Making home financing affordable for low- and moderate-income households is critical to sustaining homeownership.
Homeownership is a fundamental step toward building assets for individuals and communities. The limited wealth and earnings of low- and moderate-income households restrict their capacity to purchase a home or retain assets after becoming a homeowner. Affordable mortgage lending is critical for these households to overcome financial constraints and benefit from long-term homeownership.

In the last two decades, mortgage industry innovations, relatively stable economic conditions and strong government support have contributed to the expansion of homeownership opportunities to low- and moderate-income populations. Many households obtained mortgages at prices based on their credit risk or with financial assistance available through public programs. However, the recent subprime turmoil has shown that some “affordable lending products” helped borrowers purchase a home but did not help them sustain homeownership.

This issue of Banking and Community Perspectives highlights the importance of sound lending practices to help low- and moderate-income households preserve their assets. It presents the results of a study that examined the impact of the city of Dallas’ Mortgage Assistance Program on participants and neighborhoods.
Homeownership doesn’t just provide people a place to live. It also enables them to accumulate wealth by saving more and building equity in their homes. Homeowners move less frequently and are more likely than renters to invest in the upkeep of their homes and local amenities. They may also be more involved in their communities. Family and school stability helps homeowners’ children build long-term relationships with teachers and fellow students. The result is often a positive influence on their academic performance and future job opportunities.

These potential financial and social benefits make homeownership especially appealing to low- and moderate-income families and individuals. Few other wealth-building alternatives allow investment in large assets on such a leveraged basis and generate the same long-term benefits. However, low incomes and lack of funds for a down payment are major obstacles for low- and moderate-income households to transition from renters to homeowners. Making home financing affordable by addressing these financial constraints has been a public policy priority.

### Access to Mortgage Credit

#### Public Affordable Lending Programs

After the Great Depression, the Federal Housing Administration (FHA) was created to support single-family home financing with more flexible terms than conventional loans by offering mortgage insurance. During World War II the Veterans Administration (VA) began providing similar guarantees on veterans’ mortgages with nonconventional terms. The Department of Housing and Urban Development’s (HUD) regulations authorizing home loan purchases by government-sponsored enterprises and securitization in the secondary mortgage market helped promote lending to low- and moderate-income borrowers and those living in underserved areas.

Public funding has helped borrowers purchase homes with a lower down payment or closing costs, higher loan-to-value ratio, lower qualifying income or more favorable mortgage interest rate and enabled underwriting flexibility for borrowers with imperfect or little credit.

#### Mortgage Industry Innovations

In the past two decades, the mortgage industry has introduced many innovative private lending products and options for traditionally unqualified borrowers. Credit scoring technology enabled lenders to perform automated risk-based pricing of mortgages for prospective borrowers with different levels of creditworthiness. Instead of being declined a loan, more and more borrowers with high credit risk obtained costly subprime mortgages with higher interest rates, adjustable-rate mortgages with low teaser rates or interest-only loans with no principal payments early in the loan term.

In recent years, issuance of private mortgage-backed securities and active investor involvement in the secondary market have increased loan liquidity and mortgage credit supply. In contrast to a decline in government-backed FHA and VA loans, the volume of securitized nonprime loans rocketed to $508 billion in 2005 (Figure 1).

During the same time, historically low interest rates, relatively stable economic growth and rapid housing appreciation contributed to high demand for housing credit. Government support, legislative efforts, technological and structural changes in the mortgage industry, and favorable economic conditions boosted the U.S. homeownership rate to 69 percent in 2005 after 10 years of near continuous growth.

#### Subprime Mortgage Turmoil

The homeownership increase does not come without a caveat: rising concern about the deterioration of loan quality, and particularly subprime mortgages. Some subprime lenders and mortgage brokers, driven by excessive incentives to make and sell loans, engaged in unscrupulous practices, such as lending to borrowers with limited capacity to repay. Borrowers with little financial knowl-

![Figure 1: Nonprime Mortgage Originations, 1995–2005](chart.png)

