those jobs were lost in just the first four months of this year. And these figures do not include the 8.9 million workers who involuntarily worked part-time or the 2.1 million who wanted jobs but had given up the search. This brought the share of unemployed and underemployed workers in April to a record 15.8 percent.

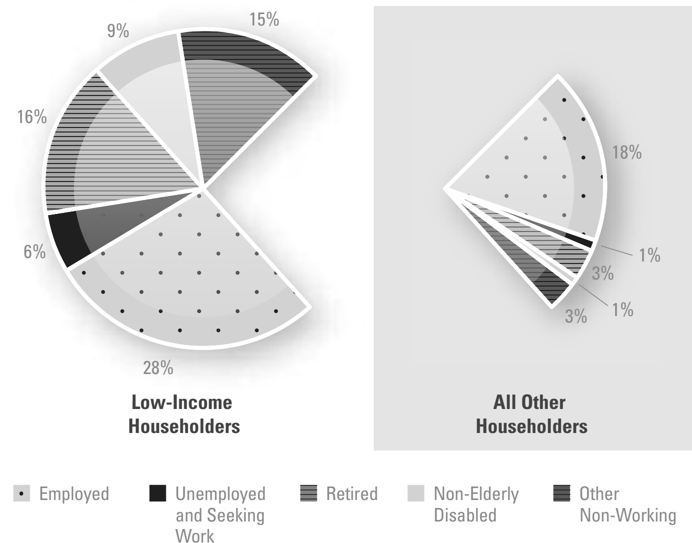
But the unemployed who are seeking work make up only a small fraction—just one in 15—of householders with severe burdens **(Figure 30).** In fact, nearly half were working in 2007. One out of five severely burdened householders was retired, while one out of ten was non-elderly disabled. Regardless of employment status, the vast majority of severely burdened householders have low incomes.

The possibility that households with low-wage workers can earn their way out of their housing affordability problems is small. In 2007, low-wage service workers in four occupational groups—personal services, cleaning and maintenance services, food services, and healthcare support—were the most likely to have severe housing cost burdens **(Figure 31).** The Bureau of Labor Statistics predicts that the majority of employment growth from 2006 to 2016 will be in low-paying service and in high-paying professional occupations.

Figure 30

Many Severely Burdened Householders Are Employed, Retired, or Disabled

Share of Householders Paying More than 50% of Income for Housing (Percent)



Notes: Employed householders worked, and unemployed householders looked for work, during the week prior to the survey. Retired, disabled, and other non-working householders were not in the labor force. Retired householders were 65 or older while non-elderly disabled and other non-working householders were under age 65. Low-income households are in the bottom fourth of all households sorted by pre-tax household income.
Source: JCHS tabulations of the 2007 American Community Survey.

Fragile Family Finances

How households that suffer loss of income weather the recession depends on their assets, debt levels, fixed costs, and ability to borrow. Unfortunately, the collapse of house and stock prices wiped out most of the gains in household wealth from the bubble years. And going into the recession, many families were already stretched thin by heavy borrowing. Aggregate household debt roughly doubled in real terms between the mid-1990s and the $14.3 trillion peak in 2007, with mortgage debt rising much faster than consumer debt.

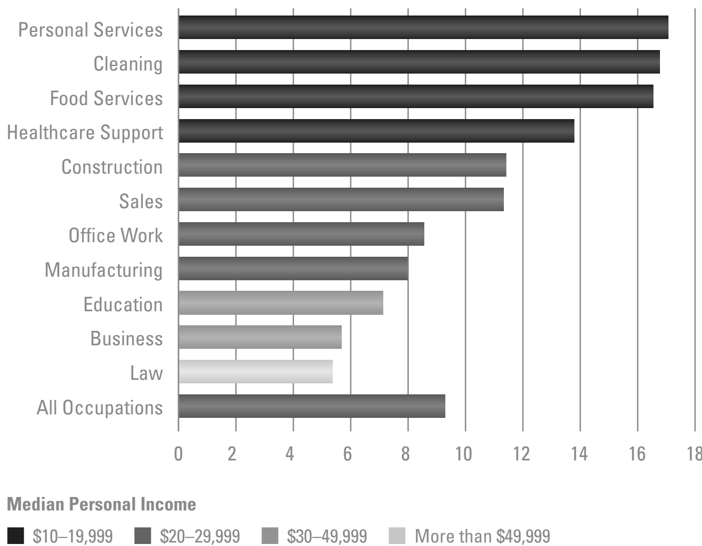
Households were able to increase their debt loads not only because of lax lending standards but also because low interest rates reduced carrying costs. The fraction of household income spent on debt payments thus increased less than the overall level of debt. For homeowners, the share of disposable income spent on mortgages, debt, and other financial obligations rose from 15.9 percent in 2001 to 18.2 percent in 2007 before turning down in 2008. For renters, the share actually fell from 31.3 percent in 2001 to 26.3 percent in 2007. These aggregate figures, however, mask the sharp run-up in debt among some families. In 2001–7, the share of homeowner families with debt that spent more than 40 percent of their incomes on debt payments climbed 3.3 percentage points, to 18 percent.

