

The Potential and Limitations of Mortgage Innovation in Fostering Homeownership in the United States

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EXECUTIVE SUMMARY

Homeownership—Achievement and Challenge and the Role of Housing Finance

- Although homeownership has been realized by approximately two-thirds of all American households (67.1 percent as of the first quarter of 2000), a historical high, it remains a dream for many racial and ethnic minority and low-income populations, recent immigrants, and others referred to as traditionally underserved populations. As of the first quarter of 2000, the homeownership rate was 47.4 percent for non-Hispanic black households and 45.7 percent for Hispanic households.
- The challenge of broadening homeownership is daunting. Information from the Survey of Income and Program Participation (SIPP) reveals that in the mid-1990s, the median renter household income in the United States was just \$21,600, and median renter household assets were only \$300. Financial constraints are especially severe among the traditionally underserved. Non-Hispanic black renters, for example, have a SIPP-reported median household income of \$15,400 and median assets of \$0.
- Innovation in home purchase lending (for example, allowing lower down payments and higher debt ratios) has become a central policy instrument in efforts to broaden access to homeownership.

Study Objective and Methodology

- This study by the Center for Urban Policy Research (CUPR), Rutgers University, included a nationwide empirical analysis of the potential and limitations of mortgage innovation in helping increase homeownership among renters, especially the underserved.
- Using data available as of 1998–99, we analyze the effects of a range of mortgage products, which have been organized into the following typology:

1. *Historical Mortgages*—standard mortgages as they existed through the two decades before 1990.
 2. *GSE Standard Mortgages*—loans conforming to the current (1990 and subsequent) standard mortgage guidelines of the government-sponsored enterprises (GSEs).
 3. *GSE Affordable Mortgages*—more affordable and flexible current loans developed by the GSEs that share characteristics such as high loan-to-value ratios (LTVs) and credit flexibility. *Emerging GSE Affordable Mortgages* represent further innovations in GSE products that have recently become available.¹
 4. *Portfolio Affordable Mortgages*—more affordable and flexible current mortgage instruments that are held in portfolios by individual lenders. These loans exceed the parameters of the GSE Affordable Mortgages.
 5. *Governmental Affordable Mortgages*—publicly backed loans, such as mortgages insured by the Federal Housing Administration (FHA; e.g., Section 203), that are often used by lower-income and minority borrowers.
- The affordability analysis of the different mortgages encompasses two measures:
 1. *Reference home-buying capacity* is the percentage of current renters able to afford either a target-priced home (the predicted housing consumption of current renters based on the observed choices of similar former renter families that purchased homes during the mid-1990s) or a benchmark criterion-priced home. We use three criterion-priced homes: a median-priced home (50th percentile), a modestly priced home (25th percentile), and a low-priced home (10th percentile).
 2. *Absolute home-buying capacity* is the dollar home-purchasing power of renters (measured as the aggregate purchasing power above the low-priced house as the minimum threshold or as the mean/median purchasing ability of renter families).
 - We analyze reference home-buying capacity and absolute home-buying capacity by applying synthetic underwriting models that reflect the respective mortgage's underwriting criteria and that incorporate all of the costs associated with buying a home (e.g., closing expenses, mortgage insurance, required reserves). The model is applied to the SIPP-reported income, asset, and debt data for the 25.8 million renter families in 1995 and for various renter subgroups (e.g., non-Hispanic black renter families [4.5 million] and Hispanic renter families [4.0 million]).

¹ We recognize that the “emerging” mortgage category is a rapidly moving target and that even more aggressive products than those considered here have been introduced since the research for this report was conducted. The same observation applies to portfolio mortgages.

- Our approach builds from and extends the methods used in other widely cited affordability estimates, such as the *Who Can Afford to Buy a House* series (Savage 1997, 1999; Savage and Fronczek 1993).

Study Findings: The Achievements and Limitations of Mortgage Innovation

- Compared with their predecessors, current mortgage instruments are much more potent in furthering homeownership. Total national absolute home-buying capacity, which was approximately \$314 billion under the Historical Mortgage, has increased to a range of \$500 billion to \$600 billion under today's more liberal mortgages (summary table 1). Expressed another way, the *delta*, or gain, in home-buying capacity from the Historical Mortgage to today's more liberal mortgage products is roughly \$300 billion.
- Affordability, as measured by reference home-buying capacity, also has increased. Under the Historical Mortgage, only 3.8 percent of renter families (1 million) could afford to purchase their "dream house" (i.e., the target-priced home). With the most aggressive mortgage instruments considered here, approximately 8 percent (2 million) of renter families can do so. When measured against the historical baseline, approximately 1 million more renters can potentially buy the target house with the currently available mortgage instruments.
- Of today's loan products, the more liberal instruments offer incrementally rising home-buying opportunities. The national home-buying capacity is about \$388 billion for the GSE Standard Mortgage, and it is in the \$511 billion to \$601 billion range for the Portfolio Affordable and Governmental Affordable Mortgages (summary table 1).
- The FHA loans are some of the most potent mortgage products offered. Because these products have, in fact, been offered for several decades, FHA must be credited as a trailblazer of contemporary mortgage innovation.
- Major hurdles remain. Even the most aggressive mortgages (FHA included) allow only 2.0 million renter families to realize target-priced homeownership, leaving approximately 24 million renters unserved at the target level. The most aggressive product leaves at least 21 million renter families—or approximately 80 percent of the total—*unable* to enter homeownership at even the low-priced threshold. Less advantaged subgroups (e.g., blacks and Hispanics) fare even worse.
- Even the most aggressive mortgage market innovations cannot, in and of themselves, address the low incomes and negligible wealth of most renters. Among the 23 million renters who are unable to afford a modestly priced home under GSE Standard criteria, two-thirds are "doubly constrained": they have insufficient in-

Summary Table 1. Impact of Alternative Mortgage Instruments: Absolute and Reference Home-Buying Capacity for All Renters, Nationwide

Loan Name	Absolute Home-Buying Capacity			Reference Home-Buying Capacity (Percentage of Renters Who Could Afford the Indicated House)			
	Total National Home-Buying Capacity ^a (in \$ Billions)	Average/Median Home-Buying Capacity ^b		Target House	50th Percentile House	25th Percentile House	10th Percentile House
		Mean (\$)	Median (\$)				
Historical Mortgage	314.3	12,199	0	3.8	5.1	7.5	10.0
GSE Standard Mortgage (Fannie Mae and Freddie Mac)	387.7	15,049	0	5.0	6.3	9.2	12.1
GSE Affordable Mortgages ^c							
Fannie Mae	477.3	18,526	0	6.4	7.8	11.0	14.3
CHBP; CHBP, 3/2 Option (NA)	538.4	20,898	0	7.2	8.8	12.3	16.2
CHBP; 3/2 Option (A)	445.0	17,273	0	5.9	7.1	10.6	14.1
Fannie 97							
Freddie Mac	516.1	20,032	0	7.0	8.4	11.4	14.9
AG; AG, 3/2 Option (NA)	583.7	22,658	0	7.9	9.4	12.9	16.9
AG; 3/2 Option (A)	518.0	20,108	0	7.0	8.5	11.5	14.8
AG 97							
Emerging GSE Affordable Mortgages							
Fannie Mae	487.5	18,924	0	6.7	8.1	11.3	14.3
Flex 97							
Freddie Mac	539.5	20,940	0	7.5	8.7	11.8	14.9
Community Gold							
Portfolio Affordable Mortgages ^d							
Bank of America Zero Down	511.4	19,850	0	7.1	8.5	11.7	14.9
Bank of America Credit Flex	546.4	21,208	0	7.7	8.8	11.9	14.9
Portfolio Composite ^e	584.1	22,674	0	8.0	9.4	13.0	17.0
Government Affordable Mortgages							
FHA 203(b)—prior ^f	601.3	23,341	0	7.9	9.4	14.2	20.1
FHA 203(b)—current ^g	562.4	21,832	0	7.8	9.2	13.0	17.3

Source: Authors' analysis of 1993 SIPP data.

^a The aggregate value of houses that could be purchased by current renters above a low-priced house threshold.

^b For all current renters, not just renters who can afford at least a low-priced house.

^c A = 3/2 Option is activated (i.e., 2 percent outside funding is forthcoming); AG = Affordable Gold; CHBP = Community Home Buyer's Program; NA = 3/2 Option is not activated (i.e., 2 percent outside funding is not forthcoming).

^d These are selected as examples of the many portfolio mortgages currently offered.

^e Incorporates the mortgage characteristics of a composite of portfolio products.

^f Incorporated FHA(b) terms before 1997.

^g Incorporated FHA(b) terms from 1997 onward.

come to meet monthly mortgage costs, and they have insufficient assets to cover down payment and closing costs.

- Although many renters cannot shift their tenure status solely through mortgage innovation, the incremental gains provided by innovative mortgage products are important achievements—especially those gains made among minority populations. For example, absolute home-buying capacity for black and Hispanic renters increases from approximately \$11 billion and \$10 billion, respectively, under the Historical Mortgage to approximately \$42 billion and \$28 billion, respectively, under today’s more liberal loan products.
- Given the overall commonality of data (SIPP) and methodology (synthetic underwriting model) of the current CUPR approach and that of other researchers such as Savage, we expect and find similar outcomes (summary tables 2 and 3).

Summary Table 2. Percentage of All Renter Families Who Can Afford Various Priced Houses Using a GSE Standard Mortgage

House Price	Savage (1999) (%)	Listokin et al. (%)
Median priced	6.7	6.3
Modestly priced	9.9	9.2
Low priced	12.8	12.1

Summary Table 3. Percentage of Renter Families by Type Who Can Afford a Modestly Priced House Using a GSE Standard Mortgage

Renter Type	Savage (1999) (%)	Listokin et al. (%)
All	9.9	9.2
White (non-Hispanic)	14.4	13.1
Black (non-Hispanic)	3.2	2.7
Hispanic	3.3	1.8

In short, Savage’s findings—that relatively few current renters (about 1 in 10) can afford even a modestly priced house, and that fewer than 1 in 30 black or Hispanic renter families can realize modestly priced homeownership—are essentially reaffirmed in our mortgage simulations.

Policy Implications

- If accepted as an important societal goal, expanding homeownership will require layered interventions. These include furthering mortgage innovation along the

continuum sketched here (e.g., lowering down payment costs, raising debt ratios); reducing the price of housing; reducing transaction costs and the carrying costs of housing; and offering various asset and income subsidies. The most potent intervention is the provision of income and, especially, asset supplements (see summary table 4). For example, a one-time \$10,000 asset infusion could potentially allow almost 36 percent of all renters (and approximately 20 percent of Hispanic renters and 30 percent of black renters) to realize modestly priced homeownership. However, the income and asset supplements (especially the latter) can be very expensive (e.g., the \$10,000 asset supplement costs approximately \$67 billion).

Summary Table 4. Effects of Policy Options by Renter Group

Baseline/Option	Percentage of Renters Nationwide Who Can Afford a Modestly Priced House (%)			Absolute Home-Buying Capacity (in \$ Billions)		
	All	Non-Hispanic Black	Hispanic	All	Non-Hispanic Black	Hispanic
Baseline						
GSE Standard Mortgage	9.2	2.7	1.8	387.7	16.7	13.4
Options						
I. Mortgage term adjustment						
A. 5% interest rate	10.0	2.7	2.1	435.4	18.6	14.5
B. 0% down	11.3	4.0	2.4	472.1	27.9	18.0
II. Housing and transaction cost savings						
A. 10% house price reduction	9.9	2.7	2.0	437.3	18.8	14.9
B. Closing-cost reduction	9.6	2.8	2.0	413.3	19.0	14.4
III. Borrower financial supplement						
A. +\$10,000 annual income supplement	13.1	3.5	3.0	630.7	25.8	21.8
B. +\$10,000 one-time asset supplement	35.6	29.8	20.1	1,280.0	149.7	138.4

Source: Authors' analysis of 1993 SIPP data.

- An elaborate network of implicit and explicit incentives help to subsidize homeownership for middle-income and upper-income families, the most notable being the regressive structure of the mortgage-interest tax deduction. Debate persists over the justification for these subsidies and their role in distorting “natural” market processes, but there is no doubt that such incentives encourage homeownership. Policy makers must decide if the alleged benefits of homeownership (e.g., enhanced personal responsibility, community stability, and economic opportunity) warrant the cost of extending homeownership opportunities to today’s renters. The opportunity is there, but the costs are daunting. For example, the \$67 billion expense of the \$10,000 asset supplement is roughly equal to the annual imputed cost of the current mortgage-interest tax deduction.
- Ultimately, the potential and limitations of mortgage innovation must be evaluated in the context of broader housing policy considerations. Housing finance is constrained by broader housing market and economic circumstances, and efforts to

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ABSTRACT

Homeownership is widely regarded as the foundation of neighborhood stability and long-term wealth accumulation for American families. In turn, home-purchase mortgage lending has become a central policy instrument in efforts to broaden access to homeownership among underserved populations.

This study presents a nationwide empirical analysis of the potential and limitations of mortgage innovation to increase homeownership among underserved populations. We examine the financial and underwriting criteria of a typology of mortgage products, and we develop synthetic underwriting models calibrated with 1993–95 Survey of Income and Program Participation data to account for all direct purchase costs (including itemized components of closing costs and down payments). Our analysis provides comprehensive estimates of a large, untapped market, but even the most aggressive mortgage market innovations can play only a limited role in efforts to deliver the material benefits of homeownership to underserved populations.

INTRODUCTION

Homeownership is widely regarded as the foundation of neighborhood stability and long-term wealth accumulation for American families. Although two-thirds of the households in the United States have achieved homeownership, the rate is much lower for racial and ethnic minority and low- to moderate-income (LMI)¹ populations, recent immigrants, and others referred to as *traditionally underserved* populations. Recent scholarly research, community activism, and regulatory intervention have focused on ways of expanding homeownership opportunities, especially for traditionally underserved populations. However, the limitations of available data and methods have, until recently, made it difficult to estimate how many renters could become homeowners if mortgage underwriting requirements were changed. The purpose of this study, conducted by the Center for Urban Policy Research (CUPR), Rutgers University, is to measure the effects of more affordable and flexible home financing (*mortgage inno-*

¹ LMI is often defined in terms of a percentage of median income. For example, as used here “low income” refers to a household of four earning less than 50 percent of the median income, and “moderate income” refers to a household of four earning between 50 percent and 80 percent of the median income.

vation) on access to homeownership by renters, especially members of traditionally underserved populations.²

The study is organized into the following sections:

1. Background
2. Literature Review
3. Simulation Framework and Models
4. Model Calibration and Analysis
5. Results: Homeownership Affordability
6. Explanation of the Findings
7. Policy Considerations
8. Summary: Achievements and Limitations of Mortgage Innovation
9. Evaluation of Simulation Results
10. Technical Appendices

² Researchers have considered various aspects of the underserved market. Carr et al. (1994a), for example, analyzed the spatial distribution of loans acquired by Fannie Mae and Freddie Mac in order to define underserved and served mortgage markets. (See also Can and Megbolugbe 1995; Carr et al. 1994b.)

BACKGROUND: HOMEOWNERSHIP IN THE UNITED STATES AND STRATEGIES TO ASSIST THE TRADITIONALLY UNDERSERVED

Homeownership in the United States has long been touted as a preferred form of housing tenure, one that offers numerous advantages over renting a home. Alleged benefits of owning a home include equity accumulation, greater involvement in neighborhood activities, greater sense of civic responsibility, improved educational and other achievements by the owner's children, and other socioeconomic gains (Bunce et al. 1996; Dreier 1996; Green and White 1994; Rohe and Stegman 1994a, 1994b; Rohe and Stewart 1995; Rossi and Weber 1996; Scanlon 1996; Shear, Wachter, and Weicher 1988). Given this array of supposed benefits, it is not surprising that homeownership is associated with realizing the "American Dream" (U.S. Department of Housing and Urban Development [HUD] 1995a).

Some researchers have criticized a historical bias by policy makers that has favored property ownership (Krueckeberg 1999). Although the empirical evidence that homeownership benefits both owners and society is supported, it is far from unequivocal (Rohe and Stegman 1994a, 1994b; Rossi and Weber 1996). Further, some studies indicate that many households rent their homes by choice. Varady and Lipman (1994) and Goodman (1999) have identified *lifestyle renters* (e.g., many elderly people and households with adult interests and schedules), who rent their homes because of the flexibility, mobility, reduced portfolio risk, locational benefits (e.g., apartments in adult-oriented downtown areas), and other advantages renting offers. There are also *transitory renters*, for whom renting for a selected period of time is preferable to owning a home (e.g., households temporarily relocated because of a job or for a personal reason). Thus, the benefits of homeownership may be overstated, or the benefits may not always be verifiable. Indeed, homeownership may not be for everyone; furthermore, an individual's preference for homeownership or renting may depend on several factors, including stage of life.

While homeownership may not be a universal good, it nonetheless is deeply ingrained as the American Dream. To realize that dream, billions of dollars in federal tax incentives have been extended to homeowners. Tax and other societal support for homeownership has prompted a dramatic shift to this form of tenure. In 1980, the homeownership rate was almost 66 percent. It then declined to 64 percent in 1990, causing much consternation. Yet homeownership has since rallied to reach a recent historic high; as of the first quarter of 2000, 67.1 percent of all American households were homeowners. The most current (2000) *State of the Nation's Housing* reports that in the last five years alone, the number of owner households grew by 6.9 million (Joint Center for Housing Studies 2000, 17).

Realizing the goal of homeownership is harder for some than for others (Gyourko, Linneman, and Wachter 1996). Since housing is such an expensive consumption item, its purchase is heavily influenced by one's financial position (Gyourko and Linneman 1993). Thus, homeownership understandably correlates with income. As of the first quarter of 2000, 82 percent of all U.S. households with a family income higher than

the median were homeowners, compared with only 52 percent of households with a family income lower than the median (U.S. Bureau of the Census 2000).

Homeownership rates also vary by race and ethnicity, with racial and ethnic minorities much less likely than the rest of the population to be homeowners (Long and Caudill 1992; Wachter and Megbolugbe 1992). As of the first quarter of 2000, the white (non-Hispanic) homeownership rate in the United States was 73.4 percent—much higher than the rate of 47.4 percent for African-American households and 45.7 percent for Hispanic households (U.S. Bureau of the Census 2000). According to the U.S. Bureau of the Census, since 1985, the white (non-Hispanic) homeownership rate has been between 25 and 30 percentage points higher than the African-American or Hispanic homeownership rate (U.S. Bureau of the Census 2000).