**Figure 1**

**Nonprime Mortgage Originations, 1995–2005**

Bilions of dollars

<table>
<thead>
<tr>
<th>Year</th>
<th>VA originations</th>
<th>FHA endorsements</th>
<th>MBS issuance</th>
<th>FHA originations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>60</td>
<td>100</td>
<td>500</td>
<td>60</td>
</tr>
<tr>
<td>1996</td>
<td>55</td>
<td>90</td>
<td>550</td>
<td>55</td>
</tr>
<tr>
<td>1997</td>
<td>50</td>
<td>80</td>
<td>500</td>
<td>50</td>
</tr>
<tr>
<td>1998</td>
<td>45</td>
<td>70</td>
<td>450</td>
<td>45</td>
</tr>
<tr>
<td>1999</td>
<td>40</td>
<td>60</td>
<td>400</td>
<td>40</td>
</tr>
<tr>
<td>2000</td>
<td>35</td>
<td>50</td>
<td>350</td>
<td>35</td>
</tr>
<tr>
<td>2001</td>
<td>30</td>
<td>40</td>
<td>300</td>
<td>30</td>
</tr>
<tr>
<td>2002</td>
<td>25</td>
<td>30</td>
<td>250</td>
<td>25</td>
</tr>
<tr>
<td>2003</td>
<td>20</td>
<td>20</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>2004</td>
<td>15</td>
<td>10</td>
<td>150</td>
<td>15</td>
</tr>
<tr>
<td>2005</td>
<td>10</td>
<td>0</td>
<td>100</td>
<td>10</td>
</tr>
</tbody>
</table>

**NOTE:** MBS is mortgaged-backed securities.

**SOURCE:** Joint Center for Housing Studies, Harvard University, 2006.
edge to choose suitable loan products were especially attracted by the easy availability of mortgages with low initial payments.

Subprime mortgages accounted for approximately 20 percent of the dollar value of loan originations and about 7 percent of mortgage debt outstanding in 2005, according to Home Mortgage Disclosure Act (HMDA) data. In mid-2007, outstanding first-lien subprime mortgages accounted for about 14 percent of all first-lien mortgages. The Mortgage Banker Association’s (MBA) National Delinquency Survey data for second quarter 2007 suggest that about 40 percent of delinquent mortgages are subprime and about 15 percent of all subprime mortgages are delinquent. Increasing delinquencies and foreclosures have jeopardized the sustainability of homeownership for these households.

Low- and moderate-income borrowers lack financing alternatives and are more likely to become victims of abusive lending. This is troublesome because these borrowers have few assets other than their homes and less flexibility in adjusting to changing economic circumstances. The threat of foreclosure may devastate a household and offset any barely realized gains from homeownership.

As housing appreciation slows and adjustable-rate mortgages reset at higher interest rates, the increase in subprime mortgage delinquencies and foreclosures will continue, and the impact may spread beyond the subprime market. Concentrated foreclosures and forced sales in some neighborhoods have dragged down property values and exacerbated the lagging home sales and housing appreciation. Investors in the secondary market are reevaluating risks associated with mortgage-backed securities, making it more difficult for lenders to originate and sell loans. Consumers may need to be more prudent spenders based on their available income and possibly shrinking home equity.

Despite the spillover effects of the subprime mortgages on the economy, prime mortgages overall are performing relatively well. The majority of homeowners are still able to make their payments, preserving ownership and its potential benefits.

**Public Program Outcomes**

Less attention has been given to those mortgages that are government-backed or originated with the assistance of various public programs. The share of these loans in the mortgage market has declined substantially in recent years due to the increased availability of private loan products and escalating housing prices. However, the participants of these programs are typically low- and moderate-income households with higher credit risk; without public assistance, they might have purchased their homes with a subprime mortgage.

A down-payment or closing-cost assistance program is one of the most common government-supported approaches to promoting homeownership. Combined with FHA or other government-backed affordable lending products, these programs have helped close the gap between the limited savings of lower-income borrowers and the down-payment requirements for a primary mortgage. As a result, these borrowers can achieve a lower loan-to-value ratio and build equity faster. Studies show that among various affordable lending programs, down-payment or closing-cost assistance is most effective in addressing the wealth constraints of underserved homebuyers. Small amounts of assistance can stimulate fairly large numbers of renters to buy homes.

Besides creating homeownership, these programs have definite consequences for both participants and communities. Empirical evidence shows that household income among new homeowners typically rises relatively rapidly. However, for some low- and moderate-income people who buy homes through public assistance programs, high mortgage payments and maintenance costs may exhaust their financial resources and leave them with no cushion in the event of a financial crisis.

So two questions arise: Does access to public funds for down-payment assistance help or hurt those who receive them? And does subsidizing homeownership result in increased community stability because of participants’ vested interest or in declining neighborhood conditions because the recipients are so financially stretched that they fail to maintain their homes?