Homeowners added to the precariousness of their balance sheets by taking on more mortgage debt when home values were soaring. They also added to the risk that a spell of unemployment or a major medical problem could bring financial disaster. Indeed,

Figure 31

Workers in Low-Wage Occupations Are Most Likely to Live in Severely Burdened Households

Share of Workers Living in Households Paying More than 50% of Income for Housing (Percent)



Median Personal Income

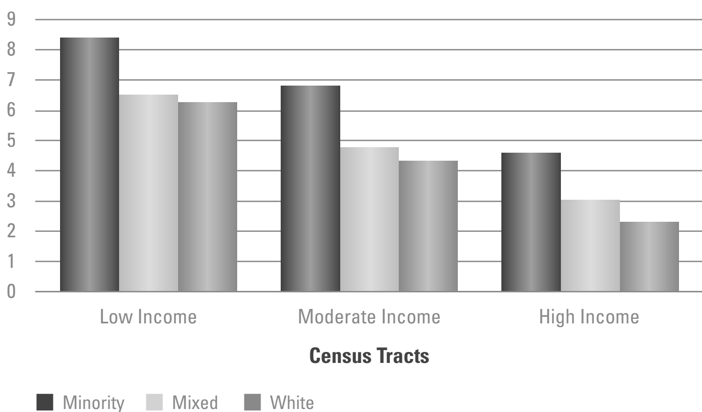
$10–19,999 $20–29,999 $30–49,999 More than $49,999

Note: Workers are those age 16 or older who worked in the week prior to the survey.
Source: JCHS tabulations of the 2007 American Community Survey.

Figure 32

Even Controlling for Income, Foreclosures Are Markedly Higher in Minority Neighborhoods

Median Estimated 18-Month Foreclosure Rate (Percent)



Census Tracts

Minority Mixed White

Notes: Minority census tracts were more than 50% minority in 2000; mixed census tracts were 10–50% minority; white census tracts were less than 10% minority. Low-/moderate-/high-income census tracts had median family incomes less than 80%/80–120%/more than 120% of the metropolitan area median. Estimates are based on a HUD model of the share of loans foreclosed from January 2007 to June 2008.
Source: JCHS tabulations of HUD 2008 Neighborhood Stabilization Program data and US Census Bureau, 2000 Decennial Census.

after declining in 2005 when laws were amended, bankruptcy filings have risen steadily since. In 2008 alone, bankruptcies were up 31 percent from a year earlier, with 1.1 million individuals filing for protection.

According to a 2007 survey by the Consumer Bankruptcy Project, more than half of bankrupt homeowners with mortgages missed payments before filing, and roughly a quarter said that higher mortgage payments contributed significantly to their bankruptcy. Moreover, 30 percent of homeowner respondents stated that the main reason for filing was to try to save their homes. Of those who had borrowed against their homes to consolidate debt, 28 percent indicated that their mortgage payments had increased beyond what they could afford compared with only 17 percent of those who had borrowed against their equity for other reasons.

While bankruptcy discharges most forms of debt and other obligations, mortgage liens are a notable exception. If borrowers are employed and have incomes, they may be able to use Chapter 7 bankruptcy to free up enough income to keep their homes. In contrast, Chapter 13 bankruptcy allows owners facing foreclosure to stay in their homes by committing to a court-ordered repayment plan. In the past, bankruptcy has often delayed but not prevented foreclosure proceedings.

Race Matters

While the recession has touched almost all households, minorities have been hit especially hard for several reasons. First, they have higher unemployment rates than whites, as well as higher job losses during economic downturns. For example, when the national unemployment rate peaked at 10.8 percent following the 1982 recession, joblessness among black workers was nearly twice as high at 20.9 percent. In April of this year, the unemployment rate was 15.0 percent for blacks and 11.3 percent for Hispanics, compared with 8.0 percent for whites.

Second, high-cost (subprime) loans and foreclosures are heavily concentrated in low-income minority neighborhoods. HUD estimates indicate that the median share of high-cost loans issued between 2004 and 2006 in low-income minority census tracts was nearly one-half, while the median share in low-income white neighborhoods was one-third. In addition, the median foreclosure rate from January 2007 through June 2008 was 8.4 percent in low-income minority neighborhoods—significantly higher than the 6.3 percent in low-income white neighborhoods **(Figure 32).**

Third, minority households are twice as likely as whites to be poor. Roughly two in ten minority households had poverty-level incomes in 2007, compared with one in ten white households.

Even so, poor white households (7.4 million) still outnumbered poor minority households (6.4 million) in that year. The poverty rate for households headed by blacks was 23 percent and by Hispanics 20 percent. Moreover, 24 percent of minority households were severely housing cost burdened in 2007, compared with just 13 percent of white households.

Crisis Responses

As the economy slowed, state and local governments faced the dual challenges of falling revenues and rising demand for services. Most governments are required to close budget gaps by increasing taxes, cutting spending, or drawing down reserves. According to a study by the Center for Budget and Policy Priorities (CBPP), in February 2009 state governments were anticipating a collective revenue shortfall of $99 billion for the fiscal year ending July 2009. Combining budget cuts made early in the fiscal year and additional revenue shortfalls reported later on, this amounted to 15 percent of state budgets. Assuming no help from the federal government, the CBPP projected a cumulative state budget gap of $350 billion through the end of fiscal 2011.

As a result, many states have had to slash social services just as need is growing. Food stamp caseloads—an indicator highly correlated with poverty—increased by 4.2 million or 15.3 percent between December 2007 and December 2008. By May 2009, at least 19 states had implemented cuts in healthcare funding for low-income families and children, while at least 21 had reduced funds for services for the elderly and disabled.

To address these problems and bolster the economy, the federal government passed a stimulus package in February that included $142 billion for protecting the vulnerable and $144 billion for state and local government fiscal relief. The bill temporarily increased unemployment and food stamp benefits, and made more funds available to states for cash assistance and homelessness prevention. Also included were significant funds for the repair, rehabilitation, and production of low-income housing, with $4 billion specifically allocated to public housing and $2.25 billion to the Low Income Housing Tax Credit program.