These racial and ethnic disparities are the result of a complex set of economic, historical, institutional, and other (e.g., demographic) factors (Gyourko and Linneman 1997). Historically, the nation's housing finance system was designed to predominantly serve the needs of the housing construction industry and white middle-class nuclear families seeking to escape the crowded cities of the interwar period for new opportunities in the suburbs (Hayden 1984; Jackson 1985; Wright 1981). The housing finance system has changed dramatically in recent years, but economic barriers—minorities' reduced income and wealth, and lower levels of intergenerational wealth transfers and upward class mobility—continue to suppress the homeownership rate of African Americans and Hispanics (Gyourko, Linneman, and Wachter 1997). Moreover, there is widespread evidence that racial discrimination persists in various forms in the housing and mortgage markets (Yinger 1995, 1998). The Boston Federal Reserve study provided the most conservative and rigorous measurement of discrimination because it involved the analysis of household financial characteristics actually considered by underwriters. Even after controlling for income, wealth, credit history, and all other factors considered in the loan-underwriting decision, African Americans were approximately 60 percent more likely to be denied mortgage credit than were identically qualified non-Hispanic whites (Munnell et al. 1996). The Boston Federal Reserve study generated a torrent of criticism that focused on issues of omitted-variable bias, data-coding errors, econometric specification, and model fit (Horne 1993; Liebowitz and Day 1992; Schill and Wachter 1993; Zandi 1993). Nevertheless, several reanalyses of the same data yielded similar results (Carr and Megbolugbe 1993), and the Boston Federal Reserve researchers convincingly defended their conclusions in a point-by-point response to their critics (Browne and Tootell 1995). In sum, debate persists on the question of discrimination, and there is little prospect for widespread consensus. While there is universal agreement on disparities in mortgage market outcomes, the question of discrimination remains.

Our study does not address mortgage market discrimination. We start with the observed differences in homeownership attainment and, holding aside its causality, look to ways, through mortgage innovation, to increase the homeownership rate, especially among minority, LMI, immigrant, and similar households. The U.S. National Homeownership Strategy, while attempting to help all Americans, underscores a “special responsibility and an important opportunity to target underserved populations and

communities,” including minorities (HUD 1996, 1). Because financing is key to realizing homeownership, there are growing efforts to improve traditionally underserved populations’ access to credit. Given the multiple barriers faced by minorities and LMI populations in securing credit, the response by the public and private sectors has been multifaceted. Approaches have included attempts to address differential treatment discrimination and differential impact discrimination as well as efforts to relax mortgage borrowing constraints.

Attempts to eliminate discrimination involve strengthened enforcement of existing laws (Federal Reserve Bank of Boston 1993; Federal Reserve System 1996). The Fair Housing Act makes it unlawful for any person who engages in the business of making or purchasing residential real estate loans, or in the selling, brokering, or appraising of residential real estate property, to discriminate based on race, color, national origin, or religion. The Equal Credit Opportunity Act prohibits lending discrimination based on the sex, marital or family status, disability, age, race, color, national origin, or public assistance status of the borrower (Federal Reserve Bank of Boston 1993, 26–27). Although most analysts believe that blatant discrimination is no longer widespread in mortgage financing, there is credible evidence that subtle forms of discrimination do persist (Holloway 1998; Hunter and Walker 1996; Yinger 1995, 1998). Moreover, the mortgage transaction is only one part of a complex set of institutional and social processes involved in housing markets, and various types of discrimination in other housing transactions and in other markets can affect minority access to homeownership (Yinger 1995). Segmentation of minorities into unstable or lower-wage jobs, for example, historically has placed minorities at a disadvantage when underwriting guidelines have required applicants to demonstrate long-term employment or a single source of income. Furthermore, minority home seekers sometimes experience discrimination in their encounters with home sales agents (Turner 1992; HUD 1991). As a consequence, efforts to eliminate discrimination in mortgage financing must be coordinated with a broad-based assault on discrimination in other markets and in the housing search process (Listokin and Wyly 1998; Vartanian et al. 1995; Yinger 1995).

There have also been efforts to expand the availability of more affordable and flexible mortgages. The Community Reinvestment Act (CRA) provides a major incentive. Enacted in 1977 and since amended, CRA requires financial institutions to meet their community’s need for credit in low- and moderate-income neighborhoods, consistent with safe and sound operation of the institution. CRA applies to depository lending institutions with offices in a metropolitan area and with assets above a specific threshold. These lenders are required to prepare CRA statements that define their market community and list the types of credit offered (Fishbein 1992).

Fannie Mae and Freddie Mac, the government-sponsored enterprises (GSEs) that are the preeminent forces in the nation’s secondary mortgage market, have also been called upon to broaden access to mortgage credit and homeownership. The 1992 Federal Housing Enterprises Financial Safety and Soundness Act (FHEFSSA) mandated that the GSEs increase their acquisition of primary-market loans made to lower-income borrowers and to areas unserved by private mortgage credit institutions (Carr et al. 1994a, 1994b). Spurred in part by the FHEFSSA mandate, Fannie Mae

announced a trillion-dollar commitment in 1994 to help 10 million families—particularly those most in need—buy homes of their own (Fannie Mae 1997, 2). Freddie Mac, the other dominant secondary-market institution, has pursued similar initiatives.

The result has been a wider variety of innovative mortgage products. The GSEs have introduced a new generation of affordable, flexible, and targeted mortgages, thereby fundamentally altering the terms upon which mortgage credit was offered in the United States from the 1960s through the 1980s (Gyourko, Linneman, and Wachter 1997; Linneman and Wachter 1989; Listokin and Wyly 1998). Moreover, these secondary-market innovations have proceeded in tandem with shifts in the primary markets: depository institutions, spurred by the threat of CRA challenges and the lure of significant profit potential in underserved markets, have pioneered flexible mortgage products (Listokin and Wyly 1998; Listokin et al. 2000; Schwartz 1998). For years, depositories held these products in portfolios when their underwriting guidelines exceeded benchmarks set by the GSEs. Current shifts in government policy, GSE acquisition criteria, and the primary market have fostered greater integration of capital and lending markets.

These changes in lending herald what we refer to as *mortgage innovation*. To better appreciate the paradigm shift in financing introduced by mortgage innovation, it is instructive to organize the evolving mortgage products into a typology:

1. *Historical Mortgages*—standard mortgages as they existed through the two decades before 1990.
2. *GSE Standard Mortgages*—loans conforming to the current (1990 and subsequent) standard mortgage guidelines of the GSEs.
3. *GSE Affordable Mortgages*—more affordable and flexible current loans developed by the GSEs (e.g., the Fannie Mae Community Home Buyer’s Program™ [CHBP] and Freddie Mac’s Affordable Gold™ [AG]) that share characteristics such as high loan-to-value ratios (LTVs; value of property) and credit flexibility. *Emerging GSE Affordable Mortgages* represent further innovations in GSE products that have recently become available.
4. *Portfolio Affordable Mortgages*—more affordable and flexible current mortgage instruments that are held in portfolios by individual lenders. These loans exceed the parameters of the GSE Affordable Mortgages.
5. *Governmental Affordable Mortgages*³—publicly backed loans, such as mortgages insured by the Federal Housing Administration (FHA; e.g., Section 203), that are often used by lower-income and minority borrowers.

³ This study includes the Governmental Affordable Mortgages as contemporary products (i.e., nonhistorical) even though Federal Housing Administration loans have been offered for many decades.

This study examines the potential and limitations of mortgage innovation in fostering homeownership by current renters, especially those who are members of traditionally underserved populations. While we recognize that homeownership is not for everyone (e.g., lifestyle renters) and that it would be counterproductive to bring the marginally qualified to homeownership if they would shortly thereafter fail, it is instructive to establish the baseline potential of renters to realize homeownership. To this end, we estimate the ability of specific mortgage instruments, grouped according to the mortgage typology described above, to expand homeownership. For example, we examine how many renters can become homeowners through the application of the CHBP, AG, and other GSE Affordable Mortgages. The study estimates the number of renter families who would be served by the various loan products—that is, the number of renters who would qualify for a home purchase loan given the confluence of the families’ financial resources and the terms of the respective mortgages. Renters not realizing homeownership from the alternative loan products are referred to as the *unserved*. We apply a *mortgage simulation*—a modeled mortgage underwriting—to determine who is served and who is unserved.

As noted, the analysis focuses on renter families, defined here as related individuals residing together or persons living alone. Our information on families comes from the 1993 Survey of Income and Program Participation (SIPP). We use the seventh-wave panel of the 1993 survey, which reports information for 1995. Based on our definition of family and wave seven of the 1993 SIPP, our data set contains 25,762,939 renter families in the United States. Our estimate varies from the American Housing Survey (AHS)⁴ estimate for the total number of renters (34,150,000) for several reasons. First, we counted renter families while AHS counted renter *households*. Second, the AHS estimate of 34,150,000 renters is the total number of renter households in 1995. Our estimate is for families who were renters in 1993 and continued to be renters in 1995. Thus, anyone who owned a home in 1993 but rented one in 1995, or who entered the SIPP after 1993, or who was under 18 in wave one, would not be counted, for our purposes, as a renter in 1993.

The analysis of the served compared with the unserved is made for all renters as a group and for all renters by race/ethnicity. Our race/ethnicity categories are non-Hispanic white, non-Hispanic black, non-Hispanic other, and Hispanic. These race/ethnicity groups include both native-born Americans and immigrants. Immigrants include all people not born in the United States, regardless of when they arrived. In addition, we present numbers for *recent* immigrants, defined as renter families whose

⁴ The AHS figure is taken from the *1995 American Housing Survey*, table 2–1, Introductory Characteristics—Occupied Units (HUD 1997, 42).

householder entered the United States after 1984.⁵ This last category is a subset of all renters and is not differentiated by race/ethnicity.⁶

The analysis is applied at the national level because there is insufficient sample size to differentiate mortgage simulations at a more microgeographic level (e.g., metropolitan statistical areas [MSAs]). For example, we cannot with statistical confidence say that x percent of the unserved are in the Washington, D.C., MSA compared with y percent in the Atlanta MSA. Yet while we do not report separate results at the MSA level, we do incorporate important geographic distinctions in our analysis. In gauging homeownership, we incorporate differences in housing prices and renter incomes across the four census regions and nine census divisions.⁷ We also incorporate areal distinctions in property tax rates, closing costs, and other home-buying expenses for eight major and geographically dispersed MSAs: Atlanta; Chicago; Houston; Los Angeles; Miami; New York City; Philadelphia; and Washington, D.C. These area variations, however, are internal to the calculations and, as noted in our findings, are reported on only an aggregate national basis.

We also compare the served and unserved renters by income category, and, in this regard, divide renters into four relative income groups: low, moderate, middle, and upper. Low-income families earn between 0 percent and 49 percent of median family income, moderate-income families 50 percent to 79 percent; middle-income families 80 percent to 119 percent, and upper-income families at least 120 percent. The respective percentages of median income that define each income group are for a family of four, and adjustments are applied for smaller and larger family sizes.⁸

Our approach both builds from and extends prior literature on mortgage simulation and other relevant studies (Bogdon and Can 1997; Gyourko and Tracy 1999; Herbert 1995; Linneman and Megbolugbe 1992).

⁵ The SIPP uses the following categories to define periods of immigration: (1) 1911–59, (2) 1960–64, (3) 1965–69, (4) 1970–74, (5) 1975–79, (6) 1980–81, (7) 1982–84, and (8) 1985–93. Our recent immigrant groups are those indicating response (8) above.

⁶ Non-Hispanic white, non-Hispanic black, Hispanic, and non-Hispanic other renter families are discrete. Combined, they sum to all renter families. Recent immigrant families, those entering the United States after 1984, overlap with the previously listed race/ethnic groups (e.g., non-Hispanic whites and non-Hispanic blacks).

⁷ The census areas are the Northeast Region (New England and Middle Atlantic Divisions), Midwest Region (East North Central and West North Central Divisions), South Region (South Atlantic, East South Central, and West South Central Divisions), and West Region (Mountain and Pacific Divisions).

⁸ For example, for a family of two, the four member–based median family income is reduced by 20 percent; for a family of seven, the median is increased by 24 percent.

LITERATURE REVIEW

In a recent paper, Calhoun and Stark spoke of “synthetic loan underwriting simulations as studies determining the number of households that would qualify to purchase a home under various mortgage assumptions” (1997, 3–4). The most relevant synthetic underwriting research has been produced by the National Association of Home Builders (NAHB 1997), the National Association of Realtors (NAR 1998), Savage (1997, 1999), Savage and Fronczek (1993), and Calhoun and Stark (1997). Another relevant study by Galster et al. (1996) examined the potential size of the homeownership market. Each of these studies is discussed below and summarized in table 1. (See appendix A for a more detailed description.)

Prior Studies

Industry Estimates of Housing Affordability

The intent of the NAHB and NAR work is to develop indices—the NAHB’s Housing Opportunity Index (HOI) and the NAR’s Housing Affordability Index (HAI)—of relative housing affordability over time and by place. The higher the HOI and HAI values, the greater the housing affordability. The HOI and HAI tap a variety of data sources and include numerous underwriting considerations. However, each measure has limitations. The HAI considers the affordability of only median-priced housing (the HOI considers the distribution of home prices), and both the HAI and HOI limit their affordability analysis to median-income families.⁹ Our research design seeks a more diverse range of potential housing selection (i.e., not just the median-priced home) and a wider pool of would-be home buyers (i.e., not just median-income families). Further, the HOI and HAI approaches were never intended to be comprehensive financial underwriting models. The HAI considers only principal and interest (*PI*) payments as part of the housing expense-to-income (front-end) ratio. It omits property taxes (*T*), property insurance (*I*), and mortgage insurance (*MI*), all of which are included in typical front-end ratios used by underwriters.¹⁰ Typical mortgage qualification processes also consider the combination of housing and other debt as a share of income—commonly known as the back-end ratio. Neither the HAI nor the HOI factors in the back-end ratio.

These indices have other limitations. Research has shown that limited assets constrain renters’ ability to purchase a home because they lack sufficient resources for the down payment, closing costs, and other related outlays (Duca and Rosenthal 1994; Linne-man and Wachter 1989). Yet neither the HAI nor the HOI considers renters’ assets:

⁹ One HAI variation, for first-time home buyers, targets units priced at 85 percent of the median and uses the median income of families with heads of household aged 25 to 44.

¹⁰ The HOI compensates, in part, for this by applying a front-end maximum ratio, 25 percent, that is lower than the typical maximum allowed (28 percent).

Table 1. Synthetic Underwriting Studies and Homeownership Affordability Indices

Characteristic	NAHB Housing Opportunity Index (HOI)		NAR Housing Affordability Index (HAI)		Savage (1997, 1999) Savage and Fronczek (1993)		Calhoun and Stark (1997)
	Median-income family	FRM, ^a ARM, ^b and Composite HAIs	First-time Home-Buyer HAI	25- to 44-year-old renters	All owners and renters differentiated by income, race, and other characteristics	FRM, ARM, and Composite HAIs	
Target home buyer(s)	Median-income family	Median-income family	25- to 44-year-old renters	All owners and renters differentiated by income, race, and other characteristics	FRM, ARM, and Composite HAIs	FRM, ARM, and Composite HAIs	All renters differentiated by race and other characteristics
Target housing unit(s)	New and existing home sales	Median-priced existing home sold	85% of median-priced existing home sold	Criterion homes—including low-priced (10th percentile), modestly priced (25th percentile), and median-priced homes (50th percentile)—and maximum-affordable homes	FRM, ARM, and Composite HAIs	FRM, ARM, and Composite HAIs	Maximum-affordable homes: 50th percentile compared with target-priced homes suggested by consumption of similarly situated owners
Geographic area(s)	200 largest metropolitan areas	United States/ census regions	United States/ census regions	United States/ census regions/divisions	United States/ census regions/divisions	United States/ census regions/divisions	United States/census regions/divisions
Financial Qualification Considerations	FRM-ARM Composite	Varies: FRM, ARM, and FRM-VRM ^c Composite	FRM-ARM Composite	FRM	FRM	FRM	FRM
1. Mortgage type	FRM-ARM Composite	Varies: FRM, ARM, and FRM-VRM ^c Composite	FRM-ARM Composite	FRM	FRM	FRM	FRM
2. Mortgage LTV	90%	80%	90%	95% (FHA—95%–97%)	95% (FHA—95%–97%)	95% (FHA—95%–97%)	80%–100% (range)
3. Down payment	10%	20%	10%	5% (FHA—3%–5%)	5% (FHA—3%–5%)	5% (FHA—3%–5%)	20%–0% (range)
4. Home-buyer assets	No	No	No	Yes	Yes	Yes	Yes
5. Housing expenses	Yes	Yes	Yes	Yes	Yes	Yes	Yes
a. Principal and interest	Yes	No	No	Yes	Yes	Yes	Yes
b. Property taxes	Yes	No	No	Yes	Yes	Yes	Indirectly
c. Home insurance	Yes	No	No	Yes	Yes	Yes	Indirectly
d. Mortgage insurance	No	Not applicable ^d	Yes	Yes	Yes	Yes	Indirectly
6. Maximum percentage of income allowed for housing expenses	25%	25%	25%	28% (FHA—29%)	28% (FHA—29%)	28% (FHA—29%)	28%–38% (range)
7. Existing debt	No	No	No	Yes	Yes	Yes	Yes

Table 1. Synthetic Underwriting Studies and Homeownership Affordability Indices (continued)

Characteristic	NAHB Housing Opportunity Index (HOI)		NAR Housing Affordability Index (HAI)		Savage (1997, 1999) Savage and Fronczek (1993)	Calhoun and Stark (1997)
	FRM, ^a ARM, ^b and Composite HAIs	First-time Home-Buyer HAI	FRM, ^a ARM, ^b and Composite HAIs	First-time Home-Buyer HAI		
8. Maximum percentage of income allowed for housing expenses and debt	Not considered	Not considered	Not considered	Not considered	36% (FHA—41%)	33%—43% (range)
9. Credit record/other underwriting variables	No	No	No	No	No	No
10. Closing costs considered	No	No	No	No	Yes	No
11. Major data sources	Experian, Census	Census	Census	Census	Census, SIPP, many others	NSFH, ^e others

^a Fixed-rate mortgage.

^b Adjustable-rate mortgage.

^c Variable-rate mortgage.

^d Mortgage insurance is not required for loans with at least a 20 percent down payment.

^e National Survey of Families and Households.