**City of Dallas Mortgage Assistance Program**

Down-payment assistance programs can be implemented by state, county or city governments. The Community Affairs Office at the Dallas Fed analyzed local and regional data related to the city of Dallas’ Mortgage Assistance Program to assess the impact of the affordable lending program on the individual borrowers and their neighborhoods.
The Dallas Mortgage Assistance Program (MAP) was established in October 1991 and has been administered by Enterprise Community Partners, Inc. (formerly known as the Enterprise Foundation). It is one of the largest down-payment assistance programs in the nation. Relative to other cities its size, Dallas has a large supply of housing with prices lower than FHA 203B limits, the maximum loan amounts required for the local program. As of August 2007, Enterprise had closed 6,170 MAP loans, and total subsidies had exceeded $55 million. The program has been mainly funded with HUD block grants through three programs—HOME Investment Partnerships Program, Community Development Block Grant Program and American Dream Downpayment Initiative.

To qualify for a zero-interest second-lien MAP loan, client households must be first-time homebuyers with total household income of 80 percent or less of the Dallas-area median. The first lien is a mortgage loan from a traditional lender, while the MAP loan assumes second-lien status. The current second-lien MAP loan has an eight-year recapture period. One-eighth of the loan is forgiven each year as long as no default occurs and the property remains the borrower’s principal residence. MAP funds are used primarily for down-payment and closing-cost assistance, although they may also cover some of the seller’s repair costs.

There are numerous requirements for both the borrowers and the properties. In particular, borrowers must successfully complete a homeowner education course from an approved provider and apply for MAP funding through a city-approved lender.

Approximately 85 percent of the geocoded MAP properties were located in HUD low- and moderate-income census tracts (Figure 2). On average, MAP participants received a total subsidy of $11,015, which includes assistance for closing or repair costs and the second-lien amount of almost $9,800.

All program participants were low- or moderate-income households. Among the MAP participants for the years 1997–2006, 1,918 (46.9 percent) fell into an income range below 50 percent of area median income, 1,480 (36.2 percent) fell between 50 percent and 67 percent, and only 693 (17 percent) fell between 68 percent and 80 percent. In terms of race and ethnicity, 2,413 (59 percent) were Hispanic, 1,534 (37.5 percent) were African-American and 128 (3 percent) were white. Approximately 29 percent of the households were headed by females, 30 percent by single parents and 16 percent by single mothers.

MAP Impacts on Participants

Of the loans made during the period 1997–2006, 74.5 percent were FHA-backed and 24.5 percent were conventional; all were fixed-term. Nearly 40 percent of the homes were newly constructed. The mortgage interest rate on MAP properties ranged from 4.63 percent to 11.99 percent, with an average of 7.08 percent. This suggests that these loans were made to eligible borrowers at reasonable prices.

A household is considered to have a housing cost burden if it spends 30 percent or more of its income on housing costs (similar to the housing expenses used to calculate front-end ratios in underwriting). About 46.7 percent of MAP households had housing cost burdens based on their front-end ratios. This was slightly lower than the 48.6 percent of low- and moderate-income households citywide that reported housing cost burdens in the 2000 census.

A household has a severe housing cost burden if it spends 50 percent or more of its income on housing. Only 0.2 percent of MAP participants with front-end ratios recorded had a severe housing burden. While the city’s percentage of low- and moderate-income households with severe housing cost burdens in 2000 was 23.1 percent, very few MAP participants fell into this category. This low level implies that the MAP underwriting process has prevented applicants from borrowing more than they can afford.

MAP sales data are only available since 2000. Of the 192 geocoded MAP properties sold from 2000 to 2006, the average amount forgiven by MAP was $1,868, and the average length of stay was 6.5 years. Only 52 of the 192 properties’ purchase and sale prices were identified in Multiple Listing Service. For these 52 homes, the average difference between the purchase and sale prices was $32,676, unadjusted for inflation, and the average equity gain was $33,367. Only one of the 52 sold for less than the purchase price. The average length of stay was 6.7 years.

Of the 554 refinancing records for 1999–2006, 89 provide reasons for the action. Forty-one were refinanced for debt consolidation, 38 for rate reduction, eight for foreclosure...
Figure 2
Distribution of MAP Properties

NOTE: Income levels are defined as percentages of Dallas area median income.
SOURCE: Federal Reserve Bank of Dallas.
preference and two for loan modification. On average, the refinancing rate is 1.53 percentage points lower than the original, and the difference is statistically significant. This suggests that MAP participants who refinanced received a lower mortgage interest rate on average, although some may have refinanced to a higher rate to consolidate debt or prevent foreclosure.