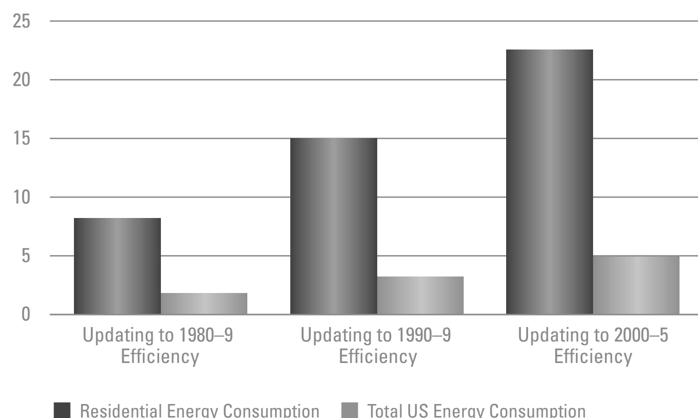
The federal government also moved to stabilize pricing in the LIHTC program after demand for tax credits dried up in the face of softening housing markets and skyrocketing losses at large banks, Fannie Mae, and Freddie Mac. Lower prices for tax credits mean fewer affordable units produced for the same government outlay. The stimulus bill attempted to set a floor under prices, offering to exchange any unused 2008 tax credits, and up to 40 percent of competitively allocated 2009 tax credits, at a rate of 85 cents on the dollar. But these measures were designed to maintain LIHTC production only at historical levels, which have neither kept pace with affordable rental demand nor offset losses of affordable units from the subsidized and unsubsidized stock.

Federal funding for direct rental assistance has been declining or unstable in recent years. As of 2008, 4.7 million renters—roughly a quarter of those eligible—received such assistance **(Table W-9).** Moreover, spending on low-income housing as a share of the domestic discretionary budget has fallen more than 20 percent since 1995. The current administration has, however, called for an increase in funding for rental housing vouchers and a set-aside of $1 billion for an affordable housing trust to pay for development and preservation of units for the nation's neediest households.

Figure 33

Improving the Efficiency of the Older Housing Stock Could Generate Substantial Energy Savings

Potential Decrease from 2005 Levels (Percent)



Note: Potential decrease is the energy that would be saved annually if the older stock consumed the same energy per square foot as homes built in the given time periods, controlling for region.

Sources: JCHS calculations based on the US Department of Energy, 2005 Residential Energy Consumption Survey, and the US Energy Information Administration, 2007 Annual Energy Review.

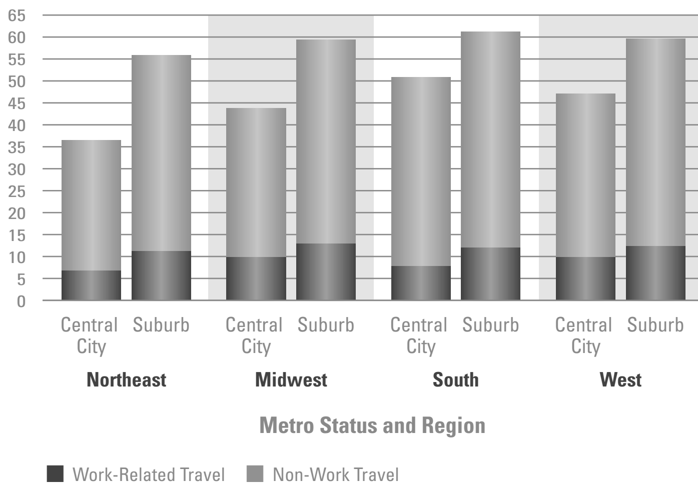
Energy and Environmental Concerns

The housing sector provides a number of opportunities to address two urgent national goals—reducing greenhouse gases and foreign oil dependence. Today, the residential sector is responsible for about 21 percent of total energy consumption. If homes built before 2000 used as little energy per square foot (adjusted by region) as those built since then, residential consumption would drop by 22.5 percent **(Figure 33).** While this calculation does not account for differences between older and newer homes related to layout, location, and household behavior, it does illustrate the potential energy savings from retrofitting the existing housing stock.

Figure 34

Central City Residents Drive Considerably Less than Their Suburban Counterparts

Weighted Average Daily Vehicle Miles Traveled by Households



Note: Weighted average daily vehicle miles traveled control for differences in the share of households by type and age across locations.
Source: JCHS tabulations of the 2001 National Household Travel Survey.

While builders have started to embrace green techniques to meet emerging consumer demand, they are also under pressure from building regulations and government procurement standards to do so. Indeed, with the new administration's commitment to energy efficiency and reduced emissions, federal regulations and programs supporting green building practices and energy-efficient improvements are likely to expand. The upfront costs of achieving significant energy reductions in the existing stock would, however, be hefty. Whether the government will provide significant enough incentives to spark such improvements remains to be seen.

Compact, transit-oriented development also holds great promise for limiting energy consumption and carbon emissions. The nation's population has spread out from urban cores for more than a century. From about 25 percent in 1950, the suburban share of the population mushroomed to more than 50 percent by 2000. This decentralization has contributed to rapid growth in vehicle miles traveled. In 2001, center city households drove 8.9 miles a day for work commutes and 36.6 miles for non-work activities on average, while suburban households drove 12.2 miles for work and 47.8 miles for other trips **(Table W-10).** Even after controlling for census region, age, and household type, center city dwellers used their cars much less than their suburban counterparts **(Figure 34).**

By one recent estimate, shifting 60 percent of future residential development to compact forms could reduce energy consumption by 2030 by the same amount as enacting a 28 percent increase in federal fuel efficiency standards by 2020. While subject to significant uncertainty and assumptions about what constitutes compact development, such estimates do point to the huge potential fuel savings from containing sprawl.