Context of the Current Investigation and Prior Literature

It is useful at this point to place our current investigation in the context of relevant past literature and research:

1. Because the purpose of this study is to identify who is served and who is not served by mortgage innovation, we need to synthetically model the mortgage process as closely as possible. For this reason, the HOI and HAI approaches do not suffice (they were not intended to perform such a duty), but the work of others is more relevant.
2. We model our synthetic underwriting financial calculations on the *Who Can Afford to Buy a House* approach, the most comprehensive synthetic macroscale underwriting research done to date (Savage 1997, 1999; Savage and Fronczek 1993). Savage and Fronczek itemize the housing expenditures of the front-end ratio (PI, T, I, MI); include debt, so that back-end ratio considerations can be incorporated; factor in closing costs; and in other ways approximate the realities of mortgage qualification. We also use the same database (the SIPP) as that used by Savage and Fronczek.
3. We build upon the Savage and Fronczek financial calculations by applying the synthetic underwriting for a menu of mortgages organized by the typology of loans (GSE Standard, GSE Affordable, Portfolio Affordable, Governmental Affordable, and Historical Mortgages). By comparison, Savage and Fronczek incorporated only two mortgage types: conventional and FHA. In this regard, our work functionally resembles the wide range of mortgage terms incorporated by Calhoun and Stark (1997); however, we target specific mortgage products, whereas Calhoun and Stark did not.
4. We further augment the Savage and Fronczek (and Calhoun and Stark) analyses by incorporating credit record information into the synthetic underwriting. Since our credit data and credit score assignment have severe limitations, our credit underwriting must be regarded as an exploratory effort to be refined in the future. (The results of the pilot credit underwriting are reported in appendix B.)
5. Savage and Fronczek measure housing affordability with respect to the household's ability to purchase a benchmark (i.e., criterion) home and through dollar values (e.g., a mean- or median-priced affordable home under different mortgage products). We follow Savage and Fronczek in this regard and use both a benchmark approach and a dollar measure of home-buying capacity.

income). For instance, Linneman and Wachter (1989, 391) related the housing services a family desires to purchase (with that capitalized value designated as V^*) as a function of the family's income (labeled as I) and a vector of preference variables labeled \mathbf{X} , with that overall relationship expressed as $V^* = V(I, \mathbf{X}; \mathbf{b})$, where \mathbf{b} is a vector of parameters.

6. Although our financial analysis is an enhanced version of the basic Savage and Fronczek approach, we depart somewhat from these authors with respect to the benchmark housing used in analyzing affordability. Savage and Fronczek examine the affordability of criterion homes. As there is an inherent attraction to using the criterion homes as a benchmark, we present estimates for the criterion homes at the metropolitan median, as well as estimates for modestly priced homes (25th percentile) and low-priced homes (10th percentile).¹² Yet, as discussed earlier, such an arbitrary price-point approach does not consider the appropriate-shelter frame of reference for any given family. We therefore also link a renter family to a housing unit based on observed consumption, as introduced by Calhoun and Stark and others (e.g., Linneman and Wachter 1989). Our basic consumption model identifies the price of the housing unit each renter family would seek if its behavior conformed to the behavior of comparable renters who previously moved to homeownership. The unit with a price calibrated in this way is termed the *target house*.

As noted, there can be various target houses. Galster and colleagues (1996) use as a reference the housing consumption of the least constrained group—white renters who recently attained homeownership. Calhoun and Stark present affordability analyses based on the consumption of all recent buyers. Galster and colleagues’ standard benchmarks are appropriate in a world unconfounded by historical racial and other barriers, whereas Calhoun and Stark orient their benchmarks to the world as it exists.

In the current investigation, we benchmark the target house according to the approach used by Calhoun and Stark—that is, the analysis is based on the consumption of all renters who recently moved to homeownership. We note, however, that target prices would be higher were the Galster and colleagues approach used.

¹² While Savage and Fronczek examine six different criterion homes, our investigation will use three that span the more modestly priced housing spectrum.

SIMULATION FRAMEWORK AND MODELS

Our overall simulation framework and the data used to calibrate its component models are summarized in figure 1. The framework comprises three major models. The *Housing Consumption Model* estimates the price of the housing unit that each renter family would seek if its behavior conformed to that of all first-time home buyers entering the market in the mid-1990s. The Housing Consumption Model yields a target or reference unit of housing consumption for each renter family. To provide comparability with Savage and Fronczek, criterion-priced homes are considered here as well. The target or criterion home thus provides the reference or benchmarked unit of housing consumption. This is followed by the *Mortgage Model*, in which alternative mortgage instruments are used to estimate the maximum purchase price for which each renter family could qualify based on its financial characteristics. The Mortgage Model also provides other measures of home-buying capacity for each mortgage product, such as the aggregate value of housing that could be purchased using the product. Given that credit is a key underwriting consideration, a pilot credit submodel, admittedly with many limitations, informs the Mortgage Model. Finally, the *Affordability Analysis* model compares a family's reference house prices with the maximum-priced house for which it could qualify and provides other measures of affordability.

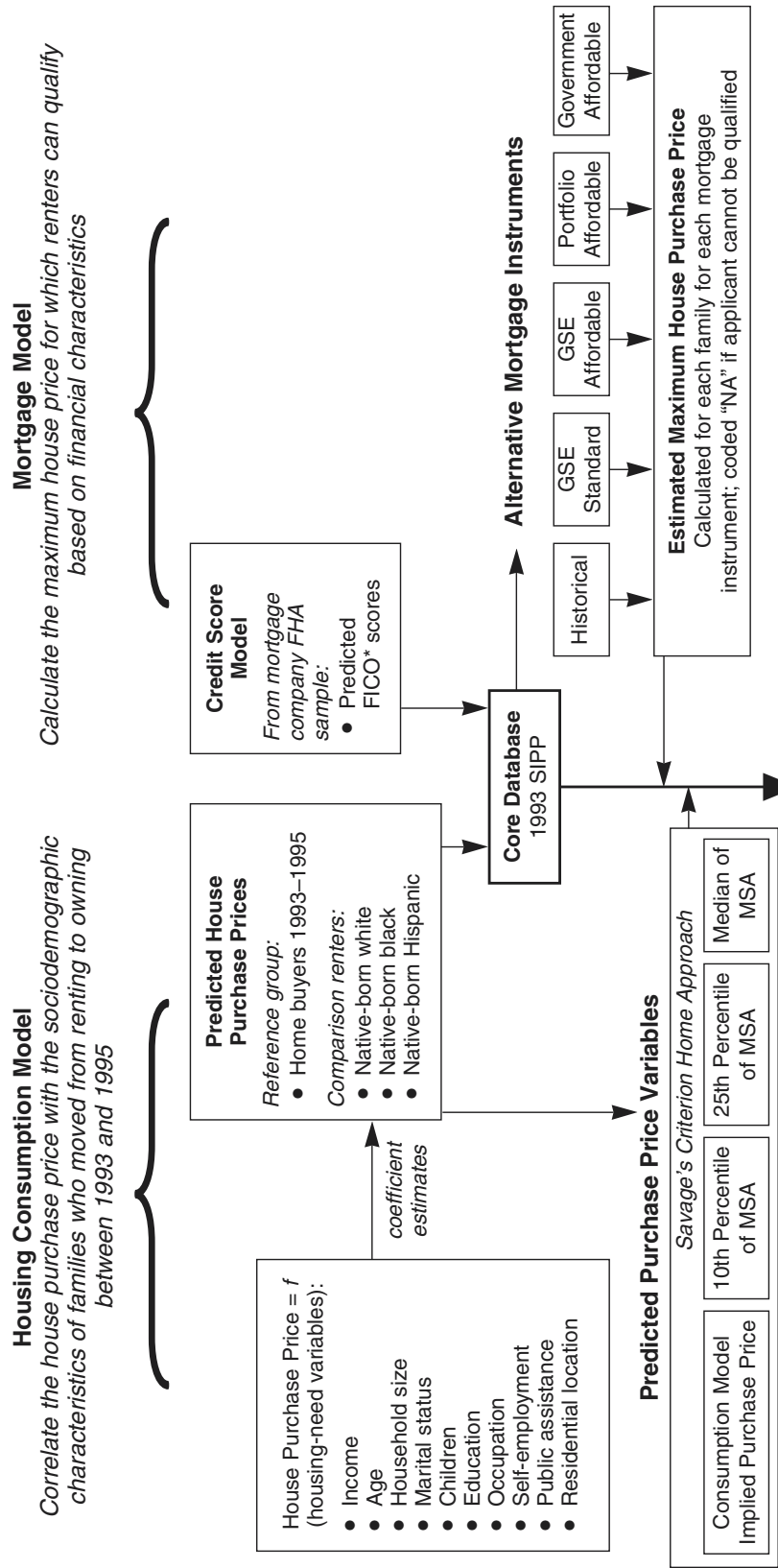
The overall simulation framework provides a measure of reference home-buying capacity because it establishes a benchmark (e.g., individually calibrated target or price-point criterion home) and then determines whether that referenced housing unit can be afforded, given the confluence of the renters' financial profile and the mortgage terms. There is much to be gained from such an approach; by establishing a benchmark of housing consumption, we gain a point of reference by which we can gauge achievement. If the renter can afford the reference home with a given mortgage product, the renter is served; if not, the renter is unserved. Thus, the loan product may be judged in terms of its capacity to allow the renter to achieve the housing benchmark.

While there is much logic to the establishment of a reference point for measuring housing affordability, such a reference point does not fully convey the ability of a given mortgage to expand purchasing power, because purchasing capacity below the benchmark is noted but not quantified. Assume, for instance, that a reference purchase price is \$100,000 and that mortgage product A offers a given renter \$50,000 in purchasing power while mortgage product B conveys \$75,000. If one simply notes that both products fail to achieve the \$100,000 benchmark, product B's greater capacity to expand purchasing power is unrecognized.¹³ If, however, we incorporate a dollar home-buying capacity, then the second product's greater potential can be measured.

Consequently, in addition to the reference home-buying capacity, our Affordability Analysis includes *absolute home-buying capacity*. The latter provides monetized measures of the purchasing power afforded by the respective mortgage products. These

¹³ Calhoun and Stark (1997) measure the relative level of achievement through the use of ratios. For more detail, see appendix A.

Figure 1. Housing Affordability under Alternative Mortgages: Overall Analytic Framework



HOUSING AFFORDABILITY ANALYSIS:

1. Reference home-buying capacity: a comparison of values from the *Housing Consumption and Mortgage Models*.
2. Absolute home-buying capacity: a tabulation of totals from the *Mortgage Model*.

* Fair, Isaac & Company, Inc.

MODEL CALIBRATION AND ANALYSIS

Housing Consumption Model

Model Framework and Data

The Housing Consumption Model builds on the work of Galster et al. (1996), Calhoun and Stark (1997), Linneman and Wachter (1989), Gyourko, Linneman, and Wachter (1997), Jones (1995), and other literature. The development of details on this model is described in a separate paper (Wyly et al. 1999). In brief, after deciding to enter the homeownership market, a family (as earlier defined) chooses a desired level of housing consumption that is influenced by income (I), wealth (W), demographic and life course factors (X), and regional housing market conditions (R). These factors relate as follows:

$$H = f(I, W, X, R; \beta), \quad (1)$$

where f is commonly modeled in a linear regression framework. In our model, the dependent variable is defined as the natural log of house value, and we refer to H as the target house price that captures the various needs, financial resources, and housing market circumstances of different families.

We predict the expected housing consumption of current renters, H , on the basis of observed choices of renter families that purchased homes during the recovery of the mid-1990s. The analysis involves three main procedures. First, we use the first and seventh waves of the 1993 SIPP files to identify those families that moved from renting to homeownership between 1993 and mid-1995. (The 1993 SIPP contained a final sample of 4,565 renter families, of which 456 moved from renting to owning during the first and seventh waves of the survey.) Second, we calibrate a regression model that relates reported house prices to a vector of social, demographic, and local housing market characteristics; the sample used consists of all families that moved from renting to owning a home (the Calhoun and Stark [1997] approach). Finally, the coefficients from this model are applied to the remaining renters in the core SIPP data set, providing an estimate of expected housing consumption for all renters in the sample. Together with criterion homes (the Savage [1997, 1999] approach), these target-priced homes are then used as the reference homes for each renter family.

The Housing Consumption Model, which develops the target-priced homes, certainly has limitations. On theoretical grounds, one may question the assumption that observed choices made by recent buyers can be used to describe the behavior of current renters if they were to move into homeownership. On methodological grounds, the technique relies on a fairly small sample of recent home buyers. Nevertheless, the target house price methodology provides a valuable alternative to arbitrary affordability thresholds. As with the simulations developed by Galster et al. (1996), our method is an explicit attempt to use the behavior of recent home buyers as a critical benchmark by which to measure the effects of alternative mortgage market innovations.

Housing Consumption Model Results

Table 2 defines the variables for the Housing Consumption Model and Table 3 presents results of ordinary least-squares estimates of equation (1). It estimates the level of housing consumption that would be expected of current renters if they made the same choices as similar families who moved into homeownership during the mid-1990s. Demographic, regional, and financial variables are comparable to those used in similar studies of housing consumption and tenure choice (Calhoun and Stark 1997; Galster et al. 1996; Linneman and Wachter 1989; Quercia, McCarthy, and Wachter 1998). Diagnostics suggest a fairly robust model fit, in line with similar studies.¹⁵

Variations in housing consumption reflect differences in individual preferences and needs, family financial resources, and regional and local housing market conditions. White-collar workers typically seek out more expensive homes than do blue-collar workers, although this difference is not statistically significant. House values rise among families with higher incomes and assets, and for people with higher levels of education. Model results imply an income elasticity of approximately 20 percent with respect to house price: in other words, a 10 percent increase in family income among recent home buyers leads to a house purchase price increase of approximately 2 percent. By contrast, the elasticity measure for family assets is remarkably low: a 10 percent increase in assets translates to only 0.1 percent capitalized into higher home prices. Variations in family assets may be more important in the tenure decision than in the desired amount of entry-level housing consumption once the decision is made to purchase a home. Higher assets may simply be used to reduce mortgage debt or to maintain liquidity.

Regional housing market variations correlate with wide contrasts in housing consumption. Not surprisingly, house prices rise in more populated metropolitan areas, with costs at the peak of the urban hierarchy running 49 percent above prices in nonmetropolitan areas. Regional variations inscribe a clear bicoastal pattern, with prices in New England and on the West Coast standing 50 percent above those in the Upper Midwest. Even after controlling for all other factors in the model, however, a premium is still apparent in the distinctive housing markets of Washington, D.C. (29 percent), and New York (36 percent).

Racial and ethnic differences in house prices are not significant, although the relevant parameter estimates are in the hypothesized direction. This result may be related to the relatively small number of minority home buyers (70) in the sample. But it is also consistent with Gyourko, Linneman, and Wachter's (1996) finding that racial differences in homeownership are not significant among families with sufficient resources to meet underwriting and down payment requirements. Gyourko, Linneman, and Wachter (1996) also find, however, that racial differences in homeownership are significant among families constrained by low assets.

¹⁵ The adjusted multiple coefficients of determination (0.59 and 0.60) are comparable to Calhoun and Stark's (1997) value of 0.45 and Quercia, McCarthy, and Wachter's (1998) value of 0.48.

Table 2. Variable Definitions for Housing Consumption Model

Variable Name	Full Sample		All Renters Moving into Homeownership	
	Mean	Standard Deviation	Mean	Standard Deviation
Dependent Variable				
LHVALUE	Natural log of reported house value		11.5	0.475
Financial/human capital characteristics				
LFINC	Natural log of family income		9.58	1.44
LASSETS	Natural log of family assets		3.10	4.14
ED	Years of education		12.2	2.92
SELF	Self-employed (dummy)		0.0465	0.0526
WHTC1	White-collar occupation, worked entire month (dummy)		0.337	0.550
WHTC2	White-collar occupation, worked on and off this month (dummy)		0.00480	0.00438
BLUC1	Blue-collar occupation, worked entire month (dummy)		0.272	0.270
BLUC2	Blue-collar occupation, worked on and off this month (dummy)		0.0138	0.00877
Demographic characteristics				
A15_24 ^a	Age 15–24 (dummy)		0.124	0.127
A25_34 ^a	Age 25–34 (dummy)		0.329	0.515
A35_44 ^a	Age 35–44 (dummy)		0.219	0.193
A45_54 ^a	Age 45–54 (dummy)		0.121	0.107
A55_64 ^a	Age 55–64 (dummy)		0.706	0.0395
MARST	Married (dummy)		0.314	0.491
CHILD	Number of children under age 18 in family		0.743	1.21
CHILD*A35_44	Interaction term between CHILD and A35_44		0.119	0.0965
CHILD*A45_54	Interaction term between CHILD and A45_54		0.0380	0.0417
Metropolitan/regional housing market dummies				
SMALL ^b	MSA population < 500,000		0.0398	0.0395
MEDIUM ^b	MSA population 500,001–1,500,000		0.154	0.158
LARGE ^b	MSA population 1,500,001–4,000,000		0.191	0.228
V_LARGE ^b	MSA population > 4,000,001		0.284	0.173
SO_ESC ^c	East South Central		0.0422	0.0614
SO_WSC ^c	West South Central		0.102	0.103
SO_SOA ^c	South Atlantic		0.151	0.210
WEST_MTN ^c	West (Mountain)		0.0410	0.0548
WEST_CST ^c	West (Coast)		0.203	0.158
NE_NEW ^c	New England		0.0570	0.0395
NE_MAT ^c	Mid Atlantic		0.173	0.101
MW_ENC ^c	East North Central		0.161	0.169
DC	Washington, D.C., MSA		0.0153	0.0263
NY	New York MSA		0.0979	0.0373
Race/ethnicity (reference category is non-Hispanic whites)				
BLACK	Black reference person		0.139	0.0614
HISPAN	Hispanic reference person		0.129	0.0614
OTHER	Reference person of other race		0.0419	0.0263

Table 2. Variable Definitions for Housing Consumption Model (continued)

Variable Name	Full Sample		All Renters Moving into Homeownership	
	Mean	Standard Deviation	Mean	Standard Deviation
Sample size	4,509		456	

Source: Authors' analysis of the first and seventh waves of the 1993 SIPP.

^a Reference category is age 65 and over.

^b Reference category is nonmetropolitan areas.

^c Reference category is Midwest, West North Central.