Because we only have records on defaulted MAP loans (those homes posted for foreclosure sales after 90-day delinquency) for the period 1997–2005, we compare the default rates with Texas’ 90-day delinquency rates in the MBA data for those years. This enables us to examine how MAP loans performed relative to the state aggregate.

During the eight fiscal years reported for the MAP program (1997–2005), 3,438 loans were completed. Of these, 165 defaulted and 227 were posted for foreclosure sale. The MAP default rate of 4.8 percent was 0.8 percentage point higher than the 4 percent average annual 90-day delinquency rate for all mortgage loans. However, it was 3.6 percentage points below the average annual 90-day delinquency rate (8.4 percent) for all FHA loans over the same period.

Because we believe that without downpayment and closing-cost assistance the majority of MAP participants might have resettled to subprime mortgages, we compared the MAP default rate with the average annual 90-day delinquency rate for conventional subprime loans. The MAP default rate was 4.8 percentage points lower.

We also compared MAP foreclosure rates with the MBA’s Texas data for the same period. Of the 165 MAP defaults, 115 indicate loan status. In 35 cases, the loans were reinstated or closed with modification or prepayment; in 25 cases, the loan holders filed bankruptcy; and in 57 cases, the property was foreclosed. Weighted by sample size, the foreclosure rate is 2.4 percent, very close to the 2.5 percent average annual foreclosure rate for all FHA loans. However, the MAP foreclosure rate is 4.3 percentage points below the 6.7 percent average annual foreclosure rate for all subprime conventional loans during roughly the same period.

While a small number of MAP participants sold their properties, the majority still live in their homes. The average length of stay for the 165 default borrowers (based on closing and foreclosure posting dates) was about 4.6 years. This indicates that most participants still own their homes three years after purchase—the most likely time to terminate homeownership. MAP gradually forgives the second-lien loan as borrowers remain in their homes and do not default. This incentive for equity building seems to have increased participants’ residential stability.

In the small sample of 83 defaults occurring since 1997, when demographic information began to be recorded, mortgage interest rate and family size did not seem to be correlated with default status. However, there were more single-parent households (by 9 percentage points), female-headed households (by 5 percentage points) and African-American households (by 23 percentage points) in the default pool than in the application pool. Despite the small sample size, this suggests that some characteristics of these families make them more vulnerable and likely to lose their homes. The housing burden of these families may not have been fully captured by underwriting variables such as the front- or back-end ratio.

Overall, based on the limited data available, the impact on individual households participating in Dallas MAP appears to be beneficial. MAP households are not as likely to purchase a home that is too expensive in relation to income. As a consequence, the MAP default and foreclosure rates are much lower than those for subprime loans—the most likely alternative for low-income households—in Texas.

MAP Impacts on Neighborhoods

The benefits and costs of a program like Dallas MAP may extend beyond individual participants into surrounding neighborhoods and communities. Homeowners have an incentive to preserve their equity by maintaining their homes, providing positive external benefits to neighboring properties. However, MAP makes homeownership accessible to an income group that, without the program, might not be able to afford a home with a prime-rate mortgage. The program has the potential to produce clusters of poverty—or at least reduced incomes—in neighborhoods that might not otherwise have as many lower-income families. The myriad potential social problems associated with concentrations of low-income residents could cause either a perceived or real change in the area’s quality and, therefore, depreciate neighboring properties.

To test for these potential impacts, we divide the census block groups into two groups: one having a large number of MAP participants and one with only a few participants. Because community changes are usually highly correlated with property value changes and studies have used housing prices or property values to measure neighborhood quality changes, we compared the changes in the average median property values of these two groups since MAP’s inception in the early 1990s. The comparison shows that neither the number of MAP homes per block group nor the density of MAP homes in the block group made a difference in the average median property value appreciation of the two groups.

In an ongoing study, we use data on individual properties in proximity to MAP to further examine the program’s impact on the sales price of neighboring properties. Preliminary results indicate that MAP properties tend to locate in slowly appreciating neighborhoods. The inflow of MAP participants contributes to home-price appreciation in neighborhoods with higher percentages of minorities or lower median home values. However, the inflow of MAP participants seems to decelerate the appreciation in neighborhoods with relatively low percentages of minorities or higher median home values. This suggests a need for future study on how and why demographic composition affects these changes in property values.
Both the aggregate and individual-level studies imply that Dallas MAP provides a path for low-income households to experience the benefits of homeownership without systematically detrimental impacts to surrounding properties.