But implementing compact land use patterns would require much more accommodating state and local regulations. Indeed, many communities now insist on low-density large lot zoning. Furthermore, the long-term decentralization of people and jobs has made it difficult to reverse the growth in the distances that households travel each day. The success of efforts to promote compact development thus depends on creating more densely settled, transit-served, mixed-use communities and on encouraging businesses to expand in or relocate to these areas.

The Outlook

Stretched thin by overborrowing, job losses, and asset deflation, more and more Americans find themselves at risk of losing their homes. These immediate and fast-spreading challenges come on top of the affordability problems that millions of low-income households already face. For many low-income families, working full time is simply not enough to pay for decent housing at the 30-percent-of-income standard. For many low-income seniors and the chronically unemployed, government transfers are also insufficient to avoid severe cost burdens. Even if home prices and real rents fall further, the improvement in affordability would do little to ease these pressures.

Federal efforts to stimulate economic growth, encourage first-time homebuyers to enter the market, lower mortgage interest rates, and stem the tide of foreclosures will have a decisive effect on how long housing takes to recover. Some hopeful signs that the economic decline is slowing have emerged, but downside risks still exist. It is also unclear if the big drop in home prices will change people's housing investment behavior for an extended period of time. If incomes do not make up for lost ground over the next few years, the ill effects of this severe recession could linger.

When the housing market does rebound, demographic forces should restore annual housing production to at least the levels seen in the late 1990s and early 2000s. The aging of the echo-boom generation will help to fuel household growth and undergird demand. Nonetheless, future immigration levels remain a wildcard that could either dampen housing demand or lift production even higher.

7 Appendix Tables

Table A-1 .... Income and Housing Costs, US Totals: 1975–2008

Table A-2 .... Housing Market Indicators: 1977–2008

Table A-3 .... Terms on Conventional Single-Family Home Purchase Mortgage Originations: 1980–2008

Table A-4 .... Homeownership Rates by Age, Race/Ethnicity, and Region: 1994–2008

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Table A-6 .... Household Distribution and Housing Costs by Income Quartile: 2007

Table A-7 .... JCHS Household Projections by Age and Race/Ethnicity: 2010 and 2020

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

Table W-1 .... Construction, Sales, and Inventories of New Homes in Recent Downturns: 1970–2000

Table W-2 .... Oversupply of Vacant Homeowner Units by State: 2008

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Table W-4 .... Ratio of Median Existing Single-Family House Prices to Median Household Incomes by Metropolitan Area: 1989–2009:1

Table W-5 .... Median Household Net Wealth by Tenure: 1989–2007

Table W-6 .... Monthly Mortgage Payments on Newly Purchased Homes by Metropolitan Area: 1989–2009:1

Table W-7 .... Characteristics of Rental Units by Structure Size: 2007

Table W-8 .... Characteristics of Rental Properties by Property Size: 2001

Table W-9 .... Households Receiving Federal Housing Assistance: 2000–8

Table W-10 ..... Average Daily Household Vehicle Miles Traveled by Region and Metro Status: 2001

Table W-11 ..... JCHS Household Projections by Age, Race/Ethnicity, and Household Type: 2010 and 2020

Table A-1

Income and Housing Costs, US Totals: 1975–2008

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
1975	4,869	2,886	133,360	9.1	970	853	651	718	19.9	17.5	22.6	24.9
1976	4,840	2,801	135,676	8.9	971	861	651	721	20.1	17.8	23.2	25.7
1977	4,857	2,819	142,061	8.9	1,015	959	650	724	20.9	19.7	23.1	25.7
1978	4,908	2,856	150,961	9.6	1,156	1,054	648	723	23.6	21.5	22.7	25.3
1979	4,916	2,795	153,460	11.2	1,336	1,195	626	700	27.2	24.3	22.4	25.0
1980	4,615	2,650	147,170	13.7	1,542	1,343	602	678	33.4	29.1	22.7	25.6
1981	4,483	2,614	139,202	16.6	1,749	1,498	595	673	39.0	33.4	22.8	25.8
1982	4,490	2,640	134,689	16.0	1,634	1,426	605	689	36.4	31.8	22.9	26.1
1983	4,591	2,634	134,622	13.2	1,363	1,196	622	710	29.7	26.0	23.6	27.0
1984	4,711	2,714	133,075	13.9	1,408	1,239	629	717	29.9	26.3	23.2	26.4
1985	4,836	2,754	133,969	12.4	1,280	1,132	647	734	26.5	23.4	23.5	26.7
1986	5,007	2,787	141,352	10.2	1,134	1,011	674	759	22.7	20.2	24.2	27.2
1987	5,039	2,760	146,498	10.2	1,178	1,080	677	758	23.4	21.4	24.5	27.5
1988	5,066	2,842	148,784	10.3	1,209	1,132	675	754	23.9	22.3	23.7	26.5
1989	5,134	2,938	150,197	10.3	1,218	1,139	669	746	23.7	22.2	22.8	25.4
1990	4,983	2,845	146,635	10.1	1,171	1,098	662	736	23.5	22.0	23.3	25.9
1991	4,908	2,727	142,752	9.3	1,057	1,001	657	731	21.5	20.4	24.1	26.8
1992	4,871	2,651	141,847	8.4	972	930	654	727	19.9	19.1	24.7	27.4
1993	4,830	2,624	141,292	7.3	873	846	650	723	18.1	17.5	24.8	27.6
1994	4,879	2,589	142,791	8.4	977	941	649	721	20.0	19.3	25.1	27.9
1995	4,925	2,656	142,986	7.9	938	907	647	717	19.0	18.4	24.4	27.0
1996	5,008	2,680	143,975	7.8	934	903	645	715	18.6	18.0	24.1	26.7
1997	5,122	2,740	145,585	7.6	925	896	649	719	18.1	17.5	23.7	26.2
1998	5,275	2,795	150,738	6.9	897	874	660	727	17.0	16.6	23.6	26.0
1999	5,391	2,895	156,645	7.4	980	943	666	732	18.2	17.5	23.0	25.3
2000	5,336	2,913	162,101	8.1	1,076	1,024	667	735	20.2	19.2	22.9	25.2
2001	5,227	2,889	168,970	7.0	1,009	970	678	750	19.3	18.5	23.5	26.0
2002	5,197	2,781	178,772	6.5	1,021	984	693	762	19.6	18.9	24.9	27.4
2003	5,225	2,687	188,806	5.8	1,000	990	698	769	19.1	18.9	26.0	28.6
2004	5,187	2,650	201,234	5.8	1,067	1,048	698	770	20.6	20.2	26.3	29.1
2005	5,236	2,667	214,795	5.9	1,143	1,114	695	772	21.8	21.3	26.1	28.9
2006	5,312	2,741	221,957	6.4	1,251	1,205	698	778	23.5	22.7	25.4	28.4
2007	5,330	2,753	219,058	6.3	1,225	1,184	707	788	23.0	22.2	25.7	28.6
2008	5,306	2,727	196,600	6.0	1,064	1,042	706	790	20.1	19.6	25.9	29.0