Our results suggest that minorities' level of housing consumption is not appreciably different from that of whites with similar financial and demographic characteristics. Nevertheless, this finding flies in the face of widespread empirical evidence and theoretical expectation that predict reduced consumption among minorities. For some analysts, these reductions signify racial differences in tastes or preferences, yet a more compelling case can be made for the effects of housing market processes that limit access to high-value suburban submarkets (Adams 1987; Badcock 1994; Gyourko, Linneman, and Wachter 1996; Ladd 1998). Either way, for the purpose of assessing mortgage-related criteria, it is reasonable to assume that the relative effects of consumer preference and housing market discrimination will continue to exist in the short term. Accordingly, in our subsequent analyses we use a model specification (tables 2 and 3) that includes negative race/ethnicity coefficients. This approach reduces predicted housing consumption among minorities, thereby narrowing the gap between these families' financial resources and the cost of homes deemed suitable for their needs.

The model allows us to predict desired housing consumption, which we term the *target house*. We assign or impute a target house price for each of the 4,109¹⁶ remaining renter families in the 1993 SIPP. To give a sense of that calculation, we report overall results. Based on the observed experience of first-time buyers who purchased a home between 1993 and 1995, the Housing Consumption Model suggests a median target-priced house (in 1995 dollars) of \$85,210 and a mean price of \$92,781 (table 4). This median estimate stands at 75 percent of the median price of all existing single-family homes sold nationwide in 1995 (\$112,900) (U.S. Bureau of the Census 1996, 717). This gap reflects the higher purchase prices among trade-up home buyers, whose accumulated equity permits larger down payments and corresponding leveraging of income to purchase more expensive homes.

¹⁶ The 4,109 remaining renter families is the starting figure of 4,565 renter families in the 1993 SIPP less the 456 who moved from renting to owning between the first and seventh waves of the survey.

**Table 3. Housing Consumption Model for Identifying a Target-Priced House:
All Renters Moving into Homeownership**

Variable Name	Parameter Estimate	Standard Error	T Value
Intercept	9.07	0.306	29.6**
LFINC	0.197	0.0281	6.99**
LASSETS	0.0124	0.00378	3.28**
ED	0.0149	0.00754	1.98*
SELF	0.249	0.0675	3.69***
WHTC1	0.0838	0.0482	1.74
WHTC2	0.308	0.223	1.38
BLUC1	-0.0841	0.048	-1.75
BLUC2	-0.0166	0.160	-0.310
A15_24	-0.394	0.127	-2.32*
A25_34	-0.202	0.120	-1.68
A35_44	-0.189	0.125	-1.51
A45_54	-0.369	0.128	-2.87**
A55_64	-0.317	0.135	-2.34*
MARST	-0.0135	0.0351	-0.386
CHILD	-0.0697	0.0177	-3.94***
CHILD*A35_44	0.138	0.0724	1.91
CHILD*A45_54	0.382	0.0945	4.04***
SMALL	0.177	0.0783	2.26*
MEDIUM	0.193	0.0454	4.24***
LARGE	0.165	0.0419	3.94***
V_LARGE	0.401	0.0544	7.37***
SO_ESC	0.0896	0.0763	1.17
SO_WSC	0.0230	0.0672	0.343
SO_SOA	0.211	0.0597	3.53***
WEST_MTN	0.219	0.0787	2.79**
WEST_CST	0.407	0.0655	6.21***
NE_NEW	0.405	0.0881	4.60***
NE_MAT	0.176	0.0760	2.32*
MW_ENC	0.130	0.0609	2.13*
DC	0.262	0.102	2.58*
NY	0.307	0.102	3.07**
BLACK	-0.0536	0.0625	-0.858
HISPAN	-0.0881	0.0675	-1.30
OTHER	-0.0530	0.0911	-0.585

Source: Authors' analysis of the first and seventh waves of the 1993 SIPP.

Note: The dependent variable is the natural log of reported house value. Model F ratio: 20.34 ($p \leq 0.0001$). Adjusted R^2 : 0.590. * $p \leq 0.05$. ** $p \leq 0.01$. *** $p \leq 0.001$.

Criterion-Priced Homes

In addition to the target homes based on the Housing Consumption Model, we consider as a benchmark criterion-priced housing. This follows the Savage and Fronczek approach, and we use three criterion-priced homes: median-priced, modestly priced

Table 4. Target-Priced and Reference-Priced Houses Used in the Mortgage Simulation Analysis

Region/Area	Target-Priced House ^a (in \$)		Reference-Priced House ^c (in \$)		
	Mean ^b	Median ^b	Median (50th Percentile)	Modest (25th Percentile)	Low (10th Percentile)
Nation	92,781	85,210	84,000	58,500	42,500
Census Division					
Northeast					
New England Metro	103,065	99,880	137,500	103,500	75,000
New England Nonmetro	85,435	82,095	109,000	84,000	62,000
Middle Atlantic Metro	119,264	111,188	106,000	65,500	42,500
Middle Atlantic Nonmetro	69,081	73,351	79,000	56,000	40,000
Midwest					
East North Central Metro	84,000	82,548	78,500	55,500	38,000
East North Central Nonmetro	62,136	62,221	62,000	43,000	29,000
West North Central	64,818	62,593	73,500	53,000	34,500
West North Central Nonmetro	60,280	58,046	52,000	35,000	22,000
South					
South Atlantic Metro	84,835	81,908	84,000	58,500	42,500
South Atlantic Nonmetro	68,064	68,887	68,000	46,000	30,000
East South Central Metro	69,605	71,440	65,500	49,000	32,000
East South Central Nonmetro	58,520	56,748	56,000	40,000	28,000
West South Central Metro	67,299	64,821	67,500	46,500	32,000
West South Central Nonmetro	54,005	53,765	53,000	33,000	17,000
West					
Mountain Metro	81,973	81,048	85,000	66,000	47,500
Mountain Nonmetro	72,439	76,485	71,000	52,000	35,000
Pacific Metro	117,768	111,605	164,500	108,500	68,500
Pacific Nonmetro	82,140	80,146	101,000	71,000	52,000

^a This is the 1995 house value predicted using the Housing Consumption Model.

^b These statistics are computed for the sample of renter families that did not make the transition to homeownership during 1993–95.

^c Reference-priced house estimates by census region are based on Savage's study (1997). For each reference-priced house, the national statistics represent the weighted median (based on SIPP family weights) of the regional estimates; to facilitate comparison with the national median target-priced house, the statistics are computed for the sample of renter families that did not make the transition to homeownership during 1993–95.

(25th percentile), and low-priced (10th percentile). National criterion home prices appear in table 5.

The national modestly priced and low-priced criterion homes are, as expected, considerably less expensive than the national Housing Consumption Model–ascribed target price of current renters (\$85,210 median), assuming these renters made the same choices as similar families who moved into homeownership. After all, renters buying homes typically want more than modest- or low-priced units. The national median-priced criterion home (\$84,000) is just slightly less expensive than the consumption-ascribed target figure (\$85,210 median). Prices of the criterion homes vary considerably by census region and division, as shown in table 4. The array of target

Table 5. National Criterion Home Prices

Criterion-Priced Home	National Weighted Median Price
Median-priced (50th percentile)	\$84,000
Modestly priced (25th percentile)	\$58,500
Low priced (10th percentile)	\$42,500

and criterion-priced homes indicated in table 4 are the benchmarks to which we apply the Mortgage Model.

Mortgage Model

Mortgage Model Framework

Because a central theme of this study is the potential of mortgage innovation to expand homeownership affordability, it is essential that details of the range and characteristics of alternative mortgage products be explained. Mortgages are often divided into two categories: governmental (those granted by the government or those having government backing, such as FHA insurance) and conventional (those that do not have a public connection). The current investigation briefly examines Governmental Affordable Mortgages, most notably FHA loans insured under the Section 203 program. It also considers several conventional loan instruments. To better understand conventional mortgages, it is instructive to differentiate between three broad categories of mortgages available since approximately 1990 (table 6).

The first is the Standard Mortgage, which is the current basic instrument of home finance in the United States. The characteristics of this mortgage are heavily influenced by the GSEs that dominate the secondary market—Fannie Mae and Freddie Mac. As such, we refer to this loan as the GSE Standard Mortgage.

Although it is the envy of other nations, the Standard Mortgage is beyond the financial reach of many disadvantaged Americans. Over the last decade, a more affordable product has evolved. Its basic parameters have been set by Fannie Mae and Freddie Mac, since primary-market lenders' willingness to offer new products often depends on the GSEs' willingness to buy the affordable loans on the secondary market. The GSEs use different programmatic terms for these loans, for example, the Fannie Mae CHBP, CHBP with 3/2 Option, and Fannie 97, or Freddie Mac's AG, AG with 3/2 Option, and AG 97. To reflect their function—to reach the financially less advantaged—and parentage, we refer to these loans as GSE Affordable Mortgages. At the leading edge of this affordable group are evolving products that we term *Emerging GSE Affordable Mortgages*. Examples are Fannie Mae's Flex 97 and Freddie Mac's Community Gold. (Because this subset was in a state of flux when we conducted our research in 1998–99 and has evolved further since then, we will focus the following discussion on the more established GSE Affordable Mortgages.)

Table 6. Loan Financial Characteristics by Mortgage Type

<i>Mortgage Characteristic</i>	<i>Historical Mortgage</i>	<i>GSE Standard Mortgage</i>	<i>GSE Affordable Mortgage</i>	<i>Portfolio Affordable Mortgage</i>
Purpose	Serve all borrowers/areas	Serve all borrowers/areas	Serve low- to moderate-income and underserved areas	Serve low- to moderate income and underserved areas
Application	Purchase or refinancing	Purchase or refinancing	Purchase or refinancing— with exceptions ^a	Primarily purchase
Targeted income	No income limits	No income limits	Maximum 100% of area median income—with exceptions ^b	Maximum 80%–100% of area median income—with exceptions ^c
Investor	GSE	GSE	GSE	Portfolio
Debt ratios: front/back-end (guideline maximum^d)	25%–28%/33%–36%	28%/36%	33%/40% ^e	Maximum 35%/42%; majority at 33%/38%
Minimum down payment	10% with mortgage insurance 20% without mortgage insurance	5% ^f with mortgage insurance 20% without mortgage insurance	3%–5% ^g	3% or less
Minimum borrower contribution	10%	5%	3%–5% ^h	Minimal—1%–2% or less (“sweat equity” may be allowed)
Maximum LTV	90% with 10% down payment 80% with 20% down payment	95% with 5% down payment 80% with 20% down payment	95%–97%	97% or higher
Private mortgage insurance	Required for LTVs over 90%	Required for LTVs over 80%	Required	May or may not be required
Interest rate	Market	Market	Market	Occasionally 0.5 points below market
Reserves	2 months required	2 months required	Typically 1 month required—with exceptions ⁱ	Frequently not required
Counseling	Not required	Not required	Required—with exceptions	Required

^a The GSE Affordable Mortgages are often formally referred to as “community lending products.” A few of the GSE Affordable Mortgages (e.g., Fannie 97, Affordable Gold 97) are limited to purchases (with exceptions); most of the other GSE Affordable Mortgages can be used for either purchases or refinancing. See tables D.1 and D.2.

^b Income may exceed the median in high-cost areas and in targeted locations (e.g., high-minority census tracts, central-city locations).

Table 6. Loan Financial Characteristics by Mortgage Type (continued)

- ^c Varies by program, with maximum incomes ranging from roughly 50 percent to 150 percent of area median income.
- ^d These are the "normal" guideline maximums that can be exceeded with compensating factors.
- ^e The maximum guideline front-end ratio in the Fannie Mae affordables is 33 percent; Freddie Mac has no maximum front-end ratio. The maximum back-end ratio is 38 percent for Fannie Mae's CHBP and 36 percent for Fannie 97; Freddie Mac allows a 40 percent guideline maximum. See tables D.1 and D.2.
- ^f The minimum borrower contribution is 5 percent (with or without mortgage insurance). A minimum 20 percent down payment is required when mortgage insurance is not placed on a loan; however, the borrower need only make a 5 percent contribution from his or her own funds. The balance of funds may be in the form of a gift.
- ^g The minimum down payment is 3 percent for Fannie 97 and Affordable Gold 97; the minimum down payment is 5 percent for CHBP, CHBP with 3/2 Option, Affordable Gold 3/2, and Affordable Gold 5.
- ^h The minimum borrower contribution is 3 percent for Fannie 97, CHBP with 3/2 Option, Affordable Gold 97, and Affordable Gold 3/2. It is 5 percent for CHBP and Affordable Gold 5. Where the minimum borrower contribution is 3 percent, the additional 2 percent can come from gifts, grants, and subsidized second mortgages (community seconds).
- ⁱ One month reserve is required by Fannie 97, Affordable Gold 97, and Affordable Gold 3/2. One month is recommended but not required for Affordable Gold 5. Reserves are not required for CHBP or CHBP with 3/2 Option.

Table 9. Summary Analysis of Data Sources Considered for the Housing Affordability and Mortgage Qualification Research

Source	Most Recent Years	Mortgage Underwriting Criteria				
		Income	Assets	Liabilities	Credit	
Consumer Expenditure Survey	1990–95	<ul style="list-style-type: none"> • Interval scale • 11 sources • Before and after taxes 	<ul style="list-style-type: none"> • Interval scale • 7 sources • Aggregate estimates not robust 	<ul style="list-style-type: none"> • Interval scale • Monthly payments on outstanding debt 	None	<ul style="list-style-type: none"> • 12 months worked • Average hours worked
Survey of Income and Program Participation	1991–93, 1996	<ul style="list-style-type: none"> • Interval scale • 38 sources • By individuals in household 	<ul style="list-style-type: none"> • Interval scale • 15 financial asset categories • 5 nonfinancial asset categories • Aggregate assets available 	<ul style="list-style-type: none"> • Interval scale • Answers on 3 categories in 1993 Survey (wave 7) 	None	<ul style="list-style-type: none"> • 48+ months worked • Average hours worked • Occupation and industry • Self-employment
Panel Study of Income Dynamics (PSID)	1990–96	<ul style="list-style-type: none"> • Interval scale • 8 sources • By individuals in household 	<ul style="list-style-type: none"> • PSID contains a supplement with a few interval estimates of assets 	<ul style="list-style-type: none"> • PSID contains a supplement with a few interval estimates of liabilities 	<ul style="list-style-type: none"> • Questions on fiscal stress by year • Available in only 1996 survey 	<ul style="list-style-type: none"> • Length of time with current employer
Survey of Consumer Finance	1991, 1993, and 1995	<ul style="list-style-type: none"> • Ordinal scale • 5 categories • Oversamples wealthy households 	<ul style="list-style-type: none"> • Ordinal scale • 10 categories for financial assets; 5 for nonfinancial assets 	<ul style="list-style-type: none"> • Ordinal scale • 6 categories 	None	<ul style="list-style-type: none"> • Current employment status
National Survey of Families and Households	1992–94 (wave 2 data)	<ul style="list-style-type: none"> • Ordinal scale • 7 sources 	<ul style="list-style-type: none"> • Ordinal scale • 5 sources 	<ul style="list-style-type: none"> • Ordinal scale • Monthly payments and total outstanding • 5 sources 	<ul style="list-style-type: none"> • Ordinal scale • Question on overdue payments: total in payments that were 2 months overdue 	<ul style="list-style-type: none"> • Employment history 1987–94 • Occupation
Public Use Microdata Sample	1990	<ul style="list-style-type: none"> • Interval scale • 8 sources 	None	None	None	<ul style="list-style-type: none"> • 12 months worked • Average hours worked
American Housing Survey	National sample is 1999 (others vary by MSA)	<ul style="list-style-type: none"> • Ordinal scale • 9 sources 	None	None	None	None

Source: See appendix C (tables C.1, C.2, and C.3).
 Note: Shaded boxes are sources chosen in the analysis.