**Policy Implications**

As more and more low- and moderate-income households gain access to homeownership opportunities through a variety of innovative public or private home-financing products, many challenges arise.

**Importance of Sound Lending Practices**

Risk-based pricing, coupled with non-traditional mortgages, has financially overburdened some high-risk borrowers, leading to delinquency and foreclosure. In recent years, the traditional relationship between lenders and borrowers became looser when lenders could easily sell mortgages and dissipate credit risk. But when secondary market investors realized the inaccurately measured risks associated with some mortgage-backed securities, they declined to take further risks, plunging lenders into a liquidity crunch. The subprime mortgage fallout has proved that foreclosure is costly for almost all parties.

Rather than waiting for market forces to tighten up underwriting standards, lenders could have avoided or reduced losses by assessing more carefully borrowers’ repayment ability and offering high-risk borrowers more suitable loans. For example, the Dallas MAP has provided up-front cost assistance to low- and moderate-income borrowers so that they obtain mortgages they can afford. To qualify for the program, applicants must verify their continuous and successful employment history, and the city-approved MAP lenders can only issue prime mortgages. These sound lending practices help explain the relatively good loan performance.

There are also arguments for more regulation of unscrupulous mortgage-lending behavior. The profits of independent mortgage brokers and predatory lenders are not always connected to loan performance. To address these issues, correct incentive mechanisms should be established along with prudent regulations.

**Importance of Homebuyer Education**

Whether borrowers obtain prime or subprime mortgages, it is critical that they properly assess their capacity to repay the loan. The homebuying process is so complicated that it is almost impossible for borrowers to fully understand their options. Lenders and community-based organizations can play an active role in educating potential borrowers about making good choices to build assets. Better preparing borrowers for homeowner responsibilities also helps protect lenders and investors from losses due to foreclosure. Dallas MAP’s mandatory pre-purchase homebuyer education has probably contributed to the relatively fewer delinquencies and foreclosures.

For some households in certain areas, homeownership may not be the best choice. And realization of homeownership benefits is neither automatic nor immediate after purchase. In addition to helping people who have already made a homebuying decision, financial education can help families that are not sure about whether to rent or buy as well as those that have purchased a home but may not know how to maintain it and sustain homeownership.

**Subsidized Homeownership Programs and Mixed-Income Housing**

Many perceived homeownership benefits are associated with the mixed-income nature of neighborhoods, where residents can have a safe and diverse environment, better services and amenities, and upward mobility, especially for youth. Unlike low- and moderate-income renters in most public housing programs, participants in subsidized homeownership programs have more flexibility in choosing their homes’ location and so are distributed in a more scattered pattern than subsidized renters.

However, the majority of MAP program participants still reside in low- and moderate-income census tracts, which suggests a lack of availability of affordable units in higher-income neighborhoods.

**Sustaining Homeownership**

Mortgage assistance programs provide local governments a way to leverage federal dollars toward low-income housing. Such public programs effectively harness private resources (mortgages) to help alleviate the critical shortage of affordable housing options in most American cities. Our study suggests that along with sensible lending and homebuyer education, these programs sustain homeownership in low-income households by mitigating the financial risk that people can encounter when they purchase a home.

**Notes**

1 For more details, see MAP manual for FY 2007–08 at www.dallasmap.org under “Exhibits and Forms.”
2 Prior to 1997, only the loan amount, applicant names, property addresses and closing dates were included in the database. Since 1997, property features and participant demographics have been collected.
3 The comparison was made with a t-test between the averages of the original and the new rates for 253 MAP participants with both rates available in the database.
4 If all default rates with unknown status were foreclosed, the MAP foreclosure rate would be 3.4 percent—still 3.3 percentage points lower than the subprime rate.
6 Comparisons are also made between groups of census block groups with high versus low density of MAP participants. For more details about the comparison methods and discussion of the results, see “The Impact of the Mortgage Assistance Program in Dallas, Texas,” by Wenhua Di, Jielai Ma and James C. Murdoch, Williams Review vol. 2, October 2007, pp. 59–85.
7 The difference in home value appreciation between the two groups remains insignificant after controlling for demographic variables, such as high school attainment, per capita income, vacancy rate, owner-occupancy rate, unemployment rate and minority rate.
8 We use a reduced-form hedonic price model to assess the impact of MAP on sales prices of neighboring houses, controlling for their characteristics, time of sale and local amenities. We also run models with only repeated sales to eliminate the effects of time-invariant factors that might cause potential spatial correlation in neighboring home prices.