Notes and Sources: All dollar amounts are expressed in 2008 constant dollars using the Consumer Price Index (CPI-U) for All Items. Owner and renter median incomes through 2007 are from US Census Bureau, Current Population Survey (CPS) P60 published reports. Renters exclude those paying no cash rent. 2008 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 2008 median sales price of existing single-family homes determined by the National Association of Realtors®, indexed by the Freddie Mac Purchase-Only Conventional Mortgage Home Price Index. Mortgage rates are contract rates from the Freddie Mac Primary Mortgage Market Survey. Mortgage payments assume a 30-year fixed-rate 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% from 1987 to 1993, and 3.5% from 1994 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: 1977–2008

Year	Permits[1] (Thousands)		Starts[2] (Thousands)			Size[3] (Median sq. ft.)		Sales Price of Single-Family Homes (2008 dollars)	
	Single-Family	Multifamily	Single-Family	Multifamily	Manufactured	Single-Family	Multifamily	New[4]	Existing[5]
1977	1,126	564	1,451	536	258	1,610	881	223,345	142,061
1978	1,183	618	1,433	587	280	1,655	863	237,573	150,961
1979	982	570	1,194	551	280	1,645	893	243,738	153,460
1980	710	480	852	440	234	1,595	915	236,651	147,170
1981	564	421	705	379	229	1,550	930	231,617	139,202
1982	546	454	663	400	234	1,520	925	223,371	134,689
1983	902	704	1,068	636	278	1,565	893	220,948	134,622
1984	922	759	1,084	665	288	1,605	871	220,489	133,075
1985	957	777	1,072	670	283	1,605	882	215,236	133,969
1986	1,078	692	1,179	626	256	1,660	876	219,541	141,352
1987	1,024	510	1,146	474	239	1,755	920	223,284	146,498
1988	994	462	1,081	407	224	1,810	940	222,464	148,784
1989	932	407	1,003	373	203	1,850	940	220,727	150,197
1990	794	317	895	298	195	1,905	955	213,631	146,635
1991	754	195	840	174	174	1,890	980	207,581	142,752
1992	911	184	1,030	170	212	1,920	985	204,373	141,847
1993	987	213	1,126	162	243	1,945	1,005	206,065	141,292
1994	1,069	303	1,198	259	291	1,940	1,015	212,759	142,791
1995	997	335	1,076	278	319	1,920	1,040	211,501	142,986
1996	1,070	356	1,161	316	338	1,950	1,030	210,866	143,975
1997	1,062	379	1,134	340	336	1,975	1,050	210,821	145,585
1998	1,188	425	1,271	346	374	2,000	1,020	212,816	150,738
1999	1,247	417	1,302	339	338	2,028	1,041	219,049	156,645
2000	1,198	394	1,231	338	281	2,057	1,039	220,077	162,101
2001	1,236	401	1,273	329	196	2,103	1,104	220,498	168,970
2002	1,333	415	1,359	346	174	2,114	1,070	226,819	178,772
2003	1,461	428	1,499	349	140	2,137	1,092	234,297	188,806
2004	1,613	457	1,611	345	124	2,140	1,105	246,264	201,234
2005	1,682	473	1,716	353	123	2,227	1,143	256,675	214,795
2006	1,378	461	1,465	336	112	2,248	1,172	260,589	221,957
2007	980	419	1,046	309	95	2,277	1,197	253,666	219,058
2008	570	323	622	284	78	2,218	1,118	231,900	196,600

Notes: All value series are adjusted to 2008 dollars by the CPI-U for All Items. All links are as of April 2009. 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, Characteristics of New Housing, www.census.gov/const/www/charindex.html.
4. New home price is the 2008 median price from US Census Bureau, Median and Average Sales Price of New One-Family Houses Sold, 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 2008 median sales price of existing single-family homes determined by the National Association of Realtors®, indexed by annual averages of the quarterly Freddie Mac Purchase-Only Conventional Mortgage Home Price Index.
6. US Census Bureau, Housing Vacancy Survey. Rates for 1977–9 are annual averages of quarterly rates.
7. US Census Bureau, Annual Value of Private Construction Put in Place, www.census.gov/const/C30/private.pdf. 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.