**Table 10. Financial and Demographic Profiles of Renter Groups
(in Dollars, except N Rows and Household Size, Family Size, and Family Weight Columns)**

Renter Group ^a	Assets	Debt	Target House	Nominal Household Income	Adjusted Household Income ^b	Adjusted Household Income ^c	Nominal Family Income	Adjusted Family Income ^b	Adjusted Family Income ^c	Household Size	Family Size	Family Weight
All												
Mean	7,904	3,609	92,781	27,398	23,178	26,200	24,117	19,933	22,928	2.50	2.24	6,959
Median	300	45	85,210	21,600	18,580	20,857	18,786	15,957	18,000	2.00	2.00	5,933
Std. Deviation ^d	38,900	8,250	41,288	22,665	24,902	22,765	20,631	23,100	20,757	1.61	1.59	2,080
Minimum	0	0	7,529	0	-123,764	-21,112	0	-123,764	-21,112	1.00	1.00	772
Maximum	712,877	211,500	327,596	208,095	192,111	192,111	208,095	192,111	192,111	13.00	13.00	27,728
N (weighted)	25,827,526	25,827,526	25,827,526	25,827,526	25,827,526	25,827,526	25,827,526	25,827,526	25,827,526	25,827,526	25,827,526	25,827,526
N (unweighted)	4,120	4,120	4,109	4,120	4,120	4,120	4,120	4,120	4,120	4,120	4,120	4,120
White (non-Hispanic)												
Mean	11,368	4,247	96,649	30,196	25,912	29,107	26,243	21,987	25,153	2.18	1.93	6,358
Median	649	500	87,799	24,240	21,198	23,362	20,556	17,879	19,992	2.00	1.00	5,775
Std. Deviation ^d	45,565	9,065	42,906	23,955	26,102	23,872	21,489	23,878	21,442	1.41	1.39	1,703
Minimum	0	0	8,286	0	-116,647	-20,449	0	-116,647	-20,449	1.00	1.00	772
Maximum	712,877	211,500	327,596	208,095	192,111	192,111	208,095	192,111	192,111	13.00	13.00	27,728
N (weighted)	16,235,457	16,235,457	16,183,879	16,235,457	16,235,457	16,235,457	16,235,457	16,235,457	16,235,457	16,235,457	16,235,457	16,235,457
N (unweighted)	2,769	2,769	2,760	2,769	2,769	2,769	2,769	2,769	2,769	2,769	2,769	2,769
Black (non-Hispanic)												
Mean	1,601	2,443	83,483	20,917	17,048	19,562	19,471	15,666	18,154	2.69	2.50	8,447
Median	0	0	73,205	15,402	12,342	14,319	13,770	11,220	12,993	2.00	2.00	6,824
Std. Deviation ^d	9,165	5,955	36,600	18,533	20,356	18,742	18,149	20,083	18,354	1.69	1.66	2,850
Minimum	0	0	8,704	0	-75,080	-15,011	0	-75,080	-15,011	1.00	1.00	2,431
Maximum	114,999	76,000	245,298	157,806	157,806	157,806	157,806	157,806	157,806	12.00	12.00	22,863
N (weighted)	4,471,070	4,471,070	4,464,525	4,471,070	4,471,070	4,471,070	4,471,070	4,471,070	4,471,070	4,471,070	4,471,070	4,471,070
N (unweighted)	609	609	608	609	609	609	609	609	609	609	609	609
Hispanic												
Mean	2,000	2,308	86,800	23,026	18,725	21,677	20,546	16,265	19,201	3.38	3.06	7,758
Median	0	0	82,812	18,266	15,010	17,283	15,314	12,844	14,178	3.00	3.00	6,745
Std. Deviation ^d	23,148	5,613	33,617	17,424	21,499	18,313	16,819	21,081	17,704	1.89	1.88	2,173
Minimum	0	0	8,485	0	-123,764	-21,112	0	-123,764	-21,112	1.00	1.00	1,995
Maximum	524,999	59,500	221,505	119,196	119,196	119,196	119,196	119,196	119,196	11.00	11.00	22,942
N (weighted)	3,986,596	3,986,596	3,980,131	3,986,596	3,986,596	3,986,596	3,986,596	3,986,596	3,986,596	3,986,596	3,986,596	3,986,596
N (unweighted)	562	562	561	562	562	562	562	562	562	562	562	562
Other race (non-Hispanic)												
Mean	3,927	3,647	95,168	28,254	23,849	26,651	24,538	20,243	22,989	3.25	2.88	6,882
Median	282	0	89,548	22,655	19,094	22,266	17,589	14,165	16,425	3.00	3.00	5,942
Std. Deviation ^d	17,493	7,602	44,494	21,650	23,124	22,093	21,087	22,531	21,445	1.75	1.78	1,917
Minimum	0	0	7,529	180	-35,845	-4,872	0	-35,845	-4,872	1.00	1.00	2,941
Maximum	214,000	59,000	237,383	100,296	100,152	100,152	100,296	100,152	100,152	10.00	10.00	23,597
N (weighted)	1,134,403	1,134,403	1,134,403	1,134,403	1,134,403	1,134,403	1,134,403	1,134,403	1,134,403	1,134,403	1,134,403	1,134,403
N (unweighted)	180	180	180	180	180	180	180	180	180	180	180	180

Table 10. Financial and Demographic Profiles of Renter Groups
(in Dollars, except N Rows and Household Size, Family Size, and Family Weight Columns) (continued)

Renter Group ^a	Assets	Debt	Target House	Nominal Household Income	Adjusted Household Income ^b	Adjusted Household Income ^c	Nominal Family Income	Adjusted Family Income ^b	Adjusted Family Income ^c	Household Size	Family Size	Family Weight
Recent immigrant												
Mean	9,076	2,696	86,015	26,757	22,721	25,338	21,836	17,800	20,418	2.48	2.18	6,959
Median	250	314	77,938	21,843	20,739	22,794	16,710	14,690	16,200	2.00	1.00	6,075
Std. Deviation ^d	52,306	4,142	37,275	20,903	20,865	20,028	17,660	18,443	16,655	1.54	1.62	1,986
Minimum	0	0	8,794	0	-21,716	-4,386	0	-38,602	-4,386	1.00	1.00	2,296
Maximum	514,100	17,000	212,301	116,826	102,297	113,872	115,845	93,756	93,756	7.00	7.00	14,193
N (weighted)	704,035	704,035	704,035	704,035	704,035	704,035	704,035	704,035	704,035	704,035	704,035	704,035
N (unweighted)	111	111	111	111	111	111	111	111	111	111	111	111

Source: All statistics are computed using the wave 7 data of SIPP 1993.

^a Non-Hispanic white, non-Hispanic black, Hispanic, and other non-Hispanic renter families are discrete. Combined, they sum to all renter families. Recent immigrant families, those entering the United States after 1984, overlap with the previously listed racial/ethnic groups (e.g., non-Hispanic whites and blacks). Finally, if not otherwise noted, whites, blacks, and other groups are non-Hispanic.

^b Adjusted for stability and other characteristics according to the Historical Mortgage standards (see appendix D).

^c Adjusted for stability according to current mortgage instruments' standards (see appendix D).

^d Standard deviation—unweighted values.

Table 15. Reference Home-Buying Capacity by Mortgage Instrument and Renter Group,^a Nationwide: Target House (Number and Percentage of Renters Who Could Afford the Indicated House)

Loan Name	All Families		White Families		Black Families		Hispanic Families		Other Families		Recent Immigrant Families	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1. Historical	986,175	3.8	887,739	5.5	43,113	1.0	16,928	0.4	38,397	3.4	32,481	4.6
2. GSE Standard	1,288,186	5.0	1,138,266	7.0	66,321	1.5	39,384	1.0	44,215	3.9	32,481	4.6
3. Fannie Mae CHBP; CHBP 3/2 (NA) ^b	1,655,784	6.4	1,445,204	8.9	95,041	2.1	60,199	1.5	55,343	4.9	45,747	6.5
4. Fannie Mae CHBP 3/2 (A) ^c	1,860,780	7.2	1,621,625	10.0	115,810	2.6	68,060	1.7	55,348	4.9	45,747	6.5
5. Fannie Mae 97	1,517,669	5.9	1,317,934	8.1	89,666	2.0	60,199	1.5	49,882	4.4	32,481	4.6
6. Freddie Mac AG 5; AG 3/2 (NA) ^b	1,803,895	7.0	1,570,079	9.7	95,041	2.1	72,582	1.8	66,195	5.8	45,747	6.5
7. Freddie Mac AG 3/2 (A) ^c	2,045,191	7.9	1,782,816	11.0	115,810	2.6	80,438	2.0	66,192	5.8	45,747	6.5
8. Freddie Mac AG 97	1,793,796	7.0	1,572,264	9.7	95,041	2.1	65,975	1.7	60,527	5.3	45,747	6.5
9. Fannie Mae Flex 97	1,717,512	6.7	1,499,275	9.3	95,041	2.1	60,199	1.5	63,005	5.6	45,747	6.5
10. Freddie Mac Community Gold	1,932,272	7.5	1,685,227	10.4	104,961	2.4	65,991	1.7	76,164	6.7	53,724	7.6
11. Bank of America Zero Down	1,830,457	7.1	1,604,680	9.9	109,943	2.5	60,199	1.5	55,629	4.9	45,747	6.5
12. Bank of America Credit Flex	1,969,907	7.6	1,722,792	10.6	104,968	2.4	65,982	1.7	76,165	6.7	53,724	7.6
13. Portfolio Composite	2,048,781	8.0	1,785,274	11.0	115,814	2.6	73,837	1.9	73,856	6.5	45,747	6.5
14. FHA 203(b)—prior	2,028,033	7.9	1,736,207	10.7	133,221	3.0	74,986	1.9	83,651	7.4	45,747	6.5
15. FHA 203(b)—current	1,997,478	7.8	1,723,583	10.7	125,051	2.8	68,060	1.7	80,872	7.1	45,747	6.5
Weighted sample size	25,762,939	100.0	16,183,879	100.0	4,464,525	100.0	3,980,131	100.0	1,134,403	100.0	704,035	100.0

Source: Authors' analysis of 1993 SIPP data.

^a Non-Hispanic white, non-Hispanic black, Hispanic, and other non-Hispanic renter families are discrete. Combined, they sum to all renter families. Recent immigrant families, those entering the United States after 1984, overlap with the previously listed racial/ethnic groups (e.g., non-Hispanic whites and blacks). Finally, if not otherwise noted, whites, blacks, and other groups are non-Hispanic.

^b NA = 3/2 Option is not activated (i.e., 2 percent outside funding is *not* forthcoming).

^c A = 3/2 Option is activated (i.e., 2 percent outside funding is forthcoming).

Table 16. Reference Home-Buying Capacity by Mortgage Instrument and Renter Group,^a Nationwide: 50th Percentile (Median-Priced) House (Number and Percentage of Renters Who Could Afford the Indicated House)

Loan Name	All Families		White Families		Black Families		Hispanic Families		Other Families		Recent Immigrant Families	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1. Historical	1,314,436	5.1	1,204,814	7.4	59,662	1.3	30,544	0.8	19,417	1.7	38,082	5.4
2. GSE Standard	1,631,007	6.3	1,495,351	9.2	71,036	1.6	39,384	1.0	25,235	2.2	44,904	6.4
3. Fannie Mae CHBP; CHBP 3/2 (NA) ^b	2,021,824	7.8	1,808,063	11.2	105,273	2.4	60,458	1.5	48,076	4.2	51,348	7.3
4. Fannie Mae CHBP 3/2 (A) ^c	2,274,326	8.8	2,010,361	12.4	130,364	2.9	73,593	1.8	59,931	5.3	51,348	7.3
5. Fannie Mae 97	1,833,291	7.1	1,633,763	10.1	114,515	2.6	59,861	1.5	25,240	2.2	44,904	6.4
6. Freddie Mac AG 5; AG 3/2 (NA) ^b	2,155,611	8.4	1,923,940	11.9	115,229	2.6	60,458	1.5	56,051	4.9	59,325	8.4
7. Freddie Mac AG 3/2 (A) ^c	2,413,936	9.4	2,126,400	13.1	140,320	3.1	73,593	1.8	73,657	6.5	59,325	8.4
8. Freddie Mac AG 97	2,180,704	8.5	1,938,343	12.0	120,542	2.7	65,752	1.7	56,051	4.9	59,325	8.4
9. Fannie Mae Flex 97	2,082,882	8.1	1,847,875	11.4	121,167	2.7	65,752	1.7	48,076	4.2	51,348	7.3
10. Freddie Mac Community Gold	2,243,952	8.7	1,989,646	12.3	125,453	2.8	67,065	1.7	61,791	5.4	59,325	8.4
11. Bank of America Zero Down	2,202,345	8.5	1,966,180	12.1	114,515	2.6	73,593	1.8	48,076	4.2	60,889	8.6
12. Bank of America Credit Flex	2,270,019	8.8	2,021,017	12.5	120,130	2.7	67,079	1.7	61,793	5.4	59,325	8.4
13. Portfolio Composite	2,434,294	9.4	2,139,630	13.2	145,212	3.3	81,540	2.0	67,912	6.0	59,325	8.4
14. FHA 203(b)—prior	2,411,669	9.4	2,112,644	13.1	153,669	3.4	81,553	2.0	63,776	5.6	60,889	8.6
15. FHA 203(b)—current	2,365,476	9.2	2,072,184	12.8	139,115	3.1	81,553	2.0	72,602	6.4	60,889	8.6
Weighted sample size	25,762,939	100.0	16,183,879	100.0	4,464,525	100.0	3,980,131	100.0	1,134,403	100.0	704,035	100.0

Source: Authors' analysis of 1993 SIPP data.

^a Non-Hispanic white, non-Hispanic black, Hispanic, and other non-Hispanic renter families are discrete. Combined, they sum to all renter families. Recent immigrant families, those entering the United States after 1984, overlap with the previously listed racial/ethnic groups (e.g., non-Hispanic whites and blacks). Finally, if not otherwise noted, whites, blacks, and other groups are non-Hispanic.

^b NA = 3/2 Option is not activated (i.e., 2 percent outside funding is *not* forthcoming).

^c A = 3/2 Option is activated (i.e., 2 percent outside funding is forthcoming).

Table 17. Reference Home-Buying Capacity by Mortgage Instrument and Renter Group,^a Nationwide: 25th Percentile (Modestly Priced) House (Number and Percentage of Renters Who Could Afford the Indicated House)

Loan Name	All Families		White Families		Black Families		Hispanic Families		Other Families		Recent Immigrant Families	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1. Historical	1,926,939	7.5	1,742,420	10.8	71,036	1.6	51,690	1.3	61,793	5.4	52,881	7.5
2. GSE Standard	2,381,156	9.2	2,119,399	13.1	119,600	2.7	72,703	1.8	69,455	6.1	59,325	8.4
3. Fannie Mae CHBP; CHBP 3/2 (NA) ^b	2,835,727	11.0	2,516,108	15.5	145,231	3.3	92,936	2.3	81,314	7.2	64,229	9.1
4. Fannie Mae CHBP 3/2 (A) ^c	3,175,282	12.3	2,761,617	17.1	193,225	4.3	106,389	2.7	113,860	10.0	83,470	11.9
5. Fannie Mae 97	2,721,339	10.6	2,388,741	14.8	145,231	3.3	100,021	2.5	87,440	7.7	68,869	9.8
6. Freddie Mac AG 5; AG 3/2 (NA) ^b	2,945,992	11.4	2,620,170	16.2	145,231	3.3	99,344	2.5	81,314	7.2	64,229	9.1
7. Freddie Mac AG 3/2 (A) ^c	3,323,161	12.9	2,891,897	17.9	202,154	4.5	115,185	2.9	113,860	10.0	83,470	11.9
8. Freddie Mac AG 97	2,962,996	11.5	2,627,453	16.2	141,659	3.2	106,389	2.7	87,440	7.7	64,229	9.1
9. Fannie Mae Flex 97	2,915,592	11.3	2,571,457	15.9	150,142	3.4	106,389	2.7	87,440	7.7	64,229	9.1
10. Freddie Mac Community Gold	3,037,966	11.8	2,686,038	16.6	155,321	3.5	115,185	2.9	81,552	7.2	64,229	9.1
11. Bank of America Zero Down	3,020,447	11.7	2,651,081	16.4	146,883	3.3	106,946	2.7	115,607	10.2	73,769	10.5
12. Bank of America Credit Flex	3,058,508	11.9	2,706,465	16.7	155,321	3.5	115,170	2.9	81,551	7.2	64,226	9.1
13. Portfolio Composite	3,346,099	13.0	2,906,418	18.0	210,651	4.7	115,170	2.9	113,860	10.0	83,473	11.9
14. FHA 203(b)—prior	3,654,988	14.2	3,073,481	19.0	284,256	6.4	150,369	3.8	146,894	12.9	87,244	12.4
15. FHA 203(b)—current	3,351,243	13.0	2,877,494	17.8	230,548	5.2	122,349	3.1	120,893	10.7	83,632	11.9
Weighted sample size	25,762,939	100.0	16,183,879	100.0	4,464,525	100.0	3,980,131	100.0	1,134,403	100.0	704,035	100.0

Source: Authors' analysis of 1993 SIPP data.

^a Non-Hispanic white, non-Hispanic black, Hispanic, and other non-Hispanic renter families are discrete. Combined, they sum to all renter families. Recent immigrant families, those entering the United States after 1984, overlap with the previously listed racial/ethnic groups (e.g., non-Hispanic whites and blacks). Finally, if not otherwise noted, whites, blacks, and other groups are non-Hispanic.

^b NA = 3/2 Option is not activated (i.e., 2 percent outside funding is not forthcoming).

^c A = 3/2 Option is activated (i.e., 2 percent outside funding is forthcoming).

Table 18. Reference Home-Buying Capacity by Mortgage Instrument and Renter Group,^a Nationwide: 10th Percentile (Low-Priced) House (Number and Percentage of Renters Who Could Afford the Indicated House)

Loan Name	All Families		White Families		Black Families		Hispanic Families		Other Families		Recent Immigrant Families	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1. Historical	2,580,006	10.0	2,296,689	14.2	128,499	2.9	79,090	2.0	75,729	6.7	59,325	8.4
2. GSE Standard	3,105,523	12.1	2,735,408	16.9	159,594	3.6	115,170	2.9	95,352	8.4	68,825	9.8
3. Fannie Mae CHBP; CHBP 3/2 (NA) ^b	3,692,602	14.3	3,204,732	19.8	228,360	5.1	125,295	3.1	134,245	11.8	93,616	13.3
4. Fannie Mae CHBP 3/2 (A) ^c	4,180,037	16.2	3,545,564	21.9	298,186	6.7	161,991	4.1	174,426	15.4	107,091	15.2
5. Fannie Mae 97	3,635,151	14.1	3,141,453	19.4	236,843	5.3	122,110	3.1	134,699	11.9	97,938	13.9
6. Freddie Mac AG 5; AG 3/2 (NA) ^b	3,841,512	14.9	3,312,840	20.5	246,040	5.5	148,339	3.7	134,245	11.8	99,487	14.1
7. Freddie Mac AG 3/2 (A) ^c	4,343,889	16.9	3,671,313	22.7	310,284	7.0	187,982	4.7	174,426	15.4	120,981	17.2
8. Freddie Mac AG 97	3,804,928	14.8	3,295,847	20.4	229,521	5.1	145,155	3.6	134,245	11.8	99,487	14.1
9. Fannie Mae Flex 97	3,694,663	14.3	3,215,251	19.9	223,048	5.0	122,110	3.1	134,245	11.8	93,616	13.3
10. Freddie Mac Community Gold	3,828,115	14.9	3,299,893	20.4	242,200	5.4	151,842	3.8	134,245	11.8	99,487	14.1
11. Bank of America Zero Down	3,828,630	14.9	3,290,183	20.3	231,753	5.2	145,036	3.6	161,698	14.3	111,498	15.8
12. Bank of America Credit Flex	3,838,076	14.9	3,309,805	20.5	242,185	5.4	151,846	3.8	134,240	11.8	99,487	14.1
13. Portfolio Composite	4,373,124	17.0	3,687,791	22.8	322,936	7.2	187,974	4.7	174,422	15.4	120,983	17.2
14. FHA 203(b)—prior	5,168,303	20.1	4,256,037	26.3	421,094	9.4	269,694	6.8	221,504	19.5	139,920	19.9
15. FHA 203(b)—current	4,467,036	17.3	3,721,483	23.0	342,831	7.7	205,096	5.2	197,738	17.4	120,284	17.1
Weighted sample size	25,762,939	100.0	16,183,879	100.0	4,464,525	100.0	3,980,131	100.0	1,134,403	100.0	704,035	100.0