Vacancy Rates [6] (Percent)		Value Put in Place [7] (Millions of 2008 dollars)			Home Sales (Thousands)	
For Sale	For Rent	Single-Family	Multifamily	Owner Improvements	New [8]	Existing [9]
1.2	5.2	221,034	35,588	na	819	3,650
1.0	5.0	240,294	42,373	na	817	3,986
1.2	5.4	214,283	50,459	na	709	3,827
1.4	5.4	138,275	43,656	na	545	2,973
1.4	5.0	123,081	41,355	na	436	2,419
1.5	5.3	92,505	34,667	na	412	1,990
1.5	5.7	156,750	48,522	na	623	2,697
1.7	5.9	179,026	58,479	na	639	2,829
1.7	6.5	174,781	57,105	na	688	3,134
1.6	7.3	204,557	60,972	na	750	3,474
1.7	7.7	222,153	48,238	na	671	3,436
1.6	7.7	218,563	40,581	na	676	3,513
1.8	7.4	209,968	38,726	na	650	3,010
1.7	7.2	185,955	31,710	na	534	2,914
1.7	7.4	157,171	23,945	na	509	2,886
1.5	7.4	187,181	20,094	na	610	3,151
1.4	7.3	208,778	16,074	85,329	666	3,427
1.5	7.4	235,797	20,456	93,911	670	3,544
1.5	7.6	216,875	25,272	80,126	667	3,519
1.6	7.8	234,360	27,889	91,089	757	3,797
1.6	7.7	234,991	30,696	89,385	804	3,964
1.7	7.9	263,391	32,459	95,577	886	4,495
1.7	8.1	289,268	35,453	96,964	880	4,649
1.6	8.0	296,054	35,332	101,387	877	4,603
1.8	8.4	302,813	36,842	103,362	908	4,735
1.7	8.9	318,210	39,436	117,111	973	4,974
1.8	9.8	363,407	41,090	117,413	1,086	5,446
1.7	10.2	430,323	45,526	131,527	1,203	5,958
1.9	9.8	477,904	52,141	144,517	1,283	6,180
2.4	9.7	444,267	56,623	154,780	1,051	5,677
2.7	9.7	315,145	50,946	144,474	776	4,939
2.8	10.0	186,111	44,105	125,668	485	4,350

Table A-3

Terms on Conventional Single-Family Home Purchase Mortgage Originations: 1980–2008

Annual Averages

Year	Effective Interest Rate (%)	Term to Maturity (Years)	Mortgage Loan Amount (Thousands of 2008 dollars)	Purchase Price (Thousands of 2008 dollars)	Loan-to-Price Ratio (%)	Percent of Loans with:	
						Loan-to-Price Ratio Above 90%	Adjustable Rates
1980	12.8	27.2	134.8	191.8	72.9	10	na
1981	14.9	26.4	127.2	181.2	73.1	15	na
1982	15.3	25.6	123.2	175.5	72.9	21	41
1983	12.7	26.0	128.6	179.1	74.5	21	40
1984	12.5	26.8	133.5	179.6	77.0	27	62
1985	11.6	25.9	139.8	191.3	75.8	21	51
1986	10.2	25.6	154.2	215.3	74.1	11	30
1987	9.3	26.8	168.5	230.3	75.2	8	43
1988	9.3	27.7	176.7	238.7	76.0	8	58
1989	10.1	27.7	181.5	247.8	74.8	7	38
1990	10.1	27.0	171.2	234.9	74.7	8	28
1991	9.3	26.5	167.1	231.3	74.4	9	23
1992	8.1	25.4	166.8	225.2	76.6	14	20
1993	7.1	25.5	159.7	213.6	77.2	17	20
1994	7.5	27.1	159.5	206.3	79.9	25	39
1995	7.9	27.4	156.0	201.8	79.9	27	32
1996	7.7	26.9	162.7	212.7	79.0	25	27
1997	7.7	27.5	168.9	219.5	79.4	25	22
1998	7.1	27.8	173.8	228.8	78.9	25	12
1999	7.3	28.2	180.2	238.2	78.5	23	21
2000	8.0	28.7	185.2	248.2	77.8	22	24
2001	7.0	27.6	189.2	261.9	76.2	21	12
2002	6.5	27.3	195.3	276.1	75.1	21	17
2003	5.7	26.8	196.3	283.9	73.5	20	18
2004	5.7	27.9	210.4	297.3	74.9	18	35
2005	5.9	28.5	232.4	328.7	74.7	15	30
2006	6.6	29.0	237.4	327.2	76.5	19	22
2007	6.5	29.3	233.2	312.0	79.4	29	10
2008	6.1	28.4	219.1	304.6	76.7	18	8

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 2006–8 are averages of monthly data. Dollar amounts are adjusted for inflation by the CPI-U for All Items. The 2008 adjustable-rate share is based on January–October only.

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

Table A-4

Homeownership Rates by Age, Race/Ethnicity, and Region: 1994–2008

Percent

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
All Households	64.0	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
Age of Householder															
Under 35	37.3	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
35 to 44	64.5	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
45 to 54	75.2	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
55 to 64	79.3	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
65 and Over	77.4	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
Race/Ethnicity of Householder															
White	70.0	70.9	71.7	72.0	72.6	73.2	73.8	74.3	74.7	75.4	76.0	75.8	75.8	75.2	75.0
Hispanic	41.2	42.0	42.8	43.3	44.7	45.5	46.3	47.3	47.0	46.7	48.1	49.5	49.7	49.7	49.1
Black	42.5	42.9	44.5	45.4	46.1	46.7	47.6	48.4	48.2	48.8	49.7	48.8	48.4	47.8	47.9
Asian/Other	50.8	51.5	51.5	53.3	53.7	54.1	53.9	54.7	55.0	56.7	59.6	60.4	61.1	60.3	59.8
All Minority	43.2	43.7	44.9	45.8	46.8	47.4	48.1	49.0	48.9	49.5	51.0	51.3	51.3	50.9	50.6
Region															
Northeast	61.5	62.0	62.2	62.4	62.6	63.1	63.4	63.7	64.3	64.4	65.0	65.2	65.2	65.0	64.6
Midwest	67.7	69.2	70.6	70.5	71.1	71.7	72.6	73.1	73.1	73.2	73.8	73.1	72.7	71.9	71.7
South	65.6	66.7	67.5	68.0	68.6	69.1	69.6	69.8	69.7	70.1	70.9	70.8	70.5	70.1	69.9
West	59.4	59.2	59.2	59.6	60.5	60.9	61.7	62.6	62.5	63.4	64.2	64.4	64.7	63.5	63.0