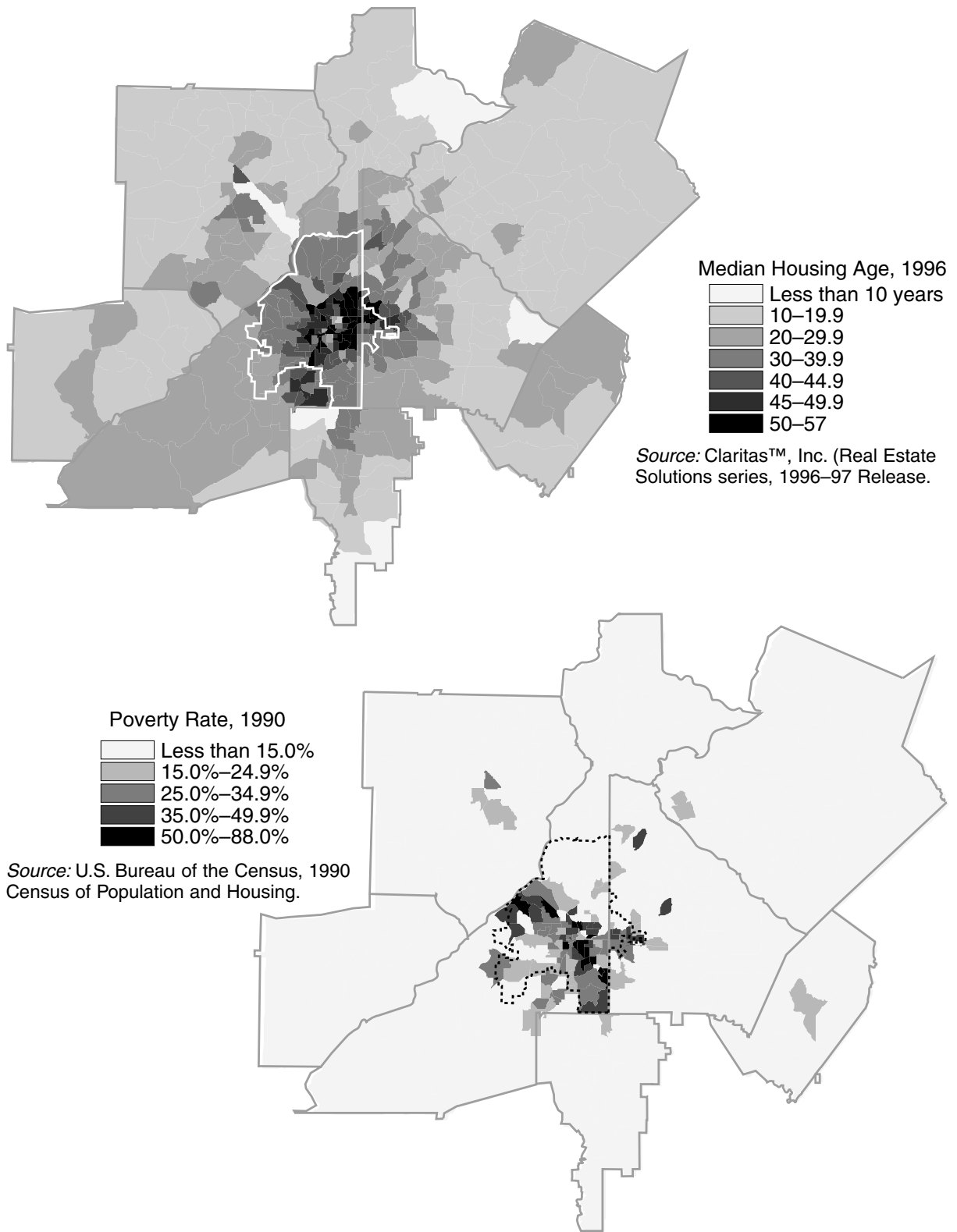
Source: Authors' analysis of 1993 SIPP data.

^a Non-Hispanic white, non-Hispanic black, Hispanic, and other non-Hispanic renter families are discrete. Combined, they sum to all renter families. Recent immigrant families, those entering the United States after 1984, overlap with the previously listed racial/ethnic groups (e.g., non-Hispanic whites and blacks). Finally, if not otherwise noted, whites, blacks, and other groups are non-Hispanic.

^b NA = 3/2 Option is not activated (i.e., 2 percent outside funding is *not* forthcoming).

^c A = 3/2 Option is activated (i.e., 2 percent outside funding is forthcoming).

Figure 2. Geographical Variations in Housing Affordability with Flexible Underwriting (continued)



Making New Mortgage Markets: Case Studies of Institutions, Home Buyers, and Communities

David Listokin, Elvin K. Wyly, Larry Keating, Kristopher M. Rengert, and Barbara Listokin

Introduction and Executive Summary

HOMEOWNERSHIP ACCOMPLISHMENT AND CHALLENGES

The United States currently enjoys its highest homeownership rate ever (66.8 percent in 1999), and significant progress toward realizing the American dream of owning one's home has been made in recent years by traditionally underserved populations—racial and ethnic minorities, recent immigrants, and low- to moderate-income (LMI) households.

Progress is uneven, however, and stark disparities remain. In 1999, 73.2 percent of non-Hispanic whites owned their own homes, compared with 46.7 percent for non-Hispanic blacks and 45.5 percent for Hispanics. Certain groups and areas are particularly challenged. For instance, through 1994, not a single conventional home mortgage had been closed on the Navajo Nation, an Indian reservation with a land area (17 million acres) larger than that of nine states.

The traditionally underserved face complex barriers, including discrimination, limited economic resources, and problems in communication and information. Each of those problems is challenging. For example, as of 1995, black and Hispanic renters in the United States had average household incomes of only \$20,917 and \$23,027, respectively, and had average assets of a paltry \$1,601 and \$2,000, respectively.

The often mutually reinforcing and self-perpetuating nature of the barriers make the challenge even more daunting. For example, language difficulties and discrimination constrain earning and assets, making it hard to secure homeownership, which historically has “bootstrapped” household wealth. Further adding to the challenge is the tension between the mortgage industry's trend toward standardization and efficiency and the traditionally underserved market's tremendously diverse needs, which often require time-consuming, custom-crafted responses.

CASE STUDY INSTITUTIONS AND ILLUSTRATIVE STRATEGIES

This study, building on a 1998 investigation funded by the U.S. Department of Housing and Urban Development (HUD), examines the lending and other strategies (hereinafter referred to as *illustrative strategies*) of a cross section of institutions that are among the leaders in the effort to expand homeownership opportunities for the traditionally underserved. The institutions were selected mainly on the basis of reputational nominations from financial institution regulators, secondary market funders, industry groups, and advocacy and community groups and activists (e.g., Federal Reserve Banks, Fannie Mae, American Bankers Association, and fair housing councils). The 16 case studies include the following subjects:¹

- | | |
|--|--|
| 1. Three national lenders and one regional lender | Bank of America (BoFA); Countrywide Home Loans, Inc.; Norwest Mortgage Inc.; and People's Bank |
| 2. Four community lenders, including minority-owned banks and banks specializing in particular areas, particular products, or both | Berean Federal Savings Bank (minority-owned), First National Bank of Farmington (FNBF; service to Native Americans), Industrial Bank (minority owned), and Trent Financial (mortgage broker concentrating on Federal Housing Administration [FHA]–insured mortgages). |
| 3. Two of the nation's longest-running lender consortia | Atlanta Mortgage Consortium (AMC) and Delaware Valley Mortgage Plan (DVMP) |
| 4. Six nonprofits (many partnering with lenders) that provide homeownership opportunities for some of the most destitute populations in the United States, such as Haitian immigrants and Native Americans | Asian Americans for Equality (AAFE); Chattanooga Neighborhood Enterprise, Inc. (CNE); Little Haiti Housing Association (LHHA); NAACP–NationsBank Community Development Resource Centers; Navajo Partnership for Housing (NPH); and Neighborhood Housing Services of Chicago (NHSC) |

The case study institutions are briefly described, and their accomplishments are summarized, in table 1.

ILLUSTRATIVE STRATEGIES TO EXPAND HOMEOWNERSHIP AMONG THE TRADITIONALLY UNDERSERVED

From the case studies, we synthesize illustrative strategies to extend and sustain home mortgage lending to minority, LMI, immigrant, and other underserved populations.

¹Nine of the case studies were originally examined in an analysis for HUD (Listokin et al. 1998). These nine have been expanded and updated.

Table 1. Case Study Institutions: Profiles and Accomplishments

Case Study Institution	Year Founded	Service Area	Description	Illustrative Accomplishments
For-Profit Lending Institutions				
National/Regional Lenders				
Bank of America ^a	1904	National	As of 1997 (prior to its merger with NationsBank), the second-largest banking company in the United States, holding about 40 percent of its assets (about \$50 billion) in residential mortgages	Maintains comprehensive program of lending to underserved populations through its "Neighborhood Advantage" affordable products program, launched in 1990. Made a 10-year, \$37 billion commitment to LMI home lending as part of an overall lending goal of \$140 billion
Countrywide Home Loans	1969	National	Principal subsidiary of Countrywide Credit Industries, which provides vertically integrated financial services. One of the nation's leading single-family mortgage originators and servicers	About one-sixth of mortgages made to black, Hispanic, or Native American borrowers. Largest lender to the Hispanic market according to 1998 Home Mortgage Disclosure Act data
Norwest Mortgage ^b	1906	National	As of 1998, the nation's largest originator and second-largest servicer of residential mortgages. Vertically integrated mortgage subsidiary of Wells Fargo & Company	The nation's top mortgage originator to minorities and LMI consumers. Offers integrated initiatives to reach underserved populations and neighborhoods
People's Bank	1842	Regional (New England)	Large regional savings bank in New England and the leading residential lender in Connecticut. Held \$2.2 billion in residential mortgages in 1996	Integrated efforts to reach underserved markets beginning in early 1990s. Offers Building Foundations—a \$200 million initiative comprising state, government-sponsored enterprise, and portfolio affordable mortgages. In 1998, Building Foundations extended approximately \$96 million in affordable mortgage loans and helped 941 people buy homes.
Community Lenders				
Berean Federal Savings Bank	1888	Philadelphia	The nation's oldest minority-owned and minority-operated thrift institution, specializing in single-family lending in the largely minority West Philadelphia area	About 95 percent of mortgages granted to minority borrowers and about 50 percent to LMI borrowers
First National Bank of Farmington (FNBF) ^c	1902	San Juan County, NM	Small commercial bank, located in a border community (Farmington, NM) to the Navajo Nation, providing mortgage and other banking services to Native Americans	A leader in the development of mortgage markets and other financial services to the Navajo Nation; closed the first federally insured mortgage loan on the Navajo Nation
Industrial Bank	1934	Washington, DC, area	Largest black-owned commercial bank in the United States, but with small volume of residential lending in Washington, DC, and Prince George's County, MD	Customized, personalized efforts to outreach, underwriting, and postpurchase retention in minority markets of the Washington, DC, area. Mortgage volume is modest (e.g., 32 mortgages in 1997), but mortgage lending is primarily to black (81 percent in 1997) and LMI (56 percent in 1997) borrowers.
Trent Financial ^d	1986	Los Angeles	Small mortgage brokerage company specializing in FHA lending to LMI, minority, and immigrant borrowers and neighborhoods in South Central Los Angeles and surrounding areas	Makes about 90 percent of its loans to people of color with low or moderate incomes

Table 1. Case Study Institutions: Profiles and Accomplishments (continued)

Case Study Institution	Year Founded	Service Area	Description	Illustrative Accomplishments
<i>Lender Consortia</i>				
Atlanta Mortgage Consortium (AMC) [®]	1988	Fulton and DeKalb Counties, GA (including Atlanta)	Nationally recognized consortium established in response to "The Color of Money" redlining study in 1988	Provided outreach and education along with flexible loan products through nine member banks. Closed a total of 1,815 loans with a value of \$95 million. Seventy percent of AMC loans went to minorities with incomes at or below 80 percent of the area median.
Delaware Valley Mortgage Plan (DVMP)	1975	Originally Philadelphia; later expanded to six-county area	One of the nation's longest-running, collaborative mortgage-loan programs; established in response to local activism that predated the Community Reinvestment Act	From 1975 through 1998, 27,952 mortgages with a total value of \$763 million granted under DVMP auspices. In 1996, 73 percent of DVMP loans were made in Philadelphia, 75 percent were made to minorities, and 60 percent were made to very low income households.
<i>Nonprofit Institutions</i>				
Asian Americans for Equality (AAFE)	1974	Asian neighborhoods in New York City	Community-based, nonprofit civil rights and housing organization dedicated to providing housing development (both rental and owner-occupied), housing assistance (e.g., homeownership counseling and tenant advocacy), citizenship courses, financial counseling, and a variety of other social and economic services to Asian Americans in the New York metropolitan area	Aided its clients in obtaining a cumulative total of \$63 million in home mortgage loans; provides homeownership counseling to about 500 persons annually; raised almost \$18 million of private and public capital to develop 185 affordable apartments; and is currently involved in \$26 million in projects that will produce about 250 affordable rental and homeownership units as well as commercial improvements
Chattanooga Neighborhood Enterprise (CNE)	1986	City of Chattanooga, TN, and Hamilton County, TN	Nonprofit organization that facilitates financing, development, and renovation of affordable housing and prepares home buyers through education and counseling; an affiliate of the Neighborhood Reinvestment Corporation (NRC)	Financed, produced, or renovated more than 4,600 units (\$140 million investment), including origination or facilitation of almost 2,000 home-purchase loans (\$92 million). In 10 years, purchase loan volume grew from 7 to more than 300 home mortgages annually. Leverages private-sector investment; captures public investment, and provides extensive services to borrowers.
Little Haiti Housing Association (LHHA)	1987	Little Haiti (and nearby neighborhoods) in Miami	Uses housing as a primary vehicle to improve the shelter and socioeconomic conditions of Haitians in Miami's Little Haiti neighborhood. Applies a comprehensive "integrated housing strategy" that produces rehabilitated and new affordable housing and provides both rental and homeownership assistance.	As of February 1999, had provided extensive homeownership counseling to 180 families. Of the 57 families who purchased houses, not one has experienced a foreclosure; and the delinquency rate is zero percent. LHHA is in the process of rehabilitating about 70 multifamily units and building a new 33-unit for-sale townhouse project.
NAACP-Nations-Bank [®] Community Development Resource Centers	1991	Atlanta; Austin, TX; Charlotte, NC; Columbia, SC; Ft. Lauderdale, FL; and Richmond, VA	Partnership between civil rights organization and leading national bank. Provides education, technical assistance, and counseling along with home mortgage, consumer, small business, and community-development lending.	Between 1993 and 1996, made 443 home mortgage loans with a total value of \$32.3 million. About 98 percent of those loans were to minority borrowers, mostly LMI households.

Table 1. Case Study Institutions: Profiles and Accomplishments (continued)

Case Study Institution	Year Founded	Service Area	Description	Illustrative Accomplishments
<i>Nonprofit Institutions (continued)</i>				
Navajo Partnership for Housing (NPH)	1996	Navajo Nation (AZ, NM, UT)	Nonprofit affiliate of the NRC devoted to homeownership on the Navajo Nation. (Through 1994, not a single conventional mortgage had been closed on the Navajo Nation, an Indian reservation with a land area larger than that of nine states.) Offers home-buyer education and counseling, provides intermediation for the buyer with tribal and governmental authorities, and makes available other services.	Involved on many fronts in surmounting the many legal and institutional barriers to collateralized mortgage lending on Indian lands. As of mid-1998, only one home purchase on the Navajo Nation, involving two separate mortgages, had been facilitated, but 13 loans had been approved. NPH had provided individual counseling, group homeownership training, or both to almost 150 people. Developed homeownership education materials especially for Native Americans.
Neighborhood Housing Services of Chicago	1975	Chicago (All LMI areas, with focus in 20 target neighborhoods)	Largest member of the NRC network. Nonprofit organization that administers loan programs to finance home improvement, purchase, and rehabilitation for LMI families; buys and redevelops single-family and multifamily properties; builds new affordable housing; and engages in community-building activities through neighborhood-based programs.	Has provided about 6,800 loans—including home improvement, purchase-rehabilitation, and purchase loans—to borrowers in LMI Chicago census tracts. Sixty percent of the borrowers earned 80 percent or less of the area median income, and 90 percent were ethnic minorities, racial minorities, or both. Other accomplishments include rehabilitation or new construction of 21,000 housing units.

^a In September 1998, NationsBank and BankAmerica merged to form Bank of America.

^b In November 1998, Wells Fargo & Company merged with Norwest Corporation, the parent of Norwest Mortgage. In April 2000, Norwest Mortgage changed its name to Wells Fargo Home Mortgage.

^c FNBF was acquired by Wells Fargo Bank New Mexico in March 2000.

^d Trent Financial ceased operations on December 31, 1999.

^e AMC disbanded in 1997 in response to greater industrywide attention to underserved markets and consortia instability.

The strategies are organized according to the stages of the lending process, as follows:

1. *Overall management strategies*: policies to create an environment conducive to lending to the traditionally underserved
2. *Strategies for seeking applicants*: strategies to broaden the pool of applicants and tap latent demand among traditionally neglected markets
3. *Strategies for qualifying applicants*: strategies to ensure that lending decisions are based solely on repayment ability of the traditionally underserved and strategies to extend that repayment capacity
4. *Strategies for retaining homeowners*: policies to support the long-term success of homeownership by often-novice buyers

Illustrative strategies from the case studies for these four stages of the lending process are summarized in tables 2 through 5. The overall themes and principal actions of the four areas of intervention are as follows:

- *Overall management strategies* are designed to create an environment in which fair and affordable lending becomes an integral part of the institution's mission and day-to-day operational fiber, including how staff are hired, trained, and compensated.
- *Strategies for attracting applicants* aim to identify and develop the social, community, and communication networks that encourage the traditionally underserved to try to become homeowners and to apply for mortgages.
- *Strategies for qualifying applicants* work to address the many barriers historically confronted by the traditionally underserved through many means, including providing home-buyer education and homeownership counseling; expanding the availability of affordable mortgage products, as well as affordable housing; applying flexibility in underwriting that is consistent with sound lending practices; and vigilantly guarding against discriminatory treatment.
- *Strategies for retaining homeowners* seek to realize long-term success in lending and homeownership by building ongoing relationships with borrowers; providing careful monitoring and quick and flexible reaction in the event of missed payments; and, more generally, tackling the many socioeconomic problems bedeviling traditionally underserved populations and neighborhoods.

APPLYING THE ILLUSTRATIVE STRATEGIES

The illustrative strategies “menu” detailed in the accompanying tables involves a changed way of thinking, as well as a compendium of actions. Not everything has to be ordered from the menu; however, its full content should be considered carefully. In fact, the menu

Table 2. Illustrative Strategies for Managing Enhanced Mortgage Lending to Traditionally Underserved Communities: Case Study Examples

Management Strategies	Case Study Examples
A. Management Commitment	
Ensure overall corporate commitment to underserved market	Norwest's corporate goal is to be the largest and most profitable mortgage originator and servicer to LMI and minority consumers.
Stipulate corporate commitment in defining documents	DVMP bank participants (e.g., PNC and CoreStates) have vision statements reiterating commitment to affordable lending.
Involve senior-level management	Countrywide's fair lending committee is composed of the president, the heads of major production divisions, and other senior officials. Norwest established the position of executive vice president of affordable housing; the officer in that position sits on the parent company's executive board. FNB's Community Reinvestment Act (CRA) officer reports to an executive vice president, with oversight provided by the board of directors.
B. Management Structure	
Allow for creative mix of specialized and companywide units involved in affordable lending	BofA has community-lending underwriters and two special processing units expressly designated to handle low-volume community lending products; however, affordable lending is done throughout the company. Norwest has staff members who focus on affordable lending (e.g., community development sales representatives [CDSRs]) and has an affordable housing underwriting group, although the company in general engages in affordable lending and underwriting. Countrywide has about 20 retail branches in inner-city locations; however, the company's 440 retail offices make affordable loans.
C. Lending Goals	
Set concrete goals for affordable lending	BofA sets three lending goals (for LMI census tracts, LMI borrowers, and minority borrowers) for every operating level. Norwest's performance objectives for division, area, and regional managers include specific numeric goals for LMI and minority lending. People's incorporates CRA objectives into annual goals for each of its business areas.
D. Compensation Formulas	
Set compensation that encourages working on affordable lending	BofA ties compensation and bonuses to affordable loan performance and offers other incentives for such lending (e.g., peer recognition). Norwest links manager compensation to LMI and minority mortgage production and provides its CDSRs with a base salary plus commission. (This system allows CDSRs to perform functions that do not immediately generate loan applications; however, in time, all CDSRs revert to full commission.) Compensation of Countrywide retail loan officers is based on the number (not the value) of the mortgages granted. People's account officers working in central cities have a special compensation system. Industrial loan officers receive a higher-percentage commission on smaller loans.
E. Workforce Development	
Educate workforce on affordable and fair lending and promote workforce diversity and cultural sensitivity	BofA offers a "Fair Lending Challenge" (interactive CD-ROM program) as well as other fair housing–CRA training, and it aggressively recruits minority and bilingual personnel. People's branch account officers and others involved in the lending process (e.g., appraisers) receive in-house training on fair lending. FNB provides staff training on the Navajo culture.

Table 2. Illustrative Strategies for Managing Enhanced Mortgage Lending to Traditionally Underserved Communities: Case Study Examples *(continued)*

Management Strategies	Case Study Examples
<i>F. Market Research</i>	
Analyze the potential and performance of affordable lending	BofA market research identifies the needs and perceptions of the underserved community and guides the development and promotion of its Neighborhood Advantage Mortgages. Norwest's Market Intelligence Group identifies market opportunities and helps develop marketing strategies.

can act as a useful checklist for institutional self-evaluation, with those actions that most comport with an institution's given situation considered first.

Illustrative strategies vary by institution type and context as explained in the following paragraphs:

1. Because they are based in traditionally underserved neighborhoods, community lenders have less cause to advertise aggressively to reach their constituents. At the same time, making their service role better known to the community will attract depositors and, ultimately, foster the mortgage-provider role. Similarly, many nonprofits, already of and in the community, still must reach out to publicize their mission and services.
2. A smaller lender may very well not be able to afford extensive matched-pairs testing, nor would the lender be able to establish a separate, specialized, affordable lending unit. Yet the smaller lender can incorporate a second review of initial declinations, and its underwriting staff can remain in a general unit but still be trained in affordable mortgage products and underwriting.
3. Lenders' abilities to make affordable loans depend on capitalization. Lenders with deeper pockets can make more affordable loans. Lenders less amply capitalized can concentrate on the many variations of government-sponsored enterprise (GSE) affordable loans and FHA mortgages that the secondary market accepts.
4. Nonprofits tend to do more of the longer-term preparation of borrowers (e.g., educating and counseling) and the custom crafting of housing subsidies and neighborhood building. Once nonprofits make traditionally underserved populations and areas more bankable, lenders can bring to bear the mass efficiency of the standardized financing market.

The menu items should be sampled, with some digested if they work and others discarded if they are less useful. Efficacy may change over time. For example, less-experienced lenders may gain comfort in consortia arrangements with their peers; in time, as they gain experience, the consortia participants may want to act alone or to redirect the group to new challenges (e.g., rehabilitation financing).

Table 3. Illustrative Strategies for Attracting Traditionally Underserved Mortgage Applicants: Case Study Examples

Strategies for Attracting Applicants	Case Study Examples
<i>A. Through Presence in Underserved Communities</i>	
<p>BofA has offices in south central Los Angeles, in Chicago's south side, and in similar areas. Countrywide has retail branches in inner-city locations in Detroit; Newark, NJ; and numerous other cities. Norwest has 800 locations nationwide, many in underserved neighborhoods. Berean and Industrial emphasize their role as community-based and minority-owned lenders. FBNB opened the first full-service banking facility on the Navajo Nation.</p>	
<i>B. Through Informal Gatherings</i>	
<p>BofA sponsors many community-based ethnic events (e.g., Cinco de Mayo festivals). Countrywide sponsors housing fairs following the opening of House America branches. AAFE participates in housing fairs in Asian-American neighborhoods.</p>	
<i>C. Through Different Media</i>	
<p>Trent uses infomercials. DVMP sends press releases to various Philadelphia-area media and distributes brochures and other informational materials to would-be DVMP clients. LHHA hosts a weekly radio program and advertises on Haitian radio broadcasts. AAFE publishes <i>Caring Community</i>, which discusses homeownership and related topics, and encourages articles on its operations in the Asian-American ethnic press. NPH publicizes its program in the <i>Navajo Times</i> and on the Navajo radio station. NHSC advertises on Chicago's black and Spanish-language radio stations and on minority-oriented cable television.</p>	
<i>D. Through Language/Cultural Sensitivity</i>	
<p>BofA advertises in English, Spanish, Chinese, Vietnamese, and other languages. BofA affordable lending materials are translated into Spanish or other languages. FBNB markets in the Navajo-language newspaper and on the Navajo-language radio station. LHHA advertises in Creole. AAFE distributes educational materials in English, Chinese, Korean, Hindi, Urdu, and other languages and is sensitive to language nuances (e.g., different words for <i>mortgage</i> in Mandarin and Cantonese).</p>	
<i>E. Through Working with Neighborhood and Other Institutions</i>	
1. Churches	<p>Norwest partners with local churches (e.g., Sharing Advantage Program and Revelation Mortgage Corporation). People's works with churches, social clubs, and other entities active in minority communities. AMC worked closely with Atlanta's Concerned Black Clergy. Industrial is a charter member of the Collective Banking Group, an organization composed of more than 60 churches in the Washington, DC, area.</p>
2. Community groups	<p>BofA partners with AAFE, Watts Homeownership Center, and other groups. FBNB networks through NPH, Navajo legal services, and Navajo schools. NationsBank partners with NAACP, and Countrywide also networks through NAACP.</p>
3. Real estate agents	<p>BofA networks with minority real estate agents (e.g., sponsors golf tournaments for Los Angeles African-American real estate agents). Trent educates real estate agents in affordable FHA and other products. CNE conducts monthly workshops for local real estate agents.</p>
4. Banks	<p>NPH has received referrals from FBNB, Norwest, and other banks. NHSC works with many Chicago banks and has partnerships with 250 companies.</p>
5. Government	<p>NPH has received referrals from the U.S. Rural Housing Service.</p>
6. Other institutions	<p>Norwest partners with Greenlining Institute and National Association of Affordable Housing Lenders. DVMP is administered by the Greater Philadelphia Urban Affairs Coalition. CNE partners with hospitals and police departments.</p>

Table 3. Illustrative Strategies for Attracting Traditionally Underserved Mortgage Applicants: Case Study Examples (continued)

Strategies for Attracting Applicants	Case Study Examples
<i>F. Through Multiple Points of Contact with Consumers</i>	<p>BofA Presta Linea, a bilingual (English-Spanish) phone center, offers loan information and can intake loan applications. People’s mortgage calling officers meet customers at their homes, its supermarket branches accept mortgage applications, and its video banking provides mortgage services. Trent and NPH offer homeownership seminars at workplaces. Industrial sends loan officers to meet applicants at the location of their choice.</p>
<i>G. Through Employees</i>	<p>Berean recruits customers through its black employees, and FBNB recruits through its Navajo employees. CNE encourages its employees to refer friends and family members to CNE for homeownership and other assistance.</p>

OPPORTUNITY AND CHALLENGE OF NEW MORTGAGE MARKETS

Lending to traditionally underserved markets is required by the Community Reinvestment Act (CRA), GSE production goals, and other mandates. Because of the changing demographics of the United States, such as the growing number of minority, immigrant, and nonnuclear family households, the nontraditional market holds great promise. That market provides considerable growth potential in a period of intensified industry competition.

Daunting challenges remain. The recent progress in affordable lending is largely the result of an economic boom that has extended to some of the underserved; meanwhile, interest rates, energy costs, and housing-price inflation have remained modest. This historically unusual concatenation of events may not last.

Other, more endemic limitations exist:

1. Affordable housing lending may not bootstrap purchasers to the more sought-after city and suburban locations; therefore, those new buyers may not realize the same appreciation in housing value that their predecessors in the post–World War II era realized.
2. The tremendous effort and subsidy that is necessary to make the new markets work is hard to sustain, especially for long periods and at high volumes. For example, over roughly a 12-year period, Miami’s LHHA has been able to achieve homeownership for fewer than 100 families, even with subsidies of \$30,000 per unit.

Table 4. Illustrative Strategies for Qualifying Traditionally Underserved Mortgage Applicants: Case Study Examples

Strategies for Qualifying Applicants	Case Study Examples
A. Provide Education and Counseling	
1. Lender-facilitated instruction	Norwest provides home-buyer education using instructional materials from Fannie Mae, GE Capital, and Mortgage Guaranty Insurance Corporation (as well as instruction conducted by nonprofits). Countrywide distributes a credit repair manual (<i>Your Credit and You</i>), often on referral from Countrywide's House America Counseling Center (HACC). CNE provides FasTrak homeowner counseling.
2. Nonprofit-facilitated instruction (often with lender partnership)	BofA partners in counseling with National Council of La Raza and other community groups. People's refers home seekers to the counseling services offered by ACORN (Association of Community Organizations for Reform Now) in addition to its own instruction. Berean relies on ACORN and other Philadelphia nonprofit counseling agencies. LHHA , AAFE , and NPH all provide culturally sensitive homeownership training (e.g., instruction given in Creole, Chinese or Korean, and Navajo, respectively). NHSC's HomeBuyers Club provides peer support, education, and credit repair.
3. Training and certification	DVMP has trained more than 300 counselors; it also certifies counseling agencies.
4. Telecounseling	Potential borrowers can work with a counselor from the Norwest Mortgage HomeBuyers Club via telephone and mail contact. Countrywide's HACC provides centralized homeownership counseling via a toll-free number.
B. Provide Affordable Financing and Housing Opportunities	
1. Affordable mortgages	Countrywide's lending consists primarily of FHA, Fannie Mae, and Freddie Mac products. NPH , FNBF , and Norwest use federal Section 184 (and other products) to enable lending on Indian lands.
a. Government and government-sponsored enterprise (GSE) affordable products	BofA's Special Allocation program provides financing to LMI borrowers or census tracts not meeting standard guidelines. People's community lending fund, or CRA pool, allows high loan-to-value (LTV) mortgages without mortgage insurance and has interest rate discounts and other affordable features. Berean allows debt-to-income ratios over 40 percent, well above industry standards. Industrial has no absolute debt-to-income ratio maximum on its portfolio loans. AMC allowed a 50-percent total debt ratio (later reduced to 42 percent). Participating DVMP lenders sometimes offered below-market-interest-rate (BMIR) financing and did not require private mortgage insurance on high-LTV loans. AMC participants discounted interest rates by 50 basis points.
b. Lenders' own affordable products	
2. Flexible underwriting	BofA Credit Flex mortgages are targeted to LMI borrowers with lower credit scores, no credit history, or limited credit history. People's allows a strong nontraditional credit record to offset blemished formal credit (typically nontraditional credit is referenced only when formal credit records are unavailable). Trent draws heavily on FHA mortgages because FHA's credit underwriting is less stringent than that of other (e.g., GSE) products. Berean pays little heed to formal credit reports because it frequently finds them to be incorrect or outdated for its LMI borrowers. Lenders financing homes rehabilitated by LHHA did not run a credit score on LHHA's mortgage applicants. FHA, Fannie Mae Community Home Buyer's Program, and Freddie Mac Affordable Gold products offer numerous flexibilities with respect to credit and other underwriting criteria.
a. Credit	

Table 4. Illustrative Strategies for Qualifying Traditionally Underserved Mortgage Applicants: Case Study Examples (continued)

Strategies for Qualifying Applicants	Case Study Examples
<i>B. Provide Affordable Financing and Housing Opportunities (continued)</i>	
b. Property standards and appraisals	To improve the accuracy of appraisals in city neighborhoods, People's uses a combination of in-house appraisers familiar with city housing markets and similarly knowledgeable outside appraisers. Industrial prefers “inside the Beltway” appraisers, who are generally more knowledgeable about Industrial's market. Berean focuses on the particular property being mortgaged and not on the neighborhood or block in which it is located. DVMP underwriting focuses on the block rather than the entire neighborhood.
c. Employment and income	Lenders working with AAFE waived the standard requirement that a mortgage applicant should have been working at least two years (AAFE showed that its Asian-American clientele often had worked abroad for many years). CNE waives a two-year employment requirement under certain conditions (e.g., home buyer previously steadily employed). AAFE lenders waive formal income verification (e.g., a W-2) and instead accept other documentation (e.g., employer letter).
d. Asset verification	A GSE pilot program accepted the informal <i>sous-sous</i> savings of LHHA's mortgage applicants as adequate funds to close. Similarly, lenders working with AAFE accepted savings drawn from the Korean <i>kye</i> . (Acceptance of informal savings later became industry practice.) AAFE also convinced lenders to accept flexible-repayment loans from extended Asian-American families as a permissible asset to close.
3. Housing subsidies	BofA participates in 14 state bond programs offering BMIR mortgages, uses credit certificates in 20 cities and counties, and is approved for approximately 200 local and state down payment assistance programs. Norwest participates in more than 600 mortgage assistance programs (e.g., for down payment and closing cost assistance, insurance writedown, and purchase-cost reduction). In 1996, Countrywide was involved in 448 BMIR mortgage revenue bond programs and 475 soft second mortgages, which reduced down payment and closing costs for LMI borrowers. People's partners with the Connecticut Housing Finance Authority (CHFA) and others (e.g., a CHFA- People's product offers 100-percent LTV-BMIR home mortgages to current residents of public housing). Berean participates in a University of Pennsylvania employee mortgage program that allows loans with up to 105 percent LTV. Industrial participates in D.C. Housing Finance Agency and other bond programs offering BMIR mortgages with closing cost assistance. DVMP participating lenders took advantage of soft seconds from the City of Philadelphia and of BMIR financing from the Pennsylvania Housing and Finance Agency. FBNB gave BMIR financing for Navajo housing through a grant received from the Federal Home Loan Banks' Affordable Housing Program (AHP). AAFE uses a variety of subsidies (e.g., building on city-owned land and using New York City-State BMIR financing). LHHA uses Community Development Block Grant, HOME, AHP, and Miami-Dade County surtax subsidies. NPH used AHP and other subsidies. NHSC partners with the City of Chicago, foundations, and lenders to provide affordable purchase, purchase-rehab, and other financing.
4. Affordable housing	AAFE has developed 185 affordable apartments; it is currently producing about 250 affordable rental and homeownership units, as well as making commercial improvements. CNE has constructed more than 100 single-family homes and has renovated or constructed approximately 400 multi-family units. NHSC has been involved in the rehabilitation or new construction of almost 21,000 housing units, including 334 units of LMI rental housing that it owns and manages.

Table 4. Illustrative Strategies for Qualifying Traditionally Underserved Mortgage Applicants: Case Study Examples (continued)

Strategies for Qualifying Applicants	Case Study Examples
<i>C. Foster Fair Access to Credit</i>	
1. Multiple reviews	Norwest loans not immediately approved by automated underwriting are referred to more detailed manual underwriting. Norwest's Affordable Housing Underwriting Group offers additional underwriting assistance. At People's , any mortgage application that is rejected gets at least two reviews; a special review committee examines rejected LMI and minority home seekers; and a senior vice president further reviews all rejections of minority loans, regardless of income. Lender participants in DVMP had multiple internal bank reviews in addition to DVMP peer review.
2. Ensuring fairness	Countrywide statistically analyzes the "denial disparity index" of its retail branches, performs matched applicant pair (minority/majority) testing, and has a special representative hear fair-lending complaints. CNE annually reprocesses 10 percent of its loans to test for fairness.
<i>D. Other Qualifying Strategies</i>	
	NPH , FNBF , and Norwest are working to address the legal, bureaucratic, and many other obstacles to mortgage lending on Native American lands (e.g., formulation of an innovative homesite lease that allows lenders to protect collateral while addressing the inalienability of tribal lands).

3. We can learn much from the illustrative strategies distilled in this study, but ultimately we cannot separate mortgage lending markets from broader efforts to combat economic and racial inequities in American housing markets. Lending markets are but one part of a broader real estate process; innovative strategies for mortgage lending must be accompanied by actions to expand homeownership opportunities by real estate agents, insurance companies, credit bureaus, appraisers, and other real estate professionals and industries.
4. Strategies for expanding homeownership opportunities are a moving target. Much progress has been made in management practices and in seeking and qualifying mortgage applicants; however, considerably more attention needs to be paid to retaining homeowners. Also, progress on home-purchase financing needs to be accompanied by the more demanding purchase-rehabilitation and home-improvement lending. In this area, many challenges remain; for instance, 60,000 low-income senior households in Philadelphia need loans for house repairs and require technical, social, and other support. (DVMP is, in fact, moving to address such needs.)