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 2007

Thousands

Tenure and Income	2001				2007				Percent Change 2001–7			
	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	613	696	2,706	4,015	-20.6	-1.9	8.0	0.7
Bottom Quintile	3,381	1,906	3,921	9,208	2,829	2,045	4,476	9,351	-16.3	7.3	14.1	1.5
Bottom Quartile	5,065	2,549	4,428	12,042	4,304	2,753	5,215	12,271	-15.0	8.0	17.8	1.9
Lower-Middle Quartile	10,695	3,630	1,456	15,781	10,341	4,398	2,479	17,218	-3.3	21.2	70.2	9.1
Upper-Middle Quartile	16,015	2,882	465	19,362	15,958	4,158	1,145	21,261	-0.4	44.3	146.5	9.8
Top Quartile	21,457	1,208	137	22,802	22,123	2,306	332	24,761	3.1	90.8	143.2	8.6
Total	53,231	10,270	6,485	69,986	52,725	13,615	9,172	75,512	-1.0	32.6	41.4	7.9
Renters												
Bottom Decile	1,309	789	4,559	6,657	1,368	827	5,027	7,223	4.5	4.9	10.3	8.5
Bottom Quintile	2,731	2,798	6,550	12,079	2,746	2,901	7,478	13,125	0.5	3.7	14.2	8.7
Bottom Quartile	3,705	3,962	6,901	14,567	3,677	4,124	8,022	15,823	-0.7	4.1	16.3	8.6
Lower-Middle Quartile	7,698	2,710	419	10,828	7,037	3,155	685	10,877	-8.6	16.4	63.3	0.4
Upper-Middle Quartile	6,771	437	39	7,247	6,134	634	65	6,833	-9.4	45.2	64.5	-5.7
Top Quartile	3,735	71	2	3,807	3,258	75	1	3,333	-12.8	4.7	-49.9	-12.5
Total	21,908	7,180	7,361	36,449	20,106	7,988	8,772	36,866	-8.2	11.2	19.2	1.1
All Households												
Bottom Decile	2,080	1,498	7,065	10,643	1,981	1,523	7,733	11,238	-4.8	1.7	9.5	5.6
Bottom Quintile	6,112	4,704	10,472	21,287	5,575	4,947	11,954	22,475	-8.8	5.2	14.2	5.6
Bottom Quartile	8,769	6,511	11,328	26,609	7,981	6,877	13,237	28,094	-9.0	5.6	16.8	5.6
Lower-Middle Quartile	18,393	6,340	1,876	26,609	17,377	7,553	3,164	28,095	-5.5	19.1	68.7	5.6
Upper-Middle Quartile	22,786	3,319	504	26,609	22,092	4,793	1,210	28,094	-3.0	44.4	140.1	5.6
Top Quartile	25,191	1,280	138	26,609	25,381	2,380	333	28,095	0.8	86.0	141.0	5.6
Total	75,140	17,450	13,846	106,436	72,831	21,603	17,944	112,378	-3.1	23.8	29.6	5.6

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 2007 American Community Surveys.

Table A-6

Household Distribution and Housing Costs by Income Quartile: 2007

Percent

	Distribution of Households					Median Share of Household Income Spent on Housing				
	Income Quartile					Income Quartile				
	Bottom	Lower Middle	Upper Middle	Top	Total	Bottom	Lower Middle	Upper Middle	Top	Total
Age of Householder										
Under 25	9.1	5.8	2.9	0.9	4.7	61.5	26.5	19.0	14.9	33.4
25 to 44	28.6	37.2	42.0	37.4	36.3	56.2	29.1	22.0	17.5	25.1
45 to 64	28.9	33.7	40.6	50.9	38.5	50.8	26.5	19.6	14.5	21.1
65 and Over	33.3	23.4	14.4	10.8	20.5	35.1	18.0	12.7	8.2	20.8
Household Type										
Married without Children	12.3	25.6	33.6	41.6	28.3	40.0	21.6	17.1	13.2	17.4
Married with Children	7.1	16.3	27.0	35.5	21.5	57.9	31.4	23.1	17.8	23.0
Single Parent	16.2	11.9	7.4	3.5	9.7	60.9	30.9	22.8	17.3	34.2
Other Family	7.1	9.1	8.2	5.2	7.4	47.4	24.5	17.8	13.1	22.3
Single Person	52.8	31.0	16.9	8.3	27.3	43.3	24.8	19.9	13.6	28.7
Non-Family	4.5	6.2	7.0	5.9	5.9	57.6	25.4	18.7	14.8	21.7
Employment Status of Householder										
Employed	37.7	65.0	77.7	83.9	66.1	50.0	27.5	20.7	15.8	22.2
Unemployed Seeking Work	5.7	2.9	2.0	1.3	3.0	70.0	29.3	21.1	16.1	34.7
Retired	31.1	19.4	10.7	6.7	17.0	34.9	17.4	12.0	7.4	21.8
Non-Elderly Disabled	11.3	4.0	2.2	1.1	4.7	53.0	26.5	18.9	13.4	35.0
Other Non-Working	14.2	8.6	7.3	7.0	9.3	67.0	27.7	20.4	14.1	28.1

Notes: Children are the householder's own children under the age of 18. Employed householders worked, and unemployed householders looked for work, during the week prior to the survey. Retired, disabled, and other non-working householders were not in the labor force. Retired householders were age 65 or older, while non-elderly disabled and other non-working householders were under age 65. Income quartiles are equal fourths of all households sorted by pre-tax income.