GUIDE TO THIS REPORT

The first part of this report provides background and synthesizes the case studies and includes a comprehensive discussion of the barriers faced by traditionally underserved populations and the innovative strategies used by lenders to reach this market. This discussion provides an overall framework for more than 300 pages of case studies, and

Table 5. Illustrative Strategies for Retaining Traditionally Underserved Mortgage Homeowners: Case Study Examples

Strategies for
Retaining Homeowners

Case Study Examples

A. Communication with and Education of Borrowers

A **Countrywide** video, *Living the Dream: A New Homeownership Survival Guide*, covering the basics of budgeting, home maintenance, and similar topics, is required viewing for all retail borrowers. New borrowers are notified by **Trent** that the company is available to help borrowers in times of need. **LHHA's** Homeowners' Club offers new homeowners an opportunity to meet for social and educational activities (e.g., to hear about fire and hurricane safety). **NHSC** mails newsletters to its borrowers to apprise them of ongoing services, programs, and opportunities with NHSC and with citywide and statewide programs.

B. Enhanced Oversight

DVMP lenders would often drive through the neighborhoods where mortgages were granted and “windshield” survey the condition of the DVMP properties. **LHHA's** family outreach specialist visits each borrower bimonthly to inquire about problems with the house or neighborhood. The specialist also notes if repairs are needed on the house, makes a visual inspection of the immediate neighborhood, and attempts to address observed problems (e.g., by referring the homeowner to reliable tradespeople).

C. Quick Response to Delinquency

Many GSE and similar affordable products mandate a quicker servicer response to delinquency (e.g., the servicer contacts the borrower 15 days after a payment is late, rather than wait for 30 days to elapse). On all its loans (portfolio and those sold to the secondary market), **Berean** intervenes before a payment is 30 days past due to work out a solution. **Industrial** acts similarly. Long before it became industrywide practice, participating **DVMP** lenders responded quickly to delinquency. **AMC** closely monitored delinquencies, and the AMC executive director visited the homes of newly delinquent borrowers to initiate workouts.

D. Delinquency Workout

Postpurchase delinquency counseling, often by nonprofits, is required in conjunction with many affordable lending products on an as-needed basis. The borrower authorizes the servicer to share relevant account information with a third-party counselor should the borrower become delinquent. **People's** provides counseling on budget management and debt restructuring to challenged borrowers (e.g., those experiencing a job loss) and also refers those borrowers to an independent, nonprofit counseling organization. On an as-needed basis, People's will work out a delinquent loan to keep it performing by modifying the interest rate or stretching out the repayment schedule. **NHSC's** Foreclosure Intervention Program provides mortgage-delinquency counseling and financial aid (e.g., NHSC can arrange a loan through Chicago's Homeowners Emergency Lending Program).

E. Overall Neighborhood Support

LHHA's Homeowners' Club (described above) sets a framework for collective neighborhood action with respect to public safety, economic activity, and social programs (e.g., organizing block and neighborhood watches). In addition, LHHA provides youth and after-school programs; resource centers for art and computer instruction; and a Service Exchange Program (through which LHHA homeowners barter services, such as providing gardening in exchange for child care). LHHA has also fostered a Little Haiti credit union/ economic development corporation. **AAFE** provides many support services for its target Asian-American neighborhoods, including civil rights advocacy, citizenship and other education, landlord-tenant dispute counseling, and economic development through such means as obtaining affordable financing for local businesses and rehabilitating or building new commercial stores. **CNE** improves neighborhood conditions through strategies ranging from commercial development to improved public safety through its Police Officer Next Door Program. **NHSC** supports revitalizing neighborhoods through beautification (e.g., cleanup of a CSX railroad embankment), commercial development (assembling properties in the Roseland neighborhood), and enhancement of public safety (e.g., participating in a “super block” intervention combining enhanced police protection and improved social services and infrastructure).

alerts readers to particular institutions or practices in specific case investigations. (Tables 1–5 in this summary serve a similar role in guiding readers.)

The detailed case studies follow the background and synthesis. Each study is organized using this common framework:

1. *Background*—This section sets the context and includes such considerations as institutional history (including corporate structure and changes in the target market), motivations for lending to the traditionally underserved, and distinguishing characteristics of the area or areas where the lending is taking place.
2. *Strategy*—This information is organized by type of strategy (management framework, attracting and qualifying applicants, and retaining homeowners), with encompassing strategies described in considerable detail. Pertinent subsidies and other bridge mechanisms are included as appropriate.
3. *Discussion*—Each case study includes a discussion of the strategies—how they evolved over time and why they changed, how successful they are in terms of reaching the underserved, costs of implementation, and change in corporate culture and the like—as well as constraints and how they were overcome. Also included in most instances is a discussion of unique aspects of the case study institution and the replicability of the institution’s approach.
4. For easier reading, each case study begins with a one-page description of the organization and its strategies.

In sum, expanding homeownership opportunities for the traditionally underserved requires a broad range of actions on many fronts. The case studies show the way to real-world progress in accomplishing this goal. This report will, we hope, allow others to learn from the experiences of diverse institutions.

References

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Case Study

Norwest Mortgage, Inc.

<i>Location:</i>	Silver Spring, MD
<i>Description:</i>	Vertically integrated mortgage subsidiary of Wells Fargo & Company, a diversified financial services company. Norwest is the nation's leading originator and second-leading servicer of residential mortgages.
<i>Year Founded:</i>	1906
<i>Service Area:</i>	National
<i>Accomplishments:</i>	Nation's largest originator to LMI and minority consumers. In 1998, Norwest originated or purchased 804,000 mortgages, including 113,000 minority and 166,000 LMI loans.
<i>Outstanding Strategies Management:</i>	Minority and LMI performance goals that are tied to compensation; diverse and diversity-trained workforce; specialized community development sales representatives; intensive study of markets; and lending performance monitoring
<i>Attracting Applicants:</i>	Outreach and partnerships with churches; direct-to-consumer advertising; and outreach by multilingual and culturally diverse workforce
<i>Qualifying Applicants:</i>	Home-buyer education; Norwest HomeBuyers Club, which provides telephone credit counseling; wide array of mortgage products to meet diverse needs—many products coupled with mortgage assistance programs (e.g., down payment, closing cost, and mortgage insurance writedowns); and Affordable Housing Underwriting Group
<i>Retaining Homeowners:</i>	Postpurchase counseling required for all affordable products; foreclosure prevention program and early intervention structure in place at time of origination (e.g., automated delinquency program identifies loans most likely to default, which then receive proactive monitoring)

Other: Philosophy that mortgage lending to the traditionally underserved is a core, profitable business. Related to this philosophy is Norwest's willingness to venture into relatively untested areas of the mortgage market (e.g., Native American initiatives).

BACKGROUND

Norwest Mortgage, Inc., is the mortgage company subsidiary of Wells Fargo & Company, a diversified national financial services company.¹ In 1998, Norwest was the nation's leading originator and second-leading servicer of residential mortgages, providing funding for approximately one of every 13 homes financed in the United States and maintaining a servicing portfolio of more than 2 million customers.² In that year, Norwest originated \$109 billion in mortgages (an all-time record for any single lender) and maintained \$245 billion in servicing contracts (Inside Mortgage Finance Publications 1999).

The bank operates the largest mortgage lending retail network in the United States, with more than 800 locations nationwide, including stores in all 50 states and more than 3,400 sales representatives. Just over half of Norwest's originations are generated through this extensive retail network.

Norwest's remaining originations come from its wholesale lending operations. Wholesale lending includes (1) mortgage broker lending; (2) correspondent lending, through which Norwest purchases loans from small- to medium-sized originators; (3) "institutional conduit sales," involving conduit purchases from major originators; and (4) "directors acceptance," which is the name for Norwest's originations of "B" and "C" quality loans.

Norwest's securitization capabilities support its origination and servicing capabilities. In addition to selling loans to the GSEs—Fannie Mae and Freddie Mac—the bank packages loans, mainly subprime and jumbo loans, through its own securities firms for sale primarily to institutional investors. (Norwest is the second-largest private conduit [securitizer] of loans in the country.) Overall, Norwest sells approximately 98 percent of its mortgage loans on the secondary market, with most going to the GSEs.

¹ In 1998, the Norwest Corporation merged with Wells Fargo & Company to become the sixth-largest bank holding company in the United States. The new entity formed by the merger is called Wells Fargo & Company. The merged company has stated a goal of being the largest CRA lender in the western United States (Wells Fargo & Company; see World Wide Web page <<http://wellsfargo.com/cra/craltr1/>>).

With the merger there have been changes in company nomenclature. Norwest Mortgage's name has officially changed to "Wells Fargo Home Mortgage." The Affordable Housing Group division's name was changed to "Emerging Markets." The Affordable Housing Underwriting Group no longer exists.

In the case study, however, we retain the premerger nomenclature with respect to company, division, and group because our research commenced before the merger was completed.

² The origination and servicing ranks are based on data published by Inside Mortgage Finance Publications (1999).

generate the bulk of first-time home buyers.³ In addition, significant populations of underserved minority and LMI households already live in the United States.

In response to those demographics, Norwest created its Affordable Housing Initiative in 1996. The Affordable Housing Initiative's mission is as follows:

To identify and capitalize on existing and new market opportunities that will expand the volume and profitability of Norwest Mortgage lending and mortgage servicing with first-time home buyers, and low- and moderate-income, minority, and immigrant mortgagors throughout the United States of America. (Russell 1998a)

One goal of the initiative is to incorporate affordable housing concepts throughout the fabric of the company. In support of this goal, the initiative created the position of executive vice president of affordable housing.⁴ This officer sits on the parent company's executive board, ensuring that affordable housing perspectives are considered in evaluating all of Norwest's projects, products, and initiatives. In addition, affordable housing employees are sited throughout Norwest's Maryland, Iowa, and California offices. They serve many functions, including sales, marketing, human resources, underwriting, education, and community relations.

Lending Goals and Managerial Compensation

Performance objectives for Norwest's division, area, and regional managers include specific numeric goals for minority and LMI lending. Those goals are established in terms of numbers of mortgages, not dollar value. Performance relative to the goals affects managers' compensation and performance reports.

Training Programs

Norwest sales representatives undergo a continuous training process to ensure that they are intimately familiar with all of the mortgage product options that could best fit each borrower's particular circumstances. Sales representatives also receive diversity and sensitivity training, which enables them to better understand their customers and thus to respond to and respect those customers' individual needs and preferences.

Diverse Workforce

Norwest has made an effort to develop a diverse workforce. It places particular emphasis on building a sales force that is multilingual and culturally and ethnically diverse.

³ See, for example, Day (1996), Masnick and Kim (1995), and McArdle and Masnick (1995).

⁴ Following the merger (see footnote 1), this position is known as the executive vice president of emerging markets.

tion's membership has grown to more than 150. NAAHL's mission is to promote private investment in affordable housing and to create sustainable communities.

Outreach by Sales Representatives

Norwest sales representatives (loan officers) are multilingual and culturally diverse. They are expected to forge relationships with local organizations, community groups, home builders, churches, real estate agents, and other relevant entities. As a result of that consistent outreach, as well as of Norwest's underlying goal of serving the LMI and minority mortgage market, a substantial number of Norwest's sales representatives produce more than 50 percent of their total originations from minority borrowers, from LMI borrowers, or from both. It is noteworthy that nearly all of those loan officers are compensated on a 100-percent commission basis.

Sharing Advantage Program

As part of its outreach activities to local churches, Norwest created the Sharing Advantage Program (Guillory 1997; Muolo 1997). With this program, Norwest works with local churches, coordinating with pastors and distributing literature that recommends congregation members consider homeownership. The literature suggests that interested members first approach their pastor and then call a Norwest representative, who will answer their questions and help them determine whether homeownership is appropriate at the current time. Norwest also makes representatives available for discussions with church clergy and congregants.

No special mortgage products are associated with this program. However, when participants in the Sharing Advantage Program successfully apply for and receive a mortgage from Norwest, the bank makes a \$300 charitable donation to either the church or the charity of choice in the borrower's name.

Qualifying Applicants

Education of Home Buyers

Most affordable loan products offered by Norwest require that the applicant complete an approved education course for home buyers to attain a Home Buyer Education Completion Certificate, or meet criteria for waiving the home-buyer education requirement. For the waiver, a home buyer typically must meet all of the following criteria:

1. Is a previous home owner
2. Makes minimum 5-percent cash down payment from own funds and does not rely on a gift, loan, or grant for any portion of the down payment

3. Has reserves after closing equal to at least two monthly mortgage payments

Home-buyer education requirements may be satisfied through a facilitated workshop or by the use of self-study materials in conjunction with telephone counseling. Self-study alone is not sufficient. Besides a number of corporate home-buyer education programs, such as those organized by Fannie Mae, GE Capital, and Mortgage Guaranty Insurance Corporation, Norwest accepts home-buyer education provided by nonprofit organizations, as long as their curricula and materials are approved by Norwest Affordable Housing.⁶ That approval is gained by submitting the education curricula and materials to the education and counseling division of Norwest Affordable Housing/Emerging Markets.

Home buyers who are unable to attend a facilitated workshop may use the self-study with telephone counseling option. The home buyer then studies the educational materials, completes the worksheets in the manual, and returns them to either the loan officer or the designated mortgage insurance company. Next, a counselor from the mortgage insurance company will call the borrower to discuss the materials, and will ask questions to determine if the borrower has read and understood the materials. If so, the counselor will forward a certificate of completion to the loan officer.

To document completion of the home-buyer education requirement, the home buyer's file must include one of the following:

1. Telephone counseling: certificate from mortgage insurance company with completed worksheets attached
2. Lender-facilitated workshop: Home Buyer Education Completion Certificate completed by Norwest Mortgage employee who facilitated the training
3. Nonprofit-facilitated workshop: evidence of completion from nonprofit organization

The topics that must be addressed in the educational process include the home purchase process, mortgage financing and terminology, personal financial management, real estate agents and purchase contracts, qualification and closing, continuing homeownership financial responsibility, selection and inspection of a home, budgets, personal credit, loan application, and home maintenance.

The Norwest Mortgage HomeBuyers Club

The Norwest Mortgage HomeBuyers Club is a credit-counseling program that the bank offers free of charge to potential borrowers with less-than-perfect credit. The program is geographically centralized, with professional counselors servicing members nationwide from various locations. Using telephone and mail contact, potential borrowers can

⁶ Now Norwest Emerging Markets (see footnote 5).

Table 1. Examples of Mortgages Offered by Norwest to Reach Traditionally Underserved Populations

Mortgage Product	Mortgage Underwriting	Mortgage Availability	Primary Target Customer
Direct Loan Leveraging Program	<ol style="list-style-type: none"> 50% Norwest first mortgage at market rate with a 50% RHS second mortgage at a below-market rate No PMI 33/41 ratios 	<ol style="list-style-type: none"> National Restricted to rural markets as defined by RHS 	Borrowers in rural markets at or below 80% of adjusted area median income. This program is designed to capture borrowers who have been unable to qualify for the base RHS program.
3% Solution/ALT 97	<ol style="list-style-type: none"> Down payment can come from borrower's own funds or from a gift, grant, or unsecured loan from a relative, an employer, or a nonprofit Two months of cash reserves required Minimum FICO score of 660 33/41 ratios 	National	Creditworthy borrowers who have a difficult time accumulating the funds needed for down payment and closing costs; no income limits
Officer Next Door/Teacher Next Door	<ol style="list-style-type: none"> 50% discount on the purchase price of a designated HUD-owned property for law enforcement officers and teachers Minimum down payment of \$100 Can be used on conventional and government mortgage products 	National	Program that encourages law enforcement officers and teachers to live in the LMI neighborhoods where they work. The program is intended to help strengthen communities, reduce crime, and promote homeownership opportunities.

Source: Hawkins 2000.

Note: Ratios refer to front- and back-end ratios.

United States, dozens of state mortgage credit certificate programs, and multiple local affordable housing funds.

Retaining Homeowners

Default Management

Norwest uses advanced technology to implement strategic collection activity as early as possible in the collection cycle. Automated delinquency analysis is used with every loan as soon as it becomes delinquent. This analysis sets priorities for loans that are

most likely to default, thereby generating a value that represents the probability of the loan going into foreclosure over the next 12 months. The prediction is based on loan characteristics, payment patterns, and credit score. Using this behavioral scoring, targeted telephone calling campaigns are developed, in which delinquent borrowers who are judged most likely to default are contacted.

Norwest collections personnel are trained in all aspects of servicing, including collections and workout. The more experienced collectors work on loans that are more seriously delinquent (e.g., 60 to 90 days late). The collections staff members are available six days a week, including early evening hours. Norwest's collection efforts range from notices to face-to-face contact with delinquent borrowers.

Delinquent borrowers are sent written notices on the 17th and 23rd days of the delinquency cycle. At the same time, an attempt is made to contact the borrower by telephone. Typically, four to five calls are made before the loan becomes more than 30 days delinquent. A special "courtesy campaign" is used for borrowers who have consistently paid 15 to 30 days late in the previous three months. Those borrowers will receive calls sooner in the delinquency process. If any borrower does not respond to the contact made in the first 30 days, the loan will be breached on day 31 and consumer counseling will be recommended.

Postpurchase Delinquency Counseling

Postpurchase delinquency counseling is required in conjunction with many of the affordable housing products offered by Norwest. This counseling is funded by approved PMI companies and is provided by a network of experienced nonprofits with a strong history of providing such service on an as-needed basis. The borrower authorizes the servicer to share relevant account information with a third-party counselor if the borrower becomes delinquent on loan payments.

The postpurchase counseling process occurs as follows:

1. After the loan closes, but before the date the first payment is due, the third-party counselor sends a letter to the borrower introducing the counselor as an independent source of help in the event that financial adversity jeopardizes the borrower's ability to meet his or her mortgage obligation. A toll-free phone number is provided, and the borrower is encouraged to call the counselor at the earliest sign of difficulty.
2. In the event that a borrower becomes delinquent and concurrent with the telephone call to the borrower, the servicer notifies the PMI company of the mortgagor's name, phone number, mortgage payment amount, and next due date. The PMI company will forward the data to the third-party counselor, who will then contact the borrower, identifying himself or herself as an independent adviser, and will begin the counseling process. The borrower is under no obligation to accept this service.

in a partnership, no full-fledged program has been established. CDO2 stresses the importance of tribal counseling services. If homeownership is to grow on reservations, the tribal authorities will have to assist with counseling and information services.

Despite the barriers, CDO2 is “cautiously optimistic” about the future of mortgage lending to Native American tribes. At present, he feels confident that if a Native American who is “qualified and committed” approaches him, that individual will ultimately get a mortgage loan. Although the numbers are small and the timetables long, CDO2 feels that Norwest’s commitment to homeownership by Native Americans ultimately will be rewarded.

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