Source: JCHS tabulations of the 2007 American Community Survey.

Table A-7

JCHS Household Projections by Age and Race/Ethnicity: 2010 and 2020

Thousands

	Low Projection					High Projection				
	Race/Ethnicity					Race/Ethnicity				
	White	Black	Asian/Other	Hispanic	Total	White	Black	Asian/Other	Hispanic	Total
Age of Householder in 2010										
Under 25	3,941	1,097	694	1,195	6,927	3,961	1,109	726	1,280	7,075
25 to 34	12,162	2,617	1,995	3,304	20,078	12,249	2,649	2,129	3,464	20,490
35 to 44	13,688	2,918	2,058	3,506	22,169	13,746	2,939	2,141	3,574	22,400
45 to 54	17,432	3,174	1,910	2,691	25,207	17,457	3,183	1,965	2,724	25,328
55 to 64	16,159	2,437	1,400	1,672	21,669	16,173	2,443	1,438	1,698	21,753
65 and Over	20,215	2,282	1,499	1,522	25,518	20,220	2,287	1,526	1,544	25,578
Total	83,597	14,525	9,555	13,890	121,567	83,806	14,610	9,925	14,283	122,624
Age of Householder in 2020										
Under 25	3,470	986	780	1,471	6,708	3,528	1,023	880	1,731	7,163
25 to 34	12,509	2,979	2,060	3,726	21,274	12,766	3,079	2,498	4,239	22,582
35 to 44	13,346	3,220	2,327	4,059	22,953	13,519	3,289	2,599	4,278	23,686
45 to 54	13,969	2,990	2,407	3,690	23,055	14,043	3,018	2,587	3,795	23,443
55 to 64	17,636	3,187	1,889	2,772	25,483	17,679	3,206	2,013	2,855	25,752
65 and Over	26,014	3,361	2,625	2,644	34,643	26,028	3,377	2,716	2,715	34,835
Total	86,944	16,723	12,087	18,363	134,116	87,562	16,992	13,293	19,614	137,461

Notes: White, black, and Asian/other are non-Hispanic. Hispanic householders may be of any race. Children are the householder's own children under the age of 18. JCHS high 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. JCHS low projection assumes immigration is half the Census Bureau's projected levels.

Source: Table W-11.

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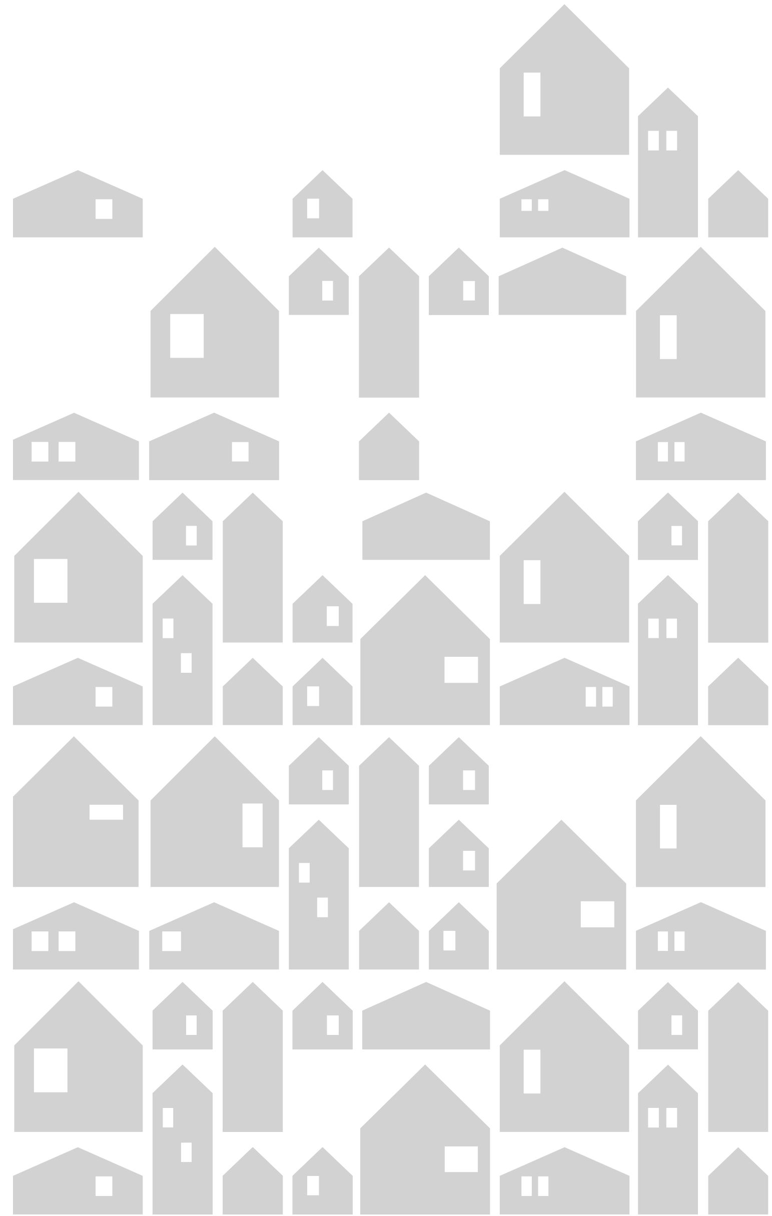

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